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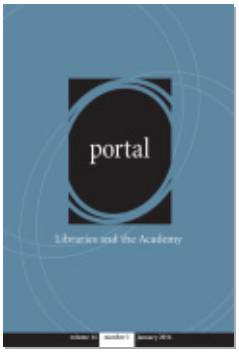

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Talking About Information Literacy: the Mediating Role of Discourse in a College Writing Classroom

Wendy Holliday, Jim Rogers

abstract: This paper reports on the findings of an observational study of information literacy instruction in a college writing course. Using a sociocultural approach, the study explores how classroom discourse can influence the ways in which students conceive of information literacy and the process of research and writing. We found that a discourse that emphasized "finding sources" more than "learning about" might limit students' engagement with information and the process of inquiry. This article concludes with recommendations for modifying discourse and instructional practices in order to help students engage more deeply in the research process.

Introduction

Information literacy (IL) is an essential learning outcome for higher education in the United States and academic libraries have embraced it as a core function.[1] A substantial literature on IL theory and practice exists and librarians productively debate questions about the best models, teaching approaches, and assessment methods. Recent multi-institutional research and assessment data suggests, however, that many students struggle with IL skills, including finding context, interpreting and reading results, and synthesizing and integrating information into school assignments.[2] Recently, the Citation Project researchers have argued that students' shallow use of sources has serious consequences, including plagiarism and poor writing. Sandra Jamieson and Rebecca Moore Howard have led an effort to empirically document how students are using the sources they cite. They found that students rarely summarize their sources.[3] Instead students quote, paraphrase, or "patchwrite."[4] Their research does not address

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why students treat sources in this way, but they suggest that students might possibly see the research process "as one in which they should find isolated sentences that might be useful in their own texts."[5]

Academic librarians are also engaged in serious conversations about students' use of sources. Barbara Fister, in commenting on the Citation Project results, suggests that traditional research paper assignments are counterproductive and even contradictory:

> When we tell them "in order to write about ideas, you need to find good sources and cite them accurately," finding and citing becomes the task; ideas are contained in the sources cited and only make an appearance through those sources.[6]

Critics of information literacy have noted similar contradictions inherent in its underlying assumptions. Both Christine Pawley and Cushla Kapitzke suggest that traditional IL discourses present definitions of information as empowering in its new openness but also overabundant and in need of control. They both argue that there are serious limits to the conception of sources as things to be found, controlled, and cited.[7] An initial goal of this research, then, was to learn about the actual IL practices in the writing classroom in order parse out some of the contradictions described by those advocating for a more "critical information literacy."[8]

Critiques of IL have often been theoretical and anecdotal, but phenomenographic research suggests a relationship between the ways in which students conceive of information literacy and their learning. Louise Limberg found that students envision information seeking in one of three ways: fact-finding, balancing information to choose the correct answer, or scrutinizing and analyzing. These conceptions influenced students' engagement with the research process and learning. Students who viewed research as fact-finding tended to use surface approaches when identifying and evaluating information; students who saw information seeking as scrutinizing and analyzing used a greater number of sources and more holistic strategies to evaluate and compare evidence and develop a deeper understanding of their topic.[9] Mandy Lupton found similar conceptions of information seeking and a relationship to surface versus deeper learning. According to Lupton, students framed IL as seeking evidence to either back up an existing argument, develop an argument, or learn as a social responsibility.[10] Both Limberg and Lupton suggest that narrow conceptions of IL can limit student learning.

Recently researchers and librarians have called for a more situated approach to information literacy, one that addresses how people seek, evaluate, and use information in the context of disciplines, work settings, and other communities of practice.[11] Some of these researchers advocate using a sociocultural framework, which places greater emphasis on "discourse, interaction, activity, and participation."[12] We argue for using a sociocultural approach because it highlights discourse as consequential. The ways in which librarians and instructors frame information literacy have significant implications for learning.

We argue for using a sociocultural approach because it highlights discourse as consequential.

A sociocultural perspective on learning is based on the dialogic and dialectical nature of human activity. In this view, people learn through their engagement in activities

within a particular learning community. Tools are central to this view of learning. They not only mediate activity, but are also dialectically created through activity. Tools are first created in our practical interactions with others. Later, as we continue to use these tools, we internalize them and ultimately use them to govern our own activity.[13] Although our analysis does not aim to document learning, these underlying epistemological foundations are essential for educators to consider critically when teaching information literacy. According to Limberg and Olof Sundin, "[t]ools for the mediation of information literacy, including, for instance, textbooks, Web-based tutorials, or classroom teaching, are not simply neutral instruments."[14]

The tools described by Limberg and Sundin constitute the context in which college students experience and ultimately frame their understanding of information literacy. Harry Daniels explains that tools are "cultural historical products that shape thinking and feeling and are in turn shaped and transformed through their use in human activity. It is through tool use that individual/psychological and cultural/historical processes become interwoven and co-create each other."[15] In this view, a "source approach" to information literacy is a psychological tool, created in a specific historical context, which can shape how educators perceive of and teach information literacy. In turn, educators convey these "concepts as tools" to the students via classroom discourse, especially in lectures and discussion. If internalized as a psychological tool, that discourse can then facilitate or hinder specific activity.[16] Instructional discourse, then, provides one possible source from which tools are initially internalized and then serve to mediate future learning.

Our research examines how information literacy was situated in a university-level writing course and uses a sociocultural framework to explore implications for teaching and learning. Specifically, it describes how information literacy was framed via classroom discourse within the practice of teaching and learning to write a persuasive research paper. We chose observational methods, outlined below, because we wanted to see how talk of information literacy unfolded over an entire semester, rather than limiting our view to specific tools (such as Web-based tutorials) or discrete instructional moments (a library instruction session). We also wanted to bring our individual disciplinary expertise and experiences together. As a librarian and a writing instructor, we had incomplete views of how information literacy was situated outside of our own direct experiences. During our observation, we paid close attention to what the writing instructor and librarian said and, when we could, how students responded and engaged with information and the research process. While we could not document learning, in the sense of identifying the psychological tools developed and internalized by students, we hoped to capture a rich contextual description of instructional discourse and suggest ways in which that discourse has important implications for the teaching and learning of information literacy.

Methods

We conducted this exploratory qualitative study using observation as our principle method. Nineteen students were enrolled in the class, and the instructor was a fulltime lecturer with several years of composition teaching experience. The class met twice weekly. Five of the students had tested out of or fulfilled the required freshman writing course in high school, so this was their first college-level writing class. There were ten sophomores and nine juniors in the class, nine of whom were women and ten men.

Both researchers observed each class session during the semester, taking notes on instructor discourse, student discourse (especially questions and areas of confusion), interactions between students during group work, and general descriptions of the classroom learning activities. We also conducted a series of interviews with the instructor exploring her perceptions of the class and students' engagement with the learning process. We conducted two focus groups with students investigating their experience of learning information literacy. We used both the interviews and the focus groups to clarify our understanding of what we observed in the classroom. Throughout the semester the researchers met to compare notes, discuss observations and our unique perspectives, and co-construct an understanding of what was happening in the class. Finally, we analyzed the syllabus, assignment descriptions, and some of the students' written work. In the case of the syllabus and assignment descriptions, we used these to show how the "official" discourse in these documents sometimes reinforced and sometimes contradicted classroom discourse. We used student assignments to see how students were treating and evaluating sources.

Throughout the semester the researchers met to co-construct an understanding of what was happening in the class.

In our analysis, we first identified specific activities in our observation notes that were related to information literacy. We then identified repeated concepts, discussed our findings and interpretations, and reached consensus about the emerging themes. We analyzed the interview notes, focus group transcripts, and class documents to further elaborate on the themes identified in our initial analysis.

There are limits, of course, to both the observation and focus group method. The class involved a single teacher, a single librarian, and a small number of students. The focus groups involved an even smaller number of students (n=5). Furthermore, we could not observe every interaction in class, especially during group work and library instruction sessions when several activities and discussions were happening simultaneously. During these sessions, we were more likely to notice and record interactions that we found especially intriguing or that confirmed our sense of what was happening in the larger class. Our observations could not be comprehensive, nor could they be taken out of our own subjective experiences. We try not to generalize, but instead describe what a few, several, or, occasionally, most students in this class seemed to be saying and doing. We did, however, triangulate these observations with our own experiences teaching and conducting research in the writing and library classroom and with other studies of students and information literacy.

Findings

In this paper, we focus on four primary themes that emerged from our analysis of the data, centering on the concept of information sources. Classroom discourse concentrated on the idea of "finding sources" as the goal or object of the research process. Sources were often described as external objects with attributes that could be identified in order to narrow and complete the research process. Students were directed to find the right kind and the right number of sources. We also observed another discourse that emphasized

"learning about." Indeed, the instructor's and librarian's goal was to engage students in a complex process of critical thinking, research, and writing. These discourses, situated in the context of a writing class, provided cues to students about the concept of information literacy and potentially mediated their engagement with information and research-based writing. Our analysis below cannot capture the many negotiations that this larger goal entails or the myriad discourses operating in the class. What follows is an analysis of a few key elements of classroom discourse that illustrate the complexity and challenges faced by writing instructors, students, and librarians in the writing classroom.

Sources as Objects

At several points during the semester, the instructor, students, and the librarian all described sources as discrete objects to be "found" and "incorporated." In one class early in the semester, for example, the instructor described the upcoming collaborative research assignment as an "introduction to locating sources." The class librarian also frequently mentioned how to locate sources, often defined by format. During her introduction to library research, she described databases as tools to locate articles. Locating sources of information, of course, is a central research task, so the emphasis on that task is understandable. The words used in classroom discourse, however, tended to emphasize sources as containers, rather than the information itself. The term "information," rather than sources, was rarely used in classroom discussion or assignment descriptions, documented only twice in our observation notes.

Assignment descriptions placed an emphasis on sources as objects, a type of building block or required element of a persuasive essay. The Topic Proposal Assignment, for example, required an annotated bibliography of three scholarly sources that should include "a discussion of how you plan to *incorporate this source into your argument* in three sentences or less" (emphasis added). This description potentially reifies the information found in texts (broadly defined) as sources themselves, discrete pieces to be "used" in an essay rather than the information contained in the source.

A similar construction of sources emerged in classroom discussions unrelated to actually locating information. The instructor defined a good topic, in part, by whether or not one might be able to find related sources. In one class, the instructor presented a wide range of topics from previous classes, trying to get students to follow their interests. She told students, "You can research anything…can you believe you can find sources for these?" When discussing how to narrow a topic, the instructor also emphasized the need to think about finding sources. She asked one student, for example, "Can you find sources on this?"

Classroom discourse sometimes described sources as representing a single, unitary viewpoint. In one assignment, Collaborating on a Complex Issue (CCI), students worked in groups to find articles on a particular issue, analyze the arguments made in each article, and then synthesize these viewpoints into a single paper. The assignment description stated,

> Because the articles are to represent the various positions on the questions at issue, members of the group must confer to ensure that the articles together reflect diverse points of view.

The assignment was intended to promote collaborative work and in-depth analysis of arguments, but it also might have sent a subtle message that each source is a single container for one perspective or argument, rather than expressions of specific claims and pieces of evidence that might converge, contradict, and, taken in total, help students understand a complex issue.

The Press Conference assignment provided another example of treating sources as objects. The assignment description asked students to prepare a short presentation on their progress to date, including how they planned to "incorporate each source" into their final argument and any "problems" they were having with sources. In their presentations, students identified problems with sources mainly as the inability to find a source related to a particular aspect of their topic. One student, for example, said that he still needed to find a source on the social effects of marijuana use, while another said that he wanted to find an article on the economics of motorcycle parking on campus. Another student described needing to find a source to explain why people drink so many energy drinks. These students appeared to approach their final research goals as "finding a source" about a particular aspect of their topic.

We have both observed this issue in our experiences with student writing. Students often write in a claim-then-quote style. Each paragraph makes a claim in the topic sentence and then students quote or paraphrase a single source for the rest of the paragraph. Then they make another claim and use another source in a second paragraph. Howard, Tricia Serviss, and Tanya K. Rodrigue describe a similar strategy of quote mining.[17]

The "Right" Number of Sources

Sources were further reified as objects in the discourse and classroom activities focused on finding the "right number" of sources. This can be especially significant because so many college writing assignments have strict requirements for a minimum number of sources. In one study, 44 percent of assignment descriptions included the requirement of using one to six research sources.[18] In the class that we observed, the Topic Proposal Assignment required at least three scholarly, peer-reviewed sources and the Persuasive Researched Essay required five sources, three of which had to be scholarly. In many cases, requiring a minimum number of sources is designed to ensure that students engage in a sufficiently comprehensive research process instead of relying on only a few easy-to-find sources. But requiring minimum numbers of sources might also reinforce the idea that research is a matter of finding a certain number of objects to be cited. In the focus groups, several students described struggling to find the right number of sources. One student worried that he would not be able to find enough sources to fulfill the assignment requirements, despite his confidence that he had enough information to write his paper: "I'll have to stretch it to make five sources probably."

Sources were further reified as objects in the discourse and classroom activities focused on finding the "right number" of sources.

In the class that we observed, the emphasis on finding the right number of sources also seemed to emerge out of the instructor's and librarian's concerns about informa-

tion overload. Both the instructor and librarian repeatedly mentioned that students faced the danger of being overwhelmed by too many search results. The instructor, for example, told the story of a former student who found 9,200 results for her topic when she searched a popular library database. The instructor noted that students often think that getting more results makes things easier, but that actually finding more focused results produces a better paper. Likewise, several weeks later, the librarian demonstrated a search in the same library database mentioned in the story, using one of the students' topics as an example. She found 500 results and then said that she needed to "fix the search" by adding more keywords.

The concept of the right number of sources implies that a perfect search will yield a perfectly focused and relevant set of results. Students might interpret this to mean that a useful focus develops *before* reading sources. Jennifer E. Nutefall and Phyllis Mentzell Ryder note that this view of research questions was common among librarians at their institution. Good research questions should come early in the process so that librarians can help match them to specific library databases and search using more specific keywords. In their study, writing instructors and librarians held different opinions about the timing of research questions. Writing instructors thought that focus formulation might take an entire semester, as students read more widely about their topic.[19] In the classroom we observed, both the librarian and the writing instructor seemed inclined toward the former view. They often instructed students to develop focused research questions and keywords in order to find a manageable set of results. Indeed, this is a common approach in our own practice.

The "Right Kind" of Sources

The instructor and librarian also directed students to find the "right kind" of sources. The class activities dedicated to evaluating information sometimes emphasized external markers of quality (print sources and library databases with scholarly articles are good; the Web is bad). The instructor, for example, went over the assignment description for the Persuasive Researched Essay in class and emphasized that two of the sources had to be in print. She said that students could use "credible" websites, such as those from a not-for-profit group, and she said, "Wikipedia is not the best source."

In her discussion of evaluating information, the instructor employed the "Web as dangerous" trope. The idea of the "dangerous Web" has been common in popular culture and in instructional messages by teachers and librarians for at least the past decade.[20] In this discourse, students need special evaluation skills because the traditional gatekeepers controlling access to good information (editors, publishers, and librarians in a print environment) are sorely compromised on the anything-goes-Internet. The instructor reinforced the idea that readers need special evaluation skills for websites, saying, "The librarian talked about evaluating database articles, but you get into sticky territory with the Web." She also had the students read and discuss an article by Geoffrey Nunberg, "Teaching Students to Swim in the Online Sea." Nunberg argues that students need to know "how to retrieve useful information from the oceans of sludge on the Web."[21] During the discussion of the article, the instructor asked, "What can you do to get reliable information?" One student responded quickly that you could use the library databases.

When asked why, several students suggested that this is where you can find correct, scholarly, and credible information. These students responded with a black-and-white rule: just use the library because that is where we have learned to find the "good stuff."

The instructor then shifted gears into a more hands-on activity. She displayed the National Resources Defense Council (NRDC) website on the screen, noting that a student had previously used it in a paper. She asked for the students' reactions, which ranged from "biased, liberal" to "looks professional, so trust it." The instructor then asked the students to go through the standard checklist approach. She asked the students to look at the URL suffix, .org. A student responded that this meant that it was a non-profit, so it was probably okay. The instructor had also said in an earlier class that not-for-profit websites were probably good to use. But the instructor then pointed out the donate button on the site. She said that we "need to think about .orgs." A student responded that other domain names might be better, like .gov. The instructor responded that "even .gov not necessarily accurate." One student seemed confused by this, possibly because many students are taught that government websites are the most reliable websites. The instructor responded, "There is no litmus test, so you need critical thinking."

Despite the call for critical thinking, other classroom activities might have promoted a litmus test approach. During the library instruction sessions, the librarian discussed scholarly versus popular sources. In the following exchange, students gave pat, quick answers to the librarian's questions and seemed knowledgeable of a checklist comparing features of scholarly and popular sources:

Librarian: Do you know what a scholarly source is?
Student: Peer-reviewed.
Librarian: What is audience of popular sources, like *USA Today*?
Student: General population.
Librarian: Audience of scholarly?
Student: Doctors, experts.
Librarian: Language of sources?
Student: Popular is easier to read
Librarian: Length?
Student: Scholarly longer
Librarian: What is an abstract?
Student: Summary
Librarian: Which has works cited?
Student: Scholarly

We examined the students' research plans to see how students were evaluating and writing about their sources. The assignment required students to identify the author (for books or articles) or organization sponsor (for websites) and date of publication or update (for websites). Some students applied the website criteria to scholarly journals and databases, possibly because they did not understand that scholarly sources, while discoverable on the World Wide Web, are not the same thing as a basic website. One student, for example, discussed *JAMA: The Journal of the American Medical Association* using the website evaluation criteria of sponsorship: "The American Medical Association sponsors this journal." Another student used the update criteria to support her choice to use PsycInfo, a scholarly database, for her research: "I'm probably going to use Psych

Info (sic) and I believe they update it quite regularly." In these cases, students defended their information choices with standard checklist criteria, even though those criteria fail to get at the heart of why scholarly research itself might provide good evidence for their argument or contribute to greater understanding of their topics.

"Finding Sources" vs "Learning About"

Throughout the semester, we perceived a potential tension between approaching research as "finding sources" versus "learning about." Other researchers have found a similar dichotomy in the ways that students perceive research and information literacy, often framed as fact-finding versus seeking evidence, analyzing, and building understanding.[22] The tension between these two conceptions or goals was seen throughout the class. In many cases, the instructor framed research in a larger learning context at the high level of course goals, but daily classroom activities might actually highlight rules and checklists. Students sometimes took on the challenge of engaging with information and "learning more about." Others struggled with a new approach to research that differed from their experiences in high school when they simply gathered up as much related material as possible and wrote about it. Other students seemed to focus mainly on assignment requirements and easy-to-follow rules, suggesting that this approach to researched writing worked well enough for them to meet their goal of passing the class and fulfilling a general education requirement.

The instructor stated that she wanted students to develop a more authentic research process and critical reading skills. Early in the class the instructor specifically cautioned students that research was about actually reading sources, not just finding and citing them. She told a story that she heard from a librarian about how students sometimes asked for help finding sources to cite after they had already written the paper. She also advised students not to begin research with a preconceived idea of where they might end up. She said that research is a "learning experience rather than a task; knowing the answer before you start is counterproductive." Finally, she wanted students to use research to build and craft an original argument, rather than to just string together the arguments of other writers. She said she did not just want summaries of sources: "Use ideas to build your own ideas. What you think absolutely matters." The syllabus also expressed these goals: "You come to class with a pre-existing knowledge base—our goal here is to expand it while cultivating productive thinking and writing habits."

In an interview at the end of the semester, the instructor acknowledged that some students struggled with these critical thinking learning goals. She said that students, for example, seemed divided into two groups during the press conferences. Some students approached research as locating sources, while others approached it as building understanding. She suggested some reasons for this. Some students, in her view, were not academically developed enough to engage more deeply with information, while others were focused on "getting the A." She noted that while she tries to sometimes "trick" them into digging deeper and motivating

Some students approached research as locating sources, while others approached it as building understanding.

them to be more curious, the dichotomy between finding sources and learning is a real issue that writing instructors and librarians face.

The student commentary from focus groups described how some students found a critical thinking approach difficult. One student said that she had to change the "just find all your sources" approach, but she felt at a loss about how to do this:

> Yeah, I just feel totally confused. It's a different research paper than I've ever written before. It's not like find all your information, put it together, and it's a little bit different, from what she's talked about, it's not just spit out the information back. So it's different. I'm a little AAAH! Don't know exactly what it's going to turn out to be.

Another student described being stuck:

> I feel completely lost. I still need to research and when she gave us that assignment yesterday, I thought "Oh no, I have one source and don't think it is good." I don't have any time do it. That was more next week's goal. I don't see any connections because I am just bogged down.

We observed similar issues during the press conferences. Students knew that they needed to find scholarly sources, but sometimes had a hard time finding sources that matched the checklist criteria. For example, one student said that she had a "hard time finding scholarly articles that apply to my topic."

Some students seemed more able to negotiate the tension between finding sources and learning. In their research plan papers, for example, these students described how the content of their sources might be useful to the development of their argument. One student talked about an article that might enable her to "see actual results of research to help me determine my personal stance." Another described the value of a potential source: "I think [the article] will really help me to identify some of the specific problems and the extent of these problems. It contains a lot of data, and hopefully it will help me to understand the underlying conflicts."

During a focus group, one student talked specifically about how the class forced him to think about research in a new way. In his old approach, he used his standard topic for any research assignment: "I think that's why we always have the topic that we always keep in reserve. Like mine used to be tigers in high school. I probably did eight research papers on tigers in middle and high school." Then he would gather up all the information he could find on tigers and write a paper: "Like when you are writing on tigers, all the information is there and then you write a thesis, who knows why, because you are supposed to." Before this class, he created a thesis statement based on whatever information he had randomly found: "I used to write a thesis by analyzing my paper, what does this paper say? And writing that one sentence at the top. Now I analyze before I write the paper, what is this thesis? I analyze how do I feel about this topic? Why do I feel that way?" When asked how he explored his thoughts and feelings about a topic, he responded, "Thinking about my topic, reading articles about it." He described this as a kind "pre-research." We asked if he had ever done this type of pre-research before and he said, "No, I never did it before because I never had a specific thing I was looking for, other than just my topic. But I am looking for points within a topic now. "

This student suggested that he was not struggling as much as he anticipated because he started his research by actually reading an article he ran across and then letting that information guide his process: "So I randomly happened to stumble on this article that I mentioned earlier and it kind of triggered something that just kind of connected things for me." This student was able to use the connections he made from reading a source. He wanted to find more information, not stretch his bibliography to five sources. This student also described learning as central to his research process: "And so as we write, our opinion of [our topic] may change as we learn."

Another student demonstrated the "learning about" approach to research in his press conference at the end of the semester. He was writing about merit pay for teachers and a classmate asked him, "What determines merit for merit pay?" The student responded with a few ideas that had emerged from his research, such as basing merit on student test scores, but he wondered aloud whether this might promote teaching to the test. He thought for a moment, and instead of responding that he needed to find a source about that, he said, "I need to research more into that."

Some students, then, did seem to understand that research was about learning from and using information for a purpose, rather than just finding sources. Activities dedicated to "learning about" probably occurred in student-teacher interactions that we did not witness, such as individual conferences and emails. Indeed, one student, the one who used to always write papers about tigers, explicitly described learning a more productive research process as a direct result of the course.

Conclusion

Our research has shown us the importance of investigating classroom activities and their framing as situated in specific contexts and consequential in their implications. When using a sociocultural framework, the ways in which teachers and librarians talk about concepts like information sources convey a specific representation of the possibility of information literacy.[23] When sources are viewed as containers, it potentially diverts attention away from the content of the sources themselves. Likewise, a discourse of "learning about" directs attention to the content of sources. If internalized, both of these conceptions might serve as psychological tools that mediate how students view and engage in the research process. Falk Seeger argues that as humans engage in their socially mediated activities, they create their own representations of knowledge or artifacts.[24] They then use this knowledge to mediate or regulate their activities; at this point the artifact becomes a tool for the individual. From the limited interactions we had with students, it appeared that some of them had already internalized the historically created artifact of source as container. By continuing to limit the discourse on sources, some students also limited their use of the artifact. This is an example of a contradiction where, as Anne Edwards describes it, "current rules restrict the use of new tools and limit our capacity to interpret and act on work tasks in fresh ways."[25] Other students seemed to take cues from the discourse on "learning about" and embraced a fresh approach to research. The "tiger" student described the power of pre-research, reading sources, changing his mind, and learning. For him, this seemed to be an empowering new concept of information literacy that matched the instructor's and librarian's goals and warrants greater attention and care in our own classrooms.

One goal of our research was to begin a conversation between librarians and writing instructors about the practice of teaching research-based writing. Observing the trajectory of "finding sources" over an entire semester provided one key lesson for our teaching practice. We are now highly conscious of the limiting nature of "finding sources" and the need to shift our discourse and activities toward "learning more about." We have already begun this seemingly simple shift in language at our institution. Van Hillard suggests that the typical emphasis on "information finding" is a library-centric discourse that inadequately captures disciplinary practices of academic writing:

One goal of our research was to begin a conversation between librarians and writing instructors about the practice of teaching research-based writing.

Written argument and analysis are typically not understood as predominately informational in nature. It is far more likely that research writing will be addressed in very different terms: documents, texts, traditions of inquiry and scholarship, debates and disagreements, studies—even knowledge production—but rarely as simply locating information.[26]

Our research suggests that the library-centered discourse of locating information has also been taken up by some students and writing instructors, at least in our local context.[27] This makes it all the more challenging and urgent to think carefully about the words we use to describe information literacy.

The Citation Project also reveals the power of framing language. Fears of plagiarism, of cut and paste in the electronic age, have led to a classroom discourse and activities focused on formal citation rules and disciplinary actions for plagiarizing. Their research has shown, however, that plagiarism is probably caused more by a lack of engagement and understanding of source material than outright cheating and laziness. Their motto, "preventing plagiarism, teaching writing," is instructive at both the level of discourse and action. The emphasis is on teaching writing, including how to read, learn from, and summarize sources.[28]

Librarians might employ a similar construction when we talk about information literacy with faculty and students. Perhaps we need to embrace a similar motto, building on Christine Bruce's recent work: preventing surface research, teaching how to use information to learn.[29] Framing information literacy as "learning about" means not only changing the words we use; it also re-directs our own practice as teachers, especially in where we focus our instructional attention. From a sociocultural perspective, the words we use have consequences, some of them long-lasting. As more critical information literacy instructors, we must be more intentional about what we spend time actually doing with students in the classroom, the library, and in online instructional spaces. This might mean spending less time on demonstrations, tutorials, and lectures that focus only on searching for information or evaluating sources using external proxies for quality. Instead, we need to develop learning activities to help students

From a sociocultural perspective, the words we use have consequences, some of them long-lasting.

read and interrogate sources, follow ideas through the practice of citation chaining, and summarize their understanding of sources in their totality. Whatever the specifics might entail, understanding learning from a sociocultural perspective can remind us that we are not teaching a static and generic set of information searching skills. Instead, we must provide cues and guiding activities that will help students engage more deeply with the stuff of information and knowledge itself and develop more productive psychological tools in the process.

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