

University of Dayton eCommons

Roesch Library Faculty Publications

Roesch Library

2008

Attitudes of OhioLINK Librarians Toward Google Scholar™

Joan Giglierano

University of Dayton, jplungis1@udayton.edu

Follow this and additional works at: https://ecommons.udayton.edu/roesch_fac



Part of the [Library and Information Science Commons](#)

eCommons Citation

Joan Giglierano (2008). Attitudes of OhioLINK Librarians Toward Google Scholar™. *Journal of Library Administration.* , 101-113
https://ecommons.udayton.edu/roesch_fac/18

This Article is brought to you for free and open access by the Roesch Library at eCommons. It has been accepted for inclusion in Roesch Library Faculty Publications by an authorized administrator of eCommons. For more information, please contact frice1@udayton.edu, mschlange1@udayton.edu.

Attitudes of OhioLINK Librarians Toward Google Scholar™

Joan Giglierano, M.A., M.L.S., Reference and Instruction Librarian and Assistant Professor

105E Roesch Library, University of Dayton, Dayton, OH 45469-1360

joan.giglierano@notes.udayton.edu

Abstract: Almost three years after Google Scholar's inception, only a third of Ohio Library and Information Network (OhioLINK) member libraries link to it from their web sites. This article reports the results of a July 2007 survey of OhioLINK academic librarians, conducted to find out about their attitudes and current practices regarding promotion of Google Scholar. It compares the findings about placement of Google Scholar on web sites and inclusion in library instruction with previous research, and concludes with recommendations for libraries still undecided about whether to embrace (or even to shake hands) with Google Scholar.

Keywords: Google Scholar, OhioLINK, academic libraries, search engines, information retrieval, on-line databases, library instruction, college students, information literacy, link resolvers, surveys

Introduction

Since Google Scholar's introduction as a beta site in November 2004, academic librarians have been debating what to do with it. Here was a tool with the Google cachet, guaranteed to mesmerize users, from undergraduate to faculty researchers, with its claim to easily and quickly locate scholarly resources in that inimitable, painless, Googly way. It even threw in "cited by" references! Could this innovation supplant the expensive subscription databases purchased with libraries' ever-shrinking budgets, or would it prove to be lacking in significant enough ways to be easily dismissed as an alternative for locating peer-reviewed articles?

Almost three years after Google Scholar's inception, only a third of Ohio Library and Information Network (OhioLINK) member libraries link to it from their web sites. This article reports the results of a survey conducted during July 2007 to find out:

- What enters into OhioLINK libraries' decisions about whether or not to promote Google Scholar to their users?
- Where on their web sites do OhioLINK libraries choose to place Google Scholar links?
- Are OhioLINK libraries incorporating Google Scholar into their instruction classes, and how do they position it with subscription databases?

This article will present the survey responses, using them to summarize OhioLINK libraries' approaches to Google Scholar and comparing them with other research findings. It will conclude with recommendations for libraries still undecided about whether to embrace (or even to shake hands) with Google Scholar.

About OhioLINK

The OhioLINK consortium, in operation since 1992, has grown to include most of the academic libraries in Ohio, as well as the state library and a growing number of public libraries. Member libraries have benefited from the consortium's combined buying power, which enabled them to provide their users with access to hundreds of databases, thousands of e-journals, and other electronic resources.¹ Member libraries often link directly to the OhioLINK list of databases for their descriptions, rather than writing their own. Through committees such as Reference and User Services (USC) and Cooperative Information Resources Management (CIRM), libraries exchange information about new databases and other products purchased cooperatively, and other issues affecting the membership.

OhioLINK reported sharing link resolver information with Google, in order to implement Google Scholar, at the USC meeting on May 16, 2005. Once implemented, links leading to resources purchased by OhioLINK, such as centrally-purchased full-text e-journal articles, would be displayed automatically for on-campus users, though branch or off-campus users would need to add OhioLINK to their Scholar Preferences.² The network administrator informed member institutions of advantages to submitting their individual link resolver information directly to

Google, as suggested on the Google Scholar site: “We strongly encourage you to provide your patrons' IP address ranges. Many good services go unused simply because people don't configure their preferences to utilize them,”³ though only one library in the OhioLINK consortium, Ohio State University, has done so.⁴ These “Find it with OLinks” links follow the name of the article. Resources with a match in the OhioLINK central catalog include links labeled “OhioLINK OLinks.” Though OhioLINK did not opt to promote or link to Google Scholar from its web site, it issued a news item about Google Scholar in May 2005, telling users about the links and how to set up Scholar Preferences for off-campus access to linked resources.⁵

Methodology

In July 2007, the author examined web sites of all OhioLINK academic libraries to find out if they included links to Google Scholar. Each school's name, the URL of its library's home page, and the names and URLs of pages on its site where Google Scholar links appeared were logged on a spreadsheet. Concurrently, the author created a brief survey using SurveyMonkey software, and then posted requests for responses on the general OhioLINK listserv and also on its Reference and User Services listserv. The survey was open for responses during the entire month. Information that could identify an individual or institution was not requested, and IP address information was blocked, to assure anonymity.

Presence of Links to Google Scholar on OhioLINK Academic Library Web Sites

Of 80 OhioLINK academic library web sites examined,⁶ 26, or 32%, included at least one link to Google Scholar. Fifty-four, or 68%, had no links to Google Scholar. Bowling Green

State University had the most Google Scholar links (11), followed by the College of Wooster and the University of Cincinnati (10 each), and Baldwin-Wallace College and Ohio State University (8 each). The libraries linking to Google Scholar were evenly split between public institutions and private universities or colleges, with 13 each. Twenty-four were libraries at 4-year schools and 2 were at 2-year schools. Of the 54 OhioLINK library web sites without links to Google Scholar, 33 were at private institutions and 21 were at public. Thirty-four of the non-linking libraries were at 4-year institutions, 19 were at 2-year schools, and 1 was at a professional campus.

Survey Results

The survey received 50 responses. The majority (32, or 64.0%) said their libraries' sites did not link to Google Scholar. The most frequent reason given for not doing so was wanting students to use the databases the library had paid for; if the library provided a link to Google Scholar, students might not use anything else. Many expressed concern over the quality of Google Scholar results, mentioning too many hits, lack of information about the sources it pulls from, and the age of the articles it retrieves. Several respondents cited lack of promotion of Google Scholar by OhioLINK; not knowing enough about Google Scholar; or not having enough time to investigate it in order to make the decision to link to it. Others said they link to Google, but not to Google Scholar, on their web sites, while a few stated they do not like or trust Google. Other reasons given were: fear of confusing students; desire to avoid frustrating users who thought they had to pay for resources Google Scholar retrieved; concern that links to OhioLINK

and local full-text resources were not comprehensive; lack of awareness of Google Scholar on their campuses; and faculty who do not want students to use Google or Internet resources.

Eighteen responses (38.0%) said their libraries' sites linked to Google Scholar. Six libraries (33.3%) reported links from the library home page, with an equal number reporting links on an Internet resources page or search engines list. Fewer reported links from an alphabetical or a subject databases list (5, or 27.8%, for each). The greatest number of libraries with links to Google Scholar (10, or 55.6%) placed them elsewhere, such as on a "Research Resources" or a "Find Articles and Journals" page, or on a separate "Google Scholar" or "Google for Researchers" page.

The survey revealed far more exclusion than inclusion of Google Scholar in instruction classes on both the undergraduate and graduate levels. Twenty-eight responses (58.3%) said librarians on their campuses did not routinely mention Google Scholar in undergraduate instruction classes; 11 (22.9%) said they did; and 9 (18.8%) did not know. When asked if instruction librarians at their library routinely mentioned Google Scholar in graduate instruction classes, 30 responses (62.5%) said no; 9 (18.8%) said yes; and 9 (18.8%) said they did not know. The negative responses to this question included 11 self-identified as institutions that did not offer graduate classes (in retrospect, this question should have included "not applicable" as a choice), but even taking that into consideration, it is evident that most responding libraries do not include Google Scholar in graduate instruction classes.

The most frequently given reasons for not routinely telling undergraduates about Google Scholar in instruction classes were time constraints; wanting students to use library databases; quality of results; and lack of information about what is being searched by Google Scholar. Other reasons given were redundancy (it duplicates other resources); reluctance of faculty to let students use Google (and, by extension, Scholar); believing it more appropriate for graduate students; and lack of knowledge about Google Scholar. A few individuals said they, personally, mention it to undergraduate classes, even though most other librarians at their institution do not, and others said they tell students about it when working with them one-on-one, though they don't teach it in instruction classes. Several said though they do not routinely do so, they occasionally tell classes about Google Scholar, and some said they mention it, but only to warn students about its limitations. One respondent said s/he planned to start telling both undergraduate and graduate instruction classes about it, since receiving directions about setting up links from Google Scholar to OhioLINK resources. Reasons given for omitting mention of Google Scholar in graduate classes were similar, though less varied.

How OhioLINK Librarians are Using Google Scholar

A few survey responses, such as the following, expressed enthusiasm for Google Scholar:

“We love Google Scholar and love the OLinks option. It has been helpful in allowing students to access materials in random databases that they may not have searched on their own.”

“Researchers are using Google Scholar more and more to upload their research and publishers are putting more information into Google Scholar. It has become one of the key resources for scholarly research. Also, our full-text journals link there.”

“As Google Scholar integrates with OhioLINK access to the full-text of items, it serves the dual purpose of getting to reputable journal literature while allowing students to use the Google interface. I always suggest to my classes that if they need to use the Web to locate research articles, use Google Scholar and not just Google. Plus, sometimes the only way I can locate certain items easily is via Google Scholar. It's a good complement to OhioLINK's databases.”

Several librarians said they used Google Scholar when answering reference questions and when doing their own research, as well as steering individual students and faculty to it when appropriate:

“We do not actively promote it but consider it an important tool. We provide the link in several places and frequently demonstrate setting up preferences for students doing higher levels of academic research.”

“Some of the librarians here promote Google Scholar at the reference desk, but usually after using another 1 or 2 databases first. The reason for this has been that if you just show them only Google Scholar they tend to not use the other databases and miss some good info; if you demonstrate it and promote it after using a couple of other databases, it shows more accurately how it complements the databases and they're more likely to do a more comprehensive search.”

A number of librarians approached the question of Google Scholar pragmatically, recognizing the likelihood that students were aware of it, and wanting to help them optimize its use:

“Students already use Google. By directing them to Google Scholar, potentially they will find more appropriate resources than by searching Google only. We don't feel that we are promoting Google Scholar, rather, we are showing students (and faculty) how to enhance its usefulness by linking to OhioLINK for location information.”

“Some librarians here address it, some ignore it. There is not a formal policy to ignore it. I choose to address it in many of my sessions because a) it is in many instances a useful resource, and b) ignoring it is akin to burying your head in the sand while the tide is rising -- users are highly aware of it, using it, and we look silly when we pretend it's not there. Like it or not, it is part of the conversation.”

Why OhioLINK Librarians Do Not Publicize Google Scholar

Based on comments from the survey responses, OhioLINK librarians want to train students to start their research with resources on their library's web site, not with Google or, by extension, Google Scholar.

“We wish to emphasize the research databases available through the library. It is a major task to draw students' attention away from Google as it is.”

“[We are] loath to direct students to anything other than our databases since our fight is to get them away from simply searching Google.”

“Our students would use only Google Scholar if that's what we mentioned and indicated it's o.k. to go there.”

The comparative “quality and ease of use” and “versatility and access” of subscription databases, as well as the desire to promote the use of these resources the library has invested in, were other reasons given for not publicizing Google Scholar:

“I believe many of my colleagues shun the use of Google Scholar because they feel that they should be the direct pipeline to scholarly resources and that students won't get good results if they try to use Google Scholar on their own. In many cases I think the instinct to react negatively to a tool like Google Scholar grows from a self protection mechanism, not a sense of arrogance about one's knowledge, although some small percentage of colleagues probably think that they are too expert to use it. I showed it to a professor from another institution the other day who was doing a high-powered research project and he was thrilled!”

“What does a student need with 176,000 hits that refer back to OLinks? If we are paying for GOOD information, let's teach how to find it and not confuse students with Google ‘Scholar.’ “

“I believe there are still many misleading results from a Google Scholar search. On the other hand, I just used it successfully with a student Monday night--but I was there to help interpret things for her. Otherwise she would have wasted a great deal of time. She had never heard of it.”

“We use [Google Scholar] sometimes in helping students do research, but we do not do any promoting of it. We still find that [Google Scholar] is still weak in providing current articles and information.”

Many librarians clearly feel they have no time to learn yet another tool, and perceive Google Scholar as offering nothing new to their users. Several mentioned how difficult it is already to cover use of the library catalog, the OhioLINK catalog, and subscription databases in instruction classes, without adding yet another topic or resource to the mix.

Misconceptions About Google Scholar

The concerns about Google Scholar expressed by OhioLINK librarians in their survey responses echoed shortcomings discussed early on by authors such as Jacsó, Myhill, Gardner and Eng, Abram, Kesselman, O’Leary, and Wlekinski.⁷ Since several years have passed since these early studies were done, some perceptions librarians have based on these articles may need to be revisited. For example, a reason given for reluctance to link to Google Scholar was the fear that users would be upset if they were asked to pay for full-text resources that show up in Google Scholar search results. A way to avoid this situation is for academic libraries in Ohio to teach users to recognize the “Find it with OLinks” links as a way to online full text, and instruct them to set up Google Scholar Preferences to enable these links off-campus. Some OhioLINK libraries, such as Wright State University and Ohio State University,⁸ include information on their sites explaining to their affiliated users what to do if prompted to pay, and how to avoid payment requests by choosing the OLinks or using interlibrary loan.

Another perception expressed in responses to this survey was Google Scholar’s inferiority to library databases, e.g., its results were “not as ‘good’,” it was “less user-friendly,” it “does not access nearly enough sites to ensure good research results.” Yet studies show Google Scholar returning as good or better results in some cases, for example, when searching interdisciplinary topics and for gray literature, and for seminal works on given topics.⁹ Neuhaus et al. found considerable overlap between Google Scholar and library databases in science, medicine, and engineering, with less in social sciences and humanities.¹⁰ Lack of duplication with library database results does not necessarily mean Google Scholar’s results are worse, just

different, and underscores the value of using Google Scholar as an adjunct when seeking to do a comprehensive search. Google Scholar's results display can be confusing, with its mixture of articles, technical reports, conference papers, books, dissertations, web sites, and other resources, as well as multiple versions of publications, all presented together. Standard library databases such as ERIC, PsycINFO, and MLA Bibliography mix resources of different types together in their results, too; while they offer limit options that allow searchers to filter out unwanted resource types, these limiters are seldom intuitive to novice searchers. Users of Google Scholar benefit from instruction, as users of library databases do, to fully understand conventions and capabilities of the tool.¹¹

Comparison with Other Survey Results

In the few years since Google Scholar's introduction, other surveys of librarians and examinations of library web sites have been done and reported in the literature. Mullen and Hartman studied 113 Association of Research Libraries (ARL) university members' web sites in 2005 and found 6 libraries, or 5% of their sample, with links to Google Scholar on their homepages; 27 (24%) had Google Scholar links on their lists of alphabetical databases; 16 (14%) had links on their subject databases pages; 14 (12.5%) included Google Scholar links in subject guides; and 22 institutions (19.5%) listed Google Scholar as a search engine or Internet search tool. Two ARL institutions placed the Google Scholar search box directly on their home pages, in contrast to none of the OhioLINK libraries. Six ARL libraries (5%) cataloged Google Scholar in their OPACs, in contrast to 2 (2%) of the OhioLINK libraries.¹² Meltzer asked University of California librarians about their use of Google Scholar in 2005, and the comments she received

were quite similar to those of the OhioLINK librarians, two years later. She found a “core of respondents do not use Google Scholar at all,” as well as others who found Google Scholar useful for “getting at older, more obscure, interdisciplinary, and difficult to locate materials quickly and simply...sometimes easier to use than traditional resources. It provides another point of entry to the world of scholarship... [when] used as an entrée into the use of OpenURL or licensed resources, and as an option for non-UC affiliated users.”¹³ York examined 9 library web sites, finding a range of tone “from wildly defensive to surprisingly embracive” in their presentations of Google Scholar.¹⁴ He also summarized the concerns of librarians about Google Scholar, many of which were repeated in OhioLINK librarians’ survey responses:

“First, users will abandon library databases and the library catalog as they come to use Google Scholar exclusively for their research, a concern that seems to be most often addressed by providing copious links to library databases and billing Scholar as incomplete and redundant, while library databases are sophisticated, comprehensive, and reliable.

Second, users will come to think of librarians as irrelevant now that they have easy access to a powerful and simple (if deceptive) tool like Google Scholar; the typical solution to prevent this erosion is to provide numerous links and pointers to "Ask a Librarian."

Third is the fear that users will be led astray into a world of incomplete and redundant content that will water down scholarship and dilute the quality of academic work. Unable to distinguish quality sources from those of a lower grade, users will become simple and unsophisticated as they become accustomed to using only that single, clean, tempting search box. The most common approach to this concern is to point out how many advanced narrowing and filtering options the library databases have.

Finally, libraries appear to be greatly concerned that users will be tricked into paying for content the library already subscribes to.”¹⁵

The Urban Libraries Council reported results of a survey done in July 2005 that received 54 responses. A much higher percentage of respondents to this survey (96%) did not link to Google

Scholar from their web sites or pathfinders, compared to 64% of the OhioLINK survey respondents, and 98% had no plans to offer staff or patron instruction on Google Scholar, compared to the 22.9% of OhioLINK libraries that include Google Scholar in undergraduate instruction classes and the 18.8% that include it in graduate instruction classes.¹⁶

Recommendations

The results of the survey and examination of OhioLINK academic libraries' web sites reported in this article show that, while in the minority, a number of institutions are finding enough merit in Google Scholar to link to it from their sites. While relatively few libraries routinely mention Google Scholar during instruction classes, comments indicate librarians are telling users about it in one-to-one consultations, and using it themselves as another tool for answering reference questions.

Google Scholar is not a panacea, but it can be a very useful complement to library databases, especially with the links to full text and the OhioLINK catalog displayed in search results. Many OhioLINK member libraries take their cues from OhioLINK on promoting databases and other resources. While OhioLINK may not see fit to put a Google Scholar search box or even to include a link to Google Scholar on its own web site, member libraries already familiar with Google Scholar's strengths as well as its limitations could help other librarians understand them. Suggestions for best practices for web placement and presenting Google Scholar to students and faculty might also be disseminated through OhioLINK for the benefit of the many librarians with no time to find out about this tool on their own. Perhaps OhioLINK and Ohio State, the only library in the consortium that has separately provided its IP ranges to

Google, might document the benefits of individual libraries' doing so, such as more exposure of local e-resources and individual library branding, and provide technical guidance to expedite the process .

The organizational culture has a definite bearing on whether librarians feel comfortable discussing Google Scholar in an instruction class, or if they prefer to introduce it to users on a case-by-case basis. In making decisions about if and how to tell users about Google Scholar, a sensible approach is to treat it as another tool, with strengths and weaknesses like any other. Introducing library databases first, then following with Google Scholar, is an instruction technique that works well for some librarians.¹⁷ Others use the authenticated links in Google Scholar and the magic words “free full-text articles” to get students’ attention, then introduce specialized subscription databases; some even have students compare and contrast content retrieved by each.¹⁸ Using the “cited by” feature in Google Scholar search results to teach the concept of forward citation searching can be a much simpler way to get this concept across to students than using the ISI Web of Science, and is especially valuable for those libraries not able to afford the ISI product.¹⁹ As Cathcart and Roberts wrote, “Because it offers the familiarity of Google, yet introduces the user to scholarly articles and the concept of a citation index, it could serve as a bridge to the more reliable, comprehensive resources offered by libraries.”²⁰ Teaching good information literacy skills enables students to judge the quality of results retrieved through Google Scholar, as they do when using subscription databases, even if there is no academic journals filter available to help. For graduate students and faculty, Google Scholar increases comprehensiveness of search results through its prowess at finding gray literature and materials in web-based institutional repositories, among other valuable resources. As Jeffrey Pomerantz

wrote, “Given that library users are using Google Scholar, it is to libraries’ benefit to see that it is used well.”²¹ Google Scholar presents real opportunities for libraries to help their users get to resources already bought, as well as to other valuable content freely available on the Web, and should not be ignored.

NOTES

1. OhioLINK, “The Ohio Library and Information Network,” OhioLINK, <http://www.ohiolink.edu/about/what-is-ol.html> (accessed July 20, 2007).
2. Reference and User Services Committee, Minutes, May 16, 2005, OhioLINK, <http://silver.ohiolink.edu/minutes/usc051605.html> (accessed July 31, 2007).
3. Google, “Google Scholar Support for Libraries,” Google, <http://scholar.google.com/intl/en/scholar/libraries.html> (accessed July 31, 2007).
4. Thomas Dowling, OhioLINK, e-mail communication to the author, August 21, 2006.
5. OhioLINK, “Using Google Scholar? Look for OLinks!” May 23, 2005, OhioLINK, http://olc7.ohiolink.edu/whatsnew/archives/2005_05.html (accessed August 1, 2007).
6. Branch campus libraries were not counted separately from their main campus locations.
7. Péter Jacsó, “Google Scholar: The Pros and the Cons,” *Online Information Review* v.29 no.2 (February 2005): 208-214; Péter Jacsó, “Google Scholar Beta,” Thomson Gale,

<http://www.gale.com/servlet/HTMLFileServlet?imprint=9999®ion=7&fileName=/reference/archive/200412/googlescholar.html> (accessed February 9, 2006); Martin Myhill, "Google Scholar," *The Charleston Advisor* v.6 no.4 (April 2005): 49-52; Susan Gardner and Susanna Eng, "Gaga Over Google? Scholar in the Social Sciences," *Library Hi Tech News* v.22 no.8 (2005): 42-45; Stephen Abram, "Google Scholar: Thin Edge of the Wedge?" *Information Outlook* v.9 no.1 (January 2005): 44-46; Martin Kesselman and Sarah Barbara Watstein, "Google Scholar and Libraries: Point/Counterpoint," *Reference Services Review* v.33 no.4 (2005): 380-387; Mick O'Leary, "Google Scholar: What's in it for You?" *Information Today* v.22 no.7 (July/August 2005): 35-39; Joann M. Wleklinski, "Studying Google Scholar: Wall to Wall Coverage?" *Online* v.29 no.3 (May/June 2005): 22-26.

8. Wright State University Libraries, "Using Google Scholar at the WSU Libraries," Wright State University, <http://www.libraries.wright.edu/find/reference/gscholar.html> (accessed July 19, 2007); The Ohio State University Libraries, "Google Scholar," The Ohio State University, <http://library.ohio-state.edu/record=e1000511> (accessed July 19, 2007); The Ohio State University Libraries, "Making Google Scholar Work for You," The Ohio State University, <http://library.osu.edu/sites/it/ER/GoogleScholar/FAQ.php> (accessed July 19, 2007).

9. Janice Adlington and Chris Benda, "Checking Under the Hood: Evaluating Google Scholar for Reference Use," in *Libraries and Google*, ed. by William Miller and Rita M. Pellen (Binghamton, NY: The Haworth Press, Inc., 2005), 146; Rena Helms-Park, Pavlina Radia, and Paul Stapleton, "A Preliminary Assessment of Google Scholar as a Source of EAP Students' Research Materials," *Internet & Higher Education* v.10 no.1 (January 2007), 65-76; Robert

Schroeder, "Pointing Users Toward Citation Searching: Using Google Scholar and Web of Science," *portal: Libraries & the Academy* v.7 no.2 (April, 2007): 243-248; Ellen Meltzer, "UC [University of California] Libraries Use of Google Scholar," California Digital Library, http://www.cdlib.org/inside/assess/evaluation_activities/docs/2005/googleScholar_summary_0805.pdf (accessed September 12, 2006).

10. Chris Neuhaus, Ellen Neuhaus, Alan Asher, and Clint Wrede, "The Depth and Breadth of Google Scholar: An Empirical Study," *portal: Libraries & the Academy* v.6 no.2 (April 2006): 127-141.

11. Glenn Haya, Else Nygren, and Wilhelm Widmark, "Metalib and Google Scholar: A User Study," *Online Information Review* v.31 no.3 (2007): 365-375.

12. Laura Bowering Mullen and Karen A. Hartman, "Google Scholar and the Library Web Site: The Early Response by ARL Libraries," *College & Research Libraries* v.67 no.2 (March 2006): 106-122.

13. Meltzer, 1.

14. Maurice C. York, "Calling the Scholars Home: Google Scholar as a Tool for Rediscovering the Academic Library," in *Libraries and Google*, ed. by William Miller and Rita M. Pellen (Binghamton, NY: The Haworth Press, Inc., 2005), 119.

15. York, 124, formatting added

16. Urban Libraries Council, "Google Scholar Survey Results," Urban Libraries Council, <http://www.urbanlibraries.org/july2005-google scholar.html> (accessed July 30, 2007).

17. Information Literacy (ili-l) Listserv Archives, "Google Scholar and Bibliographic Instruction [thread]," American Library Association, <http://lists.ala.org/wws/arc/ili-l/2007-02/msg00074.html> (accessed February 21, 2007).

18. Cheryl LaGuardia, "Connecting with Researchers, or, Will You Have Google with That Search?" Library Journal E-Views Blog, <http://www.libraryjournal.com/blog/1100000310/post/1460012346.html> (accessed August 2, 2007); Information Literacy (ili-l) Listserv Archives, "Google Scholar and Bibliographic Instruction [thread]."

19. Schroeder, 245.

20. Rachael Cathcart and Amanda Roberts, "Evaluating Google Scholar as a Tool for Information Literacy," in *Libraries and Google*, ed. by William Miller and Rita M. Pellen (Binghamton, NY: The Haworth Press, Inc., 2005), 175.

21. Pomerantz, Jeffrey, "Google Scholar and 100 Percent Availability of Information," *Information Technology & Libraries* v.25 no.2 (June 2006): 52-56.