

Engaging Sources: Information Literacy and the Freshman Research Paper (Part I)

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At the University of New Mexico, the Library and the Writing Program have had a long and fruitful collaboration. We began working together in 1998, designing an information literacy program for the second semester freshman composition course based on our shared value of a rhetorical approach to research and writing.

In 2001, we designed a quantitative study to assess the program's effectiveness (Emmons & Martin, 2002). We compared research papers written by students before and after we implemented the new program to see if it made a difference in the types of sources students chose and in the ways they used them in their papers. We found that students cited more relevant resources, but that they did not recognize the credibility of the authors and did not critically engage their sources.

We were disappointed with these results. Though students were finding current and relevant sources, we wondered why their papers did not reflect the kind of engagement we thought we were teaching. As a follow-up to this study, we decided to conduct a qualitative study in 2005-2006 closely examining a small number of papers and their sources to better understand exactly how our students are using their sources and why they perform so poorly.

Method

Because it was a qualitative study and we wanted to go into great depth, we selected six papers from portfolios submitted from earlier semesters, seeking a range of topics and some representation across gender and ethnicity. Because we wanted to read each source students used, we selected papers that cited mostly articles, along with some web sources. Each writer was given a pseudonym.

For each paper, we noted its title and its thesis, identified any research question behind the thesis, and inferred how the student understood his or her audience and rhetorical purpose. We sketched the structure of the paper, giving each paragraph both a functional label and a content label. We then read every source cited, noting how the student used it and how accurately we thought the student represented it. Finally, we deduced why the student chose each source and how he or she discovered it. Over several months of meetings and individual work, we developed summaries of each paper and source, added an analysis of unattributed sources, distributed our findings into a matrix, and dissected syllabi for assignments and prompts. Though we share ex-

amples from only three papers here due to space considerations, our findings are applicable to all six papers we examined.

Understanding Purpose, Audience, & Argument

We concluded that the students we studied typically did not understand the purposes, audiences, and arguments of their sources. The students did not acknowledge that an author is a person with a purpose and opinion who brings individual authority and individual biases to the writing.

"Joseph" provides a rich example here. In his paper "Proposal Towards Healthier Living," Joseph argues that public schools should combat childhood obesity by offering mandatory nutrition education programs that would teach children healthy eating habits. He writes:

This program [Nutrition Pathfinders©] is for these children to learn more about the food guide pyramid . . . to increase the knowledge about healthy and unhealthy meal selections. The lessons included 'hands-on activities in which students track what they know about nutrition, what new information they have learned' (Robertson 41). This quote *means this program worked* because it tracked the new information that each student learned . . . *proves nutrition education is the key* to decreasing childhood obesity.

The emphasis is ours, as we think that Joseph has drawn an unwarranted conclusion. The paper he cites summarizes the results of a study evaluating the effectiveness of Nutrition Pathfinders. The authors actually found that this program increased *knowledge* of nutrition for nearly half of the children in the program, but that it made no discernible difference in *behavior*. While Joseph describes the program accurately and understood the study's evaluative purpose, he misrepresents its conclusion and fails to note that the article was written by two people who work for the California Dairy Council, the advocacy group for the California dairy industry that developed the Nutrition Pathfinders program in the first place. This is just one of three instances in which he offers as evidence studies sponsored or produced by companies having a financial interest in the results.

Another student writer, "Jack," argues that DDT has been largely banned worldwide on the basis of faulty environmental analysis and that this ban should be reversed to take advantage of DDT's value in controlling malaria. Jack's thesis, his characterization of the environmental evi-

dence, and much of his evidence about the dangers of malaria are drawn from an article by Walter E. Williams (2004), writing in *Human Events*, which subtitles itself the *National Conservative News Weekly*. Williams is a regular columnist in *Human Events*; his contributions reflect the magazine's point of view, with such article titles as "Liberals Hope to Perpetuate Paranoia about Black Victimhood," and "Minimum Wage, Maximum Folly." However, Jack fails to note the author's evident political agenda or place of publication as very likely having an impact, and uncritically quotes several claims that are called into question by other sources Jack cites.

For example, Jack uses an article by health and environment researchers John Eyles and Nicole Consitt (2004) to support his claim that "DDT has not been proven to be hazardous to human and wildlife health if used in the right amounts." He quotes from paragraph 2: "DDT was 'indicated [sic] as an extreme risk to human health in spite of a significant lack of toxicological or epidemiological evidence.'" But Eyles and Consitt are not arguing the case for, or against, DDT; malaria and DDT account for a small fraction of their discussion. Their article, "What's at Risk: Environmental Influences on Human Health" attempts to gauge how important the environment is to human health. After exploring a variety of environmentally mediated diseases, they conclude that "over five million die each year from environment-related conditions" (p. 38) and argue that it is thus essential to work for a healthy environment. The sentence Jack quotes is from a section of the article that illustrates how contested the relationships between human health and the environment are (i.e., is there a relationship and if there is, do we understand it?). Paragraph 2, in this section, concludes that it's "still debatable" whether the decision to restrict the use of DDT was premature – a key nuance missed by Jack as he picks and chooses facts and claims.

When students fail to understand an author's purpose, as Jack has done in the example above and with two other sources he cites, they also often misunderstand the author's argument. This mistake can be seen most often where the source includes a review of literature to place the writer's argument in the context of related work. Each of the six students in our sample quotes directly from literature reviews or other quoted material in the text while attributing the information or argument to the source author. For example, while stating the problem, Joseph omits the opening of the source's sentence: "There are reports that obese children..." Instead, he quotes most of the rest of the sentence, stating that obese children can "demonstrate more negative self perceptions, decreased self-worth, increased behavioral problems, lower self-esteem" (Friedlander, et al., p. 1206) changing its status from information about ongoing research to a factual claim about obese children. Additionally, he

attributes this information to the author of the article rather than to the four studies the author cites.

In several cases, students attribute a view to the author that is directly contradictory to the author's actual view. "Louise" argues the thesis that, "Gun education for both adults and children is crucial to insure proper use, prevent accidents and increase overall safety." She writes:

"Daniel D. Polsby writes that "permitted civilian hand gun carriage risks turning every argument between strangers into a wild west shoot-'em-up."

This is an eye catching quote that focuses the reader's attention. But Louise has taken the quote completely out of context. Polsby, on proposed state-level legislation that would relax laws regulating civilians' carrying concealed firearms, actually writes:

"The two questions that these amendments beg – and indeed that they may eventually help to answer-- are:

- 1) Whether widely permitted civilian handgun carriage risks turning every argument between strangers into a wild west shoot-'em-up, or, conversely;
- 2) Whether increasing the prevalence of concealed handguns drives the crime rate down."

Polsby is setting up a discussion in which he criticizes the methodology and conclusions of several studies that seek to shed light on the causes and effects of widespread gun ownership, especially in the context of recently liberalized concealed carry laws in several states. He finds that most of the studies claim too much policy significance for weak findings that oversimplify this complex issue. He concludes that laws restricting legal ownership of firearms won't affect illegal users. This article doesn't address "gun education" at all. But Louise has taken quotations from it on four occasions to support her own claim about the importance of gun education, pulling them out of context without regard for the author's own argument.

In Part II, we further summarize what we observed in students' papers, make an argument to foreground inquiry, and share some changes we made based on what we learned.

Works Cited

- Carson, R., Darling, L., & Darling, L. (1962). *Silent spring*. Boston: Houghton Mifflin.
- Emmons, M., & Martin, W. (2002). Engaging conversation: *(Engaging Sources...Continued on page 12)*

cidentally, he's knocked a colored stack of flyers advertising "Game night in the Library" onto the floor. He leaves them there and continues talking. I'm quite sure he doesn't know he's in the Library.

Or perhaps he does. Perhaps this is his construct, his idea of what a library is. Event center, student union, mall, café.

A celebratory email circulates among the Library staff that our gate count is higher than ever.]

Lately, I've been worried about what so many institutions (including libraries) have done in a search for relevance: created identities on social networks, learned to tweet and teach through YouTube. Many libraries built their physical spaces to more closely resemble a Borders, offer yoga classes and free coffee between 10 p.m. and midnight. I have also worried that our talk about academic standards, collections, instruction, curricular support and learning, have been supplanted by institutional positioning and aggressive fund raising. Who could deny that Google, Starbucks and cell phones (the perfect storm) have swept across the academic coastline so severely, only fragmented remnants of our heritage and traditions remain? I have worried that libraries, so desperate to justify their value, will do almost anything to appeal to the millennials.

For a decade, I've written about struggling students, their challenges, obstacles and achievements. I've told you about migrant workers rising from the fields and walking, head held high, into the library; about single moms, grandparents and children; about avatars and water and 9/11 and Disney. Observation, dialog, and a happy resolution. Libraries provided the backdrop, students the lead, and librarians the supporting actors. In forty Raves, I have tried to find that silver lining, that modicum of meaning, to prove we are making a

difference... at least to that one starfish. But, today, I mostly worry.

Too often, I worry that a generation of students has been so misled by corporate culture and consumerism, and duped by media and materialism, that they view their diplomas as receipts. Too often, I worry that an academy based on the traditions of scholarship has less regard for learning than for meeting FTEs or for scoring on the field. Too often, I worry about a growing disrespect for the many, hard working professionals (like us!) who make libraries possible. Over the years, have we all not witnessed intellectual rigor, once a tenant of higher education, confronted by market-eers, computer technicians and development officers? We have seen cataloging outsourced, reference departments eliminated, and library deans, once stewards of the collected knowledge of humankind, replaced by CIOs. In their scramble for significance, I worry that many libraries, once the heart of the university, are now struggling for their own survival.

But, mostly I worry about our student assistant Lanette. Transport her back fifty years, and see if she could pass a high school exit exam. Approach her today to give her a map and chances are she couldn't find Iraq. Ask her to balance her checkbook without a calculator, or lead a class discussion without props, or tell you about the last book she's read. Or worse, transport her fifty years forward: What memories will give her sanctuary? What reminiscences to calm her chaos? Can a mind fraught with transience bring her peace? I don't think so.

Tomorrow, if it's a good day, Sadie and I will listen to the Lone Ranger and she'll ask me about Sid and tell me about her mother's chicken soup. I'll do what I can to guide and reassure her. For that's what we do.

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(Engaging Sources...Continued from page 9)

Evaluating the contribution of library instruction to the quality of student research. *College & Research Libraries*, 63(6), 545-560.

Eyles, J. & Consitt, N. (2004). What's at risk? *Environment*, 46(8), 24-39.

Friedlander S.L., Larkin E.K., Rosen C.L., Palermo T.M., & Redline S. (2003). Decreased quality of life associated with obesity in school-aged children. *Archives of Pediatrics & Adolescent Medicine*, 157(12): 1206-1211.

Polsby, D.D. (1995). Firearms costs, firearms benefits and the limits of knowledge. *Journal of Criminal Law & Criminology*, 86(1), 207-220.

Robertson, T.P. & Zalles, D.R. (2005). Nutrition education program Nutrition Pathfinders© teaches children how to make healthful food choices. *Journal of Nutrition Education & Behavior*, 37(1), 41-42.

Williams, W.E. (2004). DDT ban continues to kill people. *Human Events*, 60(24), 10.