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The Potential Use of "Blogs" in Nursing Education

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This article was written following the completion of an online discussion presented by Dr R. Schroeder to distance education learners enrolled in the Distance Education Program at the University of Wisconsin—Madison. This paper was accepted for presentation at the Ed Media conference in Lugano, Switzerland (June 2004).

Abstract

Web logs, also known as "blogs," are an emerging writing tool that are easy to use, are Internet-based, and can enhance health professionals' writing, communication, collaboration, reading, and information-gathering skills. Students from different disciplines, such as medicine, public health, business, library science, and journalism, garner knowledge from blogs as innovative educational tools. Healthcare professionals are expected to be competent in the use of information technology to be able to effectively communicate, manage information, diminish medical error, and support decision making. However, the use of blogs, as an interactive and effective educational method, has not been well documented by nurse educators.

INTRODUCTION

Nurses and other healthcare professionals are required to have effective communication skills. The ability to write clearly is necessary in order to communicate patients' needs, medical data, and contribute to the body of health profession research. Furthermore, healthcare professionals are poised to advocate preventive healthcare measures through education. To broaden the health educator's role, oral and written communication skills are essential.¹ Therefore, the healthcare educator is required to ensure that future practitioners have the capability to use the Internet and keyboard the written word in order

to meet informatics competency levels.² Since written documentation is an integral part of patient care, it is critical that the healthcare professional understands the legal ramifications associated with poor or lack of written documentation during and following patient interactions.³ Diede et al ⁴ found effective verbal and written communication skills to be the highest-ranked competency by healthcare agencies hiring new graduates from schools of nursing. The Institute of Medicine ⁵ recommends healthcare professionals be trained in the use of informatics to be able to "communicate, manage knowledge, mitigate error, and support decision making using information technology."^(p46) The purpose of this article is to explore and present an innovative method of publishing on the Internet as a motivating learning tool for healthcare students in higher-education settings and to look at the tools and the necessary steps used for this burgeoning technology. Suggestions for educators who are interested in using Web log technology in their courses are provided.

BACKGROUND

Discovering and evaluating new technologies that promote students' computer, collaboration, communication, and writing skills meet the call for faculty to determine informatics competencies for nursing students.² Schroeder ^{6,7}^(p1) describes "Web + Logs = Blogs" as Internet-based "information-disseminating tools" that originated in the late 1990s. According to Winer,⁸ "a Web log is a hierarchy of text, images, media objects, and data, arranged chronologically, that can be viewed in an HTML browser."^(p1) Blogs are automated, updated self-archived Web pages that provide Internet-based links and allow for public responses. These interactive Web sites are not to be confused with message boards or listservs because they use a "permalink" (a link to the permanent spot of the post in the Web log's archive) for each individual post, display a calendar or a date record for accessing archives, and provide a Rich Site Summary (RSS) feed that organizes the content and allows the user to read posts in a separate reader or "aggregator"⁹ (Figure 1). Blood ¹⁰ writes about the culture, theory, and creation of Web logs, and discusses the change of the nomenclature from the initial "wee-blog" proposed by Peter Merholz. The editors of the Oxford English Dictionary are considering the inclusion of the term blog in the next edition.⁷

A filter-style blog contains sieved information, such as articles pertinent to a specific field of study available on the Web, and provides a condensed interpretation of the topic material to colleagues, students, and/or friends. A diary-type blog, on the other hand, may be maintained by anyone who wishes to record simple thoughts, feelings, and/or daily reflections.¹⁰ When Web logs first surfaced on the Internet, they were cubbyholes

of conversation for tech-savvy individuals who were adept at creating personal Web pages. However, today there are numerous blogging technologies, which are user-friendly and available free to the public audience. Blood 10 emphasizes that daily blogging will enhance positive writing skills, instill self-confidence in voicing personal opinions, and promote reflective thinking that in turn will allow the writer to appreciate his or her personal opinions or ideas. He further reports 10 that a sense of empowerment may be assumed when a blogger publishes personal opinions, viewpoints, and creative ideas online.

A BLOGGER'S TOOLBOX

Blogs are easy and intuitive to create and use. Siemens 11 presents three methods of creating a blog: hosted, remote server, and desktop. There is an assortment of blog tools to choose from while brainstorming ideas for a blog spot. Within minutes a novice blogger can set up a free account by accessing a hosted service, such as Blogger.12 Individuals may opt to have Blogger host the spot, or the blog may be posted to a personal Web site. Another method, involving some configuring skills, is the remote installation of a blog on a server. Moveable Type 13 is a unique publishing service that provides individuals and/or corporations the opportunity to revise and oversee Web logs, Web sites, and journals. This publishing service allows noncommercial users to install on a server for free, or the company completes the installation for commercial sites for a nominal fee. Furthermore, users may install desktop blog tools on personal computers and then upload the blogs to a host site. Radio Userland 14 is an inexpensive desktop program. The program provides Web hosting and upgrades for a period of 1 year. There is a plethora of available blog programs, and it is recommended to visit Blogroots 15 for an extensive reference of blog resources. A compendium of blog tools 16 critiqued by the author is provided in Table 1. The Web-logging service Blogger 12 provides the user an intuitive "Create a blog in 3 easy steps." This is an example of how to publish a Web log in less than 1 minute (Figure 2). Educators may use Wink 17 to create tutorials for students learning how to use Web-publishing software.

Once the blog has been constructed, the blogger may wish to add some tools to enable interactivity and recognition. The Web-based programs Haloscan 18 and Moveable Type 13 offer free interactive commenting and track-back services that may be used to supplement an existing blog. The track-back service constitutes an incoming and

outgoing "ping" support. The user determines which site(s) to ping when the user updates his or her blog spot. The concept of pinging is similar to raising the red flag on a mailbox to notify the mailman that you have outgoing mail.¹⁹ The commenting feature invites and enables visitors to provide interactive feedback following the reading of a blog. To execute the commenting tool, the author simply cuts and pastes scripts (Java and HTML) into a template provided on the blog tool. A helpful characteristic of Haloscan is the user-friendly support forum, as well as a frequently asked questions (FAQs) area for newcomers to the site. Furthermore, the installation of a "search box" is straightforward and, therefore, the blogs may be easily archived by week, month, or year.

"How to Blog" books have been published with the novice blogger in mind.^{16,20,21} Journal articles, specifically directed at the use of blogs in general education, have been recently published.^{22,23} Ellis and Lewis ²⁴ list a variety of Web logs being used as instructional tools, in schools nationwide.^{25,26} Moreover, one method of keeping up-to-date with reading many blogs is the use of an aggregating tool, such as the RSS, that allows for instant updates.^{6,7} According to Siemens,¹¹ "RSS is a way of creating a broadcast version of a blog or news page. Anyone who has frequently updated content and is willing to let others republish it can create the RSS file."^(p3) For example, students and faculty are able to receive up-to-date news feeds from Medscape Nursing Headlines,²⁷ MedicineNet Kids Health General,²⁸ and CNN: Health.²⁹ The provision of current awareness services may encourage aspiring writers to blog about what they have learned via an RSS. David ³⁰ and Stern report blogs are replacing some burdensome e-mail listservs as a spam-free method of communicating online (E. A. Stern [me@estern.com], CARING Listserv 6327, August 9, 2004). Stern has used blogs for approximately 5 years and reports they have "advanced into remarkable tools for communication" (E. A. Stern [me@estern.com], e-mail, August 9, 2004). Educators have limited time to find information, and through RSS one may obtain necessary content material without combing through endless Web sites. Richardson ²⁵ began authoring a Web log for fellow educators in 2001 and soon discovered that Web-logging could be utilized in classrooms as a tool for collaboration, Web authoring, and RSS feeds.

A "PUSH BUTTON" AWAY

Even someone who has never blogged before can easily construct a blog spot by using

an Internet browser and a Web-logging publishing service. The updated version of Blogger 12 is user-friendly, visually pleasing, provides a comment area, and supports RSS. A step-by-step guide is provided here as a quick reference for the reader and future blogger. First, point your browser to <http://www.blogger.com/start> and notice a three-step method provided on the first Web page (see Figure 2). Pushing the "create your blog now" button will lead to a "create an account" page that requests the standard user name, password, and user's e-mail address to be entered. Then click on the "continue" button, and it will lead to a "name your blog" page. On this page, enter the specific name of the blog (eg, Tucker's Journal) and request for the blog URL. The URL is where the user will point to in order to read the blog. Web logs created by using Blogger software are by default located at <http://www.name.blogspot.com/>. The critical aspect is to identify a specific "NAME" to be used in the URL. Once the URL has been entered, click on the "continue" button and choose from a wide assortment of Web templates or styles for the Web log. The template can be easily changed from time to time in order to add aesthetic variety to the personal blog spot. Click the "continue" button and a page will appear that confirms the blog has been successfully completed. At the bottom of this page, the user may click on an orange "start posting" arrow button. Once this button is selected, the user is led to a page that contains the specific name of the blog spot in a cobalt blue header, along with "posting," "settings," "template," and "view blog" tabs at the top of the Web page. Directly above the title of the post are three self-explanatory tabs: "create, edit posts," "status," and "view blog" (Figure 3). The user decides the title of the post, enters the text in the provided field on the screen, and then clicks the "publish" button. The post may be saved, spell checked, and/or previewed before being published on the Internet.

When the "settings" tab, located at the top of the Web page, is activated the user will see "basic," "publishing," "formatting," "comments," "archiving," "site feed," "email," and "members" links under the settings tab. The "basic" link provides an area where the user may type in a description of the blog spot. This description is automatically displayed under the blog's name on the Web log. Furthermore, the user may decide if the blog should or should not be added to Blogger's listings by selecting "yes" or "no" from a drop-down menu. If the user chooses not to be added to Blogger's listings of blogs, the Web log will not appear in the listings, but it will still be available on the Internet. Under the "publishing" setting the user may choose the default setting provided by Blogger, or he or she may choose the FTP for the blog to be hosted on another server. The

"formatting" setting provides drop-down menus from which the blogger can choose dates, languages, time zones, and encoding options. In addition, the "comments" setting can be activated in order to allow the public to respond to posts on the blog. Blogger will alert the author with an e-mail when a comment has been posted to the blog. The user can determine the frequency of archiving posts to the blog site by selecting "daily," "weekly," "monthly," or "no archives." It is possible to archive posts, such as students' written assignments, and save them as PDFs. An instructor may make comments to the assignment and attach the PDF to the student's blog. The "site feed" setting assists the user in setting up feeds from other sites that support syndication, thereby automatically inserting content, such as news headlines, discussion forums, and various data. Two other setting features are "email" and "members." If the user wishes to have a post e-mailed to an account, he or she can execute it by enabling the BlogSend address on the "email" setting. Open invitations to join a blog may be sent to whomever the user wishes to invite, thus allowing others to participate in the Internet community.

BLOGS AS EDUCATIONAL TOOLS

Ferdig and Trammell 31 state there is a novel interest in using blogs in teaching and learning circles. Blogs are being used throughout the educational spectrum, from grammar to graduate school, as well as by faculty members who wish to share current research projects.32-34 Schroeder 7,32,33 reports a communication ripple, with K/12 school technology coordinators disseminating resources and religiously following research developments in the use of technology through blogging. "With no fanfare and little promotion, the blog has been discovered by thousands of educators and is now linked to from hundreds of sites."7^(p3) The faculty at the University of Southern California's Annenberg School of Communication is pioneering the idea of blogging by assigning blogs in journalism courses.35 The EdTechPost 36 offers a multitude of international blogs dedicated to technology and education. University faculty involved in distance education may find a relatively new evolving technology as a possible learning and content management system tool. Mobile blogs, also known as "Moblogging," may be created on any mobile phone. Winksite 37 allows an individual to create photo blogs or blog pages that can be accessed via a cell phone. Distance educators and students relying on telephone conferencing might benefit from using such technology tools as an advanced organizer or for sending e-mails via wireless technology. Winstanley 38 reports the use of a "stand alone" application for creating blogs on and from the palm

OS device. Vagablog 1.9 39 supports Blogger, MovableType, Typepad,40 and LiveJournal.41 Healthcare professional students may post to a course blog at their convenience by FTP-ing from a palm OS device.

According to Ferdig and Trammell,31 the pedagogical paradigm that supports the use of blogs in educational settings is Vygotsky's educational theory. Vygotsky,42 a Russian psychologist, believed children begin to learn from social interaction. Children's community "is the source of all their concepts, ideas, facts, skills, and attitudes."43^(p111) Therefore, the person's social environment, or culture, plays an important role in determining which stimuli are choreographed and paid attention to by the individual. The construction of knowledge is the outcome of the social process of language development that occurs over a period of time.43 However, Nash 44 argues that adult learners learn differently from the way children do, and require lived experiences as well as images, multimedia, audio, and biography to engage in creative written communication. Learners need real opportunities for writing and publishing the knowledge they have accrued over time. Hence, having the opportunity to publish their knowledge online, students can craft and often revise their writings, thereby providing a rich and satisfying learning environment. Blogs offer online spots where students can reflect and express their inner thoughts and feelings. Students reticent in face-to-face learning environments may be more comfortable with blogging for expressing their creative thoughts. Since blogs can be commented on, they offer a feedback feature that provides the learner with prospective scaffolding of novel thoughts.23 Constructive peer feedback, a social process that is encouraged in education, assists with cognitive development and can enrich the craft of writing and publishing. According to a nurse educator, "The fact that students can reflect on a blogged message prior to responding makes me think that this has unique potential for helping students make deep personal connections to the subject matter. It is really hard for students to make deep connections in a regular classroom where we go over topics so quickly"(E. Capella, comment to <http://www.maagnursing.com/blog>, August 20, 2004).

Betts and Glogoff,45 professors at the University of Arizona, conducted a survey of students (N = 43) enrolled in a hybrid course, "Learning, Reading and Culture," and a virtual course, "Decision Making for Information Professionals," during the summer of 2003. The students enrolled in the hybrid course consisted of educators, researchers, and administrators interested in improving language skills. The master's students

enrolled in the virtual course were, on the other hand, from various disciplines, such as library science and education. The researchers provided the students in both courses an informal survey at the end of the semester to determine the students' responses to the blogs used during the two courses. The main objective of having the students use the course blogs was to share learning experiences, present their comments to the instructor and peers, and to give them the means to demonstrate their knowledge of the specific learning principles covered in class. Without prompting from the instructor, the students enrolled in the online course created their own virtual community by sharing their personal ideas about common topics of interest.

Students responding to the survey in the hybrid course (n = 13) reported no experience in Web publishing before the course. Six participants stated "yes" they would continue using the course blog551, five respondents indicated "yes" they would use Web log technology, and three students indicated they would "maybe" use a blog in a future educational setting. When asked what they liked best about using the course blog they responded with such comments as, "It was an opportunity to participate," and "It was easily accessible and user friendly."^{45(p2)} One participant stated that she enjoyed participating by writing and another student stated the course blog allowed for an extension of discussions without taking in-class time. When the researchers asked the students how they might use blog technology in the future, the responses included, "as a journal, for notes, to post examples, as a way to study 'new literacies,' and a way for scholars to discuss articles."^{45(p2)} Furthermore, the students believed the technology provided an area for students to interact and dialogue.

Betts and Glogoff ⁴⁵ report the majority (95%) of the students (n = 30) participating in the online course (IRLS613) were beginner bloggers, and 90% stated the course blog was a good method to learn how to acquire more knowledge about technology. Twenty-nine percent of the students joined another blog during the course of the semester, and 70% reported an intention to join another blog within 6 months. Moreover, 76% of the respondents stated they would use the course blog613. A student's note regarding the use of blogs as a "casual sharing of information" in the virtual course stated, "I almost got the feeling I was sitting in a coffee shop somewhere and the person next to me poring over the newspaper casually said, 'Hey, did you hear about this new thing that just came out...?'"^{45(p2)} The aforementioned researchers ⁴⁵ report that this type of a student comment regarding blogs supports the idea that it provides a "sense of place"

that e-mails, chat rooms, or discussion threads do not.⁴⁵

According to Betts and Glogoff,⁴⁵ the results of the informal survey show that some of the more reserved graduate students wrote lengthy blogs and reported the course blog as a "safe place" to communicate. Another graduate student constructed a blog for her eighth-grade English class following the course. She used NiceNet ⁴⁶ software to develop an "author study research assignment" for her students. The teacher found that students using the blog in her English class demonstrated an increased level of assignment completion when compared with students who did not have access to the course blog. Furthermore, Betts and Glogoff ⁴⁵ report Web log technology as an appropriate tool for the "decision-making sciences" because it can be implemented for developing declarative or procedural methods of knowledge building. "Because the students taking the course came from different disciplines and professional backgrounds, there is potential to attract interest from a wider audience of teaching faculty in whose disciplines information acquisition, response strengthening, and knowledge construction are important."^{45(p2)}

DISCUSSION AND IMPLICATIONS

The creation and publication of blogs by students from the healthcare profession can enhance their written and oral communication skills. The opportunity to instantly publish on the Web encourages students to write and, furthermore, provides them the chance to read thoughts authored by peers, faculty members, and preceptors. Clinical educators may encourage students to reflect and post journals regarding their interactions with patients and clinical staff on a regular basis. Information of a private nature may be password protected within a course management discussion board, or access to those entering the site from a specific domain may be limited.³² Reminding students that their blogs are public unless entries are password protected is important. Educators need to keep in mind the Family Education Rights and Privacy Act in order to respect and protect students' privacy.³² An anonymous posting or a pseudonym may be used by the blogger in this case.

Other uses of blogs in education may be as electronic portfolios for institution-wide assessment and the establishment of professional credibility and reputation. Student may blogs for other students (eg, group discussions or a class coordinating tool.

Students writing blogs as personal reflective journaling or as a knowledge management tool for their own study purposes is another example of the use of blogs in education.47

Another proposal for the use of blogs in the healthcare educational setting is public debate regarding simulations and scenarios that might occur in the clinical setting. A nursing school blog might motivate students to post their artwork, creative musings, and responses to case studies authored by instructors. Since many students are concerned about passing the National State Board Exams (NCLEX-RN), faculty may create a blog specific to concepts and questions that may appear in the examination, and the students may respond and debate the provided multiple-choice answers, thereby providing the means to make a collaborative effort in enhancing knowledge acquisition. Faculty members may comment on the students' responses, and the students would automatically have a review site. Moreover, a scholarly exchange of relevant items related to health professions' research efforts may be published via a blogging tool. An educator can model the importance of students' contributions to the professions' body of knowledge through writing and publishing. An example of a group blog is eCornell, written by faculty members at Cornell University, dedicated to the dissemination of research surrounding online education.48

Students reading classmates' blogs as group work or part of an electronic social dialogue may motivate students to read more and increase the transfer of knowledge and enhance vocabulary skills. Instructors also may benefit from reading their own personal blogs or student's course work blogs as a means to reflect on their own practice as a healthcare educator. Furthermore, instructors may wish to read blogs written by educators from other disciplines as a pedagogical practice in order to stay current in one's profession. Healthcare educators may enhance their knowledge by reading RSS feeds from learning object repositories in order to keep up-to-date on current instructional methods.47

TYPES OF BLOGS

The University of Wisconsin—Madison Medical School 49 hosts a Student Organization page that contains students' blogs about different topics related to students' experiences in medical school. Instructors are encouraged to create their own blogs before introducing blogging as a classroom activity. A simple Google search for a specific

health profession blog will allow the instructor to contact the author and dialogue about the challenges and successes of their specific site. Educators may create blog sites that serve as multidisciplinary forums for healthcare professionals. An example of such a site is the Johns Hopkins Behavior and Health blog.⁵⁰ The public health blog sponsored by the Georgia State University Library ⁵¹ provides current news articles, events, and resources from the Institute of Public Health. Healthcare and scientific topics, appearing in an aggregated news feed can be read and then a synopsis of the articles may be written and uploaded to a personal blog site.⁵² The primary goal is to disseminate synthesized current information related to concepts taught in an undergraduate pathophysiology course and to enhance learners' technology skills. The blog provides an opportunity for the nursing student to converse and state opinions about their knowledge acquisition, or discuss topics that were cut short in the classroom setting. Furthermore, the use of blogs in educational settings may set the stage for quantitative and qualitative research opportunities that investigate the effectiveness of Web-based instruction. A quantitative study is planned, to assess undergraduate nursing students' use of blogs as reflective medical-surgical clinical journals as well as their general acceptance of this publishing technology. Also, the construction of individual Web logs for the purpose of developing electronic portfolios by Clinical Nurse Leader students is being explored.

CONCLUSION

Technological tools that promote critical thinking, synthesis and provision of information, as well as publication on the Internet are not to be ignored. Interactive content creation on the Internet harnesses the powerful nature of the Web and allows one to express his or her journalistic and communication capabilities in a social atmosphere.¹¹ Written communication is necessary in a multitude of healthcare circles to disseminate information on evidence-based practice and ultimately provide safer client care in an improved healthcare system. The art of blogging can unleash the hidden capabilities of aspiring writers and motivate expression of thoughts, ideas, and interests in real time. Most important, personal publishing via Web logs can be an excellent educational practice because the medium promotes self-directed versus teacher-directed learning, encourages self-reflection as a model of social experience and self-identity, and enriches the "process" of learning.⁵³ Perhaps more healthcare educators will seize the opportunity to introduce Web log genres,⁵⁴ such as journals, notebooks, filter Web logs,

and RSS to students as a self-motivated and community-supported tool for learners of tomorrow.

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REFERENCES

1. Tierney R. Read all about it: writing health articles for the student newspaper. *J Nurs Educ.* 2003;42(10):465-467. [\[Context Link\]](#)
2. Staggers N, Gassert CA, Curran C. A Delphi study to determine informatics competencies for nurses at four levels of practice. *Nurs Rsch.* 2002;51(6):383-390. [\[Context Link\]](#)
3. Greenwald LM, Mondor M. Malpractice and the perinatal nurse. *J Peri Neo Nurs.* 2003;17(2):101-109. [\[Context Link\]](#)
4. Diede N, McNish G, Coosh C. Performance expectations of the associate degree nurse graduate within the first six months. *J Nurs Educ.* 2000;39(7):302-307. [\[Context Link\]](#)
5. Institute of Medicine. *Health Professions Education: A Bridge to Quality.* Washington, DC: The National Academies Press; 2003. [\[Context Link\]](#)
6. Schroeder R. Catch the technology wave: blogging in online learning and professional development. Paper presented at: *Catch the Technology Wave: Education, Community Health, and Supports for Persons With Disabilities*; April 1, 2004; Memphis, TN. [\[Context Link\]](#)
7. Schroeder R. Blogging to disseminate best online learning practices and technology news. Paper presented at: *The 19th Annual Conference on Distance Teaching and*

Learning; August 13, 2003; Madison, WI. [[Context Link](#)]

8. Winer D. (2003). What makes a weblog a weblog? [Weblogs at Harvard Law Web site]. May 23, 2003. Available at:
<http://blogs.law.harvard.edu/whatMakesAWeblogAWeblog#vignetteAndWikis>. Accessed March 9, 2004. [[Context Link](#)]

9. Levine J. Blogging 101. Paper presented at: The Suburban Library System Academic Library; February 17, 2004; Burr Ridge, IL. [[Context Link](#)]

10. Blood R. Weblogs: a history and perspective. [Rebecca's Pocket Web site]. September 7, 2000. Available at:
http://www.rebeccablood.net/essays/weblog_history.html. Accessed February 25, 2004. [[Context Link](#)]

11. Siemens G. The art of blogging, Part 2: Getting started, "how to," tools, resources [elearnspace Web site]. April 13, 2004. Available at:
http://www.elearnspace.org/Articles/bloggng_part_2.htm. Accessed April 15, 2004. [[Context Link](#)]

12. Blogger. Available at: <http://www.blogger.com>. Accessed February 14, 2004. [[Context Link](#)]

13. Movable Type. Available at: <http://www.movabletype.com>. Accessed February 18, 2004. [[Context Link](#)]

14. Radio Userland. Available at: <http://www.radio.userland.com>. Accessed February 18, 2004. [[Context Link](#)]

15. Blogroots. Available at: http://www.blogroots.com/resources_blog. Accessed March 31, 2004. [[Context Link](#)]

16. Bausch P, Haughey M, Hourihan M. We Blog: Publishing Online With Weblogs. Indianapolis, IN: Wiley Publishing; 2002. [[Context Link](#)]

17. Wink. Available at: <http://www.debugmode.com/wink> [Context Link]
18. Haloscan. Available at: <http://www.haloscan.com>. Accessed February 18, 2004. [Context Link]
19. Pustateri MA. How pinging works. Available at: <http://www.cruftbox.com/cruft/docs/pinging.html>. Accessed April 15, 2004. [Context Link]
20. Blood R. The Weblog Handbook: Practical Advice on Creating and Maintaining Your Blog. Boulder, CO: Perseus Publishing; 2002. [Context Link]
21. Powers S, Doctorow C, Johnson JC, Trott MG, Trott B, Dornfest R. Essential Blogging. Sebastopol: O'Reilly & Associates; 2002. [Context Link]
22. Glenn D. Scholars who blog: the soapbox of the digital ages draws a crowd of academics. The Chronicle of Higher Education [serial online]. 2003;49(39):A14. Available at: <http://chronicle.com/free/v49/i39/39a01401.htm>. Accessed March 27, 2004. [Context Link]
23. Stiler G, Philleo T. Blogging and blogspots: an alternative format for encouraging reflective practice among preservice-teachers. Education. 2003;123(4):789-797. [Context Link]
24. Ellis J, Lewis A. Weblogs: dynamic educational resources. Paper presented at: The Governor's Wisconsin Educational Technology Conference; October 21-23, 2003; La Crosse, WI. [Context Link]
25. Richardson W. The blogging in schools question. [Web-logged: Using Weblogs and RSS in Education Web site]. April 13, 2004. Available at: <http://www.weblogg-ed.com>. Accessed April 18, 2004. [Context Link]
26. Roberts S. Campus communications and the wisdom of blogging. [Syllabus Web site]. August 1, 2003. Available at: <http://www.syllabus.com/article.asp?id=7982>. Accessed April 18, 2004. [Context Link]

27. Medscape Nursing Headlines. Available at: <http://www.medscape.com/nurseshome>. Accessed April 18, 2004. [Context Link]

28. MedicineNet Kids Health General. Available at: http://www.medicinenet.com/Kids_Health/focus.htm. Accessed April 18, 2004. [Context Link]

29. CNN: Health. Available at: <http://www.cnn.com/HEALTH/>. Accessed April 18, 2004.

30. David D. RSS could transform online communication. [eSchool News Web site]. August 3, 2004. Available at: http://www.eschoolnews.com//news/showStory.cfm?ArticleID=5211&CFID=156339&CF_TOKEN=39617746. Accessed August 4, 2004. [Context Link]

31. Ferdig RE, Trammell KD. Content delivery in the 'blogosphere.' T.H.E. J Online [serial online]. 2004;2:1-8. Available at: <http://www.thejournal.com/magazine/vault/articleprintversion.cfm?aid=4677>. Accessed February 19, 2004. [Context Link]

32. Schroeder R. Welcome to blogosphere! [Msg 1]. Message posted to <http://conference.education.wisc.edu/~DEPD0340/login>. February 14, 2004. Accessed February 19, 2004. [Context Link]

33. Schroeder R. News, techniques and theories of effective use of technology in education. Available from <http://people.uis.edu/rschr1/onlinelearning/blogger.html>. Accessed February 19, 2004. [Context Link]

34. Selingo J. In the classroom, Web logs are the new bulletin boards. [New York Times Web site]. August 19, 2004. Available at: <http://query.nytimes.com/gst/abstract.html?res=F30E14F63A5B0C7A8DDDA10894DC404482>. Accessed August 19, 2004. [Context Link]

35. Schactman N. Blogging goes legit, sort of [Wired News Web site]. June 6, 2002. Available at: www.wired.com/news/school/0,1383,52992,00.html. Accessed March 9, 2004. [Context Link]

36. EdTech Post. Available at: <http://www.edtechpost.ca/mt>. Accessed February 18, 2004.
37. Winksite. Available at: <http://winksite.com/site/index.cfm>. Accessed April 16, 2004.
38. Winstanley J. Weblogging. [Palmsource Web site]. Available at: <http://www.palmsource.com/interests/weblogging/#blogging>. Accessed August 29, 2004.
39. Vagablog. Available at: <http://www.palmgear.com/index.cfm?fuseaction=software.showsoftware&prodID=51902>. Accessed August 29, 2004. [Context Link]
40. Typepad. Available at: <http://www.typepad.com/>. Accessed August 10, 2004. [Context Link]
41. LiveJournal. Available at: <http://www.livejournal.com/>. Accessed August 10, 2004.
42. Vygotskoy LS. Mind in Society: The Development of Higher Psychological Processes. In: Cole M, John-Steiner V, Scribner S, Souberman E, trans-eds. Cambridge, MA: Harvard University Press; 1978:111-114.
43. Gage NL, Berliner DC. Educational Psychology. 6th ed. Boston: Houghton-Mifflin; 1998.
44. Nash SS. How the mind makes meaning in e-learning, Part 1. [XPLANA Web site]. April 15, 2003. Available at: http://www.xplana.com/whitepapers/archives/mind_makes_meaning_part1. Accessed April 18, 2004. [Context Link]
45. Betts JD, Glogoff SJ. Instructional models for using weblogs in eLearning: case studies from a hybrid and virtual course. [Syllabus News Web site]. August 4, 2004. Available at: www.syllabus.com/news_article.asp?id=9829&typeid=156. Accessed August 5, 2004.
46. NiceNet. Available at: <http://www.nicenet.org/>. Accessed August 28, 2004. [Context

Link]

47. Scott L. Some uses of blogs in education. October 8, 2003. Available at:
<http://www.edtechpost.ca/gems/matrix2.gif>. Accessed August 28, 2004. [\[Context Link\]](#)

48. eCornell. Available at:
http://www.xplana.com/whitepapers/archives/mind_makes_meaning_part1. Accessed
April 16, 2004. [\[Context Link\]](#)

49. University of Wisconsin—Madison Medical School. Available at:
<http://students.med.wisc.edu/studentorg.htm>. Accessed April 18, 2004. [\[Context Link\]](#)

50. Johns Hopkins Behavior and Health Blog. Available at: <http://bhblog.jhsph.edu/>.
Accessed April 12, 2004. [\[Context Link\]](#)

51. Georgia State University Public Health Blog. Available at:
<http://www.library.gsu.edu/news/index.asp?typeID=60>. Accessed April 12, 2004.
[\[Context Link\]](#)

52. Maagnursing Blog. Available at: <http://www.maagnursing.com/blog>. Accessed April
18, 2004. [\[Context Link\]](#)

53. Campbell AC. Blogging: tipping the scales of society. Available at:
<http://www.bloglines.com/blog/wrichard?subid=1063842>. Accessed August 28, 2004.

54. Brooks K, Nichols C, Priebe S. Remediation, genre, and motivation: key concepts
for teaching with weblogs. [Into the Blogosphere Web site]. Available at:
http://blog.lib.umn.edu/blogosphere/remediation_genre.html. Accessed August 15,
2004.