Beyond the Reference Desk: A Study on the Effectiveness of Low-Cost Distance Library Services at California State University San Marcos

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Many of our reference interactions are face-to-face at a desk or in our offices. Unfortunately, not all of our students are on campus. Whether a non-traditional student or a traditional undergraduate, more of our patrons are attending online classes or attending satellite campuses with no librarians on site. It's difficult to reach these students, but it's even more difficult to reach them when libraries are facing tremendous financial hardships and have limited their technology budgets. Fortunately technological advances such as programs that offer free virtual "face-to-face" time with our patrons are becoming more available. Programs such as Skype, Jing, Moodle and Spark offer librarians and patrons the freedom to interact with each other at low or no costs. Sadly many librarians are either uncomfortable with the new technology or don't feel the quality of service is as good as high-priced tools. This paper will share the basic set-up of various free or low cost online programs, outline the bene-fits and drawbacks of some of those programs, and provide effective interaction techniques to use with distance learners to help make the reference interview and information literacy sessions a more positive and comfortable experience for librarians and students.

KEYWORDS *distance library services, instant messaging, Skype*

BACKGROUND

Founded in 1989, California State University San Marcos (CSUSM) is one of the fastest growing of the twenty-three campuses in the CSU system. Located fifteen miles east of the Pacific Ocean, just thirty miles north of San Diego, and overlooking the city of San Marcos, CSUSM has an enrollment of 10,276 students and a 30% enrollment growth rate since 2004 (Lutz 2011). CSUSM has four major colleges (Business Administration; Science and Mathematics; Humanities, Arts, Behavioral and Social Sciences; and Education, Health and Human Services) with academic offerings ranging from classes such as Management and Biology to Anthropology and Education.

In January 2009 the University started offering an Accelerated Bachelor of Science degree in nursing at the CSU Temecula branch, which is approximately thirty miles north of San Marcos. From that original cohort of 50 students, CSUSM Temecula has grown to offer five undergraduate and two master's degree programs, and additional new programs are being developed for future students. Aside from community colleges in the area, CSU Temecula is the only public higher education institution in the Temecula area (CSUSM at Temecula 2010).

After much debate the California State University (CSU) system is hoping to begin *CSU Online* in the fall of 2012 in order to provide affordable, high quality online bachelor and graduate programs to those in need of a university education (CSU, Technology Steering Committee 2011).

According to researchers (Johnson 2009; Johnson 2011; Johnson and Sengupta 2009), California will need to annually increase the number of bachelor's and graduate degrees awarded in order to meet the projected workforce demand by 2025. California's commitment to providing college access and attainment has also declined by over 47% from 1981 to 2011 because of a shrinking budget (Mortenson 2011), and many for-profit university online programs are unaffordable, leaving recent graduates from those schools in severe student loan debt (Cyran 2008). For these reasons CSUSM decided to become a part of CSU Online consortium.

Even before CSUSM decided to be a part of the CSU Online consortium, CSUSM served not only its students located in Temecula but also other distance education students affiliated with CSUSM. In addition to nursing, there are other cohorts attending the Temecula branch, but there are also students who are enrolled in courses offered at one of the satellite campuses in South- west Riverside or Sorrento Valley. No matter where they are located, distance education students have the same basic library privileges as other CSUSM students but with some added services, such as the option to have requested books held for them to pick-up at the checkout desk in the library or have the books shipped directly home via 1st class mail (CSUSM Library 2009).

The literature to date mainly discusses the technological abilities of students and their library anxieties. Given the lack of research concerning evaluating the cost and ability to implement online programs by university libraries, an analysis of low-cost or free software used at CSUSM Library may serve as the standard for other public university libraries interested in saving money while providing quality education to their distance students.

The question to university librarians is how to implement these tools in their own libraries in effective and efficient ways that will not only benefit

their students but also ease librarian concern with training and learning these new software programs.

REVIEW OF LITERATURE

According to the U.S. Department of Education (2011), the number of bachelor's degrees granted by for-profit universities has risen by 400% within the last 10 years, in contrast to the increase of 29% granted by public institutions within the same period of time. The current budget crisis in the United States has led to many challenges and the reallocation of funds within universities. It is very difficult to justify expenditures deemed not necessary by higher education leaders and the government; however, these same leaders look at online courses as a way to increase revenue, but what they fail to understand is the cost effectiveness of online learning tools and the stress it causes instructors (specifically librarians) to learn these new tools.

According to Bartolic-Zlomislic and Bates (1999), initial expenditures on new equipment, software, and training can take a substantial amount of time and money to implement effectively. They reveal that start-up costs of online programs are often prohibitive for many libraries. They discuss the potential benefits and limitations of online learning, including careful consideration of the costs associated with online learning. They suggest dividing the cost factors into three groups: capital and recurrent costs, production and delivery costs, and fixed and variable costs. Capital and recurrent costs include things such as equipment and ongoing support, production and delivery costs are associated with time spent creating and time spent delivering a course, and fixed and variable costs can either remain constant or change with the number of participants. Han (2011) discusses software, training, licensing, and maintenance and says that costs are the same for each of them. Han also maintains that monitoring costs are the same based on the fact that monitoring software has to be hosted somewhere. However, bandwidth and network costs, as well as Security audit and compliance costs, were ignored in the study. Using low cost or free software may help alleviate some of the expenditures, but the production/delivery may still be a stress factor for some librarians.

Fritts and Casey (2010) look at a variety of librarians and programs that focus on reaching distance students. Their study provides a structure for training that can be developed both by Library and Information Science programs and for university libraries interested in training their current librarians. Participants of the study were members of Offcamp, ACRL Distance Learning Section, ACRL Regional Campus Libraries Discussion Group, LITA Distance Learning Special Interest Group, and Off Campus Library Service Conference. The results of their 13-question survey revealed that out of 141 respondents, 91.5% never received training in distance education in graduate school but attended workshops and seminars to learn. In addition, a large part of these librarians stated they received little to no distance education training while on the job (Fritts and Casey 2010, 622). The authors concluded that there is a great need for training and professional development opportunities, but budget

cuts are not allowing travel to support this need (Fritts and Casey 2010, 623).

With the increase of online universities, especially public universities trying to compete with the private university realm of distance education, distance librarianship is continuing to grow in academic libraries.

Instruction and reference librarians must be willing and able to learn how to implement information literacy courses and reference interactions online effectively and efficiently for their students. However, because many librarians are not receiving the training they need with new reference and instruction technologies, many are hesitant or nervous about including the technology in their instruction or reference interactions. There is little to no research specifically regarding reference or instruction librarian anxiety toward distance education and technology. However, Askar and Umay (2001.) conducted a study of non-library instructors and found factors that affected the successful use of technologies are instructor attitudes towards these technologies. Whether the technology is sophisticated and powerful or easy to use, the extent to which it is implemented depends on instructor having a positive attitude towards the technology and feeling comfortable learning (Huang and Liaw 2005). With high quality, low cost online tools, most libraries can develop online education that will become more cost effective and less stressful to learn.

COST EFFECTIVE SOFTWARE FOR DISTANCE EDUCATION LIBRARIES

Course Management Systems

Most of the librarians at CSUSM teach information literacy courses to various student populations and are often either embedded in another instructor's course management system (CMS) and/or are the designers of their own CMSs. For example, the education librarian teaches several freshmen level two-week long information literacy courses and uses a CMS to manage each class. These freshmen classes not only meet in person up to three times a week, but they are also required to complete online assignments, post to discussion boards and, complete online quizzes using their CMSs. In addition, the education librarian is embedded in the CMS of a variety of education courses to provide reference assistance to distance education masters students who only meet virtually. Working in conjunction with the instructor of record, the instruction librarian posts several media productions and online presentations for students to access and use. These students can either post questions to discussion boards, email the librarian privately, or chat using instant messaging, all of which are available via the CMS.

Most CMSs are multi-million dollar markets that include names such as Blackboard, which serves over 5,000 higher education institutions world-wide (Blackboard for Higher Education 2011a). Although Blackboard claims to improve educational experiences for both instructors and students, the company charges universities quite a bit of money to provide their services (Blackboard for Higher Education 2011b). Moodle, on the other hand, is a free course management system

“designed to help educators who want to create quality online courses” (Moodle.com 2004). Just like expensive CMSs, Moodle provides a range of services, including “fully-serviced hosting, remote support contracts, custom code development and consulting” (Moodle.com 2004). As an international company, Moodle’s customers range from individual educators to businesses and universities.

After leaving WebCT (now Blackboard), CSUSM began using Moodle in 2009. With the help and guidance of the university’s Instructional Development & Support team, faculty attended hands-on workshops and open training sessions to assist them in preparing for this new online course delivery. Moodle sites can be accessed on any computer that has an Internet connection, but the best Web browser to use is Firefox, and depending on the use of streaming and interactive media, additional hardware, software, or browser plug-ins may be required. Moodle is not a very easy tool to set up and maintain, but the resources outweigh the drawbacks because they can easily include digital content such as Web pages, Word documents, PowerPoint presentations, audio, and/or video content. Moodle also has a variety of communication tools such as forums, chat, and blog, and Moodle also offers a set of assessment tools, such as assignments and quizzes, and a grade book. Some users at CSUSM admitted that Moodle was sometimes “clunky” and the grade book was “confusing,” but for the most part many CSUSM instructors, including library faculty, are comfortable using Moodle, especially for the “free” cost. Other programs such as Haiku LMS (2011) and Coursekit (2011) are very intuitive, do not require any software installation or technical implementation and are hosted on their own Web servers. Simply sign up and configure the courses as needed. Both Coursekit and Haiku are excellent tools for creating interactive tutorials featuring quizzes, sequential modules, discussion, and video embedding.

Instant Messaging (IM) Services

There are a number of free and low-cost tools for making chat reference available to distance learning students. A commonly adopted approach is to utilize the free Web-based Meebo IM service. Launched in 2006, Meebo made it easy for many libraries to initiate IM-based chat reference. Meebo offers Web widgets that libraries can embed within their Web pages and it is able to connect with additional IM services such as Yahoo and MSN. Students using a library’s Web site communicate via the embedded Meebo widgets with a librarian who is signed-in to Meebo (Breitbach, Mallard, and Sage 2009). If a library has ready access to its Web pages, setting up a Meebo account and adding it to a Web page requires less than an hour.

While simple to implement, Meebo does have its limitations. Since each Meebo widget is tied to a single Meebo account, using it for chat reference means that librarians must share a single Meebo account. Other limitations include the inability to transfer IM messages among librarians and the lack of usage analytics (Theiss-White, Dale, Fritch, Bonella, and Coleman 2009).

LibraryH3lp was developed by programmer Eric Sessoms as a solution to address many of Meebo’s shortcomings. It incorporates

message queues, multiple accounts, and usage statistics. Widgets for inserting into library Web pages are highly customizable and avoid the accessibility issues associated with Meebo's use of Flash. LibraryH3lp is a hosted solution that does not require local installation of software. Since its introduction in 2008, it has been rapidly adopted among a growing number of libraries. CSUSM Library initially used Meebo to pilot chat reference service. While student response to the new service was enthusiastic, the limitations of Meebo as a chat reference service led the library to consider other options. LibraryH3lp was considered as a possible solution but the library eventually chose to use the Openfire IM server instead. Though LibraryH3lp was capable of meeting most of CSUSM library's needs, Openfire offered additional features that would better manage chat reference service. In addition, Openfire opened up the possibility of integrating the chat reference service with an internal IM network. Openfire offered a significant advantage over LibraryH3lp by not having to create yet another account for each librarian. Instead, Openfire's integration with CSUSM's campus email system meant librarians could log in using existing campus username and password. Openfire is a server-based application that provides organizations with the ability to host an internal IM network. Developed through a partnership between Jive Software and the Ignite Realtime Open Source community, Openfire is an exceptionally stable and easy-to-use tool for rapidly deploying a secure IM network. Developed as an Open Source project, Openfire is a free download from the Ignite Realtime Web site (Ignite Realtime n.d.).

To install Openfire, a Windows or Linux Web server that has Java available (most servers are configured to include Java) is needed. Opening the Openfire software package initiates an automated installation process. Once installation is complete, there is a four-step Web-based configuration process. This configuration process requires no external supporting if electing to use Openfire's built-in database and authentication system. To take full advantage of the applications capabilities consider integrating its authentication mechanism with the institution's Lightweight Directory Access Protocol (LDAP) system, if available. Integrated authentication allows librarians to re-use campus logins within Openfire. After configuration, library personnel can connect to the Openfire network using a variety of free IM clients. IM clients are software that are installed to each computer and allows the user to send and receive instant messages. Any IM client will connect to the Openfire-based network. Openfire comes with an optional add-on package named Fastpath. Fastpath is a full-featured chat management system that allows librarians to offer a complete chat reference service that includes Web-based widgets, queues, message transfers, and more. In addition, Fastpath chat is fully integrated with the Openfire IM network. In practice this means that a librarian can hold simultaneous IM conversations with other librarians while also engaging in reference interactions with students via the Fastpath Web page widgets. To utilize Fastpath, librarians staffing the reference service will need to use the Spark IM client. Developed by the same organization that created Openfire and Fastpath, Spark includes an optional package that works directly with Fastpath. Spark allows

librarians to sign-in to both the internal IM network and to manage incoming chat requests that are received via Fastpath.

Since the introduction of the chat reference at CSUSM, there has been a high use of IM reference service, and the data shows strong levels of satisfaction among students (Ly and Carr 2009).

Screencast Applications

Within the last two years, CSUSM librarians began using online screencasting software as a way to quickly create and share customized video clips in IM reference interactions and emails. The use of screencasting allows librarians to communicate with students “as if they were sitting right next to each other at a reference desk” (Carr and Ly 2009, 410). Jing is a simple and free program with minimal features that focus on sharing basic screen captures and screen recordings easily (Techsmith 2011). While instant messaging or emailing a student, one could use Jing to instantly share specific screenshots or videos regarding a database or the library’s Web page without having to describe each step via typing. A librarian who uses Jing can simply record the process on his or her own computer and email/IM the video directly to the student to save time. The screen shots are handled in the same way and can easily be marked with a bright red text box, an arrow, or highlights to emphasize specific areas of the screen shot.

If the computer being used has a microphone, Jing can record commentary at the same time one is recording a video of a screen. Since most students prefer short videos without a lot of talking, each recording maxes out at five minutes. As soon as the recording is finished, the video is ready to be seen using a link ready to paste and share or it can be saved as an SWF Flash video and posted on a Web site.

In the latest Jing release, subscribers who sign up for a \$15-a-year Jing Pro plan are also able to record from their Webcam so students can see your face while you talk to them. You can toggle between Webcam and screen recording during a screen capture (Dolcourt 2009; Techsmith 2011).

Carr and Ly (2009), librarians at CSUSM, conducted a study on the use of Jing on the CSUSM campus. Their findings indicated that students were asking more in-depth questions that required a lot of typing and long answers on the part of the librarian. Both students and librarians were satisfied when Jing’s capability to “say things visually” cut back on the time and effort it took to interact virtually with these types of questions (Carr and Ly 2009, 413).

Another free screencast tool, Screenr, is similar to Jing but does not require installation of software on a computer and works through a browser. In comparison to Jing, the Screenr Web site for sharing screencasts is much easier to use and the upload process is more intuitive. The Screenr Web site also incorporates a number of social Web features such as public streams, social network sharing, and discussions. Another significant advantage is that Screenr accounts can be created and accessed via external services such as Google, Facebook, and Twitter.

Video Chat

The education librarian began using Skype as a way to meet “face-to-face” with distance education master’s and doctoral students who could not come to campus because of how far they lived or because of time constraints (most, if not all, of these students are working professionals in schools all over Southern California). Like Google Talk and other Voice-over Internet Protocol (VoIP) tools, Skype offers voice and video capabilities enabling the users to have a conversation with each other during real-time.

Founded in 2003, Skype is now a division of Microsoft Corp, and, according to the Skype Web site, there are over 20,000 educators who use this product in their classrooms (Skype 2011). Free video calling on Skype allows the librarian to interact with students from around the world. The latest version of Skype offers a clear quality video with High Definition capability (if the users have an HD quality webcam). With Skype, the librarian can show students exactly what is on his or her screen by using Screen share, a feature that allows the student to see exactly what is on the librarian’s screen so the student can follow along in real-time. These features are free with basic Skype; however, group calling and group screen sharing costs money, prices vary according to plan (Skype Premium 2011).

All of the students who used Skype with the education librarian at CSUSM were extremely satisfied with the reference and instruction interactions they received. Unlike Google, one does not need a special email address to start Skype.

SUCCESSFUL INTERACTIONS

All of the programs mentioned above can be embedded in a Moodle shell or on a librarian’s Web page. Whether embedded within a class or offering one-on-one reference interactions, teaching online shares similarities to teaching in the classroom; however, even the best traditional instructors may still find that teaching in an online environment can lead to feelings of inadequacy and being ill-prepared.

The first step in online instruction needs to be significant planning and preparation because, as Brewer, DeJonge, and Stout (2001) suggest, the design of an online course “can either facilitate or impede the learning process” (p. 12). The following tips could help librarians effectively and efficiently implement these online programs with their own reference or information literacy interactions.

Make friends with your IT staff. Although the learning curves on the above mentioned programs are not steep, they still require some help from technologically savvy individuals who know which plug-ins to download and which versions of these programs are compatible with the institution’s system.

Focus on learning objectives. How will the material to the students support their different learning styles? Be prepared to present the content in several different formats. Clearly stated objectives are even more important in online courses as students do not have the opportunity to participate face-to-face (Jarmon 1999). Failure to

properly inform the student of the objectives leaves them feeling confused and frustrated.

Be patient. Not everyone is comfortable with asking for help, let alone asking for help virtually, and not everyone is comfortable with technology. Whether dealing with a poor speller, a slow typist, or a person who is simply not computer savvy, patience and respect is always a requirement when dealing with these students.

Be clear. Student expectations should be clearly defined and easy to identify in a CMS. Start small and slow and build on what the students are learning in class.

Establish a relationship. To create a sense of community among adult learners, instructors should reinforce, recognize, and reward students (Snyder 2009). White (2000) advises that “a positive emotional climate can serve as a frame of reference for online students activities and will therefore shape individual expectancies, attitudes, feelings, and behaviors throughout a program” (p. 7). Post frequent messages on the virtual board, send a Jing video welcoming students, and encourage them (but do not force them) to post pictures and/or Jing videos of themselves online.

“Meet” regularly throughout the semester or quarter. One of the most important elements of an online learning is consistency. Students, even adult learners, will lose motivation if they feel they are not being held accountable and feel they are not on a schedule. In fact, Ko and Rossen (2004) recommend, “In an online environment, redundancy is often better than elegant succinctness” (p. 76). The course schedule should list each module with due dates, assigned reading, assessments, and other activities. Have students post frequent (perhaps weekly) discussions or video responses to each other’s posts regarding readings and assignments.

CONCLUSION

With many public universities facing budget crises and with for-profit university increasing enrollment rates, the need for low-cost/free distance learning tools is evident. The products described in this paper are just a sampling of what is available for libraries to reach their distance students and compete with the for-profit schools in a more cost-effective way. In addition to cost-saving incentives, many of these programs are easy to learn by both librarians and students, decreasing feelings of anxiety by all parties involved. Using dynamic, synchronous and asynchronous tools such as video chat, screen casting, and instant messaging embedded on the library’s Web page or in a CMS allows libraries to offer students research assistance and information literacy content even if they’re not on campus. Further research should focus on the effectiveness of high-priced distance learning tools compared to lower-cost/free distance learning tools such as the ones mentioned above. One should also look at student and library satisfaction rates of these low-cost tools in comparison to the high-cost programs offered by larger corporations.

Whatever programs a library decides to implement should be supported not only by the librarians but their technology staff, their administrators, and most importantly their students. The last thing libraries want is to

alienate their distance learners even more, especially with poorly modeled and poorly implemented online learning tools. It is the librarian's responsibility to ensure their students have equal access to library materials no matter where those students are located. However, it is the administrator's responsibility to make sure their librarians are getting the necessary training with these online tools, regardless of the price of the tools, in order to ease anxiety and empower those librarians to help their students to the best of their abilities.

REFERENCES

- P. Askar and A. Umay, Pre-service elementary mathematics teachers' computer self-efficacy, attitudes towards computers, and their perceptions of computer- enriched learning environments. In C. Crawford, D. A. Willis, R. Carlsen, I. Gibson, K. McFerrin, J. Price & R. Weber (Eds.), *Proceedings of the Society for Information Technology and Teacher Education International Conference 2001*(pp. 2262–2263). (Chesapeake, VA: AACE.2001)
- S. Bartolic-Zlomislic and A. W. Bates, Investing in online learning: Potential benefits and limitations. *Canadian Journal of Communication* 24.(1999) Retrieved from <http://tonybates.ca/papers/investing.html>.
- Blackboard for Higher Education *Create an improved educational experience*. Retrieved from <http://www.blackboard.com/Markets/Higher-Education-%281%29/Solutions/Teaching-and-Learning.aspx>.(2011a)
- Blackboard for Higher Education *Fully online learning improves access while ensuring learning outcomes*. Retrieved from <http://www.blackboard.com/Markets/Higher-Education-%281%29/Solutions/Teaching-and-Learning.aspx>.
- W. Breitbach, M. Mallard, and R. Sage. no. 1 (2009) Using Meebo's embedded IM for academic reference services: A case study. *Reference Services Review* 37 1: 83–98. doi:10.1108/00907320910935011.
- E. Brewer, J. DeJonge, and V. Stout, *Moving to online: Making the transition from traditional instruction and communication strategies*. Thousand Oaks, CA: Corwin Press.(2001)
- A. Carr, and P. Ly, More than words: Screencasting as a reference tool. *Reference Services Review* 37 4: (2009) 408–420. doi 10.1108/00907320911007010.
- Coursekit, Retrieved from <http://coursekit.com>.(2011)
- California State University, (2011) *Technology Steering Committee*. Retrieved from <http://its.ctate.alstate.edu/onlinelearning>.

- California State University San Marcos, (n.d) California State University San Marcos college portrait. Retrieved from:
<http://www.collegeportraits.org/CA/CSUSM>.
- California State University San Marcos, (2010) Distance education—Cal State San Marcos: Enabling learning worldwide. Retrieved from:
<http://www.csusm.edu/iits/support/distanceed>.
- California State University San Marcos, (2010) Embracing & advancing technology. Technology @ CSU San Marcos. Retrieved from:
<http://www.csusm.edu/about/technology.html>.
- California State University San Marcos at Temecula, (2010) About us. Retrieved from:<http://www.csusm.edu/temecula/aboutus.html>.
- California State University San Marcos Library, (2009) *Distance education information*. Retrieved from
[http://biblio.csusm.edu/distance-education-information# what](http://biblio.csusm.edu/distance-education-information#what).
- R. Cyran, *The Downside of Diplomas*. *Wall Street Journal - Eastern Edition*. p.C14.(2008, March 6)
- J. Dolcourt, CNET editors' review: Jing. CNET *Download.com*. Retrieved from http://download.cnet.com/Jing/3000-13633_4_10744274.html.(2009)
- J. Fritts, and A. M. Casey, Who trains distance librarians?: A study of the training and development needs of distance learning librarians. *Journal of Library Administration* : 617–627. doi: 10.1080/01930826.2010.488925.(2010)
- Y. Han, Cloud Computing: Case Studies and Total Costs of Ownership. *Information Technology & Libraries* 30 4: (2011) 198–206. Retrieved from <http://ezproxy.csusm.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=aph&AN=67229032&site=ehost-live>.
- LMS. Haiku, (2011) Retrieved from <http://www.haikulearning.com>.
- H. M. Huang, and S. S. Liaw, Exploring user's attitudes and intentions toward the web as a survey tool. (2005) *Computers in Human Behavior* 21: 729–743.
- Ignite Realtime: Openfire Server, (n.d) Retrieved from <http://www.igniterealtime.org/projects/openfire/index.jsp>.
- C. Jarmon, (1999) Strategies for developing effective distance learning experience. In *Teaching at a distance: A handbook for instructors* (pp. 1–14). Mission Viejo, CA: League for Innovation in the Community College.

- Jive, (2011) The new way to do business. Retrieved from <http://www.jivesoftware.com/about/vision>.
- H. Johnson, *Educating California: Choices for the future*. San Francisco, CA: Public Policy Institute of California.(2009)
- H. Johnson, *California workforce: Planning for a better future*. San Francisco, CA: Public Policy Institute of California.(2011)
- H. Johnson, and R. Sengupta, (2009) *Closing the Gap: Meeting California's need for college graduates*. San Francisco, CA: Public Policy Institute of California.
- Ko, S. and S. Rossen, *Teaching online: A practical guide. (2nd ed.)*. Boston: Houghton Mifflin.(2004)
- M. Lutz, CSUSM reaches record enrollment, surpasses 10,000 students. Retrieved from:[http:// www.csusm.edu / news / articles / nr_RecordEnrollment2011.html](http://www.csusm.edu/news/articles/nr_RecordEnrollment2011.html) (2011)
- P. Ly and A. Carr, Do u IM?: Using evidence to inform decisions about instant messaging in library reference services, poster presented at the Evidence Based Library and Information Practice (EBLIP) Conference, 29 June–3 July, Stockholm, available at: http://blogs.kib.ki.se/ebliip5/posters/ly_carr_poster.pdf.(2009)
- Moodle.com, Retrieved from <http://moodle.com>.(2004)
- T. Mortenson, (2011) How to limit opportunity for higher education 1980 to 2011. *Postsecondary Education Opportunity Magazine* 230: 10. Retrieved from <http://www.postsecondary.org>.
- National Center for Education Statistics, (2010) Total fall enrollment in private for-profit degree-granting institutions, by attendance status, sex, and state or jurisdiction: 2007 and 2008. Digest of Education Statistics. Retrieved from http://nces.ed.gov/programs/digest/d10/tables/dt10_222.asp.
- Skype, (2011) Skype in the classroom, now 20,000 members strong. The Big Blog: Everything New at Skype's HQ. Retrieved from http://blogs.skype.com/en/2011/12/skype_in_the_classroom_now_200.html.
- Skype Premium, (2011) See what features you get with Skype Premium. Retrieved from <http://www.skype.com/intl/en/prices/premium>.
- M. M. Snyder, (2009) Instructional-design theory to guide the creation of online learning communities for adults. *TechTrends* 53(1): 48–56.

- TechSmith, (2011) Jing Features. Retrieved from
[http://www.techsmith.com/jing.html?gclid =
CM_uhKi3ha0CFUsaQgodDDegCg](http://www.techsmith.com/jing.html?gclid=CM_uhKi3ha0CFUsaQgodDDegCg).
- D. Theiss-White, J. Dale, M. E. Fritch, L. Bonella, and J. Coleman, (2009)
IM'ing overload: Library3lp to the rescue. *Library Hi Tech News*
26(1/2): 12–17. doi:10.1108/07419050910966481.
- U. S. Department of Education, (2011) Web tables: Students attending for-
profit postsecondary institutions: Demographics, enrollment
characteristics, and 6-year outcomes. Retrieved from
<http://nces.ed.gov/pubs2012/2012173.pdf>.
- K. White, Face to face in the online classroom. In K. W. White & B. H. Weight
(Eds.), 2000*The online teaching guide* (pp. 1–12). (Needham
Heights, MA: Allyn and Bacon.