



PH.D. IN "COPY-AND-PASTE"?

Addressing the Rise of Plagiarism in Graduate Programs

Overview

Plagiarism on college campuses is a well-documented problem. The ease of “cut-and-paste” plagiarism in the age of the Internet has often been cited as the primary culprit along with students’ own ignorance of acceptable citation practices. Much of the emphasis, then, is placed on undergraduate education and the need to teach students how to correctly integrate writing into their courses, with the bulk of this instruction in many cases taking place in first-year writing courses.

What is less often discussed is the growth of cheating and plagiarism in graduate and professional schools. In fact, while rates of cheating among graduate students are lower than among undergraduates, they are not substantially lower. It has become a substantial problem in science and technical programs, and is more pronounced among English-as-a-Second-Language (ESL) students than among those whose primary language is English.

A Growing Problem

According to a survey conducted by the Pew Research Center, more than half of college presidents believe that plagiarism has increased substantially in the last ten years. Eighty-nine percent indicated that “computers and the internet have played a major role” (p.16). Further, a survey of undergraduate and graduate students (McCabe 2005) demonstrates that academic dishonesty is not merely an undergraduate problem. Though 56 percent of undergraduates and 68 percent of graduate students indicated that copying from a written source without acknowledging it constituted plagiarism, 38 percent of undergraduates and 25 percent of graduates admitted to having committed this offense within the past year. Further, 80 percent of professors reported they had detected this sort of plagiarism in their students’ papers.

Intentional or Unintentional

While the pervasiveness of plagiarism is almost universally acknowledged, the causes of the cheating are a matter of debate. While some argue that most plagiarism is accidental and best addressed through educational means, others believe cheating has become a part of student culture. To some extent both of these are true. A study of graduate students at the University of Sao Paulo (Krokosczyk & Ferreira) revealed mixed results. Thirteen percent of students believed that most plagiarism is accidental whereas 24 percent claimed it was intentional. Twenty-eight percent thought that “the desire to achieve good academic yields” (p. 5) motivated plagiarism, while 18 percent attributed it to the difficulty in writing and 15 percent to the lack of punishment. These results suggest that ignorance of correct citation methods may facilitate intentional cheating. When not knowing how to correctly cite information is combined with the relative ease of cut-and-paste plagiarism students tend to overlook the ethical issues involved (Howard & Davies 2009).

International Students

Plagiarism among students whose first language is not English has long been a significant problem. Part of the problem is technical. The students, who may have attained their undergraduate degrees in their home countries, are unfamiliar with North American and European standards of documentation. This is exacerbated by their difficulty in written English. In particular, they may have considerable trouble accurately paraphrasing or summarizing material from their research sources. Another part of the problem is cultural. The students may think about intellectual property differently and not recognize that failure to cite is a violation of academic decorum. From this viewpoint correcting this behavior is largely an educational issue.

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A study of graduate students' research proposals in the sciences (Gilmore et al 2010) revealed that while 37 percent of native English-speakers' proposals contained plagiarized material, that percentage increased to 50 percent among ESL students. Similarly, Vieyra, Strickland and Timmerman (2013) discovered that 65 percent of plagiarized papers in their study group were written by ESL students. Forty-seven percent of all papers written by ESL students contained plagiarism as opposed to 16 percent among native speakers. Ultimately, Gilmore, et al (2010) concluded that "a lack of enculturation," or an understanding of the role of literature review in the sciences, was a significant problem, particularly for graduate students, for whom "cultural differences in conceptions of plagiarism, [and] inadequate English language skills," (p. 24) was a particular problem.

A Particular Problem for the Sciences

Relatively little research has been done comparing frequencies of plagiarism by major or discipline. However, quite a number of studies have been done, especially in recent years, describing the depth of the problem within particular disciplines. Since many of these studies focus on STEM disciplines, it is reasonable to assume that the professoriate in these areas perceive plagiarism as a significant problem. Vieyra, Strickland and Timmerman (2013) studied instances of plagiarism in graduate students' research proposals in the STEM disciplines. They found that 28 percent of their sample contained plagiarized sentences, with the majority of those (68 percent) directly copied from the source material. Only "3 percent appeared to be an ultimately unsuccessful attempt at paraphrasing" (p. 40), or an honest mistake. Gilmore, et al (2010) also researched instances of plagiarism in graduate student research proposals in the STEM disciplines. They found that 40 percent of revised proposals at doctoral-granting institutions contained instances of plagiarism while 56 percent of revised proposals at master's granting institutions contained plagiarism.

Though these studies report different frequencies of plagiarism for graduate students in the STEM disciplines, they demonstrate that plagiarism is a difficult problem in the sciences. Once again this suggests that plagiarism is a complex issue with multiple facets. Students entering graduate study fail to understand the role of literature review, and possess inadequate writing and documentation skills. This is partly an enculturation problem, which is magnified for ESL students, for whom failure to understand Western standards of documentation and problems with English magnify the issue. The relative ease of lifting material from electronic sources, combined with the other pressures faced by graduate students, often makes the temptation to cut corners hard to resist.

A Career Ender

The first and most direct impact of plagiarism (or habitual cheating in general) is that it undermines an individual's education and because of this can ultimately impact career success. According to *Are They Really Ready to Work?*, a 2006 report on work preparedness, employers indicate that 28 percent of college graduates working for them are "deficient" in written communication. This contrasts with the 93 percent of employers who say that written communication is "very important" in the positions they offer (p.41). Further, 19 percent rate their workers as "deficient" in professionalism and work ethics, which 94 percent rank as a "very important" skill (p. 41).

In the academic world plagiarism can end careers overnight when degrees are revoked, making the professors who hold those positions suddenly unqualified for them. One of the most recent publicized cases of academic dishonesty occurred in 2011, when Germany's defense minister, Karl-Theodor

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zu Guttenberg, was found to have plagiarized parts of his doctoral dissertation, resulting in the retraction of his dissertation and the resignation of his position (Dempsey, 2011). More recently Samim Shaik was stripped of his PhD in Mechanical Engineering by the University of Natal when it was discovered that he's plagiarized "more than two-thirds" of his dissertation ("Chippy Shaik Stripped of Doctorate"). Academic

dishonesty impacts non-academic careers as well. In the world of journalism, a former reporter at the Times, Jason Blair, plagiarized scores of stories over several years before being caught, marring the Times' reputation and ending Blair's journalism career (Sullivan, 2013).

Types of Plagiarism

Defining and understanding what plagiarism is, as well as how to avoid it, is a difficult task for many graduate students. This can be complicated by the fact that many professional organizations may define plagiarism poorly, define it differently, or not define it at all. The American Psychological Association, for example, defines it as "present[ing] substantial portions or elements of another's work or data as . . . [one's] own" (p. 395), whereas the World Association of Medical Editors says it exists when "six consecutive words are copied" (Masic p. 209), and the AMA Manual of Style divides it into four separate subcategories:

1. Direct plagiarism: Verbatim lifting of passages without enclosing the borrowed material in quotation marks and crediting the original author.
2. Mosaic: Borrowing the ideas and opinions from an original source and a few verbatim words or phrases without crediting the original author. In this case, the plagiarist intertwines his or her own ideas and opinions with those of the original author, creating a "confused, plagiarized mass."
3. Paraphrase: Restating a phrase or passage, providing the same meaning but in a different form without attribution to the original author.
4. Insufficient acknowledgment: Noting the original source of only part of what is borrowed or failing to cite the source material in a way that allows the reader to know what is original and what is borrowed.

Direct plagiarism, also called "cut-and-paste" plagiarism is probably the most common type, made easier by access to electronic resources like the Internet. In egregious cases, long passages of text may be plagiarized (or even whole documents) though shorter passages are more common. Though direct plagiarism may be intentional, it is just as often an indicator of poor writing and research habits.

The writer may have pasted in text meaning to cite it later, but simply forgot. Mosaic plagiarism is harder to detect because the writer has intentionally changed certain words to make the passage appear original. While this may be an intentional attempt to deceive, it may also be the result of a failed attempt to paraphrase. By itself, paraphrasing is not plagiarism if it is correctly cited. While it may be intentional, it also may be an indicator of poor research writing habits. Insufficient acknowledgement may also be an indication that a writer has underdeveloped research and writing practices.

Similar marketing research has been performed by Turnitin to identify the types of plagiarism in the classroom and in research, namely the Plagiarism Spectrum (http://turnitin.com/assets/en_us/media/plagiarism_spectrum.php) and Decoding the Types of Plagiarism (<http://www.ithenticate.com/resources/infographics/types-of-plagiarism-research>).

Reputations Marred Across Medical Research

There are no easy solutions to the plagiarism problem among graduate students. When an incident occurs, professors are frustrated because they believe their student has attempted to deceive them or are unprepared for graduate study. The student, on the other hand, may feel that she is being held to an unfair standard without ever having been taught the principles of academic writing. While it is important that students be aware that strict penalties exist for transgressions, the best solution is an educational one. Some solutions may include:

- Educational technology: Some programs may offer plagiarism self-checking software, such as Turnitin and iThenticate, and online tools to provide feedback and help students correct their own plagiarism errors.
- Workshops: Students who enter a graduate program may participate in workshops that introduce them to the writing, research, and documentation standards of their profession.
- Research writing courses: In some disciplines, a course in the research and writing standards of the profession may be required, often in the first semester.
- ESL courses: For students who speak English as a second/other language, courses designed to meet their needs can not only help them with their English language skills but also help them understand the intellectual property standards of English-speaking countries.
- Writing center assistance: Writing centers can conduct workshops and provide individual tutorials to help students understand the documentation standards they are working with.
- Mentoring: Professors and senior graduate students can mentor students and help enculturate them to the standards of the profession they are preparing to enter.

Conclusion

When plagiarism is discussed in the professional literature, it usually focuses on undergraduate education. In part this is due to the assumption that graduate students should already be competent writers who know the documentation standards in their fields. This is, unfortunately, not true. In addition, as McCabe's research demonstrates, avoiding plagiarism is almost as challenging for graduate students as it is for undergraduates. This problem may have been magnified over the last decade or so along with the exponential growth of the Internet and the ease of "cutting and pasting." Students who speak languages other than English, and especially those who come from non-Western countries may not understand the academic writing practices of English-speaking countries. The existence of clear, published plagiarism policies and disciplinary procedures for transgressions is one solution. A better one might be the availability of educational tools, which may include electronic writing tools, workshops, writing courses, writing center tutoring, and mentoring programs.

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