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Time Zones, Screencasts, and Becoming Real: Lessons Learned as a Distance Librarian

Rebecca Hedreen
Southern Connecticut State University

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Time Zones, Screencasts, and Becoming Real:
One Distance Librarian's Experiences and Lessons Learned

Rebecca Hedreen

Rebecca Hedreen has been Coordinator for Distance Learning (and a Reference Librarian) for Hilton C. Buley Library at Southern Connecticut State University for 7 years. She received her MLS from University of Rhode Island, and has an MA in Education with a specialization in Adult Education and Distance Learning from University of Phoenix. She is an advocate for appropriate technologies and techniques in online education and library services, and for the use and creation of open access resources in higher education.

Abstract

The primary job of a distance librarian is to ensure that students and faculty in online classes can get to the information they need, wherever they are and whenever they need it. This requires understanding the habits of learners, the methods of teaching, and how learning works in general. This article provides examples from the varied experiences of one distance learning librarian of how that knowledge can be applied to library services with students who are not physically present, whether they are truly "distance" students or students working in their dorms, at home, or on campus after library hours.

Keywords: distance library services, distance learning, web 2.0, user–centered

Introduction

The library literature abounds with articles, presentations, and books on using various sorts of distance learning tools and techniques for library services. The *5th Bibliography of Library Services for Distance Learning Resources* from the Distance Learning Section of ACRL is full of articles that discuss how a particular type of tool, for example, webchat, can be used for library services, with examples of successful, and sometimes unsuccessful, use in various types of libraries. Rarely, though, is there any discussion of when to use such tools, or any theoretical discussion of why some tools work better than others in different situations. New discussion and new research are needed into both how and when to use different types of tools and techniques.

Three anecdotes, first described briefly and then analyzed at length, provide examples of lessons learned by one distance learning librarian, Rebecca Hedreen, negotiating different time zones, experimenting with screencasting and becoming real for her patrons.

Time Zones

In an independent project (not representing her own institution), Hedreen volunteered with the Second Life Library (Hedreen et al., 2008; for a more recent view of librarianship in Second Life see Cote et al., 2012). She used time allotted by her institution for research and professional development to log into the virtual world of Second Library during normal business hours, typically in the morning, when few other professional librarians working in the United States were likely to be in the virtual world. She was able to regularly chat with Europeans who had entered Second Life during their own time in the evenings and Brazilians, who like herself, were able to explore Second Life during regular business hours. It was while she was in Second Life one morning chatting with a Brazilian librarian that she realized why few students at her institution ever used chat, instant messaging, or Skype with their librarians. Synchronous communication requires that you be online at the same time. Recognizing the differences in schedules and time zones becomes critical when deciding on synchronous vs. asynchronous help services.

Screencasts

Sometimes a promising technology actually forms a mismatch between the choice of technology and the reality of the learning environment. When using screencasts for distance instruction, Hedreen discovered that screencasts fail as a primary method of online instruction, because they don't allow easy review of step–by–step instruction.

Becoming Real

The third lesson learned suggests that sometimes the most effective technique may be the one that requires the least amount of effort. When she first began her job in serving students working remotely, Hedreen eagerly signed up for half a dozen communication services, like chat, IM, and VOIP. She designed an informational website describing the services she and the library offered to online students and faculty. She directly contacted as many of those online students and faculty as she could, getting herself on mailing lists, asking for links to be inserted into syllabi and online courseware, and generally trying to get her name out to everyone who might need it. Nonetheless, the one thing she did that elicited enthusiastic feedback the most often was putting her picture up on her website. Relieved students and faculty were delighted enough to comment often: "You are real!"

Time Zones

The anecdote describing the experience of being a librarian in Second Life provides an important lesson about distance learning and the realities of time zones and

schedules. As a virtual world, Second Life provided an opportunity to explore librarianship separated from content. Librarians using Second Life might have uploaded materials and could link anywhere on the internet, but for many Second Life librarians it was their first experience of doing library–like work in an environment where they, or the organizations they worked for, had no control over what content was available. Librarianship in Second Life is really about connecting, user to experience, librarian to librarian.

During morning hours on the east coast of the United States, few east coast librarians were able to be in Second Life on a regular basis. Europeans might be on, at least those who logged on during their evening hours. The difference in time zones was negated by the differences in schedules. The Brazilian librarians Hedreen interacted with had schedules compatible with hers and were working in similar time zones. In contrast, most of the online students she dealt with as a distance librarian were local, so their time zones were the same, but they were also working similar hours to hers so they were not doing class work when she was working. She found that the only uses she had of her various real–time communication services available through Second Life were the occasional quick chat during lunch or breaks, and messages from a few international students in completely different time zones. In other words, in order to interact online with people in real time, you have to be online at the same time (Kayongo & Van Jacob, 2011).

The schedule (adjusted for time zones, if necessary) when students (and faculty) are online should be a primary factor in determining the priorities for library service types, especially reference and instruction. In distance education theory, a matrix of place and time can be determined to help define different kinds of classroom setups (Lehman, 2007). A similar matrix can be constructed for library services (specifically, in this case, reference and instruction), as in the table below.

	Same Time (Synchronous)	Different Time (Asynchronous)
Same Place (Local)	Reference desk, appointments, traditional instruction sessions, and orientations	Handouts, signage, and practice exercises like scavenger hunts
Different Place (Distant)	Assistance by phone, chat, IM, SMS, and virtual conferencing	Assistance by email, "telephone tag," subject guides and tutorials, recorded podcasts and screencasts

Figure 1. *Reference and Instruction Services by Time and Place.*

Understanding which category online students and faculty fall into means understanding how the online programs at a particular institution work. Are classes held at specific times, with live broadcast lectures or discussions? Or are

most classes organized around recorded lectures and readings, with students responding in online discussion forums over the course of time as their personal schedules permit? Do most students visit campus regularly, either for "hybrid" classes with scheduled on campus meetings or because their entire course load is not online? Is a "residency" required each semester, each year, or at the beginning of the program, when a library orientation or instruction session could be scheduled?

Some online programs are online for scheduling convenience and not primarily to reach geographically distant students. The students may live near the campus and visit regularly. It could make sense, for these distance students, to request that they visit the library. This will make the delivery of hardcopy resources much easier. However, if the distance program is intended for students living far from campus and does not require frequent trips to the college, then true distance services have to be developed, such as scanning locally held hardcopy, developing online instruction, and providing easy communication services. "Online" education is not necessarily the same as "distance" education, and knowing what type of program is in existence or is being planned can save a tremendous amount of work for a library.

If the library plans to offer synchronous help services (reference), these must be coordinated with when the users are online. Users can be surveyed as to when they are mostly likely to be using the online library or needing online library help. Users may respond that they need help nearly any time. Nevertheless, it is more likely that few of them will be online doing class work during regular working hours, but are more likely to be online during the late evening and during the night. One demographic, parents, are likely to be online during the early morning and a fair number of others are likely to log on during lunch time.

Timestamps on email questions and other technologies will give a clue as to when most distance learners are doing their work. Hedreen's institution was able to determine from the logs of its learning management system that the system was used the least during Wednesday morning, so that was when they scheduled weekly downtime for several years. When schedules don't permit synchronous library help, best efforts should be put into asynchronous reference. While library patrons may generally prefer synchronous interactions (Robertson & Granfield, 2008), changing a librarian's title and shift to that of the Overnight Librarian may not be a viable option.

Asynchronous help can be the base for distance library services: tutorials, guides, knowledge bases, and asynchronous communication systems like email (Johnson, Trabelsi & Fabbro, 2008). Hedreen found the most used communication tool to be email. It is also one of the most flexible and versatile tools. The librarian can send text, links, and images. She can detail step–by–step instructions, or send simple, quick replies. She can set up appointments for phone, video conferencing, or in–

person visits, and she can easily forward messages or copy people if the situation needs additional input. Since the librarian is not tied to a desk, she can answer from a variety of places and devices. Email can even simulate real–time conversation if both parties are online and answering quickly. On the patron end of the conversation, email can be saved for reference, copied, forwarded to other students or faculty, and simple forwarded emails (those with minimal editing) are "branded" with the librarian's contact information for additional help. Additionally, even when a librarian works synchronously with a student (phone, in person, chat, video conferencing) she may often end up emailing something to them. Email, discussion forums, and many social networking sites can all be used asynchronously and pretty much using the same standards (Croft & Eichenlaub, 2006).

Finding out more about how online instruction works can also help provide faculty and students with better library support. For instance, subject guides can play an important role (Roberts & Hunter, 2011; Morris & Del Bosque, 2010.) A subject guide is an example of directed access. The user is directed to particular resources. However, not all subject guides take full advantage of database and OPAC linking features. Specific citations can usually be linked directly to full text (via full text databases, online subscriptions, or online reserve systems) or catalog records. It is often possible to link to searches as well; for instance, subject heading or author searches in OPACs and keyword or subject term searches in article databases. The mechanisms are specific to each ILS or database.

Semi–directed searches are searches where the user has an opportunity to add input to the search. This could take the form of a search box or widget in which the user can enter keywords, but there is coding behind the scenes that passes the search to a specific database and/or add additional keywords or limiters. In some cases, it is possible to create a link to a partially filled advanced search box. Look for features to 'share/bookmark this search', permalinks, or just try the address bar URL in a different browser[1]. Research on the use and effectiveness of search boxes and search links on library websites seems to be a wide–open field.

Directed links and searches can be an important instruction technique, moving from an extremely specific and controlled exercise to a more fluid and natural situation. Programs with highly specified readings and mostly instructor led research are well served with specifically directed links. As student work gets more independent, so should the library linking. Faculty may be advised to provide the first readings directly in the learning management system (LMS), then mix some of the next readings with provided and direct full text links, then all links. For a more advanced assignment, a link to a search could be provided with the instructions,

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[1] Pasting the URL into a different browser will expose many URL's as unusable due to session IDs or cookies. Another method is to restart the current browser and wait 24 hours before testing the link.

"Find an article on this week's topic and summarize for the class. Here's a search to get you started, but you can modify this search or try a different database." By the end of the class, students should be more comfortable with entering the databases themselves and searching. During Hedreen's time as a student at University of Phoenix, courses (which were all developed by a team of instructional designers and were very standardized) used this technique. The reading list for each week consisted of set of specific links, then a link to a general search in one of the databases. Students are able to use the search as is, or add their own search terms to narrow or change the search once in the database.

Most online programs use some sort of LMS and there is usually some way of embedding a librarian within the course (Becker, 2010). In some systems this may take the form of the librarian being added as an auditing student. As an auditor the librarian has the privileges of any other student, but she is not added to the grade book. In other systems, there may be roles (either as default or created by an administrator) specifically for librarians or guest instructors. Different roles within the courseware provide different options and responsibilities, such as the ability to start a new discussion thread. Higher roles improve the options for the librarian, but may require significant work ahead of time for the courseware administrator.

Regardless, the most important aspect is being able to interact with the students within the course itself. The librarian may create or request a discussion thread for asking library related questions, and keep a general eye on the topic under discussion and on the assignments. She can then answer direct questions and post useful resources for the topics. It is not necessary for the embedded librarian to read every student post or respond to discussions or assignments as a class participant. This allows her to be present in the class without taking up too much of her own time. It is also helpful to make use of the notification system for new content that may be a feature of the LMS. This allows one to get an email message when someone sends her a message in the LMS or when new content is posted by the professor. Notification features vary widely among learning management systems, another reason that librarians should get familiar with the system(s) used at their campuses. How much time and effort the librarian will be spending in a particular class should be negotiated with the instructor ahead of time. There are many different models, with varying time requirements (see Becker, 2010; Herring, Burkhardt, & Wolfe, 2009; Konieczny, 2010; Matthew & Schroeder, 2006; Tumbleson & Burke, 2010, as examples).

Screencasts

Showing is better (and often easier) than telling (Small, 2010). Anyone who has tried to talk someone through a complex user interface over the phone knows how hard it is to describe something when you can't be sure what the other person is looking at. When screencasting software became cheaper and easier to use, it

seemed like a miracle for library instruction (Sparks, 2010). Librarians have been enthusiastic about the idea of using screencasts to create short, concise videos showing specific processes. But those who have may have still found themselves talking people through processes on the phone and over email, trying to figure out what was going wrong.

Hedreen was faced with just this quandary, and found that the problem with using screencasting for distance instruction lay with the linearity of video. With a screencast video, the viewer starts at the beginning and watches to the end. He may skip bits, or try and go back to a previous step, but this is hard to do with most video. That is not generally how a librarian is likely to teach someone something. A common pattern in library instruction is for the librarian to show the whole process, but then go back and walk everyone through the steps, dealing with problems as they arise. She may often go back multiple times to redo certain steps when something does not work as expected.

One possible solution is to create short screencast videos showing the entire process in question: finding a book in the catalog, searching for a research article, etc. Then a combination of text instruction and screenshots goes step by step through the process. These textual instructions are what most students will go back to when something goes wrong. They can read and reread the instructions as many times as necessary and focus on the exact step that is causing problems, but will still have the video to show them what ought to be happening. The method also makes it easier to diagnose problems. "OK, did you get through step 5?" "That's when I didn't get any results." "Are you sure you put the dates in the right boxes, like in the picture?" "Oh, wait, I see. Those boxes!"

That said, screencasting can be a valuable tool (EDUCAUSE, 2006). It really does show in a way that nothing else does outside of in-person demos, and the patron can review a screencast over and over. Screencasting can be used to answer a specific reference question that comes up repeatedly at the reference desk (Jacobsen, 2011). This can be a great way of developing a library of short videos for future reuse and expansion, possibly in conjunction with a knowledge base like SpringShare's LibAnswers (http://springshare.com/libanswers/).

Podcasts have also gained popularity as a distance learning tool (EDUCAUSE, 2005). Podcasts provide a way of talking someone through a process or procedure (Berk, Olsen, Atkinson, & Comerford, 2007). One disadvantage of using podcasts for instruction, though, is that it may be difficult to get the timing right, since you cannot know how long a process, like search results loading, is going to take. That means that your learner is going to have to start and stop the audio recording as they wait for things to happen on their end. Or the opposite can happen, and the learner is waiting for you to get to the next step, while you are describing something that has already happened. Another problem with using podcasts for instruction is

that so many of the things librarians are trying to teach people are visual (such as web navigation and interfaces). Audio recordings may give us the worst of both worlds, too much linearity and the difficulties of trying to describe in words something that is happening visually. Additionally, avoid the "talking head" video, essentially a podcast in which you can see someone's mouth moving (Nielsen, 2005). The video doesn't contribute anything, and simply uses up bandwidth. There might be a few instances where a video introduction is useful ("Hi, I'm your librarian"), but as a general rule, avoid the talking head unless you are going to be physically doing something.

One of the reasons that both audio and video recordings have been trumpeted for online instruction is the belief that they cater to different learning styles (Mestre, 2010). There are many schemes for learning styles, but some of the most common are variations on the Visual/Audio/Reading/Kinesthetic categories (Fleming, 2011). The basic premise is that different people take information in better in some formats than others. Some will learn well from a picture or diagram, others by listening to a lecture or instructions. Others like to sit down and do something, with or without instructions. There are other schemes, relating to categories like detail vs. big picture, or practical vs. theoretical, and much debate about their validity (Dembo & Howard, 2007).

The important thing about any of these schemes is that they are preferences. If you test out as a kinesthetic learner it does not mean that you can't learn from reading a book. It might seem best to provide everything in a variety of formats, but in practical terms it would mean a lot of duplicated effort. Also, some topics are easier to discuss in words than to draw as diagrams, or easier to show in pictures than describe (Zhang & Bonk, 2008).

One very important issue to always keep in mind when deciding on the format for instructional material is accessibility. The trend toward video can, taken to an extreme, make it very difficult for the visually impaired to access the instruction (Wakimoto & Soules, 2011). Since text is the most flexible and versatile medium, it is likely to be worth the time to provide really good text based instructions, even if you supplement the words with images or video as well. In fact, if you strive to provide accessible versions of everything you do, you will end up with materials in varied formats, exactly as the learning style proponents recommend.

Becoming Real

A major complaint in online education is the sense of isolation that students often feel (Dickey, 2004). They are separated from their instructors and classmates by a screen, and the other people often do not seem quite real. Since most students do not fully understand what librarians do or how a librarian can help them, that isolation can be even more profound between students and librarians (Balas, 2003;

Johnson, Trabelsi & Fabbro, 2008). Students in the physical library may apologize for interrupting a librarian when at the Reference Desk and for emailing the librarian with a legitimate reference question.

Becoming "more real" and accessible to students might be one of the most important goals of a distance librarian. For instance, using a photograph in all online locations and using the same picture whenever possible positively identifies the librarian as an actual person. The online librarian can participate in online discussions, email lists, and social networking. She even may be accepting friend requests from students (even while turning the privacy features on a social network up to high to protect her own privacy). Students who recognize her as a person and a helpful resource are not only more likely to contact her themselves, but are also more likely to suggest that classmates contact her as well.

Being accessible may also mean being asked for help that you cannot provide, especially tech support. The librarian can mitigate this by making clear up front what she can and cannot do. Offering suggestions as to where else students can get help works well, too. The need to refer students will engage the librarian more in her own campus, finding out which office does what and how students can get help. Just as knowing about how the online programs are taught enables the librarian to provide the best library service she can, finding out how the rest of campus works also means she is not duplicating efforts or giving bad information. In essence, getting out of the library (at least intellectually) makes her a better librarian.

Failing Small

One of the most important lessons in working with technology and distance learning is discovering how to fail. It is nearly impossible to be sure that everything you try is a success, and that means you must plan for failure. Some work environments make this easier than others, but one way of easing the blow of failure is "failing small" (Keen, 2011). Whether you call them pilot projects or experiments, the idea is to set things up so that you can easily discontinue a service or project, and that you come up with an answer for what you learned from the process. For instance, when Hedreen signed up for synchronous services, she was conducting a type of pilot project. She learned that synchronous services were less important (but not utterly useless) for her institution's particular circumstances at that time. Aside from the time it took to set things up, she spent very little time on those services and no money, so there was no heavy investment that needed to pay itself off. Even projects that do cost money can be valued for what they teach you about your patrons, rather than just in terms of the service offered. This makes winding up the project and canceling the service easier if it doesn't work out. (Obviously, this will depend heavily on institutional climate, but framing a project from the beginning as an experiment can be a life, or job, saver.)

Conclusion

This report of the experiences of Hedreen as a distance learning librarian is meant to spark discussion and conversation within libraries, among librarians, and with library users. The conclusions reached and the decisions that were made at her institution are not necessarily going to work for other libraries, other librarians, or even her own institution at a different point in time. But the questions she has learned to ask may give insight into others' circumstances, spark research into the effectiveness of online library services, and reassure others facing the task of becoming a distance librarian.

References and Recommended Reading

Ally, M. (2008). Foundations of educational theory for online learning. In T. Anderson (Ed.), *Theory and Practice of Online Learning* (2nd ed., pp. 15–44). Edmonton: AU Press. Retrieved from http://www.aupress.ca/books/Terry_Anderson.php

Anderson, T. (2008). Social software to support distance education learners. In T. Anderson (Ed.), *Theory and Practice of Online Learning* (2nd ed., pp. 221–241). Edmonton: AU Press. Retrieved from http://www.aupress.ca/books/Terry_Anderson.php

Balas, J. I. (2003). Is the reference librarian real or virtual? *Computers in Libraries, 23*(4), 48.

Becker, B. W. (2010). Embedded librarianship: A point–of–need service. *Behavioral & Social Sciences Librarian, 29*(3), 237–240. doi: 10.1080/01639269.2010.498763

Berk, J., Olsen, S., Atkinson, J., & Comerford, J. (2007). Innovation in a podshell: Bringing information literacy into the world of podcasting. *Electronic Library, 25*(4), 409–419. Retrieved from http://taslibrary.pbworks.com/w/file/19502166/Podcasting%20Curtin.pdf

Cote, D., Kraemer, B., Nahl, D., & Ashford, R. (2012). Academic librarians in Second Life. *Library Innovation, 3*(1), 20–47. Retrieved from http://uknowledge.uky.edu/libraries_facpub/17/

Croft, R., & Eichenlaub, N. (2006). Email reference in a distributed learning environment: Best practices, user satisfaction, and the reference services

continuum. *Journal of Library Administration, 45*(1/2), 117–147. doi: 10.1300/J111v45n0107

Dembo, M. H., & Howard, K. (2007). Advice about the use of learning styles: A major myth in education. *Journal of College Reading and Learning, 37*(2), 101–109. Retrieved from http://3csn.org/files/2010/04/Dembo_Howard_2007_LearningStyles.pdf

Dickey, M. (2004). The impact of weblogs (blogs) on student perceptions of isolation and alienation in a web–based distance–learning environment. *Open Learning, 19*(3), 279–291. doi:10.1080/0268051042000280138

Distance Learning Section. (2010). *5th Bibliography of library services for distance learning resources*. Chicago: Association of College and Research Libraries. Retrieved from http://caspian.switchinc.org/~distlearn/resources/5thBibliography/BibliographyHome.html

EDUCAUSE Learning Initiative. (2005). *7 Things you should know about podcasting*. Retrieved from http://www.educause.edu/ELI/7ThingsYouShouldKnowAboutPodca/156806

EDUCAUSE Learning Initiative. (2006). *7 Things you should know about screencasting*. Retrieved from http://www.educause.edu/ELI/7ThingsYouShouldKnowAboutScree/156815

Finkelstein, J. (2006). *Learning in real time: Synchronous teaching and learning online*. San Francisco: JosseyBass/Wiley.

Fleming, N. (2011). *VARK —a guide to learning styles.* Retrieved from http://varklearn.com/english/index.asp

Hedreen, R. C., Johnson, J. L., Lundy, M. A., Burnette, P., Perryman, C., Van Den Brekel, G., ... Czarnecki, K. (2008). Exploring virtual librarianship: Second Life Library 2.0. *Internet Reference Services Quarterly, 13*(2/3), 167–195. doi: 10.1080/10875300802103833

Herring, S. D., Burkhardt, R. R., & Wolfe, J. L. (2009). Reaching remote students: Athens State University's electronically embedded librarian program. *College & Research Libraries News, 70*(11), 630–633. Retrieved from http://crln.acrl.org/content/70/11/630.short

Jacobsen, M. (2011, January). Reference backtalk: Screencasting for an audience of one. *Library Journal, 136*(1), 142. Retrieved from

http://www.libraryjournal.com/lj/reviewsreference/888274283/reference_backtalk_screencasting_for_an.html.csp

Johnson, K., Trabelsi, H. & Fabbro, E. (2008). Library support for e–learners: e–resources, e–services, and the human factors. In T. Anderson (Ed.), *Theory and practice of online learning* (2nd ed., pp. 397–418). Edmonton: AU Press. Retrieved from http://www.aupress.ca/books/Terry_Anderson.php

Kayongo, J. & Van Jacob, E. (2011). Burning the midnight oil: Librarians, students, and late–night chat reference at the University of Notre Dame. *Internet Reference Services Quarterly, 16*(3), 99–109. doi: 10.1080/10875301.2011.597632

Keen, A. (Interviewer). (2011). Seth Godin: The value of failing small. *Keen On.* Retrieved from http://www.youtube.com/watch?v=6CuMrXSSOI4

Knoer, S. (2011). *The reference interview today*. Santa Barbara, CA: Libraries Unlimited/ABCClio.

Konieczny, A. (2010). Experiences as an embedded librarian in online courses. *Medical Reference Services Quarterly, 29*(1), 47–57. doi: 10.1080/02763860903485084

Krosti, E. (2008). *Web 2.0 for librarians and information professionals*. New York: NealSchuman.

Lehman, J. D. (2007). *Distance learning*. Retrieved from http://www.edci.purdue.edu/lehman/edci564/DEOverview_564.htm

Matthew, V., & Schroeder, A. (2006). The embedded librarian program. *EDUCAUSE Quarterly, 29*(4), 61–65. Retrieved from http://net.educause.edu/ir/library/pdf/eqm06410.pdf

Mestre, L. S. (2010). Matching up learning styles with learning objects: What's effective? *Journal of Library Administration, 50*(7/8), 808–829. doi: 10.1080/01930826.2010.488975

Morris, S. E., & Del Bosque, D. (2010). Forgotten resources: Subject guides in the era of Web 2.0. *Technical Services Quarterly, 27*(2), 178–193. doi: 10.1080/07317130903547592

Nielsen, J. (2005, Dec 5). Talking head video is boring online. *Jacob Nielsen's Alertbox.* Retrieved from http://www.useit.com/alertbox/video.html

Roberts, S., & Hunter, D. (2011). New library, new librarian, new student: Using LibGuides to reach the virtual student. *Journal of Library & Information Services in Distance Learning, 5*(1/2), 67–75. doi: 10.1080/1533290x.2011.570552

Robertson, M. and Granfield, D. (2008). Preference for reference: New options and choices for academic library users. *Reference and User Services Quarterly, 48*(1), 44–53. Retrieved from http://pi.library.yorku.ca/dspace/handle/10315/2471

Small, J. (2010, October). Delivering library instruction with screencast software: A Jing is worth a thousand words! Paper presented at *Discovery! Future Tools, Trends and Options: 7th Health Libraries Inc. Conference, Melbourne, Vic.* Retrieved from http://epubs.scu.edu.au/lib_pubs/35/

Sparks, O. B. (2010). Five minute screencasts—The super tool for science and engineering librarians. *Issues in Science and Technology Librarianship, 60.* Retrieved from http://www.istl.org/10winter/tips.html

Tumbleson, B. E., & Burke, J. J. (2010). When life hands you lemons: Overcoming obstacles to expand services in an embedded librarian program. *Journal of Library Administration, 50*(7/8), 972–988. doi: 10.1080/01930826.2010.489002

Wakimoto, D. K., & Soules, A. (2011). Evaluating accessibility features of tutorial creation software. *Library Hi Tech, 29*(1), 122–136. doi: 10.1108/07378831111116958

Zhang, K., & Bonk, C. J. (2008). Addressing diverse learner preferences and intelligences with emerging technologies: Matching models to online opportunities. *Canadian Journal of Learning and Technology/La revue canadienne de l'apprentissage et de la technologie, 34*(2). Retrieved from http://www.cjlt.ca/index.php/cjlt/article/view/496/227