

Examining the Presence of Advocacy and Commercial Websites in Research Essays of First-Year Composition Students

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Network technologies have the potential to reach large audiences instantaneously and support a variety of publication sources. At times, this immediate exchange of texts overwhelms our ability to discern the credibility and usefulness of information sources. Nowhere is this struggle more evident than in the increasing dependence on Internet research in composition classes; often, the speed of change in the information age presents new challenges before even we (the “experts” of such literacy) are prepared to engage them.

—Michelle Sidler

INTRODUCTION

Advocacy. In the first decade of the twenty-first century, this term—advocacy—has achieved buzzword status. For some groups, particularly those in higher education, the rise of advocacy is a direct result of the changing economic landscape. Calls for advocacy fill the halls at professional meetings and conferences and line the pages of campus newspapers and academic journals. Advocacy’s presence is even more defined and refined on the Internet. Flying under the radar of the user-developed, highly social nature of what is commonly referred to as Web 2.0 is the rise in digital advocacy, and this development has manifested itself in three ways.

First, organizations that historically have had missions other than to advocate, particularly those founded to inform others or share in the mutual interests of their members, have taken on advocacy roles. Whether out of necessity or opportunity, many traditional organizations now in

some way maintain an advocacy presence, especially on the Web. Just looking within my own area of interest—composition studies—highlights this first face of digital advocacy. Take, for example, the website for the National Council of Teachers of English (NCTE) which supplements its traditional legislative platform with position statements and talking points for its 2008 Advocacy Day on topics such as the following:

- Change Adequate Yearly Progress Measures
- Change Support for English Language Learners
- Change Type of Support for High-Quality Teachers in High-Need Schools
- Substitute Scientifically Valid Research for Scientifically Based Research and Change Appointment Process for Peer Review Panels. (NCTE “Take Action”)

Compiling information in its online “Action Center,” the NCTE encourages members to “take action” and “let your voice be heard” (NCTE “Take Action”). The NCTE is no longer solely or primarily an organization about membership, publication, and teacher development; it is in many ways an advocacy group, using the Internet to amplify its voice and extend its reach. In the Web 2.0 world, however, NCTE is similar to many organizations that now blend information with commercialism and advocacy.

Second, take a look at almost any website of a for-profit company and you will see this mix. For example, consider the hot online insurance company Esurance which uses its website to inform consumers through its “Learning Center” and its “Esurance Insights” as well as advocates its “green” position on the environment and its care for creating “healthy communities,” all the while trying to sell insurance to visitors on the site (www.esurance.com). Mega corporations like McDonald’s have been doing this for years, using advocacy projects and informational tips in the pursuit of improving sales. McDonald’s new “365BLACK.com” campaign is a perfect example of how advocacy has been reshaped on the Web. The “365BLACK” website is accessible from McDonald’s homepage yet is a distinct URL (www.365black.com/365black/) and pitched to visitors as part of McDonald’s corporate position that “African-American culture and achievement should be celebrated 365 days a year—not just during Black History Month.”

The website not only contains information on scholarships and employment opportunities for African Americans, but also allows visitors to share their stories on how McDonald’s has benefitted their lives as well as contains links to video ads for three stereotypically black meals and to

McDonald's own website. Comparing itself to the African Baobab tree, McDonald's cites its commitment to "nourishing" the African American community through this web-based campaign. In the Web 2.0 environment, the three components of advocacy, information, and marketing blend seamlessly and invite users to participate in ways that make it increasingly difficult to separate out the chief enterprise of selling McDonald's to consumers. Sites like 365BLACK.com and Esurance.com are just two examples of those that more subtly package advocacy and require a sophisticated level of critical thinking to fully understand.

Third, organizations with clear advocacy intentions now have the reach and facets of Web 2.0 to extend their ideas in ways never before seen or imagined. Take, for example, one of the better-known advocacy groups, PETA. In addition to its own website (www.peta.org), the People for the Ethical Treatment of Animals maintain, support or contribute to dozens of websites designed foremost to advocate, sites like kentuckyfriedcruelty.com and marscandykills.com. Unless visitors to these two sites recognize the small "peta.org" logo in top corner of the screen, the connection could be difficult to make. Also, the PETA website itself is far from static, as users can watch PETA-sponsored, YouTube-like videos, join in discussion forums, and contribute to the PETA blog. When considering the reach of such organizations in decades past, even a powerful advocacy group like PETA has benefited significantly from Web 2.0 developments. Apply this idea to the large number of sites for advocacy groups on today's Web, and this type of website should be cause for concern for all teachers, particularly first-year composition teachers whose students do a large part of their research on the Web and seem to find these sites with regularity. The reformation and rise of advocacy on today's Web create the need for increased attention to fostering students' critical thinking skills, as digital advocacy is clearly more blended, subtly packaged, and inviting, even on overt advocacy sites like PETA's website.

So what separates NCTE from Esurance, 365BLACK, and PETA? Some would argue quite a bit. In today's Web 2.0 world though, the difference is perhaps much less than we think or are willing to admit. Now, some might say that NCTE's calls to action are secondary matters, not the main reason for joining and participating in this professional organization or, for that matter, visiting its website, whereas Esurance and McDonald's use advocacy as part of their larger commercial enterprises and PETA claims advocacy as its reason for existence. A quick examination of websites for these organizations supports this claim to some degree. The home page of PETA's website places its "Action Center" directly under its logo and mentions the words "action" and "activism" several times as it lets its members

and website visitors know in big, bold letters that “your voice [is] needed today” (www.peta.org). With visual references to Ku Klux Klan activities and animal slaughterhouses on its front page, it likely takes visitors only a few seconds on the PETA website to understand its advocacy mission and how this organization chooses to enact advocacy on the Web.

These startling images are absent, of course, on the websites for NCTE and 365BLACK, and their calls to action are not foregrounded on their home pages. It takes some drilling down to find these calls. It also takes some searching to find the advocacy pages on Esurance’s site, though these items are also often used in its commercial campaigns. Still, looking at the language, the purpose and the presence of it on these sites, digital advocacy clearly should not be overlooked or undervalued. Further, the complicated nature of the Web in the 2.0 era makes providing students with the critical thinking skills necessary to understand and use the information they find on it imperative, especially with regard to the complex purposes and arguments, potential biases, and authority concerns common to advocacy and commercial claims found online.

Consider first-year composition teachers for a moment. These teachers might still prefer their students to use traditional print sources in their research essays, as they recognize the filtering done by editors, peers and writers themselves to these sources. Students need to be able to locate, understand and use print sources, but the amount of critical examination needed for understanding and using them is manageable for teachers to present and for the students to implement. Tell teachers who prefer traditional print sources that a student wants to use information found on the NCTE website, and the teachers will likely readily consent. Who wouldn’t? However, what if the information the student wants to use is from NCTE’s advocacy forum? Does this use now come into question? Now, switch from the NCTE to Esurance or PETA. The role of advocacy and how it is conducted are different on these sites, but how so? Is the information contained on Esurance’s, 365BLACK’s or PETA’s website unfiltered, unedited and unreviewed, or filtered but just filtered differently? It is true that the uses and definitions of advocacy range quite a bit—from basic consciousness-raising to fomenting radical ideology and action, from covert to overt, and from peripheral to central—still, it is clear that digital advocacy weaves together a large part of today’s Web. Understanding these differences and subtleties, how do teachers explain them, and how can their students take this understanding and apply it to sites where the purposes to inform, advocate and sell are more seamlessly blended? The answers to these questions point directly at critical literacy skills that appear essential to navigating information in the digital age.

The success of Howard Dean's MoveOn.org campaign aside, it is too early to tell just how much Web-based advocacy will shape the larger landscapes of politics, economics and education in the United States and worldwide. However, we can see the seeds of change being planted, even if it is just in first-year composition classrooms. Digging into students' essays and asking them about their research practices, the emerging coalescence of Web 2.0, digital advocacy and Generation Y is clear.

To this end, this essay reports on how first-year composition students make sense of and use advocacy as well as commercial websites as sources of information and support in their writing. This essay reports not only on how many advocacy and commercial websites are used by first-year composition students, but also how these websites are used as source material in students' essays. An investigation of more than one hundred student research essays suggests a number of students are relying on advocacy and commercial sites for their information with little or no apparent understanding of both the information and sponsors of these sites. While strategies exist for helping students recognize and write about information that advocates or sells, it is critical that writing program administrators (WPAs) and teachers acknowledge these types of sources in their curricula on research writing. Further, WPAs and teachers can and should work with college and research librarians to more fully integrate information literacy instruction in writing courses.

This research evolved from a study completed in 2005 and published in 2009 that focused on "sources students use in their research essays for first-year composition courses and what students and teachers say about this use" (McClure and Clink 115). The researchers examined one hundred student essays to analyze the types of sources that students use as well as determine the amount of attention students give to analyzing and crediting the sources of their information in their essays. Focus groups were also conducted with participating students and their teachers on the use of sources in these essays and the instruction given to students on source use. The study concluded that students still use traditional resources for their essays, often only to meet the requirements imposed by their teachers. Otherwise, students relied almost exclusively on source information retrieved through search engines on the Internet, finding online versions of traditional resources such as dictionaries and encyclopedias but also regularly utilizing personal websites. Students largely understood that sources need to be current, but were less agile in thinking through the authority of their information. In addition, students did not typically articulate the authority and reliability of their source information, such as detailing the appropriate

credentials, research methodologies, or even just the names of the sources. Finally, students were least able to recognize or articulate bias.

The research presented in the pages to follow examines one of the unexpected findings from the previous study—the use of advocacy and commercial websites as sources of information in research essays written by first-year composition students. This finding led the researcher to pose the following questions: To what extent are first-year composition students using advocacy and commercial websites as sources of information in their research essays? What kind of attention are they paying to them and how are they framing these sources in their writing? Why do students say they are using these sites? And how are composition teachers addressing these sites in their instruction on conducting academic research?

REVIEW OF CURRENT LITERATURE

Despite the countless number of research papers written on college and university campuses each term, surprisingly few studies have been conducted on how undergraduates conduct scholarly research, including how students locate, analyze, and use source material. In fact, only a couple of studies consider the ability of students to identify and evaluate different types of websites, including advocacy and commercial ones. In “Of Course It’s True; I Saw It on the Internet! Critical Thinking in the Internet Era,” Leah Graham and Panagiotis Takis use an email survey of 180 college students enrolled in a “Computers and the Internet” course to determine students’ understanding of what the researchers label four “areas of misinformation: advertising claims, government misinformation, lobby group propaganda, and scams” (72). Graham and Metaxas summarize their “disheartening” findings when they write that students were “overwhelmingly susceptible” to misinformation, ideas they routinely found on the Internet. Citing one example of the biased advocacy website getoutraged.com, Graham and Metaxas note that 48% of students believed the statistics provided by the group to be accurate and would be confident about using them in academic writing (74). Other than this research from Graham and Metaxas, there appears to be no other work in the area of web-based advocacy and commercialism and its effects on students’ researching and particularly their writing habits. While such research has likely been conducted at the institutional level, none seems to have found its way into publication. In fact, the most comprehensive study to date of students’ research practices might be Wendy Austin’s 2000 dissertation *The Research Paper in Cyberspace: Source-based Writing in the Composition Classroom*; however, Austin focuses

her research more on students composing hypertext essays and support for them given in writing centers.

The study of students' research habits in the digital age began in earnest some ten years ago with Mary Ann Gillette and Carol Videon's essay "Seeking Quality on the Internet: A Case Study of Composition Students' Works Cited" published in a 1998 issue of *Teaching English in the Two-Year College*. In this study, Gillette and Videon examined forty-eight Internet citations in composition essays written by two-year college students and found that half (50%) of the verifiable citations were links to research papers composed by other students (189–91). Based on this and other findings, Gillette and Videon offer guidelines for librarians and teachers to assist students in finding "quality" websites (193–94).

Gillette and Videon note in their literature review their surprise over the very limited amount of scholarship on students' research practices prior to 1998: "While we found several reports on research habits of published academics and doctoral candidates, we located only one aimed at the undergraduate level" (190). In this way, Gillette and Videon's work is significant, as other studies investigating students' research behaviors and practices in the digital age have since been published (Lorenzo and Dziuban; Van Scyoc and Cason; Davis; Graham and Metaxas; Jenkins; Grimes and Boening; Burton and Chadwick). In all of these studies, there is common ground regardless of the discipline under examination, as they examine "undergraduate research behavior at both the national and individual institutional level [and] have unanimously found that the vast majority of students turn to the Internet first for academic research" (Van Scyoc and Cason 48). Further, these studies often conclude that students "lack the ability to distinguish credible academic sources from popular materials on the Internet and have difficulty citing what they find" (Davis "Effect" 42).

Recently, researchers from University College London (UCL) have argued the widening access to technology has not improved students' information literacy skills, suggesting instead "their apparent facility with computers disguises some worrying problems," such as spending "little time evaluating information, either for relevance, accuracy or authority" and focusing instead on the speed of searching. Further, the heavy use of finding information via search engines like Google and Yahoo, with as many as 89% of students beginning their searches this way, has some researchers believing it is difficult for students to assess the relevance of materials presented to them given the long lists of materials to choose from in search engine returns (University College London). While the UCL researchers focus on the "Google Generation" (students born after 1993, those in the 11–15 age group), they maintain these findings could easily be applied to

students in the previous Generation, Generation Y, those currently enrolling in large numbers in first-year composition courses. The researchers concede that there is little to no evidence that students' information skills were stronger at any time in the pre-Internet era; however, they contend that Google searching may be evidence of a significant shift in researching habits, in information behavior. Clearly, this behavioral shift suggested by the UCL researchers deserves the attention of the providers of information literacy skills, including composition teachers.

Aside from the UCL study, most if not all other recent studies on student research practices rely on three sources of information to draw their conclusions: bibliographic information taken from students' research essays; perceptions of students gathered from interviews, surveys and focus groups; and observations from teachers and academic librarians. These studies consider what sources students use and what teachers, students, and librarians say about this use; however, these studies continually omit or fail to consider how students use their source material in the texts of their essays. An analysis of the rhetorical use of source material seems necessary before stronger recommendations can be made on how to improve information literacy instruction. The study presented in the pages to follow presents such research as it also reflects the growing trend of creative research and scholarship on the habits of undergraduate researchers, such as that offered in the 2007 special issue of *Computers and Composition Online* (www.bgsu.edu/cconline/edwelcome_special07.html). Two of the editors for this special issue, James Purdy and Joyce Walker, have recently published the beginnings of their work, documenting the research steps or protocols used by today's college students, another new twist on the subject of how students research and write in the digital age. Still, the total number of published works remains low, and much more research is needed.

METHODOLOGY

More than one hundred research essays written by first-year composition students in a second-semester composition course are mined in order to determine the degree to which students rely on advocacy and commercial websites as sources of information for their essays and how students negotiate the use of these sources in their essays. The essays were collected with IRB approval in sections taught by five experienced composition instructors and were written in response to an assignment that called for either an informative or argumentative thesis on any topic of the student's choosing and required a minimum of five sources. Since the researcher wanted to examine what sources students choose on their own, the only information

provided to participating students and teachers was the study's focus on research papers.

To replicate previous studies, the citations listed in students' bibliographies are examined and surveys of student and teacher participants are used. The bibliographies reveal what types of sources students use, and comments garnered from the teacher and student surveys indicate how students select sources, how much instruction on advocacy and commercial websites composition teachers provide, and how their students interpret these particular websites. Unlike previous studies, however, the bibliographic examination is extended beyond the frequency of citation types (website, book, journal, etc.) to consider the frequency of website type (advocacy, commercial, government, etc.), information previously unrecorded in studies on undergraduate student research practices. While other studies have considered student and teacher perception of source selection and use, no study has looked closely at advocacy and commercial websites. Further, no study has mined student essays to see how advocacy and commercial sites are used. The bibliographies are studied here, but the examination then moves inside students' research essays in an attempt to identify source use patterns. These findings are then connected with student and teacher feedback on source selection and use.

“SIGHTING” SOURCES

Five categories have been identified for sorting the sources used by students in the 106 essays that are a part of this study: websites, books, print articles, PDF articles, and other sources (CDs, DVDs, personal interviews, etc.). The total number of sources used by students is 875, or 8.25 sources per essay. Not surprisingly, the raw count of the 875 sources illustrates the heavy use of the Internet for source retrieval:

- websites: 265 (30% of all sources)
- PDF articles: 219 (25%)
- books: 181 (21%)
- print articles: 178 (20%)
- other sources: 32 (4%)

First, the bibliographic entries validate the findings of several recent studies that show students' heavy use of the Internet for locating information. If the two types of digital sources identified above—websites and PDF articles—are taken together as they likely have been in previous studies since they are both accessed using the Internet, then the percentage of

web-based sources used by students in this study is 55 percent. This count confirms the findings in other recent studies that students are becoming increasingly reliant on the Internet for their research. In looking at research from 1996 to 2008, it is safe to conclude that student use of the Internet for conducting academic research has grown by more than 500 percent. Published findings show the percentage of Web-based sources in bibliographies for student research essays at 10% in 1996, 20% in 2000, 24% in 2002, 48% in 2005, and now 55% in 2008 (Davis "The Effect" 55, Jenkins 164, McClure and Clink 118). In fact, information found in other reports suggests the percentage might be significantly higher (Van Scyoc and Cason 49; University College London).

Certainly, this rapid increase parallels the development of the Web over the last decade. Take, for example, the number of sites now on the Web as well as the development of online holdings in college and research libraries over this period. Andrea Foster reports in the *Chronicle of Higher Education Online* that the number of websites has grown from 18,000 in 1995 to more than 100,000,000 in 2007. In addition, we have been witness to the near doubling of online databases over the last ten years with now more than 18,000 such databases available (Foster), as the national average for expenditures for electronic materials has increased by 119% during the period from 2000–2003 and with the average research library now spending between 30–50% of its materials budget on e-materials (Mischo et al. 30). For example, one regional state university in the upper Midwest reports expenditures for electronic journals grew from \$170,496 in 2000 to \$488,609 in 2005, a figure now consistent with the 2008 national average of \$456,238 (Library Services; Primary "Survey"). The increased expenditures are reflected in the use of full-text PDF articles as sources, with one study reporting that PDF downloads at a University of North Carolina regional campus increased 1007% after the school entered the statewide e-library consortium (Mischo et al. 31).

The exponential growth in the number of traditional print articles now available in PDF form is affecting students' research practices in the digital age. Most previous bibliographic studies tend to compare the number of websites with the number of traditional print sources, yet the identification of a significant percentage of PDF articles in this study is significant. Students are still getting the majority of their information from websites, yet it appears many are using online research databases and other avenues to retrieve PDF versions of traditional print documents. In fact, 69% of all the sources used by students in this study are library-based (books, print articles and PDFs), a statistic some eighteen points higher when compared to data collected just four years ago (McClure and Clink 119). Further, this

statistic calls into serious question the recent lamentations over the impending death of the academic library, or at least its second-class status in the research process, the “last stop” for students (Davis “Effect” 45; Purdy and Walker). In fact, future investigations on the presence of PDFs might confirm that the research pendulum is swinging with force back into the library, especially as more and more libraries invest in electronic materials as well as research and learning commons models¹ that aim to facilitate the research process for students, especially the library-based process.

The findings from several studies over the past decade-plus confirm the heavy use of the Internet by students for conducting academic research; however, this study may be the first to focus on the types of websites students are using. Only a short time ago, it was common advice to tell students not to use the Internet at all for academic research. As it became clear that the Internet was pervasive in students’ lives, this advice changed to helping students distinguish credible websites, a la Gillette and Videon. For example, personal websites have typically been viewed as untrustworthy sources for academic research. However, this advice is no longer good, as many have pointed out that some of today’s most respected minds—from Maya Angelou (<http://www.mayaangelou.com/>) to Stephen Hawking (www.hawking.org.uk/)—have their own websites.

Educating students about today’s Web can no longer be reduced to simple lists of dos and don’ts. The challenge should not be “to get students to use the right online sources . . . [but] to move beyond the notion that students’ use of the ‘wrong’ online sources means that they are not serious or engaged researchers” (Purdy and Walker). In other words, it is no longer a simple activity of drawing the line between right and wrong online sources in an attempt to have students only use traditional scholarly sources. Resources today, particularly websites, are too accessible, too plentiful and too complicated to draw such a line. We need to help students understand and use all types of information, especially Web-based information that is coming at them unrelentingly from all sides. Therefore, it seems time to look closely at the kinds of websites students are using as sources of information and to shape both information literacy and writing instruction from this understanding.

To this end, eight categories have been used to group and describe the 265 websites that students in this study chose as sources of information. These categories include commercial, advocacy, personal and community, government, search engine, dictionary, educational institution, and topical websites, and the definitions and frequency of these types of websites are provided in Table 1:

Table 1. Website Types as Sources of Information

Website Type	Frequency
Advocacy: Sites associated with promoting a political, social or ethical agenda. Information is biased toward the agenda of the organization. <i>Ex: peta.org; prochoice.org; natvan.com</i>	46 websites (17% of all websites)
Commercial: Sites associated with selling a product. Information provided on the site is used to promote the “need” for a certain product. <i>Ex: gatorade.com; siemens.com; nike.com</i>	20 (8%)
Dictionaries: Sites providing definitions and brief descriptions of a term. <i>Ex: WebMD.com; dictionary.com; merriam-webster.com</i>	9 (3%)
Education Institutions: Sites for schools, school districts, colleges and universities. <i>Ex: leeschools.net; csuohio.edu; laurelschool.org</i>	28 (11%)
Government: Sites associated with government agencies. These may be the sites of specific government departments or organizations associated with a specific government agency. <i>Ex: irs.gov; dea.gov; uspto.gov</i>	38 (16%)
Personal & Community: Sites setup and maintained by individuals. These sites include personal web pages, blogs, and community sites where individuals may post comments and information with limited or no censorship. <i>Ex: blogger.com; my.execpc.com; cyberend.com</i>	19 (7%)
Search Engines: Sites that allow individuals to perform keyword searches for all available information on the Internet and provide links to sites related to the search criteria. These sites often have their own informational pages providing news coverage, reviews, health information, etc. <i>Ex: msn.com; yahoo.com; about.com</i>	20 (8%)
Topical: Sites related to organizations and associations not selling a product. The information provided tends to be subject-specific and unbiased for the purpose of educating consumers, researchers or the general public. <i>Ex. nih.gov; apa.org; hrddailyadvisor.blr.com</i>	83 (30%)

In looking at these eight categories of websites, it is clear that students are using a significant number of websites whose primary purpose is to inform. Sixty percent of the websites used by students in this study are

online dictionaries, sites for educational institutions and government agencies, or topical websites. Still, this research illustrates the marked use of websites produced by advocacy groups as well as for-profit corporations, with 25% of all websites falling into one of these two categories. Advocacy and commercial websites have a significant presence on the Internet; the above data indicates they have a notable presence in student research writing. Now, it is true that advocacy and commercial websites only represent 8% of all (print and digital) sources used by students in this study, but when students are choosing to use websites such as peacepilgrim.com, biblebelievers.org and abortionfacts.com as sources of their information—information that in the pre-Internet past would have been much harder to come by—a research writing trend and possible concern might be emerging, especially if students do not fully understand the types of advocacy enacted on these sites. This concern, coupled with the growing use of the Web for conducting research makes this trend worthy of our attention. In fact, 39 of the 106 essays or more than one out of every three students in this study use either advocacy or commercial websites as sources of information. Further, this study only considers websites easily recognized as overtly commercial or advocacy-based. As was suggested earlier, many websites that traditionally would not be seen as advocacy or commercial sites now serve these purposes, with some doing it in very blended, indistinct ways. Therefore, the amount of advocacy and commercial information used by students in this study could be even higher and the need for fostering student awareness and understanding of these sites could be even greater.

Returning to the analysis of bibliographic information in this study, it is clear that this information only completes part of the picture in terms of how much students rely on advocacy and commercial websites as sources for their writing, and taken by itself might be seen as undeserving of more attention. However, this data only provides *how many* sites are used, when the more revealing information is *how often* and *in what ways* these sites are used. This puzzle is only complete with the addition of two other pieces: a close examination of students' use of these sites within their essays and analysis of teacher and student responses to using them.

MINING THE ESSAYS

As noted in the last section, advocacy and commercial websites only constitute eight percent of the total number of sources used by students in this study; such a low percentage may not deserve attention. Examining the essays more closely, however, it is found that fifteen percent of all in-text citations made by students are for commercial and advocacy websites.

Closer examination of the 106 essays, 875 total sources, 46 advocacy and 16 commercial websites comprising this study shows that awareness of the purposes and biases of advocacy and commercial websites is only communicated in five (13%) of the thirty-nine essays that reference such sites. An example of such communication occurs in an essay on the rising costs of college where the student writes, “The initiative to End Grade Inflation [www.endgradeinflation.org], obviously a biased source, still makes a good point stating that as the value of a degree drops its cost in tuition steadily rises.” Writing nothing more about the site, the student moves on to another point. It is clear from this example that the awareness of bias as it has been communicated is at best limited.

Perhaps the strongest and clearest example of awareness of bias comes in a two-line passage from a student essay on Catholicism in which the writer comments on the advocacy site www.roman_catholic.com: “[T]hese people assume they have the right to evaluate the worth of one life compared to others. One cannot possibly see this point of view as anything but self-absorbed and hypocritical.” Despite a somewhat more effective discussion here, this student and the four others who at least attempt to communicate the purposes and limitations of their advocacy and commercial sources fail to provide clear discussions of their own reasons for using advocacy or commercial websites as sources. Further, these findings conflict with those presented in the oft-cited *ICT Literacy Assessment Report* produced by the Educational Testing Service. In this 2006 report, ETS claims that 52% of the more than 6,300 high school seniors and two- and four-year college students in its study were able to identify the objectivity of sources (Educational Testing Service). This number may be accurate, but the percentage of students here who articulate or even mention their understanding of objectivity and subjectivity is much lower. It is not one out of two students as ETS suggests; it is closer to one out of ten. Students might know bias when they recognize it, but they do not seem compelled to discuss it in their writing.

In essays on more controversial topics, students often gravitate toward advocacy sites, but they do not recognize them as such, at least in how they present the information from them in their essays. Whether students are writing on abortion or the legalization of marijuana, gender stereotypes or organ trafficking, eating disorders or green power, they only use information from these sites to support their point of view without ever acknowledging the limitations of their sources or discussing their reasons for using them. For example, one student supports her pro-choice stand with ideas from several advocacy sources, never once acknowledging these sources could be biased. Another student arguing for the legalization of marijuana

presents twelve “facts” from three different advocacy websites, including this interesting factoid from www.briancbennett.com: “In 2001, out of the 2,416,425 people that died, only 138 deaths are marijuana related.” This example shows that advocacy and commercial websites have not only authority and objectivity issues, but also accuracy issues. As Lorenzo and Dziuban note in their 2006 white paper for *Educause*, “[S]tudents [who] increasingly rely on Web sites and Internet archives for information [increase] the likelihood that they will stumble across and cite false or incorrect information” (9). This comment from teachers Lorenzo and Dziuban is confirmed by college student Carie Windham in her white paper for the same series: “We [students] know how to track down an answer on the Internet, but we’re often quick to accept it without a critical evaluation of its source or content. We are . . . information illiterate” (3). Windham’s acknowledgement of Generation Y’s acceptance of all things Web, in which most students lump all websites together in the belief they all contain quality information, suggests that students need additional information literacy training across all criteria (Sidler 59).

Even in essays with informative thesis statements or on less controversial topics, students fail to acknowledge advocacy and commercial websites as such. Interestingly, two essays on body image both cite a website titled “Campaign for Real Beauty” (www.campaignforrealbeauty.com/home.asp) sponsored by Dove soap. This commercial site promotes the use of Dove, a use the company suggests will contribute to a woman’s self-esteem; however, both students treat the website as an authoritative, unbiased source in the texts of their essays. One student writes

Dove is making a personal effort to change the imagery of females in advertisement . . . Their campaign plans to target young teens to “golden-aged” women to appreciate their beauty . . . I think Dove’s promotion of the gorgeousness of ordinary women is important . . . In the decades to come, Dove is in hopes [sic] that their company can make a dramatic change in changing the perception of true beauty.

The other student buys (yes, buys) into Dove even more convincingly:

One company has taken responsibility for their actions in their attempt to change social norms. Dove launched a campaign called *Campaign for Real beauty*. Their goal is to help change the stereotypical views of women and to help women feel more beautiful each day.

In both essays, these students do not acknowledge that Dove wants to sell soap, especially to its target market—women. Instead, both students see

this website and its information in its community-minded, socially-responsible spin. While it would be interesting to talk to these students about the commercial aspects of this website, it would also be interesting to observe these students in their research processes to see how they both came to this website, along the lines of the work being done by Purdy and Walker.

The lack of discussion and disclosure of sources as well as the seemingly quick and unmeasured acceptance of them might be the result of poor instruction, poor assignment design, or simply poor execution from student writers. Some might also contend the lack of metadiscourse on source information in research essays from first-year composition students is nothing flawed; it is the result of informed decisions by students on audience, on the rhetorical situation, on their understanding of what academic research papers should accomplish. For example, it is certainly possible that students who used advocacy and commercial websites as source material for their essays refrain from discussing these sources in such ways that would force concessions, force them to wrestle with inconsistent data, inaccuracies or biases, or force them to add or acknowledge the complexity of certain topics. These students might be making the rhetorical move deliberately, to avoid critical references to these sources, seeing it as weakening their writing. It is also possible that students in this study believe one genre is more suited for academic research writing. Students might think that overt advocacy or persuasion papers, papers that typically ignore opposing or differing views, make the best research essays. It is also possible that students believed their readers to be aware of the sources, thus removing the need to discuss them fully. Some of these claims suggest a high level of sophistication in writing skills which is not consistent with the findings here, yet future research into student use of Web 2.0 source information should consider more closely what students and teachers believe to be the purpose of the research paper.

The lack of discussion or disclosure might also be due to changes in students' researching practices, changes brought on by the explosion of information in the Web 2.0 age. Nicholas Carr in his article "Is Google Making Us Stupid?" believes the Web is having profound cognitive effects, reprogramming its users to skim and know only superficially rather than read and fully understand ideas they encounter. Carr argues the style of reading common to users of the 2.0 version of the Web is a style that puts immediacy first and in doing so affects students' abilities to read deeply and critically, to make "rich mental connections" (online). Carr comments on his own experience as a Web 2.0 user, "For me, as for others, the Net is becoming a universal medium, the conduit for most of the information that flows

through my eyes and ears and into my mind . . . Once I was a scuba diver in the sea of words. Now I zip along the surface like a guy on a Jet Ski."

Carr's self-assessment is supported by research that he cites from scholars at University College London whose five-year-long study of Web users published in 2008 suggests that "new forms of 'reading' are emerging as users 'power browse' horizontally through titles, contents pages and abstracts going for quick wins. It almost seems that they go online to avoid reading in the traditional sense" (University College London). It is important to mention that power browsing, as the UCL researchers call it, is not particular to the Google Generation. In fact, the UCL researchers concede their studies show undergraduates as well as professors "exhibit a strong tendency towards shallow, horizontal, 'flicking' behaviour [sic]" and that "power browsing and viewing [skimming titles, contents pages and abstracts for information] appear to be the norm for all," leading the researchers to conclude, "Society is dumbing down." This conclusion might be overstated. Still, these "quick wins" are evidenced here in student use of advocacy and commercial websites, and this finding suggests that attention to fostering deep and critical understanding of Web-based information will only become more important as the 2.0 version of the Web continues to evolve.

Throughout the essays in this study, the finding remains that students do not seem to understand the difference between sources with an informative purpose or objective analysis and those that support a specific point of view or promote a particular product. They appear to perceive all web-based source material—advocacies, commercial pitches, and scholarly works—as equal types of support, especially in strengthening the writer's point of view. As several other studies have concluded (Graham and Metaxas; Van Scyoc and Cason; Sidler), students are using the Internet to gather much of their source information, but they appear to lack the information literacy skills needed to understand and use it effectively. Despite the prevalence of advocacy and commercial websites in the bibliographies of student essays and the apparent lack of understanding in the bodies of the essays themselves, participating teachers and their students seem to feel that they are respectively providing and receiving adequate information literacy training, even in regard to advocacy and commercialism and the corresponding issues of authority, bias and accuracy among others.

SURVEYING THE PARTICIPANTS

All five participating teachers responded to an online survey at the conclusion of the study. All of the teachers indicate on this survey that they provide information literacy training, with four of the five responding that

they provide training throughout the entire course. This training comes in various forms including readings from course texts (3 out of 5 teachers), assignments and class activities (5/5), teacher-developed handouts (4/5), links to websites (4/5), a single library instruction session (3/5), and multiple library instruction sessions (1/5). However, four of the five teachers also indicate that they spend less than 25% of class time on information literacy concepts, with two indicating they spend less than 10% of the time. Despite what seems like limited instruction in terms of class time, teachers rate the incoming and exiting information literacy skills of their students as a “7” and “9” respectively on a ten-point scale.

All five teachers comment that they teach the information analysis concepts such as authority, bias and accuracy, concepts important to the dissection and use of advocacy and commercial websites, with four teachers responding that they spend at least some time discussing these two particular types of websites. One teacher comments: “[The students and I] rank types of sources in terms of reliability and specificity, talk about what kinds of sources carry the most authority in papers we’ve been reading, and discuss how we might make our readers aware of potential biases or agendas” (“Teacher Survey”). Since teachers were unaware of the focus of this study, these responses are significant. From these teachers’ perspectives as gathered in this end-of-study survey, students are getting the training they need to understand and use commercial and advocacy websites, even after these same teachers have read and evaluated their students’ essays that appear to the researcher to be almost completely devoid of such understanding. This disconnect certainly suggests the need for more teaching training, or as one teacher participant comments, at least the need for more library instruction sessions (“Teacher Survey”). As I have contended in the past, it is likely that only a small number of first-year composition teachers have received a significant amount of training in the teaching of research skills, though they are likely competent researchers in their own right (McClure and Baures). Still, first-year composition teachers like those in this study find themselves the lead providers of information literacy training on most college campuses.

Students also find their information literacy training sufficient. Of the 106 students submitting essays for this study, forty students (38%) completed the online study offered at the conclusion of the course, and responses from these students indicate their teachers spent significant time providing information literacy training. In fact, 35% of the students surveyed claim their teachers dedicated at least nine class sessions on information literacy topics, and more than 90% of all respondents claim their teachers provided

information literacy training on bias and objectivity. One student comments on the information literacy training provided by her teacher:

She had us look at the website “Snopes.com” [A site that claims to be “the definitive Internet reference source for urban legends, folklore, myths, rumors, and misinformation”] to actually check sources and information. It was a great exercise that led us to seriously question many sources. (“Student Survey”)

Interestingly, the percentage for having received instruction on bias and objectivity of source information is higher than responses for any criterion, including accuracy (87%), authority (73%) and timeliness (60%). Further, 83% and 56% of student respondents indicate their teachers provided training on advocacy websites and commercial websites respectively.

Training provided by teachers was supplemented by library information sessions, as 70% of student respondents note they participated in one or more sessions with an academic librarian. Again, this additional instruction focused on bias and objectivity, with 59% of students reporting such training. Advocacy and commercial websites were topics also covered by most librarians, as 63% and 52% of students claim they received some training on these types of sources during their library sessions. For example, take the following student comment on the information analysis training she received during a library instruction session:

We had a great session . . . [The academic librarian] put up the first Google result on Dr. Martin Luther King Jr. on the Smart Board and analyzed the website, which was absolutely terrible and did not represent anything Dr. King stood for. Upon first glance, though, it looked reputable, and after all it was the first Google result! She did a terrific job of getting us to question our sources and to be aware of the information we were accessing.

The claim by this student and the finding it represents are significant, since librarians were also unaware of the study’s focal points. Similar to the survey responses from participating teachers presented earlier, academic librarians appear to be providing some training on digital advocacy and commercialism, though students seem indifferent in applying this training to their academic writing.

Still, all forty students responding to the survey note they pay at least some attention to using timely or current sources of information in the research essays for their first-year composition courses. This finding is consistent with both statistical and anecdotal evidence offered in other studies, as most report that students use timely sources, often concluding that

both the currency of information available on the Internet and the criterion itself make it easy for students to apply in their research and their writing. Looking at other criteria, however, the percentages do not drop off much. In fact, 97% and 92% of student respondents indicate they pay some attention to using sources with an appropriate level of authority and those free from bias respectively. While the close examination of student essays suggests otherwise, students themselves believe they understand and use information analysis skills effectively in their research writing. This finding is consistent with students' overall rating of their skills which students rate as a "6" entering their first-year composition courses and a "9" exiting their courses, and it supports conclusions presented in other research that finds "a big gap between [students'] actual performance in information literacy tests and their self-estimates of information skill" (University College London).

CONCLUSION

So what to make of this apparent disconnect between training in and using information literacy skills, especially in terms of advocacy and commercial websites? To answer this question, perhaps it best to return to one of the organizations used to frame the concept of digital advocacy in the introduction to this essay, the NCTE. The parent organization for all English teachers, including and especially first-year composition teachers who participate in the Conference on College Composition and Communication (CCCC), has recently adopted and published its "Definition of 21st Century Literacies" which includes the following statements that define literacy for today's Generation Y students living in a Web 2.0 world:

As society and technology change, so does literacy. Because technology has increased the intensity and complexity of literate environments, the twenty-first century demands that a literate person possesses a wide range of abilities and competencies, many literacies. These literacies—from reading online newspapers to participating in virtual classrooms—are multiple, dynamic, and malleable. (NCTE "Toward a Definition")

Going on to articulate several skills needed by our students to be digitally literate as readers and writers, the NCTE believes today's students need to "manage, analyze and synthesize multiple streams of simultaneous information." The UCL's claim that today's users are more power browsers than readers certainly complicates the process of managing information found on the Web. What also complicates this already-difficult process is that today's Web delivers these "multiple streams" in many ways, even within one website. Though it is often thought that the user-defined nature of the

Internet in the Web 2.0 era makes it an easier space, this ease is really only an ease of access, of entering the conversation. In fact, the level of sophistication in critical thinking skills needed to understand and use information on today's Web—to manage, analyze, and synthesize information—is a level never before seen in higher education or any other part of contemporary culture. Never before has information been so abundant, so available, and so complex. As Lorenzo and Dziuban remark, “[T]he volume of information being generated [on the Web] means no one will ever be “educated” for long—we will have to continually educate ourselves, searching, retrieving, and synthesizing information. It is no longer a college skill; it is a lifelong skill.” This comment seems true enough; however, it is argued that these information literacy skills are a large part of what makes first-year composition a college and university requirement across this country. For this reason, more attention to fostering students' critical thinking skills particularly with regard to information available on the 2.0 version of the Web is clearly needed in first-year composition courses.

Much like the expression that it takes a community to raise a child, it certainly will take the efforts of not just composition teachers, but all working in higher education to foster students' information literacies in the 21st century. Andy Guess in a 2008 article for *Inside Higher Ed* explains it this way: “[T]he gap between students' research competence and what's required of a modern college graduate can't be easily solved without a framework that encompasses faculty members, librarians, technicians and those who study teaching methods.” Fortunately, some work in bringing more collaboration to the teaching of information literacy skills is being done. For example, University of Central Florida's “Foundation for Information Fluency” (sacs.ucf.edu/ccr/report/qep_summary.htm), Cornell University's “Undergraduate Information Competency Initiative” (infocomp.library.cornell.edu/?q=institute), and the California State University system's “Information Competence” program (www.calstate.edu/ls/Archive/info_comp_report.shtml) are three initiatives designed to take more institutional responsibility for information literacy training (Lorenzo and Dziuban). For example, the developers of Cornell's program acknowledge that today's Generation Y students are digital natives, but they lack the “research practices and mindset that encourages critical thinking about competing online sources.” Faculty participating in the initiative work in teams with librarians, IT staff members, and representatives from Cornell's Center for Learning and Teaching in an attempt to infuse information analysis skills into their curricula (Guess).

Though these programs exist and though the Association of College & Research Libraries (ACRL) maintains that “nearly every college library has

a staff member charged with integrating information literacy into the curriculum" (Foster), it is safe to argue that many working in higher education today still believe information literacy to be the work only of librarians and composition teachers. A recent study of forty-five major research libraries finds that nearly three-fourths of libraries spend less than 20% of staff time on information literacy issues with more than half of the libraries spending less than 10% of staff time on such issues (Primary Research Group "Newsletter" 3). As this data suggests and as most librarians and WPAs know, the lion's share of this work often occurs in first-year composition, particularly with assignments that prompt or require students to conduct research.

Another recent study from the Primary Research Group of more than 110 colleges and universities in the United States and Canada points out that only 9% of the schools surveyed actually require a course in information literacy whereas 23% of these schools require information literacy training be integrated into first-year composition courses. In addition, more than a third of the schools surveyed believed they could be doing a much better job with information literacy training (Primary Research Group "College"), a thought that has been echoed by many corporations and businesses (Lorenzo and Dziuban). Now, the Primary Group's survey does not list the respondents in this research. More importantly though, the reliance on first-year composition programs to steward information literacy training may be even more pronounced than its report suggests. For example, seventy percent of the students responding to the survey here, of which nearly half were beyond their freshman year, note that they have written research essays in only one or two courses, including their first-year composition courses ("Student Survey").

Since students are possibly not gaining significant exposure to working with sources in other areas of the curriculum, it appears first-year composition courses whether by choice or mandate are on the front lines of information literacy and critical thinking, and both the public perception and the sample of student research writing presented here suggest that this training is falling short. Graham and Metaxas draw a similar conclusion, "As students continue to view the Internet as a primary source of information, without a significant shift in training methods, this problem will only worsen" (75). Students will continue to go to the Web, and information literacy and critical thinking training for living and communicating in a Web 2.0 world is vital to students' success in higher education and beyond. As researchers from University College London conclude, "Information skills are needed now more than ever and at a higher level if people are to really avail themselves of the benefits of an information society."

Therefore, WPAs and composition teachers must make this 21st century literacy work even more a part of their curricula, most logically through a close partnership with their academic and research librarians. To echo Purdy and Walker, we must “bring together the fields of library and information science and writing studies to offer fuller insight into online research practices and their relationship to writing.” In fact, it has been my experience that many WPAs and composition teachers are unfamiliar with the extensive work the ACRL has put into the development of its *Information Literacy Competency Standards for Higher Education* (www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.cfm), a document similar to the WPA’s *Outcomes Statement for First-Year Composition* (www.wpacouncil.org/positions/outcomes.html).² WPAs should take the leadership role in forming these partnerships, since they are the ones in charge of courses that nearly all undergraduates take, courses that frame much of the undergraduate experience, particularly in regard to research methods and information literacy skills. A good starting point for such partnerships could be using the WPA and ACRL documents in local conversations among compositionists and librarians to determine what values, outcomes and standards for researching and writing they share.

It is true that library staffing is not what it once was, yet research librarians remain underutilized resources for students and uninvited partners of many faculty members, including those teaching first-year composition. Few WPAs and likely fewer faculty understand the kinds of things that librarians know about and how fully they are immersed in this world of source material, including non-traditional, non-academic, and even Web 2.0 sources. Inviting librarians more into undergraduate courses is an important move to make, and these partnerships can take on many forms. For example, teacher-librarian partners could work together to design assignments in order to build in research and analysis concepts at the points of need in them. Librarians and teachers could then co-facilitate tailored research sessions that address the subtleties of source information, like that common to advocacy on today’s Web. In the process, librarian-teacher partners will certainly learn more about their shared writing and researching goals, thus likely to improve both library and writing instruction in the process.

It is also true this solution presents a host of challenges for WPAs and librarians alike, but it presents a tremendous number of opportunities, including taking a lead role in providing a richer, more defined vertical starting point for integrating information literacy across the curriculum. In fact, faculty in writing and other programs have recently entered into such partnerships with academic librarians, and two partnerships of note

are those at Auburn University (media.cla.auburn.edu/english/news/EC11-14-07.html) and Utah State University³ (library.usu.edu/instruct/eng2010/index.php). Even working together as they are at these schools, it will not be easy for WPAs, composition teachers, librarians and others in higher education to help students understand the complex nature of information on today's Web.

In fact, it is possible that forming partnerships between libraries and writing programs might not significantly impact the researching practices, information analysis skills, and critical thinking abilities of undergraduates like first-year composition students. Some researchers believe that “intervention at university age is too late: these students have already developed an ingrained coping behaviour [sic]: they have learned to ‘get by’ with Google” (University College London). Until the outcomes of library-writing programs as well as other partnerships at the undergraduate level can be richly studied, however, these partnerships should continue. Depending on the findings from studies of library-writing programs, it might be necessary to extend these partnerships to include primary and secondary teachers and students. Embedding information literacy training throughout the P-16 curriculum might be the only way to effectively improve the information literacy skills of today's students.

Time is of the essence here, as recent research suggests that Internet users worldwide are developing their own “unified set of online attitudes, activities and behaviours [sic]” (University College London). And as the findings presented here show, these behaviors or practices might not be good ones. Students in this study continually fail to negotiate just one facet of today's Web—digital advocacy and commercialism—and this failure significantly affects their understanding of information and weakens their writing. More than a decade ago, Gillette and Videon voiced such a concern. Perhaps now in the Web 2.0 era, it is all that more important to listen. Five years ago, Kathleen Blake Yancey suggested that composition is “in a new key” (297) and that learning to understand and use Web 2.0 information is very much a part of the tune. In such an information age, the question remains how should we play it best?

NOTES

1. The topic of information/research/learning commons models for academic libraries has been discussed in the literature of library and information science for some time. See Lippincott for a discussion of such models and their related issues.

2. See McClure and Baures for a demonstration of how these two documents can be combined.

3. See Holliday and Fagerheim for a detailed discussion of the Utah State library-writing program partnership.

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