

**“Seeking Synchronicity: Evaluating Virtual Reference Service from User,
Non-user, and Librarian Perspectives”**

**IMLS Interim Performance Report
October 31, 2006**

Submitted: October 31, 2006 to: 202-653-4604.

Award Number:

- ✓ LG-06-05-0109-05

Awardee Institution Names:

- ✓ Rutgers, The State University
- ✓ OCLC Online Computer Library Center

Interim Performance Report: From May 1, 2006 to October 31, 2006

Co-Principal Investigators:

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2.0 Performance Description

2.a Purpose of the Project:

"Seeking Synchronicity: Evaluating Virtual Reference Services from User, Non-user, and Librarian Perspectives," is studying and evaluating the practice, sustainability, and relevance of virtual reference services (VRS). The partnering institutions are Rutgers University School of Communication, Information and Library Studies and OCLC, Online Computer Library Center, Inc. VRS are human-mediated, Internet-based library information services. The rapidly increasing public use of remotely accessed, digital reference resources, such as full-text indexes and databases, has increased the demand on libraries to provide reference services online, and this project aims to improve libraries' ability to respond to the demand. The project focuses on live chat VRS and will develop a theoretical model that incorporates interpersonal and content issues and will make research-based recommendations for library staff to increase user satisfaction and attract nonusers. It will also make recommendations for VRS software development and interface design and will produce a research agenda for user-centered VRS.

2.b Research Activities:

IRB Approval and Human Subjects Certifications:

Prior to starting the grant, it was necessary for the grant protocol to receive Rutgers' IRB approval, and this was accomplished in November, 2006. All members of the grant team have also received Human Subjects Certification.

Research Team Staffing and Research Space:

The grant team is working well together and includes a full-time project manager, three Ph.D. and two MLIS graduate assistants based at Rutgers University in New Brunswick, NJ. The grant team includes additional members based at OCLC, Online Computer Library Center, Inc. located in Dublin, OH, including one MLIS research assistant and one Ph.D. research assistant. In total, the grant team employs seven graduate students. Previously, as outlined in the grant protocol and budget, two Ph.D. student were to work on the grant; however, given the importance of the grant, the School of Communication, Information and Library Studies (SCILS) at Rutgers awarded the grant an additional line for a full-time Ph.D. student who will be funded by the University with tuition remission for the 2006-2007 academic year. Rutgers continues to support the grant team with two assigned offices to effectively house all team members. Additionally, SCILS has also provided a desktop computer and phone to support grant activities. OCLC provides research assistance and also has dedicated office space for the team members located in Dublin, OH.

Research Team Communication:

The grant team holds a weekly meeting to address projects and timelines, which includes members of the team within Rutgers and at OCLC via conference call. The advisory board members are frequently updated about the progress of the research, are regularly consulted, and are invited to the team meetings. A luncheon will be held in November

2006 to bring the advisory board together to thank them for their continued support, to elicit their input, and to provide details of research activities and an overview of upcoming national presentations.

Results:

According to the scope of research outlined in the Grant, there are four primary phases of data collection: focus group interviews, chat transcripts, online surveys, and telephone interviews. Phase I involved focus groups, Phase II involves transcript analysis and Phase III calls for online surveys. Phase IV will consist of telephone interviews.

Focus Group Interviews:

During Phase I, eight focus group interviews with VRS users, non-users, and librarians were conducted to gain insight into their perspectives and to inform development of online surveys and phone interviews.

- *VRS Librarians:* Two focus group interviews with VRS Librarians were conducted with a total of twenty-one participants.
- *Non-Users:* Four focus group interviews with non-users of VRS were conducted. Of these interviews, one focus group interview included graduate students and three focus group interviews included teens between the ages of twelve and eighteen. The teen focus group interviews were comprised of individuals from rural, suburban and urban settings. A total of thirty-three teens and seven graduate students participated in the non-user focus groups for a total of forty participants.
- *Users of VRS:* Two focus group interviews with twenty-three users of VRS were conducted.

Group	Number of Focus Group Interviews	Number of Participants
VRS Librarians	2	21
Non-Users	4	40
Users	2	23
Totals	8	84

A total of eighty-four individuals participated in eight focus group interviews. The Principal Investigators decided to conduct an additional focus group interview to capture the input of teen users of virtual reference services. This additional focus group interview will serve as a comparison between the other focus group interviews with teen non-users of VRS. It is hoped that the additional focus group interview will take place in November with teens from an urban area.

Transcript Analysis:

During a twenty-month period, a random sample of fifty transcripts per month will be pulled from QuestionPoint, a VRS service, to total 1300 transcripts. These transcripts are carefully examined by an OCLC team member prior to dissemination to other project members to ensure that all personal identifiers are removed from the transcripts, including librarian name, user name, email addresses, as well as any other information that could link the transcripts back to individuals. Since the project was initiated in October 2006, 750 VRS transcripts have been collected. Six hundred transcripts have been analyzed and coded by: Type of Question, Subject of Question, Geographic Location, Type of Library, Session Duration, and Dimensions of Relational Content (interpersonal communication between users and librarians). Analysis has begun on the remaining 150 transcripts which have already been stripped of identifying information. Subject coding is nearing completion for this group. The transcripts also have been analyzed to identify which transcripts include interactions with teen users of VRS. As the transcripts continue to be collected, we will continue to look for information to identify teen users of VRS. This demographic information will be used to analyze the differences in interaction between this group and other individuals who use VRS. Additionally, 600 transcripts have been coded with a newly developed coding scheme to analyze query clarification strategies in interaction for the reference interview. This new coding scheme will provide another way of analyzing the transcripts and will extend the research in this area.

Timeline Updates:

Online survey development: While the research activities continue to progress at a steady pace, the need to modify the timeline for the grant activities has become necessary. The original date to commence the VRS librarian online survey was May 2006. However, development of the survey and software complications has delayed this process. The survey has been pre-tested and will be disseminated to VRS librarians in November 2006. The design of two online surveys, one for VRS Non-Users and one for VRS Users, is underway and pre-testing has taken place in October 2006, with dissemination of the surveys scheduled for November 2006. The analysis of all completed online surveys will begin in November 2006.

Telephone survey development: The data collected from the focus groups and online surveys will be analyzed and used to construct telephone survey instruments. The construction of these instruments will take place in January – February 2007. The telephone interviews with the VRS Librarians, user, and non-users of VRS will be conducted in February, March and April 2007, and will the data will be analyzed in May and June 2007.

2.c Project Outputs and Activities

Conference Presentations:

During the first eleven months of the grant, Marie L. Radford and Lynn Silipigni Connaway have presented at five conferences, including national and local conferences and one international conference in Alexandria, Egypt. In addition, papers have been

accepted for presentation at three additional conferences scheduled to take place between October 2006 and March 2007. Following is a list of conference presentations that have taken place between October 2005 and September 2006.

Conference Papers Presented:

Radford, M. L. & Connaway, L. S. "*Screenagers*" and virtual (chat) reference: *The future is now!* Accepted for presentation at the New Jersey Association of School Librarians, Long Branch, NJ, October 29-31, 2006.

Radford, M.L. & Connaway, L. S. *Virtual windows: Observing chat reference encounters through transcript analysis*. Presented at a Symposium: "The Role of Observation and the Health of Community" at the 19th International Association for People-Environment Studies, Alexandria, Egypt, September 11-16, 2006.

Radford, M.L. & Connaway, L. S. *Face-work in chat reference encounters*. Presented at the Library Research Round Table Research Forum "Librarians as Research Subjects," American Library Association Conference, New Orleans, LA, June 24, 2006.

Radford, M.L. & Connaway, L. S. (2006). *Relational communication in chat reference*. Presented at the 10th New Jersey Communication Association Conference, Montclair State University, NJ, March 25, 2006.

Radford, M. L. & Connaway, L. S. (2006). *Seeking synchronicity: Evaluating virtual reference transcripts*. Presented at the 2006 ALISE Conference, San Antonio, TX, January 16-19, 2006.

Upcoming Conference Papers:

Connaway, L. S. & Radford, M. L. *Service sea change: Clicking with screenagers through virtual reference*. Accepted for presentation at the Association for College and Research Libraries, 13th National Conference, Baltimore MD, March 29-April 1, 2007.

Radford, M.L. & Connaway, L. S. (2006). Panel organizer and presenter of paper: *Seeking sustainability and singularity: Evaluating virtual reference from user, non-user, and librarian perspectives*. Paper accepted for presentation as part of a panel with J. Pomerantz: *Shaping the Future Realities of Virtual Reference*. Accepted for presentation at the American Society for Information Science and Technology Conference, Austin, TX, November 3-9, 2006.

Radford, M.L. & Connaway, L. S. (2006). Presenter of paper: *Expect the unexpected: Urban screenagers' communication and information seeking preferences*. Accepted for presentation as part of a seminar: *Urban Communication: Creating Sites for Connection and Action*. National Communication Association, San Antonio, TX, November 15, 2006.

2.d. Research Outcomes:

Broad Interest in the Seeking Synchronicity Research:

In March 2006, Dr. Carol Tenopir wrote about the Seeking Synchronicity grant in her monthly column in *Library Journal*. The article was entitled: "What Chat Transcripts Reveal."

 Tenopir, C. (2006, March). What chat transcripts reveal. *Library Journal*, 34.

Online Proceedings by the Co-Principal Investigators.

Publication:

Bolander, R.C., Connaway, L. S., & Radford, M. L. (2006). Seeking Synchronicity: OCLC and Rutgers researchers explore virtual reference services by analyzing chat transcripts. *NextSpace*, 2:18-19.

Online Proceedings Under Review:

Radford, M.L. & Connaway, L.S. Online proceeding: Seeking sustainability and singularity: evaluating virtual reference services from user, non-user, and librarian perspectives. Submitted to: The American Society for Information Science and Technology Conference, Austin, TX, November 3-9, 2006.

Radford, M.L. & Connaway, L.S. Online Proceeding: virtual windows: Observing chat reference encounters through transcripts analysis. Submitted as part of a Symposium: The Role of Observation and Health of Community presented at the 19th International Association for People-Environment Studies, Alexandria Egypt, September 11-16, 2006.

Papers in Progress:

Radford, M.L. & Connaway, L.S. Expect the unexpected: Urban screenagers' communication and information-seeking preferences. To be submitted to a peer-reviewed LIS journal.

Radford, M.L. & Connaway, L.S. Face-work in chat reference. To be submitted to *Library & Information Science Research*.

Additional publications will be forthcoming.

Evolving Coding Schemes:

The following coding schemes have been further developed and/or used during the process of analyzing data from the virtual reference transcripts:

- *Relational Dimensions Category Scheme*, developed by Marie L. Radford has been enhanced and applied to code interpersonal communication dimensions in the chat discourse of librarians and VRS users to assess and analyze their interactions in 600 transcripts. The outcome of this coding will add to the field of research in interpersonal communication, computer-mediated communication, and discourse analysis as well as research in library and information science.
- *Dewey Decimal Classification and Relative Index (DDC)* has been utilized to classify chat questions since this is a well-developed and established subject classification scheme, which will increase the research product’s accessibility and connectivity to the broader library community. This is the first instance of application of the DDC to classify virtual reference questions, which will be a unique outcome of this research project.
- *Question Clarification Coding Scheme*, has been developed as a means to code the process of query negotiation and definition between virtual reference librarians and users. This is a new coding scheme, which will add to the body of research on question clarification and reference interviewing.

2.e. Other Results

Seeking Synchronicity Website:

In January 2006 an official website, hosted by OCLC, was activated; the web address is <http://www.oclc.org/research/projects/synchronicity/>. The number of site visits, the flow of the traffic to the various pages of the site and the number of downloads of the research and presentations have been documented.

Page Views or Downloads for the first 10 months of the Project Website, from January 2006 – October 2006:

Jan	Feb	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Total
525	793	955	552	877	678	1344	1028	1051	1146	8949


A total of 8,949 views or downloads have taken place on the Seeking Synchronicity website. Of this total, 2,955 have been views or downloads of the home page, 1,299 have been views or downloads of the research proposal and another 1,180 have been views or downloads of the ALISE (2006) presentation, which total 5,434 visits. The remaining website traffic includes visits to the other areas of the web site.

2.f. Additional Comments

There is a growing interest in grant research results demonstrated by requests for practitioners and researchers. Please see Appendix A, which contains several emails and document the growing impact and interest in the research of Virtual Reference Services and users, non-users and librarians. Additionally, please see Appendix B for information about the financial status report.

3. Certification

In submitting this report, I certify that all of the information is true and correct to the best of my knowledge.


Co- Principal Investigator

October 31, 2006

Date

Appendix A
Email Showing Grant Interest October 2006.

----- Original Message -----

Subject: Using Your Materials for Training
From: "Struckmeyer, Mary DPI-RLL"
<Mary.Struckmeyer@dpi.state.wi.us>
Date: Sat, October 14, 2006 4:56 pm
To: "'mrادford@scils.rutgers.edu'" <mrادford@scils.rutgers.edu>

Hello, Marie--

I am a reference librarian with the Wisconsin Reference and Loan Library in Madison, Wisconsin and I do monthly online training sessions on virtual reference best practices for our Ask?Away consortium (www.askaway.info). My next session is this Thursday, October 19 and I am writing to ask your permission to use some slides from the presentation that you and Lynn Silipigni Connaway did at the Library Research Round Table, June 24, 2006 at ALA in New Orleans, Louisiana. I found the slides for "Face Work in Chat Reference Encounters" on the Internet and I would like to show the slides with the positive and negative transcript examples. I will also use the slides that give you and Lynn credit for the presentation.

I have also printed out the text of your presentation titled "Please Hurry It Up" for the Maryland Library Association, May 5, 2005 and the PP slides created by Joe Thompson. I would also like your permission to use the slides and written recommendations for facilitating interpersonal communication in virtual reference encounters. Using your materials will help me a great deal, since I have less than a week to put this together.

Thank you in advance for your help and consideration of my request.

Mary E. Struckmeyer
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Appendix A
Email Showing Grant Interest October 2006.

Deborah,

Right now we are working on a paper with our screenagers results & getting ready to do 2 presentations (1 at the NJ Assoc. of School Libraries). We will have a draft paper by the beginning of next week and I am happy to share it with you as well as our ppt for the NJASL meeting that will be at the end of Oct. When these items are ready, I will be happy to send them to you.

Glad to hear our research is of interest!

MR

> Hello Marie and Lynn,

>

> I am currently planning a workshop for Maryland librarians on teens and chat reference, to be given in November. I see, from the OCLC website, that you will soon be presenting your research on "screenagers". I am wondering if you have any recommendations for librarians that I might be able to share with Maryland librarians at my workshop? Or other results of your research on teens? I already have (and use with staff!) Marie's handout from the Maryland Library Association Conference May 2005.

>

> Thank you for your work. It really helps us in training staff.

>

> Sincerely yours,

> Deborah

>

> --

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