

## Assessment from a Distance: A Case Study Implementing Focus Groups at an Online Library

Jennifer C. Hill & Christine Patterson

The Sheridan Libraries, Entrepreneurial Library Program, Johns Hopkins University,  
Baltimore, Maryland, USA

**ABSTRACT:** Assessing library resources and services at a distance holds unique challenges in gathering data needed to make informed decisions. This article describes the complete process of piloting virtual focus groups- from planning and implementation through the analysis of results for a completely online student population. The virtual focus group method proved effective in getting qualitative feedback to spur library improvements, and it is transferable to many different library settings.

**KEYWORDS:** Assessment, academic libraries, distance education, focus groups, online libraries

### INTRODUCTION

How do librarians address the library needs and experiences of a completely online population to get insight when opportunities to communicate with users in person are not available? Assessment at a distance holds unique challenges in gathering the data needed for making informed decisions. Without being able to observe user behavior, how can librarians know if their improvements worked?

The Entrepreneurial Library program, a department of the Sheridan Libraries at Johns Hopkins University, develops and provides financially sustainable services to external clients. Through a unique partnership, the Entrepreneurial Library Program customizes and maintains an online library for Excelsior College. Excelsior College is fully online and offers courses and exams at a distance. There are over 33,000 currently enrolled students (approx. 4,100 FTE) worldwide, and the student body is composed mainly of adult learners with an average age of 37. These students often have competing responsibilities in addition to their education, which can

make their school/life/work balance challenging. In addition, approximately 30% of them are active-duty or reserve military personnel.

Excelsior College was built upon a strong foundation of assessment. The library was developed in 1999, and since that time, assessment has been central to decision-making. Historically, the library has relied on online surveys and other quantitative measures to assess user satisfaction. As part of each survey, there were opportunities to provide open-ended comments. The librarians found this feedback extremely valuable, and they often made decisions based on this input. Therefore, in order to gather even more in-depth, qualitative data from their online users, the librarians decided to try virtual focus groups.

This article demonstrates how to plan for and implement virtual focus groups for an online library. However, with the growing nature of online courses at both traditional and non-traditional institutions, these strategies can easily be applied in multiple library settings to get feedback from any type of user. In the library literature, there are many studies that describe libraries using surveys and in-person focus groups, yet little research was found specifically on implementing virtual focus groups. The hope is that this article will help fill this gap.

#### LITERATURE REVIEW

The focus group method has been around since the late 1930s (Walden 2006, 224) and focus groups have been used in libraries to measure user satisfaction and get feedback for decades. As defined by Walden (2006), “focus groups involve open, in-depth discussions with small groups of purposely selected individuals, led by a trained moderator/facilitator, to explore a predefined topic of shared interest in a nonthreatening, semi-structured setting” (223).

However, when working for a completely online library, all assessments need to be conducted virtually. There is much research on academic libraries using online surveys to gauge

user satisfaction, but little has been written on using virtual focus groups in academic libraries. A review of the literature shows that in other disciplines, virtual focus groups are commonplace, with academic libraries just beginning to use the process.

### Focus Groups in Academic Libraries

In 2006, Walden conducted a literature review of focus groups used in library science, and he discovered that this method was underused in libraries. In his literature review, he found that focus groups are being used to elicit a variety of outcomes and they can be used for large scale decisions such as strategic planning or more granular evaluations, such as assessing a library's catalog. Most focus groups identified in this literature review were held in-person, but there was a section called Internet, which listed a few articles using online focus groups. Hiller (2003) describes the use of focus groups to get insight on the University of Washington Libraries' database use statistics. Much like the present study, he used focus groups to complement his quantitative data and tell a more complete story.

### Virtual Focus Groups in Other Disciplines

Outside of academic librarianship, there is much literature on using online/virtual focus groups. This modality is utilized greatly in marketing research, and many articles can be found in trade publications. Stancanelli writes about the process of researching the online focus group and concludes that "in order to understand online focus groups one must explore traditional focus groups. Online focus groups and traditional focus groups have more commonalities than differences" (2010, 764). Thus, the mode of delivery of the questions has changed but the underlying principles of successful focus groups remain.

A plethora of articles discussed using a variety of online platforms, both asynchronous and synchronous. These included the use of internet discussion boards, email discussion lists,

and learning management system (Blackboard/WebCT) discussion boards. Turney and Pocknee describe the use of Blackboard discussion boards for a week-long asynchronous study of public attitudes to biotechnologies and the benefits of using “existing university infrastructure with which academic researchers are familiar” (2005, 8). Kenny elaborates on a successful, two-month study utilizing the WebCT platform for an asynchronous study of nurses. This activity allowed for a broad range of questions to be asked over the time period and for relatively easy administration-- “the online group proved easy to facilitate and only one person was needed” (2005, 418) to moderate/facilitate. Moloney et al. (2003) discuss their use of an internally constructed internet discussion board for a study of women and the ability to reach these participants as “people’s lives and schedules have become more complicated” (274). Tates et al. studied young oncology patients and state that the use of internet discussion boards “may offer new opportunities to collect data in other hard-to-include populations” (2009, 1). Again, this difficult to reach population is similar to challenges the librarians faced in the present article. Vogel (2001) uses an email-based discussion list. While these different platforms may be of interest to others thinking about online focus groups, for the Excelsior College Library’s assessment, the focus groups were scoped to be synchronous, one-time events.

Of great interest was an article by Cheng, Krumwiede, and Sheu, which compares online audio focus group effectiveness to face-to-face (FTF) focus groups. They conclude that online audio focus groups are as effective as FTF groups and result in “better quality, greater quantity of information, more interaction, more satisfaction, and more openness among participants” (2009, 234). This research validated the choice of an audio focus group for the project described in the current study.

Virtual Focus Groups in Academic Libraries

In the library literature, there are few instances of using virtual focus groups. In 2000, Chase and Alvarez investigated past research studies that used traditional and online focus groups (OFG) within library and information science research to uncover guidelines and best practices for use. They explain that online focus groups are becoming more prevalent, and they suggest how the virtual method may be applied to LIS research, specifically in virtual libraries. In their study, the online focus group was conducted using free, online conferencing software resulting in a text-based discussion that did not include audio transmission or reception. An interesting approach to note is that this study sent a question to the participants ahead of time for them to reflect on and provide responses prior to the meeting. These responses were compiled and shared with the other participants to provide a framework for their focus group discussion, meaning that this focus group used both online and offline questions. In the current study, although no questions were presented to the attendees ahead of time, this method warrants consideration for use in future focus group sessions. While this study informs the present article because it illustrates an early example of an online focus group, the software used is now antiquated due to advances in technology.

More recently, Grays, Del Bosque, and Costello (2008) discuss using virtual focus groups to assess the effectiveness of their subject guides for distance learners. Much like the current study, their students are located across the United States and throughout the world. Similarly, they did not have an option to do in-person focus groups. This article reports on what they will do when they hold the virtual focus groups, as they were still in the planning stages when this article was written. They discuss techniques and challenges of using virtual focus groups, and they describe their plans to use a chat room in GoogleTalk as a forum for the groups. This study planned to use text-based chat as the means to interact with the groups, which is similar to Chase

and Alvarez's method. Grays, Del Bosque, and Costello planned to distribute a pre-screening survey to potential focus group participants to determine their level of familiarity with the library as well as to assess their technical abilities to attend a virtual focus group using software. The authors of the present study also incorporated a mini-prescreening survey by including the registration question: "Did you use the Library within the last 12 months?" It may be worth considering the use of a larger set of prescreening questions in future focus groups. In addition, the authors of the present study used a phone line to ensure that they did not need to screen potential participants for technical abilities.

After reviewing many different technologies, the Excelsior College librarians ultimately decided on using a conference call phone line as the forum for the groups. For our population, using a phone conferencing line made the most sense as it did not place any technology barriers on the participants. We did not have to worry about computer hardware, software, or their Internet connection, which can vary greatly among users.

The present article fulfills a gap in the library literature as it not only explains the process of planning the virtual focus groups for online learners, but it also describes the focus group implementation, analysis of results, and reflection on the process. In addition, the authors could not find any other published articles on using virtual focus groups to assess library services for distance learners using audio teleconferencing; thus, other librarians may be encouraged to try this method. More research needs to be done on virtual assessment strategies for online libraries and distance learners.

## METHODOLOGY

### Investigation Phase

Two librarians took the lead of this project. They began by consulting with the college's assessment unit to determine a recommended method for collecting qualitative data. Their goal was to gather input and actionable measures to improve the library's resources and services. After much discussion, they decided to pursue virtual focus groups. This was a great opportunity for the librarians to learn a new method of assessment, with both units deriving benefit from the research and experience.

Before diving in, the librarians surveyed the various mechanisms available for delivering virtual focus groups. After an initial evaluation, the team narrowed down the options and did further investigation of the following: Adobe Connect Pro, Google Talk, Skype, and a conference call telephone line. The librarians evaluated each tool on the following factors: ease of access, recording capabilities, cost, reliability, and the varying technology levels of the students. During this phase, the librarians weighed the pros and cons and discussed how each of these factors would work in each tool. They discussed bandwidth issues, reliability of recordings, the need for headsets or microphones, the familiarity of participants with the tool and the software participants might need to download. The librarians wanted to head off any concerns that might prevent students from participating, such as technology anxiety or unfamiliarity with the tool chosen.

It was determined that the conference call phone line would be the best choice for this unique population. The phone line was selected because it was free for the participants, had low operating costs, included a recorded audio file, had high reliability, and posed no technology barriers.

Implementation Phase

After selecting the tool, the librarians then had to decide how to best organize the groups. They chose to hold separate virtual focus groups for each degree level offered at the college: associates, bachelors, and masters. Next, the library team drafted eight focus group questions, which were reviewed by the assessment unit for validity and potential biases. The librarians then ordered the questions to establish a logical flow that would be comfortable for the participants. They decided to arrange the questions to guide the conversation of library experiences from past to present to future. (See Appendix A.)

After the questions were finalized, the librarians developed an invitation email message to send to the representative student samples. These samples were pulled by the assessment unit and included a representative set of students from all programs. The email message invited students to attend a focus group at a specific time based on their degree level. The scheduled times were chosen to hit different time zones in the United States during traditional lunch hours. Three sixty-minute sessions were planned, one for each degree level. Amazon.com gift certificates with a value of \$15.00 were included in the invitation as an incentive to participate. The assessment unit compiled random samples of students at all degree levels into Excel spreadsheets. The librarians then forwarded the spreadsheets to the college's marketing department (along with the invitation email wording) for distribution via their broadcast email systems.

Within the invitation, interested students were asked to register via a web form, which allowed the librarians to collect contact information in order to send reminder messages leading up to the date of the group meetings. The form asked for the following information: name, email address, phone number, and degree level (associates, bachelors, masters). In addition, it also included a multiple choice question, "When was the last time that you used the library?"

Response choices were: “never, within the last month, within the last 6 months, or within the last year.” This last question was used to obtain a mix of participants with varying levels of library familiarity. The librarians wanted to ensure that the groups included participants representing all levels of library use. They tried to limit participation of “never-used” participants to one or two. Reminder emails were sent to registered participants two weeks before the meeting and the day before the event.

The librarians were fortunate to have access to an external Johns Hopkins facilitator who was not affiliated with the library but did possess knowledge of libraries. The facilitator had experience with conducting in-person focus groups and was excited for the challenge of leading virtual focus groups. The ideal candidate for a moderator is an individual with group facilitation experience who also has knowledge of libraries (Von Seggern and Young 2003, 273). She was able to keep her professional distance, but was also trained in the role of moderator, and she knew which library points needed to be further probed. The librarians met with the facilitator prior to the sessions to review each question so that the facilitator understood the expected outcomes. In addition, they discussed various techniques that would enhance the experience, such as having students state their name prior to each comment for identification purposes, drawing quieter attendees out, and balancing the group dynamics.

Based on the facilitator’s recommendation, the goal was to have no more than seven students with varying levels of library experience attend each virtual focus group. The ideal number of participants was five or six. To ensure this number, the librarians planned to accept up to fifteen registrants per focus group, knowing that some students may no longer be able to attend on the day of the event.

The initial sample size was 200 students per degree level, with a representative mix from all disciplines offered at Excelsior. However, the librarians had to continually request additional samples from the Assessment Unit based on low response rates. The librarians sent invitations to 1,200 students each for the associates and bachelors levels, and 600 students for the masters level, for a total of 3,000 invitees. In the end, five students registered for each of the associates and bachelors levels, and seven students registered for the masters level focus group. This number was lower than the librarians had hoped for, yet they were excited to hear what these students would say. Unfortunately, only one participant of the five registrants attended the first group. Due to this low attendance for the associates level session, a decision was made to hold a second associates level session. The invitation was then sent to a new sample of students in this degree level. Table 1 shows how many invitations were sent compared to how many students registered and how many actually attended.

Table 1: Focus Group Recruitment and Participation

<b>Degree-Level</b>	<b>Invitations sent</b>	<b>Registrations</b>	<b>Attendees</b>
Associates	1,200	5	1
Bachelors	1,200	5	4
Masters	600	7	3
Associates (2)	3,000	5	2

When holding the groups, the two librarians attended each session as unobtrusive observers to take notes, which the facilitator shared with the participants. They also arranged to have each session recorded by the college's telecommunications administrator; the facilitator informed participants that they were being recorded at the beginning of each session. In addition, the facilitator informed the participants that all of the information collected would be

anonymized. The library would not disclose who actually participated in the focus groups and the final report would make no attribution to comments made. Participants were encouraged to be honest and forthright in their comments. The questions appear in Appendix A.

After each session, the telecommunications administrator sent the recordings to the librarians by email as MP3 files. The librarians then used a two-phased approach to listen to and document each recording. First, one librarian transcribed the conversation into a Word document, a time-consuming but necessary process to ensure accurate data coding in the next phase. Then, the second librarian listened again while reading the written transcript, and modified the text as needed. This allowed the librarians to have a written record as well as an audio recording of each session. With the written transcripts in hand, the librarians then proceeded to the analysis phase.

#### Analysis phase

First, the librarians separately read each of the transcripts, paying close attention to recurring patterns. They established some ground rules to keep in mind while reading (*Adapted from Gibbs and Taylor 2010*):

- The original research question- How can we improve our resources and services?
- Grounded theory- no background knowledge, let the data do the talking- code as a novice
- Look for important vocabulary and repetitions
- Codes are not mutually exclusive
- Mark up the papers with memos and notes!

During this initial reading, each librarian pulled out a list of potential themes. Next, the two librarians met to compare their findings and to reach a consensus on themes present in the

transcripts. They developed a list of agreed upon overarching themes. From this list of themes, they created a coding schema.

Table 2- Coding Schema Developed Based on Themes Identified

<b>Code</b>	<b>Theme</b>
A	Availability (of librarians and resources-times, convenience)
C	Collections- includes multimedia resources to add, books, databases, free resources, all other suggestions for materials
I,O	Instruction, overview- intro to the library, orientations, not subject specific
I,P	Instruction, point of need- in courses, syllabus, 3 weeks later
I,Search	Instruction, searching- in depth and quick help relating to search tips and strategies
I,Sub	Instruction, subject
Market	Marketing/communication
Modes	Modes of contact- chat, phone, email, quick questions, preferences
Multi	Multimedia/interactivity- audio files, visuals on website, interactive tools
Nav	Navigation- how to move around, organization of library's website, difficulties, too many clicks, adding visuals
PC	Personal connection
ST	Search tools- search engines, Google, faceted searching, interfaces, difficulty searching

Codes were not exclusive; Ideas could be assigned multiple codes

With a fresh outlook and clean copies of the transcripts, the librarians again separately read each transcript and this time added codes to the comments. They kept in mind that multiple codes could be assigned to a comment and they encouraged each other to interpret the data as they each saw fit. The librarians felt that it was better to have more options than no options for the comparison meeting, and that they should “go with their guts.”

After this initial round of coding, results were compared and discussed to establish intercoder reliability. The librarians sat down with the transcripts and went through each sentence one by one. For each comment, they discussed why they assigned a certain code. In instances where there were discrepancies, they debated the merits of each code. In some cases they assigned both codes, and in others they chose the best-fitting code. After multiple meetings, they emerged with mutually-agreed upon fully coded transcripts, one for each of the focus groups.

### FINDINGS AND DISCUSSION

With the fully coded transcripts in hand, the librarians then quantified the results by code, by individually counting the number of occurrences of each code for all four transcripts. Next, they conferred to ensure that they arrived at the same numbers before creating an Excel spreadsheet to capture the data (Table 3). The data for each code are ordered from most occurrences to fewest.

Table 3: Occurrences of Each Code Quantified by Degree Level

<b>Code</b>	<b>Theme</b>	<b>Associates 1</b>	<b>Associates 2</b>	<b>Bachelors</b>	<b>Masters</b>	<b>Total</b>
Nav	Navigation	9	6	13	4	32
Market	Marketing/ Communication	3	10	11	6	30
ST	Search Tools	2	4	1	16	23
I,Search	Instruction, Searching	1	0	9	10	20
C	Collections	9	3	4	3	19
A	Availability	2	9	3	5	19
I,O	Instruction, Overview	5	1	2	4	12
Modes	Modes	0	4	2	5	11
I,P	Instruction, Point of Need	1	0	7	1	9
Multi	Multimedia	1	5	1	1	8
I,Sub	Instruction,	1	0	1	3	5

	Subject					
PC	Personal connection	0	1	2	0	3

Finally, the librarians compiled all of their findings into a comprehensive report. This report included four sections: the list of codes, the quantification of comments by code, a listing of verbatim comments by code, and potential action items based on the corresponding comments. The findings were shared with key stakeholders at the college through various mediums, and a report was presented at an open forum to which all faculty, staff and administrators were invited. The open forum was also broadcast as a live webinar and was recorded. In addition to the robust report, the librarians used this opportunity to identify positive comments to be potentially used for library marketing purposes. These comments were pulled out and pasted in a separate document for future reference.

As this was the first experience with using focus groups, the librarians learned many things. Before getting started on a project like this, try to partner with key players at your institution. Collaboration with the assessment and telecommunications units was paramount for this study. The librarians needed their help and they relied upon their expertise to ensure success. These relationships can be mutually beneficial. For example, although the assessment unit had much experience with in-person focus groups, they had not held virtual focus groups before. With this pilot, they were able to learn from the library's investigations and experiences.

The medium chosen (telephone) worked very well. It was easy for participants to figure out how to call in, and the recordings produced were very clear. For future studies the authors may investigate other possibilities; however, they found the telephone to have many benefits and would consider using it again. One drawback occurred when a student wanted to call in from Europe and was unable to do so. These sessions were based on United States time zones, and a

toll-free U.S. phone number was provided. In future sessions, the librarians would want to provide an international call-in phone number for students who are located overseas.

Another finding from this experience is that there is never a perfect time to schedule focus group sessions. Even though invitation emails were sent to thousands of students, the response rate was low. A best practice for the Excelsior Library is to always offer an incentive for participation in library assessments; yet, even with this incentive, some students who had originally RSVPed did not make it to the actual session. As noted previously, the librarians planned the meetings during traditional lunch hours across time zones in the United States. However, even doing this did not result in the participation that was hoped for.

Additional observations emerged from working with the facilitator. Before the session, the facilitator collaborated with the librarians to determine which questions were imperative to cover in the one-hour time period and which could be skipped if time was running short. The facilitator planned to be continually conscious of how much time was left as the sessions progressed. In addition, she had students state their names before each comment to ensure that everyone participated. The facilitator also knew when to direct the conversation back to the question asked, but other times let it veer off course to capture beneficial feedback. A knowledgeable facilitator can easily determine this fine line on the fly.

The discussions throughout the sessions were lively. One unexpected benefit was that the students were excited to interact and talk to others because they do not have many other opportunities for synchronous interaction in their environment. Their typical interactions are through asynchronous discussion board postings in their online courses. At the end of all four sessions, the students expressed their pleasure in participating and asked if the library had plans

to expand these sessions in the future. They were interested in what their peers were experiencing and wanted to chat more.

Regarding the coding process, the librarians found that there were instances where the first half of a sentence might have one code, but the second half of the same sentence would have a different code. Even with a great deal of preparation in establishing coding guidelines beforehand, all data are different; as a result, one never really knows what will happen until diving into the analysis. Being flexible and letting the data do the “talking” is important. It is important to remember that the data represent real comments from current students.

We also learned that our manual coding process was time-consuming and labor intensive. With only two librarians working on this project, manually coding each response added a great deal of time to the transcript analysis portion of this study. Investigating software that could automate the transcript analysis process by assigning codes to specific words is something to consider for future projects, if funding is available.

Through the analysis of transcripts, the librarians found that many of the improvements suggested by the students were ideas that the library was already pursuing; this feedback provided validation for these efforts. For example, the students confirmed that they wanted a more intuitive search feature, similar to Google, and the librarians were able to investigate and implement a web-based discovery tool. In addition, students expressed interest in more in-depth FAQs, or possibly even a question search engine, and the librarians acted upon this to implement LibAnswers. The rich information that was gathered will prove invaluable in informing decisions for future improvements.

## CONSIDERATIONS

Overall, the plethora of information documented from these four focus groups resulted in substantial ideas for improvements and provided further insight into the lives of our students. However, the findings were from a small sample, which limits the generalizability of the results to the entire Excelsior student population.

In addition, the results may have been different if the participants had been on the library's website during the groups. Although the goal was not usability testing, being able to see the library's resources and services may have freed participants from having to rely on memory.

This article reported on the process of implementing virtual focus groups instead of the unique results of those focus groups because the specific results would not apply to other libraries. However, the authors hope that the information shared on how to conduct the groups and analyze the results will be useful to others.

#### FUTURE DIRECTIONS AND CONCLUSION

Throughout this process, lessons were learned that can be applied to many different library settings. At traditional campuses, librarians have the ability to engage students in person for informal feedback whether at the library or in other campus hubs. Yet with an entirely online population, librarians are restricted to email solicitations. With this particular population of non-traditional students, their busy lives outside of school create additional communication barriers/challenges.

In the future, the librarians will have the participants choose the meeting time that works best for them, instead of the librarians assigning scheduled time slots. This may increase attendance, yet it may involve more work for the librarians. They may have to host multiple sessions for each degree level, perhaps with one in the morning and one in the evening for each cohort. Another option could be to host a poll using Doodle, for example, with multiple time

choices. The librarians would then choose the time slot with the most registrations for each degree level. In addition, due to the international nature of this student population, the librarians would provide an international toll-free number in future studies to allow for greater participation.

In upcoming years it might be more beneficial to investigate conducting one-on-one interviews, either in place of the focus groups or in addition to, since attendance was low and it was difficult to get people to sign up. Even with the low attendance, the information gathered was still of paramount importance and the librarians will plan to hold virtual focus groups or interviews every few years. It is only due to the nature and workload of this type of assessment that it cannot be done every year. The librarians also discovered that they may be able to use the virtual focus group method to do usability testing in the future. Such valuable input could be gained by having students all over the world on their computers at the same time, sharing their impressions of the website with the librarians while bouncing ideas off their peers.

Going forward, the librarians have been repeatedly referring to the results from the focus groups and will continue to implement action items to improve the library. Since this analysis, they have used this rich data in conjunction with results gathered from online surveys and informal assessments to inform decisions. The first-hand student responses greatly enhanced librarians' knowledge of how students use and view the online library. This type of conversational information was unavailable before holding the virtual focus groups. Since the librarians do not have opportunities to gather this type of information informally, they need to systemically plan and devote time to it.

As a result of this experience, the librarians have also reformatted their annual web survey to include a combination of multiple choice questions from their traditional online survey

with some of the open-ended questions used in the focus groups. This hybrid survey can be emailed, allowing users to provide feedback at their own convenience, which eliminates one of the barriers revealed during the focus groups.

Although this experience was time consuming and labor intensive, the library was able to tap into information that was never available before: actual student interactive reflections of their library experiences in their own words. The rich data gathered were worth the learning curve and the benefits of having this data proved the value of the process. Now the Excelsior College library is armed with comprehensive data and the librarians have both quantitative and qualitative [data-information](#) to [inform-implement](#) future [decisionschanges](#).

[You need a stronger conclusion.](#)

#### REFERENCES

- Chase, L., and J. Alvarez. 2000. "Internet Research: The Role of the Focus Group." *Library & Information Science Research* 22: 357-69. doi:10.1016/S0740-8188(00)00050-5.
- Cheng, C. C., D. Krumwiede, and C. Sheu. 2009. "Online Audio Group Discussions: A Comparison with Face-to-Face Methods." *International Journal of Market Research* 51: 219-41. doi:10.2501/S1470785309200438.
- Grays, L. J., D. Del Bosque, and K. Costello. 2008. "Building a Better M.I.C.E. Trap: Using Virtual Focus Groups to Assess Subject Guides for Distance Education Students." *Journal of Library Administration* 48: 431-53.
- Hiller, S. 2003. "Evaluating Bibliographic Database Use: Beyond the Numbers." *Against the Grain* 15: 26-30.
- Kenny, A. J. 2005. "Interaction in Cyberspace: An Online Focus Group." *Journal of Advanced Nursing* 49: 414-22. doi:10.1111/j.1365-2648.2004.03305.x.

- Moloney, M. F., A. S. Dietrich, O. Strickland, and S. Myerburg. 2003. "Using Internet Discussion Boards as Virtual Focus Groups." *Advances in Nursing Science* 26: 274-86.  
[http://journals.lww.com/advancesinnursingscience/Fulltext/2003/10000/Using\\_Internet\\_Discussion\\_Boards\\_as\\_Virtual\\_Focus.5.aspx](http://journals.lww.com/advancesinnursingscience/Fulltext/2003/10000/Using_Internet_Discussion_Boards_as_Virtual_Focus.5.aspx).
- Stancanelli, J. 2010. "Conducting an Online Focus Group." *The Qualitative Report* 15: 761-65.  
<http://www.nova.edu/ssss/QR/WQR/ofg2.pdf>.
- Tates, K., M. Zwaanswijk, R. Otten, S. van Dulmen, P. M. Hoogerbrugge, W. A. Kamps, and J. M. Bensing. 2009. "Online Focus Groups as a Tool to Collect Data in Hard-to-Include Populations: Examples from Paediatric Oncology." *BMC Medical Research Methodology* 9:1-8. doi:10.1186/1471-2288-9-15.
- Taylor, C., and G. R. Gibbs. 2010. "How and What to Code." *Online QDA*.  
[http://onlineqda.hud.ac.uk/Intro\\_QDA/how\\_what\\_to\\_code.php](http://onlineqda.hud.ac.uk/Intro_QDA/how_what_to_code.php).
- Turney, L., and C. Pocknee. 2005. "Virtual Focus Groups: New Frontiers in Research." *International Journal of Qualitative Methods* 4: 1-10.  
<http://ejournals.library.ualberta.ca/index.php/IJQM/article/view/4445/3548>.
- Vogel, I. 2001. "An Online Impact Assessment Tool for Research Information: Some Preliminary Concepts." *Information Development* 17:111-14.  
doi:10.1177/0266666014240809.
- Von Seggern, M., and N. J. Young. 2003. "The Focus Group Method in Libraries." *Reference Services Review* 31: 272-84. doi:10.1108/00907320310486872.
- Walden, G. R. 2006. "Focus Group Interviewing in the Library Literature: A Selective Annotated Bibliography 1996-2005." *Reference Services Review* 34: 222-41.  
doi:10.1108/00907320610669461.

## APPENDIX A- Focus Group Questions

1. Think back to when you first learned about the library. Was this a helpful experience or would you have preferred to learn about it another way or at another point? How would you like to be made aware of new library resources and services in the future?
2. What do you typically use the library for (exam prep, courses, research papers)?
3. When conducting research which resources do you typically use? Are there resources or topic areas that we don't have in the library that you would like to see?
4. Please identify what you learned from using the library.
5. What improvements would you like to see in library services?
6. Describe your overall experiences with library resources and the services of the librarians. \*\*\*(this question can be skipped if time is an issue)
7. Please describe your vision of a perfect (ideal) library. What would this library look like? What kind of services and resources would it provide?
8. We've talked about a wide range of issues today. Are there any other topics or concerns we haven't touched upon? Is there anything else about your own library experience that you would like to share with the group?