Abstract

Purpose – The purpose of this paper is to examine the feasibility of using the Evernote note-taking application in the research consultation as a way to respond to the challenges of doing research in the twenty-first century digital environment.

Design/methodology/approach - This study examines the results of surveys conducted at the time of the research consultation and at the end of the semester when the students had completed the research needed for their assignments.

Findings - The study found that students are open to having a tool like Evernote used in the research consultation and that the tool can be helpful in organizing the information and search terms discussed in the consultation.

Research limitations/implications – Due to the size of the sample in the study, further research with a larger sample size should be conducted.

Practical implications – This paper outlines a promising method of collaborating and documenting resources in the research consultation.

Originality/value – Using the note-taking application Evernote in research consultations creates a more interactive service.

Keywords Academic libraries, Reference services, Research consultations

Paper type Case Study

Introduction

The proliferation of information sources and source formats in recent years has created a rich, but uneven, market-place for the researcher looking to find the best resources. The unevenness can be particularly challenging for undergraduate and graduate students still unfamiliar with the complexity, quantity, and formats of the research landscape (Magi and Mardeusz, 2013).

Students navigating multiple formats may also struggle with documenting different sources in an organized way (Smith, 2001). One form of instruction that librarians have used to assist students with these issues is the research consultation: a personalized, one-on-one session between the librarian and the student. Away from the busyness of the reference desk, the librarian can spend more time with a student in a quiet area, usually the librarian’s office or designated consultation area. Often, questions asked in this meeting format are more complex, and librarians can prepare and review sources prior to the actual meeting. Like preparing notes for a class presentation, a planned research consultation can help develop outcomes based on the users’ questions and
needs. In response to the complexity of information available to library students engaged in research, the author implemented the use of Evernote – the digital note-taking application – in research consultations as a way to help document and organize the consultation. This study explores the feasibility of using Evernote by surveying students’ experiences immediately after their consultation and with a follow-up survey at the end of the semester. Through an exploration of how Evernote can enhance the research consultation, this pilot study will add a critical component to scholarly discussion on the format and effectiveness of the research consultation.

**Literature Review**

Known variously throughout the literature as “the term paper clinic,” “term paper counseling,” “individualized consultation,” and “personalized research clinic” or “assistance,” the research consultation has been a key object of study since at least the 1970s (Morris, 1979). Earnest study of the research consultation (in the late 1970s and early 1980s) was accompanied by a renewed interest in bibliographic instruction. Since the 1980s, studies of research consultations have largely used a case-study model to describe the service through description, assessment, and surveys. Library research generally concludes that the advantage of the research consultation is its ability to answer complex questions in an individualized one-on-one setting. (Cassell and Hiremath, 2006, p. 340).

Although research consultations have been part of the landscape of library research for the last few decades, there have been notable gaps in the study of this issue at the institutional level. For instance, in his Association of College and Research Libraries (ACRL) 2015 Conference article, Devin Savage argues that the ACRL’s Academic Library Survey (now known as IPEDS) does not “gather statistics [for] research consultations”. Moreover, Savage points out that the Reference and User Services Association’s (RUSA) “guidelines for reference
work” ignore the research consultation (p. 578). One survey that has studied the research consultation, the Library Orientation/Instruction Exchange (LOEX) survey, was last completed in 1995, hardly reflecting the current impact of digital resources on libraries. The LOEX survey, however, does offer a unique multi-decade comparison (1979, 1987, and 1995) of the usage of the research consultation in academic libraries. The LOEX survey does not use the term research consultation but does describe and define individualized instruction using similar language: individualized instruction is “given individual[ly], usually at the reference desk, but also in offices and by appointment” (1995, p. 233). In the 1979 LOEX survey, to which 830 US colleges and university libraries responded, 173 (or 21%) reported using term paper clinics and 67 percent reported that they offered a form of individualized instruction to students (Kirkendall, 1980). In the 1995 survey, the use of the so-called “term paper clinic” had declined (only 11 percent reported using it), while 94 percent of libraries reported that they offered “individualized instruction” (Shirato and Badics, 1997). The decline of the “term paper clinic” and the subsequent increase in “individualized instruction” may reflect a shift in pedagogical approaches to one-on-one assistance from a focus on the individual assignment to a greater concern for research as a scaffolded process.

Yet, in their comparison of term paper counseling to group instruction, Donegan et al., (1989) found little difference between the two forms of instruction when it came to students’ comprehension of library research. Furthermore, they argue that consultations reach fewer students than classroom instruction and that they are the more labor-intensive and expensive option for bibliographic instruction. However, this study was completed in the 1980s and, therefore, does not take into account the onslaught of information that library students are exposed to via the Internet. Lee (2004) of Mississippi State University’s Libraries (MSU)
analyzed data that was gathered at an MSU reference department retreat in order to reassess the “procedures and performance expectations” of the research consultation in light of advances in digital technology. The department recognized the need to streamline the consultation process by identifying who was using consultations and by developing ways to improve outreach in this area. Yi in his study of research consultations also recognized that the old system of reference was outmoded for this digital environment and called upon librarians to incorporate information literacy instruction into research consultations as part of the solution:

Academic libraries have an urgent task to develop strong information literacy programs to help our students build the information competency skills needed to succeed in the information era. The traditional brief librarian-student encounter in reference and stand-alone bibliographic instruction programs can no longer meet the demands generated by the Information Age. In the past decade, library instruction has evolved from traditional one-shot session to multi-phased and multi-leveled information literacy program; from teaching specific tools and sources to teaching broader skills of information searching and evaluation. This is a good time for academic librarians to revisit another traditional library service, individual research consultation services, to see what role it plays, or can play, in assisting students to acquire much needed information literacy skills (2003, p 342).

Yi’s observations are echoed in other recent studies; for instance, Magi and Mardeusz (2013) corroborate Yi’s view with their study of consultations at the University of Vermont. They found that research consultations had increased because students were seeking more one-on-one assistance to deal with the digital research environment. The study pointed out that students benefited from the high level of interaction and collaboration that occurs in a consultation.
Reinsfelder (2012) performed a citation analysis to measure the impact of the consultation on undergraduates and concluded that the personalized format of the consultation helps improve the quality of the sources that students used in their research. Put differently, the one-on-one assistance provided in the consultation aids students in weeding out potentially inadequate source materials. In a similar study, Faix, MacDonald, and Taxakis (2014) analyzed the effects of the consultation on both freshmen and upper-classmen. Their research suggested that freshmen may actually receive lower grades on research assignments after a consultation because of the expansive scope of the resources presented to them. While freshmen students were often unable to discern which sources were best for their assignments, upper-classmen benefited from the consultation service.

Although many studies recognized that individualized instruction has changed over the years, few have examined what innovations had been implemented in the research consultation. One exception is the study by Meyer et al. (2010), librarians at the University of Denver, who created a research-center model that utilized the strengths and formats of their writing center. This model centered on creating an inviting space for the consultations with glass walls (made possible with a generous renovation grant), where students and librarians could meet. These spaces were equipped with dual workstations which allowed students to interact more fully with the librarian during the consultation. Additionally, the space helped synergize collaboration with the university’s writing center. The study found that students were responsive to the new set-up, some coming back for a second or third consultation. Another recent study that has examined innovations in information literacy instruction in the digital age is Beck and Turner’s *On the fly BI: reaching and teaching from the reference desk* (2001). The study focused on the use of note-taking in research consultations, but especially at the reference desk. They included a paper
template that was used to “close the gap” between what is learned in information literacy instruction sessions and what is asked for at the desk. Similarly, Swoger and Hoffman, in their article, *Taking notes at the reference desk: assessing and improving student learning*, discussed how their university’s reference departments created and used “reference notes” to organize reference desk interviews and to store information that could be useful for future interviews. These notes included prompts such as “project due date, research question, keywords/subject headings, databases/resources and other information (subject guides, strategies, types of sources, question for professor, etc.)” (p. 206). Swoger and Hoffman noted that the reference notes help the librarians to “think critically about their interactions at the reference desk…[and to] remember important sources” (p. 209). Moreover, the notes were given to students at the end of the reference session so that they had a record of what was discussed.

Evernote has been studied as a research tool in various academic units and disciplines, but only one study has considered its effectiveness as a tool for librarians. Soule and Kleen identified 15 inexpensive web 2.0 tools that could help faculty at universities create assignments and activities that engage the millennial generation. Included in this group of 15 was the Evernote application. In their study, Soule and Kleen surveyed faculty at a university described as mid-sized and in the southwest. Of the respondents, two percent of faculty reported using Evernote. The authors recommended Evernote for its ability to give students a way to capture “articles and images for future use” and for faculty to be able to find and tag resources at home and have them easily retrievable at work (Soule and Kleen, 2011, p. 30). Walsh and Cho (2012) studied using Evernote as an alternative to the paper lab notebooks that were most common in academic labs and Schepman, et al. studied the adoption of note-taking software by undergraduate students. They concluded that Evernote “would be useful in library work because
the web clipping function would provide a quick and easy way of storing the input and output of literature searches and scholarly records. This could offer potential quality enhancement in the scholarly aspects of academic work and a potential decrease in the risk of plagiarism or poor scholarship” (2012, p. 316). Burke, et al. (2013) used Evernote during a library scavenger hunt in which students teamed up to find information. While their study is important because it is currently the only article that explores the use of Evernote in an academic library setting and for information literacy instruction, they were ultimately more interested in the feasibility of using mobile technologies in routine scavenger hunts. Burke, et al. did not consider Evernote's efficacy in one-on-one research consultations. What all of these studies reveal is that personalized assistance clearly helps students who are increasingly confronted by more types of information than they can feasibly handle on their own. Indeed, several scholars agree that digital technologies such as Evernote can improve the quality of information literacy instruction by organizing the different types of sources that students will inevitably encounter. Thus, it is essential to re-assess the form and function of the research consultation in response to the proliferation of sources in the digital era.

What is Evernote?

Evernote is a multi-platform note-taking application available on the web, Windows 7, 8, and 10, Mac OSX, Chromebook, Android and Apple’s iOS operating systems. In addition to creating documents with its built-in word processor, Evernote captures and organizes sources such as voice recordings, webpages, PDFs, scanned documents, photographs, Microsoft Office files, and emails. Documents that are downloaded into Evernote from the Internet contain working hyperlinks, making it easy to consult URLs that are embedded in the documents. The Evernote program allows for webpage and PDF annotation, and uses optical character recognition (OCR)
to enable searching of text within documents/pictures that have been scanned using a smartphone or tablet camera. Sources can be organized into three levels in Evernote: notes, notebooks and stacks. The note, the most basic level, usually consists of one source. Examples of a note include a webpage that has been clipped or minutes from a meeting. Notes can then be organized into notebooks, and notebooks into stacks. In Evernote, clipping is defined as capturing a source’s content and format; once clipped, the source appears in a note with its active hyperlinks intact. Multiple notes are grouped together into notebooks, which can be added to continuously throughout the research process. Finally, groups of notebooks can be further combined into stacks. Evernote’s interface is easy to navigate; saved resources appear in a column on the left-hand side of the screen, while the note (the individual document or item) that is being viewed appears on the right. Because all notes are searchable, it is very easy to retrieve a note from any notebook. As a result of its clear interface and accessible features, Evernote can be learned quickly by students in research consultations.

In this study, notes primarily consist of resources found and documented during the research consultation. These notes are then organized into a notebook that is unique to each consultation. At the end of the consultation, the student’s Evernote notebook is shared with them via a web link provided in an email. The patron is not required to have an Evernote account to view the sources created in the shared link; however, to add to the notebook after the consultation they have to sign up for a free Evernote account. Resources in Evernote can also be shared via an in-built chat feature, although this function was not used for this study.

Why Evernote?

Swoger and Hoffman’s study revealed that keeping a running log of information that is used and consulted in reference interviews—in the form of “reference notes”—enhances the overall
experience of the interview for both the librarians and the students. This is one scenario in which Evernote would be extremely effective, since its primary function is to digitally organize various types of information so that they are easily accessible. Evernote also has other traits that help to enhance a research consultation. It is supported by both Windows and Mac operating systems, Android and iOS mobile software, it is cloud-based, and does not require the patron to create an account to view the resources documented in the consultation. Furthermore, the free version has all the benefits needed to document research and it enables students to join the research consultation notebook later if they decide to create an account and further collaborate with the librarian in a follow up session. Lastly, Evernote is easy to understand as the results of this study will discuss; on average it takes less than three-minutes to explain how Evernote works during the research consultation.

Methodology

Approach

The pilot study used a mixed-methods approach of both qualitative and quantitative assessment. During the second half of the spring 2015 semester, any student that used the research consultation service in the author’s office was eligible for taking the research consultation survey. For the purpose of this study, research consultations that happened over the phone, on the computer through chat or with distance education students were not included. Additionally, research consultations with faculty and staff were not included in this study.

A research consultation at Mississippi State University, a public university with approximately 20,000 students, is defined as either a scheduled or non-scheduled meeting requiring at least 20 minutes of interaction. The service is promoted at both the reference desk and in classroom presentations. Mississippi State students can request a consultation by
completing the “Request a Consultation” link found on the library’s main page under the icon, “Ask-a-Librarian.” Additionally, they can find information about the service from the reference desk, professors, instruction sessions, friends, or LibGuides. Students can also contact a subject-specialist librarian through email. Research consultations are a need-based service generated by students’ requests for more in-depth assistance; the pilot study thus used a convenience sample of students who requested a research consultation with the author in person. Because of the limited amount of research consultations in a given semester, the sample size was small (the sample size reflected 13.7% of all consultations given by MSU librarians in spring 2015). The results cannot be generalizable to other college students and only tentative trends can be drawn from the data.

Data Collection

The study collected data using a Google forms survey that was administered right after the research consultation concluded. The author would leave the room while the patron took the survey on the computer. An end-of-semester survey was emailed to all the students who agreed to take the initial survey during the last week of the semester. The use of two surveys was an attempt to capture the experience of the patron both at the time of the research consultation but also at the end of the semester once their research assignments were due. This method helped to better assess students’ usage and understanding of Evernote beyond the initial introduction in the consultation. Another survey tool that was used to assess the patron’s usage of the shared Evernote notebook was the link provided in the email. All links provided to students used a Google URL shortener. This enabled the author to see if the students actually clicked on the email link after the consultation.
The students in this study would often send an email to schedule a consultation. The author would then perform a short reference interview over email to find out additional information about their assignments and to inquire about what sources, if any, they had already consulted; otherwise, the initial reference interview would take place in the librarian’s office. When the student(s) responded to the reference email interview, the response would be “clipped” (transferring of the text and any attachments of the email to a note) using Evernote and the author would make their questions and goals the main note in the student’s notebook. The meeting would thus center on their email reference-interview objectives.

(Insert Figure 1)

The above screenshot (Figure 1) shows what the shared Evernote Notebook looks like from the students’ web link. Each box in the middle column represents a note. When a note is clicked on, it appears in the third section (on the right).

Respondents Profile

(Insert Figure 2)

Ten students took the survey. Thirty percent of the respondents classified themselves as juniors (n=3), fifty percent were seniors (n=5) and twenty percent were graduate students earning their master’s degree (n=2). Though the author’s specialty is business, the student population was not necessarily all business majors. All ten students who were asked if they would take the initial survey at the time of the research consultation completed it. The end-of-semester survey was completed by seven out of the ten students who took the initial survey.

Results

The results of the first survey indicated that all ten participants were new to the research consultation service. Three of the students had heard of the Evernote application, but only one
had ever used it. This limited data suggests that the branding and marketing of Evernote as a tool for research among college students has a lot of room for expansion. As the results below suggest, students learn how to use Evernote quickly and find it useful for organizing research. The one student who reported using Evernote was asked in the survey how often he or she used Evernote and to rate the frequency using the Likert scale (0-5). A 0 represented never, while a five represented every week or more. The student indicated that she or he used it every week (5) and reported that it was his or her primary tool for organizing and doing research. This student requested that the resources be shared in a notebook so that he or she could edit them and bring them into his or her own Evernote account.

The initial survey focused on how students organized their research at the time of the initial consultation. Each of the students used unique organizational methods:

- notebooks
- Through screenshots of websites and pictures and then organized into folders in Evernote
- write notes
- in a word document and notecards
- I usually don't
- printouts
- Just by saving it in my "favorites"

These results indicate that there is not a single, popular method of organizing research.

The end-of-semester survey assessed the impact and perception of Evernote; in this follow-up survey, the following question was asked: After going through the research consultation with Evernote, did you use the link that was sent in the email linking to the sources? All seven students who took the end-of-semester survey indicated that they did. This was also
confirmed by the Google URL shortener; all links provided in the email that were sent out after the consultation were clicked on at least once. Question 2 in this survey asked: Did you find the way Evernote organized and clipped articles useful? Five students responded to this optional open-ended question. Responses were all very positive in nature: four responding with a yes and one describing it as “extremely” useful. The end-of-semester survey also revealed that 40% of the students created an Evernote account after the consultation.

Discussion

The results of the two surveys have several implications. To begin with, several students were potentially interested in using Evernote in both their current research and in future assignments in order to organize their research more effectively. As mentioned above, each student organized his or her research differently; some preferred written notes while others used techniques such as saving the results to their browser’s favorites section. Students in the consultation often expressed amazement that Evernote was able to capture analog sources, notes, and resource on the internet and in databases. This may be the reason why Evernote was adopted by some students after they had used it in the consultation. It is important to remember that students were not required to create an Evernote account to view the results of the consultation.

Three of the students followed up with additional questions for their research projects. In one case, a student had changed the scope of his or her topic slightly and wanted to work on developing some additional search strategies. Because the consultations were documented in Evernote it was easy to revisit the notes and discussions that were recorded in the first consultation. The students with laptops were also able to interact during the consultation by going into the shared notebook. As a result, we were both able to add keywords used, ideas discussed, and sources that could prove to be beneficial. Having the notes from the prior meeting...
easily accessible also enabled the librarian to quickly revisit the details that were discussed sometimes weeks prior to the second consultation.

The data resulting from the use of the URL shortener demonstrates that students continued to refer back to the sources after the consultation. This kind of analysis could also be used as an effective measurement for librarians looking to assess the usefulness of the research consultation. Often when librarians provide students with resources, it is difficult to measure if the patron actually follows through with the resources discussed. By confirming that the links were clicked on, we can conclude that students have at least reengaged with the sources that were discussed.

The feasibility of using Evernote in the research consultation is promising based on this pilot study. Students reported an ease in understanding how the Evernote application worked even though only one of the participants was previously familiar with the application. Additionally, students reported a positive experience in the research consultation and that they would use the service again. Moreover, when examined in light of the limited studies on innovation in the research consultation, namely the study by Meyer et al. the Evernote model study produced some of the same beneficial student-centered results. Meyer et al. noted that the collaborative interaction created by having dual workstations (a keyboard and mouse for the patron to also use) was a positive enhancement (p. 66). In the case of Evernote, the student and librarian were also able to collaborate on identifying keywords, search strategies, and databases, while documenting the process in Evernote. The use of Evernote could easily complement a writing-center model by enhancing where and how the interaction is documented and organized or it could simply enhance a traditional consultation at a library where the patron meets at the librarian’s office, as was the case in this study. Either way, Evernote creates and stores a research
narrative that students can add to, refer back to, and learn from as they continue to develop as researchers.

**Conclusion**

Far too often, the consultation service has been neglected as a subject of research and pedagogical development. There needs to be further examination, and reporting, of what is accomplished during the research consultation; this includes testing innovative ways of conducting the research consultation through assessment, national surveys, and pilot and case studies. Again, as Devin Savage (2015) pointed out in his conference article, there have been too few surveys of the scope and contents of research consultations at the macro-level through professional organizations such as ALA. By giving this topic the priority status it deserves, the library community would benefit from gaining a sense of how consultations are conducted and who is currently employing new technologies to improve the service.

This pilot study assessed the feasibility of using a note-taking tool like Evernote in the research consultation. Further studies should explore note-taking tools as a way to collaborate with students before, during, and after consultations and could also consider the impact of note-taking tools on information literacy instruction during classroom sessions. Moreover, further research should be conducted in order to examine the longitudinal effects of using note-taking tools to teach research skills. Overall, as the information landscape continues to expand, it will be necessary to consider more deeply how note-taking tools can improve information literacy instruction.
References


**Appendix: Survey at the time of the Research Consultation**

A * after the question means the question is required to complete the survey.

**Q1: What is your patron status?**
- Freshman – Undergraduate
- Sophomore – Undergraduate
- Junior – Undergraduate
- Senior – Undergraduate
- Masters – Graduate
- PhD – Graduate
- Non-degree student
- Community Member
- Other

**Q2: Was this your first research consultation in the library?**
- Yes
Q3: Have you heard of the application Evernote prior to your consultation?*
  o Yes
  o No
  o Unsure

Q4: Have you used the application Evernote?*
  o Yes (directed to Q5)
  o No (directed to Q6)
  o Unsure (directed to Q6)

Q5: Do you still use Evernote*
  o 0 Never
  o 1 Hardly Ever
  o 2 On the Occasion
  o 3 Sometimes
  o 4 Most weeks
  o 5 Every week or more

Q6: Was the use of Evernote in the research consultation easy to understand?*
  o Yes
  o No
  o Undecided

Q7: How do you currently organize your research?
(Please write your answer below)

Q8: Would you be interested in learning more about the Evernote application?
  o Yes
  o No
  o Maybe

Q9: Any comments or observations?
(Please write your answer below)

End of Semester Survey:
A * after the question means the question is required to complete the survey.

Q1: After going through the research consultation with Evernote, did you use the link that was sent in the email linking to the sources?
(Please write answer below).

Q2: Did you find the way Evernote Organized and clipped articles useful?*
(Please write answer below).
Q5: How likely would you use the research consultation in the future?*
Scale 0-5 0Never - 5 Very Likely

Q4: After using the Evernote application, did you end up using the application?*
Help text provide: i.e. Creating an Evernote account, exploring the application.
  o  Yes
  o  No

Q5: Would you be interested in a workshop on Evernote?*
  o  Yes
  o  No
  o  Maybe

Q6: Did you find the research consultation helpful?*
  o  Yes
  o  No

Q7: Thank you for taking the survey, do you have any other comments?
(Please write answer below).