

# MAKING THE MOST OF TEACHABLE MOMENTS: LIVENING AND ENHANCING THE VIRTUAL REFERENCE EXPERIENCE

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## INTRODUCTION

Virtual reference services, including e-mail, chat or IM, and for some, text messaging, are widespread and increasingly imperative in academic libraries. These services provide a method of contact for users who either physically cannot come to the library or are simply more comfortable requesting help via virtual means. As virtual reference is incorporated into the menu of reference services, it is important to consider how the role of instruction in reference translates to the virtual medium. Although virtual reference interactions possess inherent challenges and barriers between the librarian and user, technology is increasingly available to not only combat these challenges and break down these barriers, but also to help make the most of teachable moments, liven and enhance virtual reference interactions, and foster an instructional experience that accommodates multiple learning styles.

## INSTRUCTION IN REFERENCE

Reference and instruction are not mutually exclusive and teachable moments arise with every reference question asked. Elmborg (2002) identifies the moment a student approaches the reference desk with a “genuine question” as an opportunity to teach and says “[r]oughly defined, a teachable moment is one in which the student arrives at a position where he or she is open to teaching” (p. 461). Desai and Graves (2008)

expand on this further, noting “[r]eference queries...catch researchers at their point of need and provide opportunities for one-on-one personalized instruction and hands on learning” (p. 242). Reference is instruction and virtual reference is no exception. Some scholars even identify virtual reference as an opportunity “[t]o align reference service with the teaching and learning missions of the libraries and their overarching institutions” by “[learning] instructional strategies and [using] them in the provision of digital reference services” (Oakleaf & VanScoy, 2010, p. 385).

Although opportunities for instruction in virtual reference are evident, questions asked virtually often require a level of instruction where text is not enough and more than one learning style should be accommodated. For the purposes of this examination, three learning styles are considered: visual, auditory, and kinesthetic. Visual learners learn best by seeing. They are well served by visual demonstration. Auditory learners ideally need to be able to hear what is being taught. Kinesthetic learners must do. They thrive on active, hands-on learning. Virtual reference interactions by nature do not address any of these learning styles. To make the most of teachable moments and engage users in learning during virtual reference interactions, librarians must look at ways to address the different learning styles users’ may possess.

## BARRIERS TO PROVIDING INSTRUCTION IN VIRTUAL REFERENCE

Besides inherent difficulties in providing instruction, there are a number of barriers associated with virtual reference interactions. Barriers are well-documented in the literature and familiar to any librarian who has worked a virtual reference shift, with the overarching issue being lack of ability to visually demonstrate. Communication in general can be challenging. It

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is often labor intensive to conduct a reference interview, if one happens at all. Diagnosing technical problems requires asking many more questions than in a face-to-face interaction, as the librarian cannot see the users screen and vice-versa. Providing instructions in text is an endeavor compared to in-person conversation. Further, the absence of body language and facial expressions lends to a lack of personal connection. When this all comes together, virtual reference interactions generally take longer, which can be frustrating for both parties. Thus, virtual reference interactions often require a different approach than those occurring in person and harnessing teachable moments poses a significant challenge. Fortunately, an increasing number of flexible and free technologies make it easier than ever to liven and enhance virtual reference interactions, employ instruction, and engage the varying learning styles of users reaching out from a distance.

## LIVENING VIRTUAL REFERENCE FOR MULTIPLE LEARNING STYLES

Concluding their study on presence of instruction in in-person and virtual reference interactions, Desai and Graves (2008) state: “[a]s reference mediums evolve, librarians will not only have to learn to recognize the ‘teachable moment’ but also to identify strategies to maximize learning potential in each medium” (p. 254). Email and chat represent an evolution in reference that is not going away. Oakleaf and Van Scoy (2010) provide eight strategies for fostering a learning experience during virtual reference interactions. All eight are excellent best practices, but two stand out in the context of this discussion, namely: “Show, Don’t Tell” and “Let Users Drive.” The authors state “[l]ibrarians who use technology to engage students using visuals and real-time interactions achieve the important goal of addressing multiple learning styles” (p. 383). Using screencasts, screen sharing, and web conferencing software, librarians can meet this challenge and simultaneously break through many of the barriers to providing instruction in virtual reference interactions.

### On-the-Fly Screencasts

By creating screencasts, also known as screen captures, on-the-fly, librarians can break down the barrier of lack of visual demonstration inherent in text-only asynchronous and synchronous virtual interactions. Email questions regularly lend themselves well to on-the-fly screencasts: demonstration often takes less time than writing text instructions and can meet needs of visual and auditory learners. For synchronous virtual reference interactions, these screencasts may be used either to quickly demonstrate or serve as a take-away for users to illustrate multi-step tasks that may be difficult to remember. Mikael Jacobson (2011) uses on-the-fly screencasts to “[give] patrons a permanent record of the [reference] interaction,” and notes “[s]creencasting to an audience of one is even more useful for in-depth research questions that call for a detailed and nuanced search strategy” (p. 142). Further, creating a repository of on-the-fly screencasts made for more general tasks facilitates repurposing. There are a number of free software options for creating on-the-fly screencasts. The functionality of this

freeware varies, but there is an option to suit most everyone.

- **Screenr** ([www.screenr.com](http://www.screenr.com)) is a no download option that runs on Java. Screenr records within a frame, not the entire screen. Before recording, resize said frame, move it around, and select a microphone for audio. The frame can still be moved while recording and there’s an option to pause and take a break. The software allows for a five minute recording, but you must login to “publish” and share it. A separate Screenr account is not required; simply login with Google, Facebook, or Twitter credentials, among other options, and create a Screenr username. Once published, share the screencast via link, Facebook, or Twitter, upload it to YouTube, download it in MP4 format, or take advantage of the embed code.
- **Screecast-o-matic** ([www.screencast-o-matic.com](http://www.screencast-o-matic.com)) works similarly to Screenr, does not require a download, and runs on Java, but is slightly more robust. Like Screenr, Screencast-o-matic records within a frame that can be resized before starting and moved around while recording. One can pause and restart, but also backtrack and record over previous sections. There is a 15 minute time limit and multiple export options (YouTube, MP4, FLV, or AVI). With a free account, upload to SOM, which includes a permalink, an embed code, and an option to add Notes that appear at certain times in the recording. Screencast-o-matic is excellent for those wanting an on-the-fly screencast option that also offers some editing features.

These are just a couple of many options. They were chosen for the range of functionality and their ease of use for making quick, on-the-fly screencasts. Additional options include **Jing** (<http://www.techsmith.com/jing/>), **GoView** ([www.goview.com](http://www.goview.com)), and **ScreenCastle** ([www.screencastle.com](http://www.screencastle.com)), among others.

### Screen Sharing

Synchronous virtual reference interactions held over chat are especially ripe for fostering learning and making the most of teachable moments. By utilizing screen sharing software, librarians can meet the needs of visual and kinesthetic learners. Screen sharing software allows for near replication of an in-person interaction in the virtual environment. As with free screencasting software, free screen sharing software varies in functionality, but visual learners are immediately accommodated as the librarian is able to share their screen and visually demonstrate the task or skill at hand. Some screen sharing software also allows for the presenter to share control with the user, which works well for kinesthetic learners who require a hands-on environment to learn effectively. Though not as widely available as screencasting software, there are a number of screen sharing options to take advantage of teachable moments:

- **join.me** (<http://join.me>) is a simple, free, no registration, web-based tool for quick screen sharing. Go directly

to the website and click “share.” A download is required for the presenter, but can be installed to one’s desktop to start future meetings. Share the provided join.me URL via link or email and the user can see the presenters screen in their web browser. join.me features an internal chat feature and the ability to share control. It is an excellent tool for replicating the in-person reference experience, with the potential to cater to both visual and kinesthetic learners.

- **ShowMyPC** ([www.showmypc.com](http://www.showmypc.com)) is free screen sharing software with no download, registration, or login required. Both presenter and user must run the appropriate .exe file off the website’s homepage (show for the presenter, view for the user). As the presenter, upon running the file, simply click on ShowMyPC, and share the provided password with the user. Full Control can be given to users, as well. This is another solid option, though more cumbersome than join.me.
- **Mikogo** (<http://www.mikogo.com/>) is free screen and application sharing software. Download and an account are required for the presenter, but not the user. Once a session is started, the presenter can send an email to invite a participant or copy and share the information. The user must go to the Mikogo website, enter the session ID, and run an .exe file to join. The software allows for switching presenters. Though a little clunky to start, Mikogo has fairly robust functionality.

A final option is to take advantage of the screen sharing option during video chat using **Skype**. This, however, is even more onerous than ShowMyPC or Mikogo. There truly is no product comparable to join.me in its applicability and efficiency for use during virtual reference interactions.

### **Bringing it all Together with Virtual Research Consultations**

Any library user can take advantage of virtual reference services. For online and distance students however, contacting a librarian through virtual reference is often the only means they have for getting help. Keeping this particular patron base in mind, it is imperative to work towards providing equal levels of service. To that end, virtual reference services should mirror the elements of in-person reference services as much as possible. This does not just mean equal access to a librarian, but also equal opportunities for learning.

Beyond enhancing asynchronous and synchronous virtual reference interactions to engage users, liven, and enhance teachable moments, there is the thought of research consultations in a virtual environment. Research consultations are regarded in the literature for their value as an instructional venue, but to date have been restricted to in-person services. Free web conferencing software is an opportunity ripe for research consultations with students who cannot come to the physical library for one-on-one, in-person consultations. Most web conferencing software has a variety of features to facilitate effective teaching and the

accommodation of multiple learning styles. These features often include text chat, audio (usually through over Voice-Over-IP), presentation sharing, application/screen sharing, an interactive whiteboard, video, and the ability to share presenter privileges. By maximizing the functionality of web conferencing software, librarians engaging in a consultation can swiftly accommodate auditory learners by speaking to one another, visual learners by demonstrating skills through application or screen sharing, and kinesthetic learners with the combination of application or screen sharing and allowing students to get hands-on experience through sharing presenter privileges.

In Fall 2010, the Distance Learning Librarian at Norwich University began offering Virtual Research Consultations by appointment for online students. Virtual Research Consultations are held in an **Elluminate vRoom** (<http://www.learncentral.org/user/vroomreg>): a free web conferencing room for up to three people, including the presenter. Elluminate vRooms include all of the aforementioned features, provide a permanent room URL, and are an optimal collaborative environment. The user simply needs the presenter’s vRoom URL to enter. To facilitate scheduling, the Librarian has experimented with two scheduling tools: **Jiffle** ([www.jiffle.com](http://www.jiffle.com)) and **Tungle.me** ([www.tungle.me](http://www.tungle.me)). Both integrate with Outlook or Google Calendar, allowing the facilitator to show times available on a public calendar, which students can visit to select a time for an appointment. Utilizing scheduling software eliminates the run around of trying to find a time that works for both parties. As of this writing, nearly 30 students have made appointments.

There are web conferencing options other than Elluminate, which does have the disadvantage of not being web-based: both the moderator and participant must allow time for a small Java download. Additional free options include:

- **Big Marker** ([www.bigmarker.com](http://www.bigmarker.com)) is a fairly new, web-based option with no limits on number of participants. It has impressive functionality for a free product including: interactive white board, document sharing, screen sharing, video, and making anyone presenter. Users must be given a Meeting ID and go to the Big Marker website to join. This free, collaborative environment is well worth exploring.
- **Adobe ConnectNow** (<https://acrobat.com/welcome.html>) is a free version of Adobe Connect, much like the Elluminate vRoom, which allows for two participants including the presenter and provides a permanent meeting URL. ConnectNow is completely web-based, but does require the presenter have an Adobe ID. This software includes all of the aforementioned essentials, though an add-in must be installed by the presenter to share a desktop or application. Users need only the meeting URL and Flash enabled to attend.

A final alternative, as well as a nice back up to have, is to simply use screen sharing software. Although screen sharing will not have the piece for auditory learners unless used in conjunction with phone, both visual and kinesthetic learners can

be accommodated.

## CONCLUSION

As virtual reference services continue their permeation of libraries' menu of reference options and distance education becomes a bigger focus at an increasing number of institutions, an emphasis on equality of services between in-person and virtual interactions is essential. It is natural to teach during in-person interactions at the reference desk, but during virtual interactions, making the most of teachable moments takes a bit more foresight. With the free and increasingly accessible tools discussed, librarians can better replicate the in-person experience in the virtual environment, break down barriers between themselves and users, and meet the needs of multiple learning styles.

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## FURTHER READING

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