

A POTENTIAL TO THE PLAGIARISM PROBLEM: IMPROVING READING

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In classical music it is common for one composer to draw on the work of another: The *Variations on a Theme of Paganini*, and *Rhapsody on a Theme of Paganini*, written by Brahms and Rachmaninoff respectively, for example. In doing so, a later composer is thought to be paying homage to the earlier one from whom the passage or work is drawn. The homage is paid clearly through attribution, as in the titles cited here, so this point seems an odd place to begin a discussion of plagiarism problems in college writing courses. However, it makes sense to begin here for several reasons: first, taking the work of another and making use of it is not always plagiarism, a point made clearly by Appeals Court judge and law professor Richard Posner (57); no one has a problem with a properly attributed use of a source. Second, the attitude involved is worth noting; musical use of another's work is seen as a tribute, not a theft or even borrowing. Third, what makes musicians' use of one another's work distinctive is that it is an act of conscious choice. In contrast, first-year composition students' plagiarism is more complex to define than it may at first appear. In general, though, it is not intended to pay homage to the source, and, in the situation to be described here, not a result of conscious choice. Instead, first-year students' plagiarism, when it entails inappropriate use of source materials, may arise partly as the result of students' lack of critical literacy; thorough attention to and careful teaching of critical reading, re-integrated into writing courses and across the curriculum, might help to address the plagiarism problem.

The kind of plagiarism that arises from students' inability to read well is not the situation where students buy or borrow the work of others. Downloading a paper from a term paper site or taking one from fraternity files is dishonesty, pure and simple, and should be treated, prosecuted and punished as such. The kind of plagiarism that is affected by the inability to read well has been discussed by Rebecca Moore Howard, a Syracuse University rhetorician who has studied and written extensively about plagiarism. In her book-length seminal study of plagiarism as well as in more recent work, Howard suggests the need to address the reading problem overtly in teaching writing (*Standing*); her more recent work supports this suggestion (Howard and Davies). I want to extend her discussion by first focusing on the type of plagiarism that may arise from poor reading and then by exploring the nature of students' reading problems and ways to address them. The reading problems of students are now much more clear thanks to a variety of different types of studies of students' reading abilities before, during and after college, along with studies of prose and document literacy in the population at large. Ultimately, teachers of writing and all other faculty can and should help students develop the kinds of critical literacy abilities that will enable them to use sources based on strong skills in analysis, synthesis, evaluation and application. Students who master these components are more likely to be successful in finding and using sources appropriately without plagiarism.

Definitions

It might be useful to think first about what exactly constitutes plagiarism, not as obvious as one might think. The term has been used in our field with varied definitions. In the fall of 2005, the University of Michigan held a very interesting conference bringing together teachers, lawyers, publishers and others to discuss plagiarism and intellectual property issues. The title of the conference, *Originality, Imitation & Plagiarism: A Cross-Disciplinary Conference on Writing*, reveals the complexity of plagiarism; conference organizers subsequently published a

collection of papers from the meeting (Eisner and Vicinus). One of the main speakers was Stanford University law professor Lawrence Lessig, who has written extensively on intellectual property issues (*Future, Free*). In his presentation, Lessig showed how texts and materials in the public domain have been used repeatedly and copied, such as characters from Disney movies and others in Japanese anime, among other sources. His point was in part that the use of source materials is not always quite what it appears to be and the line between appropriate use and plagiarism is not really clear. In his books, Lessig argues that we need to define and consider more carefully what kinds of use of materials are acceptably free and what kinds of use need to be controlled and how. Moreover, as noted at the outset of this paper, the use of others' material with acknowledgement can be a way of honoring previous work.

The point here is that an exact definition is complex and not always clear. In addition, many creative works in writing, art, music, television and so forth take from prior materials, a point explored in great detail, with many examples and references by Jonathan Lethem in a recent issue of *Harper's*. Other scholars have also attempted rigorous definitions. A collaboration between an attorney and a librarian in Connecticut distinguishes plagiarism from copyright infringement (Bielefield and Cheeseman 187-88). Judge Posner offers his own definition in a whole book on the subject from a legal standpoint, making clear that the intent to deceive is one aspect of what teachers find infuriating about student plagiarism (34-35). And David Leight, a community college writing instructor, has done a survey of writing texts that reveals the array of definitions and metaphors used to capture the essence of plagiarism (221). Finally, University of Arizona professor and senior composition scholar Ed White has pointed out that plagiarism suggests that students have missed the larger point of their education insofar as it reflects their failure to think clearly and with integrity (210).

Studies of students' reading abilities make it seem reasonable to propose that plagiarism results mostly from the fact that students

cannot separate their own ideas or trace their sources because of their lack of reading skills. Rebecca Moore Howard agrees with this claim and describes her own inability to read as leading to patchwriting in her own work. “As I think of my own excursions into patchwriting, I recognize that it almost always occurs when I do not really understand what I am reading” (“The New Abolitionism” 90). While patchwriting, defined as copying with some limited changes, with or without proper attribution, is not always plagiarism, and while Howard makes clear that it can be seen as a transitional stage for novice writers, it can also reflect weak reading abilities. If senior scholars like Howard who are thoroughly familiar with plagiarism have difficulty with appropriate use of sources due to reading problems, imagine the difficulties of students whose reading skills are weak.

A somewhat more comprehensive definition of plagiarism can help to pull together these various aspects. This definition is offered by Notre Dame anthropologist Susan Blum, reporting her 2005-2007 interview study of more than two hundred students at selective schools on college experiences in general, including plagiarism, morality and a range of other issues (Blum 7-9). Blum suggests that plagiarism be thought of in terms of a triangle whose points include cheating plagiarism, or fraud; inadvertent plagiarism, or failure to understand and observe the conventions of citation; and professional plagiarism, or outright and deliberate copyright infringement. Blum only indirectly considers the possibility that inadvertent plagiarism occurs due to weaknesses in reading, so in some ways the present discussion probes the kind of plagiarism she considers inadvertent. Blum concludes that plagiarism arises not because students are immoral, but because of where they are in their lives and the many, many demands on their time and energy (173-80).

Careful study of students’ reading problems might help us better understand this inadvertent form of plagiarism that is neither cheating nor copyright infringement. The basic definition I want to use here is that this plagiarism occurs when writers use source material inappropriately, whether in direct quote,

paraphrase or summary. When students are working with print or digital materials that they want to use in their own work, they might avoid plagiarism if they are equipped with a full set of critical reading skills so that they can choose and use their sources properly. They must be able to go beyond simple summary, though that is a good starting point.

They need to be able to analyze any argument, whether textual, digital, or visual, seeing the parts of the argument and how they work together. They need to be able to synthesize various sources in support of their ideas. These activities should take place in the context of evaluation, possibly using the key concepts and insights of the source discipline of the materials; this activity helps to explain why critical reading might play a useful role in every course and in every discipline. And finally, students need to be able to apply or use the materials they have read to create and support their own arguments. With this carefully delineated definition of the kind of plagiarism that concerns most writing teachers and with the definition of the critical literacy skills needed in hand, we can turn to the studies that shed light on students' reading problems. These studies help account for why this kind of plagiarism occurs and point to strategies for improving reading in ways that might help to address this part of the plagiarism problem.

Students' Problems

To clarify what abilities students need to avoid plagiarism, it might be useful to think precisely about what is required when writers use sources in support of an argument. To be sure, they need to read well enough to understand the material they plan to use, as Howard has said (*Standing* xvii). However, I want to demonstrate just what that entails, since using source materials appropriately requires an ability to go far beyond simple comprehension. The options for writers in using sources entail direct quotation or simple copying, paraphrase and summary. Even in direct quotation, though, the choice of a quote, its

presentation and its use in support of a point requires more than just understanding the passage being quoted.

Most academics consider these skills just part of library research. Librarian Frances Harris describes the process and challenges a student might confront working with typical informational text, in her book *I Found It On the Internet: Coming of Age Online*. Harris writes:

When one of my students conducted a web search on women in the military, she found an article titled “Women at Arms” (<http://www.policyreview.org/aug00/Bockhorn.html>). As far as she was concerned, this page was a source she found on the Internet, undifferentiated from other web-based sources. She did not recognize it as a piece from the online counterpart of a scholarly print journal, *Policy Review*. To some degree, the website’s designers are responsible for her misconception. Though the *Policy Review* masthead is unmistakable, the links on the page lead to the journal’s current issue, not to the August 2000 issue in which the article originally appeared. The original issue can only be accessed by deleting Bockhorn.html from the URL, not a very intuitive navigational method. My student cited this source as a web page, not as an article in a journal. While she documented some of the important information—the title of the piece, the author’s name, and the URL that would lead other readers to her source—she missed important contextual information that would have helped her interpret its value.

The next problem in deciphering this source is that it is not, after all, really an article about women in the military. Instead, it is an extended editorial review of two books on the topic. A bibliography generation tool like NoodleBib, with its detailed prompts, or timely input from a teacher or librarian, might have pushed my student to make this discovery. And, still, she would not have been finished with her detective work. From the online table-of-contents page

of the issue, there is a link to the publisher of *Policy Review*, the Hoover Institution at Stanford University (in a short-lived collaboration with the Heritage Foundation, a conservative think tank). A little digging uncovers the Hoover Institution's mission, one which is likely to shape (i.e., bias) the content of its publications. To be thorough, my student would have had to parse out the meaning of that mission and the degree to which it affected her planned use of the source. She would also have needed to weigh the usefulness of a book review for her needs. In the end, she could regard the article as a "bread crumb" source, one she could not use outright but which would lead her to other sources she could use, such as the books being reviewed. To get that far, she would have had to read an article she would not get "credit" for and then search again, this time for the two books.

Not many students would persist through all the steps just described. Efforts like these are generally not rewarded by teachers and are often not even acknowledged. They are discounted as merely an inevitable occurrence in the indefinable task that is library research. But if students are expected to demonstrate good judgment in selecting sources, the search process must be given its due (Harris 135-37)

More to the point in the present argument, if students are expected to use sources without plagiarism, they need all the reading skills described in this passage by Ms. Harris. The idea that students need fewer reading skills because of computers quickly falls by the wayside here too, because this passage shows clearly how much computer skill students need in addition to reading expertise.

There is an urgent need for students to capitalize on their tech-savvy comfort with using computers to become equally savvy about understanding, evaluating and applying the information they can get from the Internet. As reporters Claudia Wallis and Sonja

Steptoe note in their recent cover story for *Time*, students must become “smarter about new sources of information . . . to rapidly process what’s coming at them and distinguish between what’s reliable and what isn’t” (53). The skills needed entail managing, interpreting, validating and acting on the information that is available, according to one of their sources, an executive from Dell Computers. This executive is part of a group of business people concerned about better education called the Partnership for 21st Century Skills (Wallis and Steptoe 53). The *Time* report also includes discussion of the need for stronger literacy skills as identified by employers and universities. In response to this need, Educational Testing Service, purveyors of the SAT, Advanced Placement and related measures, has developed an online test of students’ information literacy. “A pilot study of the test with 6,200 high school seniors and college freshmen found that only half could correctly judge the objectivity of a website” (Wallis and Steptoe 56).

The connection of plagiarism to reading problems among student writers seems intuitive and obvious, so it also seems that there should be clear research studies to support the link. However, searches of the research literature in five of the major databases of scholarly articles yield virtually no studies in the past five years other than two that provide indirect support discussed below. It is surprising that Google Scholar, Academic One File, Wilson Select Plus, Language and Language Behavior Abstracts and the MLA Bibliography show no studies that directly connect plagiarism to reading, reading problems, or college students’ reading. Various configurations of these search terms yielded no results for 2004-2009. Similarly, a search of World Cat for books also yielded no results. Thus, while the research discussed here is only suggestive, it is the best material currently available to support the relationship of plagiarism and reading problems.

There are two reports that provide some indirect evidence in support of the need for reading instruction to address the plagiarism problem. A 2006 study by an information literacy librarian at San Diego State University entailed having almost

three thousand students use an online tutorial to learn about plagiarism. The pre-test/post-test results of this study show that one of the students' main difficulties lies in judging and creating paraphrases of passages, that is, in reading material and understanding it well enough to put it into their own words: "Students displayed a complete lack of ability in the practical application of paraphrasing. They could not read an original passage and identify what was wrong with a paraphrase" (Jackson 425). This finding does not necessarily mean that more reading instruction would solve the plagiarism problem, but it does suggest that weak reading skills contribute to the problem and supports the idea that reading instruction might help students read and use sources more appropriately.

The second suggestive report comes from Rebecca Moore Howard and her associate Laura Davies in a paper on "Plagiarism in the Internet Age." Howard and Davies note that the plagiarism problem does not arise simply because of students' access to the Internet. Instead, it is a by-product of their inability to read and use sources: "Many students are far from competent at summarizing and argument—and students who cannot summarize are the students most likely to plagiarize" (Howard and Davies 64). In a study Howard did with other colleagues, papers of eighteen sophomore students at a "well-regarded college" (67) and their source materials were read for plagiarism problems. All the papers in this study showed some aspects of plagiarism, including mishandling of sources, failure to provide citation and so forth, but most significantly:

None of the 18 papers contained any *summary* of the overall argument of a source. Many student writers paraphrased adequately, restating a passage in their own language in approximately the same number of words, but none of them used fresh language to condense, by at least 50 percent, a passage from a source text of a paragraph or more in length.

The lack of a summary of the overall argument and the inability to condense (Howard and Davies 67) suggest failure to understand the overall argument, leading Howard and Davies to advocate careful teaching of paraphrase and summary, i.e., teaching reading.

In short, simple comprehension reflected in the ability to paraphrase and summarize may be the beginning point of trouble for inadvertent student plagiarists. Sure, they can read well enough, perhaps, to recall the words off the printed page and maybe even to capture the main ideas of a source. Truly effective and efficient reading calls for a much deeper array of skills, though. These skills are thoroughly described by researchers at American College Testing who administer the ACT exam to high school students. Their recent study of reading looked at test results for 563,000 students entering college who took the ACT, focusing on their performance on the reading portion of the test and their success in undergraduate studies. The sample group was followed for three years. This very large sample included an array of students from across the country, attending a variety of institutions from Research I universities to community colleges, public and private, large and small (American 11-13). What the ACT researchers found was that half of the students who took the ACT exam did not earn a score of 21 or better (top score is 36). Those who earned scores of 20 or less were not successful in postsecondary education. (The ACT definition of success included several factors such as enrollment in college right after high school graduation, grades of B or C or better in history and psychology courses, and retention to the second year.)

Consider the following list of abilities, enumerated by the ACT researchers, as those tested on the exam because they are needed to read complex texts successfully in college courses. Complexity specifically entails these elements:

Relationships: Interactions among ideas or characters in the text are subtle, involved or deeply embedded.

Richness: The text possesses a sizable amount of highly

sophisticated information conveyed through data or literary devices.

Structure: The text is organized in ways that are elaborate and sometimes unconventional.

Style: The author's tone and use of language are often intricate.

Vocabulary: The author's choice of words is demanding and highly context dependent.

Purpose: The author's intent in writing the text is implicit and sometimes ambiguous. (American 17)

Students need to be able to work with all of these elements to understand a passage fully and use it appropriately, even if all they are doing is quoting it directly in their papers. They need to be able to see the relationships among the ideas being presented, even if there are many of them and they are very complicated. They need to be able to see the structure of the text and follow the tone and language, since not everything the source is trying to convey may be stated explicitly. And they need to have the vocabulary skills and interpretive skills to understand the language and purpose. These points are summarized by the ACT researchers with the mnemonic RSVP. And half of first-year college writers don't have the skills needed, as further discussion below of the ACT study will show. Together with the ETS findings on information literacy, these studies provide support for the claim that stronger reading might help students avoid inadvertent plagiarism.

My use of the quote in the preceding paragraph is a good example of the point I am trying to make here. If readers look carefully at what I have done, I have followed a set of fairly clear guidelines for the standard use of source material in academic writing (the general guidelines are those presented by Lipson (42-53); my colleague Catherine Haar has given me a little heuristic that I use with students, too). I started by introducing the material and qualifying the source, mentioned in my introduction to the paper. Then, I presented the quote, making clear, in what

precedes it, just how it fits with my argument. I provided the citation to the material I used and created an entry for it on my Works Cited list at the end of the paper so that readers can see the source for themselves, and finally, I have used the material, providing a sort of summary and commentary in the sentences that follow the quote. Naturally, I understand all the vocabulary that is used, and of course I understand the full study from which the quote is drawn and its implications as well.

The point here, though, is that students need to have these carefully described reading skills, and it is at least in part the lack of them that leads to inadvertent plagiarism. And this need is just for the simplest kind of use of a source, direct quotation. Summary and paraphrase, to be used effectively and appropriately in writing without plagiarism, require even more sophisticated skills. In these uses of sources, the students must understand the ideas well enough to put them in their own words and, in the case of summary, make the source material significantly shorter without losing the content. It should be clear at this point that plagiarism arises at least to some degree because students simply do not have the reading and information literacy skills along with the experience needed to use sources appropriately.

Students need at a minimum to be able not only to comprehend the material they are using, but also to analyze, synthesize, evaluate and apply that material before they integrate it into their discussion. The 2006 ACT study shows that about half of the students entering college lack the skills ACT has described at a level that will allow them to be successful in college overall (American 11-12). The ACT is only one of a number of direct measures of reading ability that reflect these problems. Other studies by the Pew Charitable Trusts and the U.S. Department of Education (National Assessment) reveal similar findings among college students and among the population at large. Similarly, the most recently released findings of the National Assessment of Educational Progress show a decline in reading abilities of students from 1992 to 2005. NAEP tests a representative sample of 21,000 high school seniors from 900

schools across the country (United States, NAEP). More indirect evidence showing declines in reading activity and ability arises from a recent study by the National Endowment for the Arts (United States, NEA).

To look beyond these national studies that after all examine reading abilities and not plagiarism, and to see the problem at a more local level, I met with Ms. Karen Lloyd, the Assistant Dean of Students at my university, a medium-sized public Research Intensive institution in the Midwest. Ms. Lloyd is the person who oversees the Academic Conduct system, organizing hearings on misconduct cases in conjunction with a standing committee of the University Senate. As a by-product of this assignment, she meets with every student who is charged with academic misconduct. In addition, she is a member of the national Association for Student Judicial Affairs, the professional organization of university officials who deal with plagiarism and other forms of academic misconduct (<http://www.asjaonline.org/>).

Ms. Lloyd reports, based on her knowledge of the problem nationally and locally, that the number of reported incidents of plagiarism is increasing. Cases on our campus have increased from twenty in 2001-02 to forty-eight in 2005-06, the latest year for which she has complete data. Of this number, a very small handful involve the purchase of papers from an outside source such as a term paper website. Far more common are inadvertent plagiarism cases where students use material because it is readily available on the Internet and they see nothing wrong with using it. In addition, students are increasingly pressed to get their school assignments done expediently (a social factor whose implications for plagiarism are supported by Blum's interview research (148-72)), and they lack the skills to read, understand, interpret and integrate source materials appropriately and accurately. Ms. Lloyd has read this paper and, based on her experience, agrees with my argument. She believes that the use of a writing center and character education can be useful to address the plagiarism problem from a developmental standpoint; however, fundamentally, students may also benefit from stronger skills in

reading and a clear sense of the requirements and expectations when they use sources in their work (Lloyd).

The work of Kathryn Valentine, who is the director of the writing center at New Mexico State University, supports Ms. Lloyd's perspective on plagiarism. Writing in *College Composition and Communication (CCC)* in 2006, Valentine makes clear that the ability to use sources appropriately is a kind of developmental process akin to learning a whole new language. She draws on the work of sociolinguist James Paul Gee who sees plagiarism as part of the larger process of acquiring a particular kind of discourse (96). Her case study of a Chinese graduate student named Lin makes a particularly poignant example of how a student for whom English is a second language faces the tasks of learning the language and all the requirements and expectations that go with it, including the appropriate use and citation of source materials (Valentine 98-100). She suggests that not only ESL students but also all students need instruction to help them acquire the appropriate discourse of their discipline:

. . . [I]t is not enough for student to be taught the “rules” and “mechanics” of citation. Instead, they need to be taught the significance of citation for their identity as honest students (if they are going avoid [sic] plagiarism) and how to read the context (which defines when it is necessary to cite and what will count as citation) in which they are working. . . . students need to know citation and plagiarism as literacy practices—as complicated ways of making meaning. . . . (105)

In approaching plagiarism this way, Valentine suggests that students should come to understand the use of sources and citations as a set of choices writers make within a particular context of a discipline and genre as well as other constraints (Valentine 107). Seen as a developmental process in every discipline, the teaching and learning of the appropriate use of source materials become less a matter of rules, regulations and

laws and more a matter of supporting students' acquisition of the language of academic discourse.

Valentine's view is consistent with that of Rebecca Moore Howard, Susan Blum and other scholars discussed above. From this perspective, then, we need to look carefully at just what abilities students need, and how to get them there. To avoid plagiarism, students need to go beyond even what the ACT research describes, as my local research shows, to be able to read, understand and evaluate materials, both print and digital, drawing from printed sources on paper as well as websites and Web 2.0 materials, using the skills of critical literacy. They also need the kind of direct instruction about plagiarism and ethics, intellectual property, and related matters proposed by Blum (177-79). College faculty, in writing and in every discipline, can help move students toward the critical literacy skills that may help them understand and avoid plagiarism. Ultimately, every undergraduate course in writing as well as in every discipline should be a course in critical literacy development with extensive work on reading that can help all instructors achieve course goals and help students develop the critical literacy skills they will need to live and work in the twenty-first century as full participants in our society.

Plagiarism and Critical Literacy

If I am correct that plagiarism arises to some degree from a lack of ability to read at a high level, the next step is to understand fully the nature of the critical literacy that must be taught in writing courses. My definition, like that of others who are working in this area, addresses both reading and writing, and both print and digital forms. Unlike other scholars' proposals, though, my definition integrates current research in psycholinguistics that makes clear the mental processes involved in reading and writing. Here is my proposed definition:

Critical literacy is best defined as the psycholinguistic processes of getting meaning from or putting meaning into print and/or sound, images, and movement, on a page or

screen, used for the purposes of analysis, synthesis, evaluation and application; these processes develop through formal schooling and beyond it, at home and at work, in childhood and across the lifespan and are essential to human functioning in a democratic society.

(Reading)

The definition warrants some explication, since it contains very specific terms used in particular ways that have implications for teaching and learning.

First, critical literacy involves thinking and language processes focused on meaning. Just being able to render a printed text aloud, for example, is not critical literacy. In addition, critical literacy entails both the production side (i.e. writing or composition or design) and the perception side (i.e. reading or viewing). These processes work in tandem, not in isolation. The definition is set up specifically to entail production and perception of both conventional written work in printed form as well as digital materials that may include text, images, animation and sound. Just getting or producing meaning in any of these forms does not constitute critical literacy; a user must make use of the fully understood content for analysis, synthesis and evaluation. Meaning must be used to break material apart, bring varied materials together and make judgments. Finally, it is important to be aware that critical literacy is not strictly a school enterprise or the work of only the young; Kathleen Blake Yancey, chair of the national organization for teachers of writing, pointed out in her Chair's Address to that group in 2004 that a lot of critical literacy activity happens now outside of school, among adults at home and at work. The implications of critical literacy matter not just for school and for solving the plagiarism problem; the ability to read and write in these ways is necessary if we are to maintain our democratic society.

The implications of critical literacy are also of increasing concern in light of the advent of new technologies. The use of the web, including Web 2.0 that entails social networking and an

array of types of interaction, demands more, better, faster reading abilities as a base. Reading scholar Donald Leu and his colleagues make this point in a discussion of the need for “foundational literacies” as the starting point for those working with new literacies as technology continues to develop (Leu et al., 1590-91). Leu explains the relationship this way:

It is essential, however, to keep in mind that the new literacies . . . almost always build on foundational literacies rather than replace them. Foundational literacies include those traditional elements of literacy that have defined almost all our previous efforts in both research and practice. These include skill sets such as phonemic awareness, word recognition, decoding knowledge, vocabulary knowledge, comprehension, inferential reasoning, the writing process, spelling, response to literature, and others required for the literacies of the book and other printed material.

Foundational literacies will continue to be important within the new literacies of the Internet and other ICTs. In fact, it could be argued that they will become even more essential because reading and writing become more important in an information age. (Leu et al.1590-91)

These key skill areas are the very same ones described by those who have done research on students’ reading abilities and are also the same ones needed to avoid plagiarism.

Librarians also recognize the need for foundational literacies as they work with students to develop information literacy as students work in the library. Students with solid information literacy skills will not plagiarize because they can locate, read, understand and use sources by drawing on print literacy, according to Rider University faculty librarians John Buschman and Dorothy Warner:

It is our contention that a more-than-merely-cursory look at information literacy standards and guidelines reveals that

print literacy—and the intellectual/epistemological foundations built upon it—are at its basis, and this further characterizes the “new” literacies of which it is a part. (1)

To achieve information literacy by building on print literacy, these librarians draw on the work of literacy scholars Goody and Watt and the Association of College and Research Libraries’ standards for information literacy, pointing out that

. . . information literacy—and the many and various literacies—largely rely on a fundamental enabling concept within literacy itself: critical distance and reflexive evaluation. This concept itself is so deeply embedded within literacy that its very existence came about because of literacy. (Buschman and Warner 3)

If students are to avoid plagiarism by having and using critical literacy skills that include information literacy, these capacities all rely on the fundamental print reading abilities analyzed by the ACT researchers and others examining this issue.

Individually and collectively, then, we have work to do to help students develop these essential skills. The work that is needed is well documented in various recent research studies examining the literacy abilities of the population at large. The first of these is the one mentioned above, done by the American College Testing organization and released in March, 2006. Among other things, the findings of the ACT study mean that perhaps half of the students in contemporary college classrooms lack the reading skills described by the ACT; it seems reasonable to assume that they are unlikely to have the accompanying writing skills as well. The lack of these abilities appears to contribute to unintentional plagiarism; given how widespread the lack of reading ability is, it is a wonder that plagiarism is not even more widespread.

Another study of college students, conducted by the Pew Charitable Trusts organization, examines not entering college students’ literacy levels as did the ACT, but those finishing

college, and it too shows students' weaknesses in critical literacy. As I have reported elsewhere

The Pew survey, called the National Survey of America's College Students (NSACS) tested a sample of college students nearing the end of their academic work, using the same instruments as the National Assessment of Adult Literacy. The survey "collected data from a sample of 1827 graduating students at 80 randomly selected 2-year and 4-year colleges and universities (68 public and 12 private) from across the United States" (Pew). Full results . . . show that while college students generally have higher literacy levels than the population at large, they are still not as skilled in prose, document and quantitative literacy as they could be or should be (Pew 20-21).

In particular, fewer than half of college students and much fewer than half of the population attain scores at the "proficient" level on any of the three dimensions of literacy according to both the Pew and the national assessments (Pew 19). Moreover, the Pew study was designed to help colleges and universities but also looks at the preparedness for the workforce and "ultimately, the NSACS helps educators and employers develop a better picture of the skills of the emerging labor force" (Pew 1). Literacy is not only essential to performance in college, but also to performance on the job, so there is a lot of interest in it for economic and employment reasons as well as educational reasons. (Horning, "Defining")

The message is clear in all of these studies that critical literacy is essential; half or more of the population in college and out lacks the critical literacy abilities that may help them to understand and avoid plagiarism.

The ACT and Pew studies are not the only ones to find the problems under discussion here. Two national studies of adults'

prose and document literacy conducted by the Department of Education at the request of the Congress yield a similar picture. These adult literacy surveys, the National Adult Literacy Survey reported in 1993 (Kirsch et al.; hereafter NALS) and the National Assessment of Adult Literacy, conducted in 2003 and reported in 2006 (US Department of Education “National;” hereafter NAAL) both show that only about 40% of the nation’s adults have prose and document literacy at the highest skill levels that entail analysis, synthesis and evaluation. At every level and in every sector of society, from college students to the prison population, the lack of critical literacy is widespread. It may be contributing to inadvertent plagiarism in college writing courses and it leads to the wider concerns articulated by lawyers like Lawrence Lessig about how we make use of common ideas in our culture and to even wider concerns about full participation in our democratic society.

The Skills to Teach

The Council of Writing Program Administrators, a national organization for those who lead college writing programs across the country, has offered its own discussion of plagiarism, “Defining and Avoiding Plagiarism: The WPA Statement on Best Practices.” In this statement, the role of reading is a key focal point in the list of Best Practices, recommended for teaching students to understand and avoid plagiarism. In addition to explaining plagiarism and having clear policies about it, using appropriate assignment design and sequencing and making sure students understand responsible use of sources, the WPA Best Practices call for teachers to “Attend to Sources and the Use of Reading.” In this section of the statement, teachers are encouraged to have students use a variety of sources and understand the conventions of citation, but in addition, the research discussed here suggests that teachers should help students learn how to evaluate sources through a focus on reading. Here is the full text of the Best Practice recommendations in these latter two areas:

Show students how to evaluate their sources.

Provide opportunities for students to discuss the quality of the content and context of their sources, through class discussion, electronic course management programs or Internet chat spaces, or reflective assignments. Discuss with students how their sources will enable them to support their argument or document their research.

Focus on reading. Successful reading is as important to thoughtful research essays as is successful writing. Develop reading-related heuristics and activities that will help students to read carefully and to think about how or whether to use that reading in their research projects. (Council, *Defining*)

The WPA statement may benefit from considerable expansion, and that need can be answered by drawing on the particular skills discussed in other studies, such as the work by ACT discussed earlier. In a conference presentation, I have proposed that the WPA add a reading section to its highly-regarded document describing outcomes for first-year composition (Horning; Council, *Outcomes*).

The national adult literacy surveys also offer a description of key reading abilities that have been tested among a sample of the adult population across the country. The sample was designed and drawn to reflect the population of the country as a whole, based on national census data. Here is the adult literacy survey list of skills essential for the highest level of prose literacy, dealing with ordinary written texts like newspapers, magazines and books:

Each prose selection was accompanied by one or more questions or directives which asked the reader to perform specific tasks. These tasks represent three major aspects of information-processing: locating, integrating and generating. Locating tasks require the reader to find information in the text based on conditions or features specified in the question or directive. . . . Integrating tasks

ask the reader to compare or contrast two or more pieces of information from the text. . . . In the generating tasks, readers must produce a written response by making text-based inferences or drawing on their own background knowledge. (Kirsch, et al. 73-74)

Document literacy, dealing with tables, charts, graphs, maps and other kinds of documents, entails these abilities:

. . . Questions and directives associated with these tasks are basically of four types: *locating*, *cycling*, *integrating*, and *generating*. Locating tasks require the readers to match one or more features of information stated in the question to either identical or synonymous information given in the document. Cycling tasks require the reader to locate and match one or more features, but differ in that they require the reader to engage in a series of feature matches to satisfy conditions given in the question. The integrating tasks typically require the reader to compare and contrast information in adjacent parts of the document. In the generating tasks, readers must produce a written response by processing information found in the document and also making text-based inferences or drawing on their own background knowledge. (Kirsch, et al. 84)

It is important to note that neither NALS nor NAAL examined skills working with web-based materials, but as I have argued elsewhere, the underlying abilities are the same whether the source is a page or screen and whether the material is text or images (Horning, *Reading*).

If these two sets of abilities, described by researchers who have looked at how readers actually perform, are examined together, the result is a clear set of goals for teaching that may help students avoid inadvertent plagiarism. To locate, cycle, integrate and generate, readers must have the abilities to see relationships, notice and make use of richness, follow the structure, appreciate

and delve into style, capture the full meaning of vocabulary and know and interpret the writer's purpose. These abilities are all the linchpins in what I have called critical literacy, which calls for analysis, synthesis, evaluation and application. To understand and use source materials appropriately in support of an argument without plagiarizing, these are the abilities students must have. If teachers of writing or in any discipline want to make sure that students can not only read, understand and use source materials appropriately but also participate fully in getting an education and engaging in our democratic society, they can help students develop these skills that lead to critical literacy.

These goals are a tall order, to be sure, especially in the face of the large numbers of students coming to college without the reading skills they need. The appropriate response, however, is not to throw up our hands in despair, not to "dumb down" our courses, not to lower our standards, and, as Amy Robillard has pointed out recently, not to deny how angry we feel when students plagiarize. I propose that perhaps some of the anger that Robillard explores arises from the deceit and anti-learning discussed above in the matter of definition, but it is also to some degree self-directed, a by-product of our inefficacy at preventing this student behavior. The appropriate response is to adjust our teaching to help students get the skills they need to avoid plagiarism, to write well and to be successful in college and in their personal and professional lives. Teachers can begin by helping students understand that reading is a skill like any other (playing a sport or an instrument, for example) and that it must be practiced regularly like other skills. Reading must be much more of a focus in writing courses both in first-year programs and in WAC and WID situations, so that when students are asked to do research, the focus is on critical reading within the research task. And there are some books to address this need, as discussed by David Jolliffe in a review essay on the reading problem in a recent issue of *CCC*. Plagiarism in general continues to be a subject of interest among college writing teachers, as Blum, Haviland and Mullin, and Eisner and Vicinus all make clear.

The need for fundamental reading and information literacy skills across the curriculum is essential because of the way information and information access are changing. In a recent report in Educause, the Washington-based nonprofit association that supports the use of information technology in higher education, Educause leaders describe the need for these skills across all disciplines in higher education:

Beyond just a way of finding accurate and correctly sourced information for an assignment, today's information literacy is a way of thinking about information. Critical thinking, knowledge construction, and reflection are the processes that surround information. . . . Information literacy is embedded in the cultural practices of the academy. Many of our practices expose students to the way experts reason through problems, what they read, and how they create knowledge. Allowing students to learn by doing, using the same resources as professionals, acculturates them into the practice of the profession. (Lorenzo, Oblinger, and Dzuiban)

What professionals in every field read, how they read it, and what they do with the information they obtain through reading is foundational to this process. Teachers can help students build ACT's RSVP skills and the locating, cycling, integrating and generating abilities described by the government which are needed to read well and use information appropriately without plagiarism, if they work on reading along with writing directly in every course.

Because of the web, teachers must do more of this kind of work and do it in a much more conscious and concentrated way, using good help available from our information-savvy colleagues in the library. Many of the practices discussed here are already being used by writing teachers, but more collaborative work with faculty in other disciplines to make courses reading- as well as writing-intensive in the following ways can help students see these

as skills needed in every discipline. There are five particular adjustments teachers can make to begin to work on the plagiarism problem and the reading problem that underlies it.

What to do Monday

The first adjustment teachers can make is to begin to educate students about the complexities of plagiarism as suggested by Blum (177-79). Colleges and universities can offer panel discussions and student/faculty dialogues on the ways in which source materials are used in various contexts and for various purposes. The way students use resources through the Internet, such as downloading music or visual images with or without attribution, is one way of opening up discussion of the processes involved, the cultural expectations, disciplinary conventions and other issues. It is, as Blum notes, a complex topic, but one that deserves thorough and thoughtful discussion.

A second adjustment teachers may already be making is to require intensive reading on all assignments. In addition to helping students work on essential comprehension skills through close reading of textbooks, primary source materials and digital information, teachers can draw on the apparatus provided in textbooks and accompanying websites, now increasingly common. Students I have interviewed in my own case study research with novice and expert readers indicate that students commonly ignore these support materials when they could be used to enhance reading development. Teachers can further develop students' reading by integrating focused work with source materials into inquiry projects and by helping students become more active and capable readers as discussed by Daniels and Zemelman and by Tovani. Though these books are addressed chiefly to K-12 teachers, their strategies can be readily adapted to college-level material.

Because reading requires practice like all other kinds of skills, a third adjustment teachers can make is to require extensive reading. In my own courses, I have been requiring extensive reading outside of class in every course I teach for several years.

Students complain a lot about this work, but I think it changes their experience with course material. I created this task because of my increasing frustration with students' lack of reading ability, and after teaching courses in developmental reading in which this strategy worked well. At the beginning of the term, I provide students with a list of four to six contemporary books related to course issues from which I ask them to choose two to read on their own during the term. They must write a brief review of each book, and the review assignment is structured in such a way that they must really read the book to complete it (see Appendix A for a sample assignment from a first-year composition course with a focus on environmental issues).

The reading and review count sufficiently in their course grade so that failure to do the work will make a substantial difference. The books are current, topical and related to the course material. I never discuss these books in detail in class, beyond occasionally going around and asking students to say which one they have chosen. I present this work as an opportunity to practice and develop better reading skills. What I have seen is that the assignment results in deeper engagement with course material and much higher quality discussions in class as well as on web-based work. The first time a student says in class, unsolicited by me, "In the book I'm reading..." the assignment comes to fruition, and this has happened in just about every class since I started using this assignment. The two-page reviews are quick to read and grade, too. Requiring extensive outside reading, then, is a third kind of adjustment teachers can make. When I get the occasional case of plagiarism, which I do, I can do a better job of using this as a teaching opportunity to discuss plagiarism as well as sending the case to the judicial system for review.

A fourth adjustment to help students develop more and better reading skills entails looking directly at digital materials, and can probably be done best by working with digitally sophisticated library faculty. Our web-using students may be beyond us in their ability to do things digitally, but they are not beyond teachers in their understanding and use of what they find on the web. Web

materials come in different categories, running the full gamut from fully refereed scholarly journals to hoax sites that have no real information at all. If teachers expect students to be discriminating web consumers, critical reading skills on screen must be taught just like those on paper.

Many university librarians can offer solid instruction in information literacy; the national Association of College and Research Libraries has excellent guidelines for this kind of teaching (*Objectives*). Librarians make great use of helpful heuristics for the analysis and synthesis of web resources, training students in examining accuracy, currency, relevance, authority, validity, bias, source and context (*Objectives*). Adding library instruction in information literacy offers a crucial approach to helping students develop a full array of reading skills in the digital environment in which they will live and work. The library instruction can be enhanced and supported through the use of some of the exercises suggested by Burkhardt and her colleagues.

A fifth adjustment teachers can make is to require students to move beyond simply finding materials, something everyone can do easily now with computer access and Google searching. Students must be required to go beyond finding and probe their sources. Such a requirement is easy to institute by having students prepare an annotated bibliography of sources within a couple of weeks of beginning work on course projects. They should be taught to distinguish between primary and secondary sources, and to evaluate both print and digital materials in terms of accuracy, currency, relevancy, and so forth. Class exercises with summary, paraphrase and quote can be helpful in demonstrating briefly but clearly what is expected when students use outside sources. This kind of work needs to happen not only in first-year composition courses (where it probably already is a regular feature of most teaching) but also in the company of writing assignments across all disciplines. In doing so, teachers make every course a reading and writing course, a course that will help students be expert readers, writers, critical thinkers, and participants in contemporary society, as well as more fully engaged in their course work.

These adjustments to teaching set up an ambitious plan to address the plagiarism problem. However, the problem is growing and will continue to grow unless all faculty take deliberate steps to address it. Recent research suggests that some of the plagiarism problem arises from weak reading; all the studies cited here involve large numbers of readers in school and out who do not read at a level that might help them to avoid plagiarism. Before, during and after college, students and the population at large lack the foundational and information literacies based on print that support critical literacy, and critical literacy skills can help students avoid plagiarism. To move toward a solution to this problem, open discussions of the nature of plagiarism, intensive and extensive reading work in all courses, along with support from faculty librarians and appropriate instruction as students engage in their own research work can help build the skills that will allow them to analyze, synthesize, evaluate and apply source materials appropriately and accurately.

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APPENDIX A

BOOK REVIEW ASSIGNMENT

During the semester, you will be required to read two books from the following list (or others you bring in for specific approval) and write brief reviews. There are two main purposes for this assignment. The first is to provide you with the opportunity to explore a range of environmental issues in greater depth. A second purpose is to provide you with the opportunity to develop and practice your skills in critical reading, essential in both your personal and professional lives. I hope you will find the books you choose interesting and enjoyable as well as challenging.

To write each of your two reviews (see due dates on the course outline), you should prepare a brief paper (approximately 500 words, or two typed pages, double spaced). Your review must include the following three elements:

1. Your review should summarize five (5) main ideas discussed in the book you are reviewing and for each major idea you summarize, you must connect it clearly and specifically to issues we have discussed in class or that appear in other readings.
2. Choose at least one of the following additional features to include in your review: a) Explain what the book has to do with the course and why you think I chose it as one of the readings, b) Discuss the practical implications of the book for your personal and/or professional life, c) Relate your personal experience(s) to two concepts in the text, OR d) (for second review only) Compare and contrast the two books you have read for the course.
3. Provide an evaluation of the book, positive, negative or in between.

Following is a list of approved books from which you can choose your reading. You are welcome to propose others for my approval.

- Thomas Friedman, *The World is Flat*
- Holmes Rolston, *Environmental Ethics*
- J.R. McNeill, *Something New Under the Sun: An Environmental History of the 20th Century World*
- Elizabeth Kolbert, *Field Notes from a Catastrophe: Man, Nature and Climate Change*
- Bjorn Lomborg, *The Skeptical Environmentalist*
- Edward Wilson, *The Future of Life*