

Plagiarism and Pedagogy: Reflections on the Causes and Consequences of Plagiarism among Engineering Students

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ABSTRACT: Academics working in composition classrooms are reporting the increasing frequency of plagiarism in student writing. The problem is exacerbated by the internet, which blurs the definition of copyright and transforms the research process. One conclusion might be that our society suffers from a hopeless erosion of values. But recent research on plagiarism and our own classroom experiences bring us to consider another possible conclusion: that our positions on plagiarism are not as clear as we think they are. In fact, some of the lessons we now teach our students may actually oppose the standard academic definitions of scholastic dishonesty. For instance, what we call group work was once called collusion. And while pedagogical trends emphasizing collaboration ostensibly prepare our students for corporate teamwork, the shift may confuse the concept of sharing work. Moreover, the broad perspective that we encourage in preparing engineering students for careers in a global community means asking them to acknowledge that not all cultures agree on the boundaries of what conventional Western thought defines as intellectual property.

Perhaps our web-surfing students aren't less ethical than their forebears: perhaps they are internalizing some conflicting practices. If that's the case, we, as educators, should rethink our own attitudes about academic integrity, uncover the contradictions between pedagogy and practice, and find a new approach. In this paper, we will draw from contemporary research and our own experiences to investigate the ways in which the official academic rules for original written work and contemporary writing practices seem to be at odds.

1 INTRODUCTION

In Gus Van Sant's film *Finding Forrester*, William Forrester, an eccentric writer, takes on an apprentice named Jamal Wallace, a gifted high-school student. In one scene, Wallace encounters a writing block, and Forrester suggests that Wallace copy the opening paragraphs of one of Forrester's essays. After this jump-start, Wallace completes the essay himself. Wallace submits the essay as an assignment for his English class. His English teacher finds the essay "too good," locates the source of the opening paragraphs in Forrester's writings, and accuses Wallace of plagiarism. In the denouement, Forrester reveals himself and vindicates Wallace. The small-minded English teacher shrivels before Forrester's generous spirit and Wallace's youthful genius.

The film's treatment of plagiarism is muddled: like it or not, Wallace did plagiarize. Yet the conflict highlights the ethical ambiguity of an issue we, as academics, tend to think of as cut and dried. As writing instructors, we find ourselves with split affinities: we may admire the efficiency of Forrester's jump-start technique, but we also identify with the English teacher, particularly when we find student papers studded with paragraphs and passages lifted from online journals or the internet. The muddle is worth investigating for what it reveals about current confusions in academic and corporate arenas over what constitutes plagiarism, and what is the appropriate response.

It is certainly a muddle that we, as academics, seem to be facing with increasing frequency. Growing evidence on university campuses shows that student plagiarism is out of control (Decoo, 2002). A study Miguel Roig conducted and published in *Psychological Record* found that 36% of the undergraduates surveyed admitted to plagiarizing written material (1997). The problem is not confined to students: we

find allegations of plagiarism against published professionals such as Stephen Ambrose and Doris Goodwin Kearns.

American composition instructors are trying to come to terms with the increase in plagiarism by speculating about its source. Robert Lee Mahon blames it on the social climate. To students, he claims, it's a game (Mahon, 2002). Debra Straw nostalgically recalls the 1950s when life was more straightforward and cheating was rare. She believes that "the Yankee work ethic appears to be dying concept," and laments the fact that "[s]tudents don't regard hard work as a positive thing. They want to complete tasks quickly; they think short cuts are clever and adequate" (Straw 2002). Although there is certainly a foundation for these observations, blaming all instances of plagiarism on a hopeless erosion of values may be an oversimplification.

In our Technical Writing courses, we teach students to avoid plagiarism as a matter of ethics. We now wonder, however, if this approach adequately addresses the scope of the problem. We should make it clear that the incidents of plagiarism that interest us are not those of deliberate fraud, such as downloading entire papers or cutting-and-pasting entire paragraphs. Here we are discussing what Rebecca Howard calls "patch-writing," which she defines as "copying from a source text and then deleting some words, altering grammatical structures, or plugging in one synonym for another" (1999, xvii). Although "patch-writing" is, essentially, clumsy paraphrasing, it is, as Howard points out, considered "plagiarism" by leading American composition textbooks (8-13). Our students' "patch-writing" concerns us because the "plagiarism" is often unintended. A student typically leaves out necessary quotation marks but cites the source; the source citation suggests that the student does not intend to deceive. Howard views such instances of student "patch-writing" as not a criminal activity, but as "a means of learning the language and ideas of the source" (110). Although "intent" is impossible to determine, Howard's view of "patch-writing" as a stage of learning is a useful step towards refining our view of "plagiarism."

In this paper we examine some of the causes for the apparent rise in plagiarism, paying particular attention to recent changes in pedagogical practice that pertain to Technical writing.

2 CAUSES OF PLAGIARISM

Several factors may be contributing to both the extent and forms of plagiarism that we collectively face. Even the most unequivocal critics of student conduct admit that the Internet has had an enormous impact on how students gather and use information and is at least partly to blame for the problem. As Wilfried DeCoo notes in his book *Crisis on Campus* "the ease by which material can be collected from the Internet . . . has multiplied the problem of plagiarized papers" (DeCoo, 2002). A Turnitin.com study conducted in 2000 found that 30 % of "a large sampling of Berkeley students had plagiarized directly from the internet" ("Statistics" 2001).

The problem of plagiarism is further complicated by the cultural melting pot we find in contemporary academia. At large universities like ours, an international student body inevitably expands the boundaries of conduct. In Howard's terms, some students are not only "learning the language" of their profession, they are also still learning English. Moreover, in engineering, the broad perspective that we encourage in preparing our students for careers in a global community means asking them to acknowledge that not all cultures agree on the boundaries of what conventional Western thought defines as intellectual property.

Finally, there are those like historian Stephen Oates, once accused of plagiarism himself, who argue that "plagiarism" itself is not "a simple, well-defined form of misconduct that can be easily detected." Instead, he claims, there is much "confusion and consternation . . . both inside and outside academia" about what does and does not constitute plagiarism (Oates, 2002).

"Plagiarism" is actually defined clearly enough in American university policy statements. According to our own university's definition, "Plagiarism' includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any other means another's work and the submission of it as one's own academic work offered for credit" (Student Judicial Services). The real confusion surrounds the question of authorship. This definition of "plagiarism" assumes that the categories of "one's own academic work" and "another's work" are clear and distinct. Recent research in Rhetoric and Composition argues otherwise. For instance, Andrea Lunsford and Lisa Ede assert that "the traditional model of solitary authorship is more myth than reality, [and] that much or most of the writing produced in professional settings in America is done collaboratively" (1994, 418).

In order to prepare our engineering students to work in such professional settings, we, like many other American writing instructors, have taken up the challenge of redesigning the writing classroom to incorporate collaboration, in both critiquing and writing assignments. Nevertheless, this practice may, for the students, confuse the concept of sharing work. What we are now calling “collaboration” and “group work” would have, twenty years ago, been considered “collusion,” a form of plagiarism. Moreover, when we teach our students how to cite and quote from the work of other writers, we often draw a distinction between academic and corporate practice. In academic work, the contributions of other writers—their intellectual property—must be cited. On the other hand, in large businesses and corporations, what is written “at work” is often owned not by the author-employee, but by the corporation. A report that one engineer starts may be completed by another engineer, rewritten by an engineer in another division, and quoted out of context by a CEO, all with no citation, quoting, or even passing acknowledgement of the initial “writer.”

If the Internet, an international student body, and confusion over authorship and collaboration are all contributing to a rise in plagiarism, perhaps our students are not less ethical than their forebears. Perhaps, they’ve just internalized some complicated and conflicting practices. It follows that they will meet even greater challenges in the workplace, where they will have to write collaboratively to audiences or with collaborators from all over the world. Corporate writers who take material from writers outside the corporate domain can draw lawsuits on their employers. How do we, as professors, then approach the problem of plagiarism in teaching technical communication, bearing in mind that engineers will spend, by one contemporary estimate, at least one-third of their careers writing (Petroski, 1986)?

3 APPRENTICESHIP

Gus Van Sant’s film intrigued us not only because of its display of the plagiarism muddle but also because of its illustration of a contemporary apprenticeship: the student Jamal receives his meaningful writing instruction through his apprenticeship with Forrester, not in his conventional English class. In the context of the apprenticeship, Jamal’s plagiarism is a pedagogical issue, not an ethical one. The scenario recalled, for one of us, anecdotes from Professional Engineers who finally “learned to write” not from school or university, but from their bosses or colleagues on the job. Consequently, we suggest that we first acknowledge the fact that student writers are, by definition, apprentices. In professional writing courses, the concept of apprenticeship takes on even more importance than it does in, for example, freshman composition. Our job as instructors of technical writing is to teach students the conventions of the discourse they will engage in professionally. Second, we recognize that the foundation of apprenticeship is learning from masters and models the craft the apprentice will one day practice professionally.

4 MODES OF WRITING

Acknowledging that students are apprentices leads us to reframe our purpose as instructors: how do we best prepare apprentices? The approach to writing instruction that dominates the professional and technical writing is commonly referred to as a modes-of-writing approach. In traditional composition classes, the modes of writing typically presented are narration, description, evaluation, or persuasion, for instance. The modes-of-writing approach is practical; it trains students to adopt certain standardized techniques, such as the five-paragraph essay.

In technical writing or professional writing courses, the modes are more narrowly and concretely defined as memos, proposals, resumes, or formal reports. A sampling of technical writing textbooks shows that the material is organized around modes of writing with chapters devoted to reports, proposals, correspondence, and so on¹. Even books that approach the subject matter from a more theoretical platform, such as audience-centered writing or rhetorical strategies, devote chapters to the various genres of documents professionals must produce. The evidence suggests that teaching students the modes of writing that they will encounter as professionals is the predominant and practical task for teachers who are training students for careers in engineering or science or business.

¹ For examples, see *Technical Writing: A Practical Approach* by William Pfeiffer or

5 TEMPLATES

In Technical Writing classes, the modes of writing become even more standardized when instructors provide students with models to emulate. Quite often writing instructors accomplish that by providing students with sample papers. Students who are writing a proposal can study other proposals and analyze the language, structure, and content to see what made those proposals successful. Consequently, students tend to use those samples as templates. For instance, a student may study a sample proposal and write a first paragraph that emulates the first paragraph of the sample sentence by sentence. The student uses the first sentence to state the problem, the second sentence to state the ramifications of that problem, the third sentence to propose a solution, and the fourth to outline the rest of the proposal. The prevalence of this practice is reflected in technical writing textbooks and class websites that provide sample instructions, proposals, lab reports, letters, and so on, to show students the format, style, tone, and language of those documents. Students are often rewarded for adapting their own document closely to such a template.

6 FORMULAIC WORDING

While there is value in the use of models, templates may well be a factor that exacerbates the plagiarism problem. Our students, given templates that they are expected to emulate may confuse the legitimate use of a provided template with what instructors might deem an illegitimate use. For instance, when we talk to students about the function of a particular piece of writing, such as the introduction to a formal report, we would discuss certain requirements in an introduction: a statement of purpose, background, and an overview of the paper. What we care about is that students deliver those requirements. We are not concerned with the formulaic wording. The problem is that the distinction between generic wording such as “in this memo I will” or “the purpose of this report is to” and specific wording may not be as clear to students as it is to instructors. In fact, instructors may be compounding the problem by overlooking the confusion formulaic wording may cause a student who has been drilled the week before in the pitfalls of poor paraphrasing.

7 COMPROMISING ORIGINALITY

The use of templates also contributes to another, subtler problem that engineers may encounter in the workplace when they are required to generate new material, or write *de novo* (from the new). The idea of *de novo* writing draws on the romantic concept of authorial originality, which is contested by Howard and other postmodern Rhetorical scholars who study plagiarism (Howard, 1999; Woodmansee, 1994). Nevertheless, the phrase still has meaning to engineers and scientists who often detest being faced with a blank page, with no easy template or obvious modes of writing to guide them. Technical Writing courses that ostensibly prepare engineers to write in the conventions of their field may be devoting too little time to developing *de novo* skills. *De novo* writing assignments help students develop analytical skills and learn how to translate those skills into effective rhetorical strategies. More importantly, they encourage the student to move away from “apprentice” status toward mastery of the language. An engineer with mastery of the language can judge when and how to use formulas, templates, and modes of writing, but she maintains the freedom to break with those conventions when necessary. Masters of the language do not need plagiarism. Nevertheless, it is possible that they did once, along the way.

8 CONCLUSIONS

Technical writing instructors who use model papers, templates, and other writing formulae face a dilemma. We find ourselves, like the teacher in *Finding Forrester*, unable adequately to resolve our conflict over plagiarism using the punitive methods generally prescribed. Academic dishonesty policies are written as if the definitions and boundaries are clear and universal while experience shows us that they are not.

Our students are apprentices who learn through trying on new modes of expression, new formulae, and new words. One of the problems with using templates is that it fails to show the apprentice how to generate original ideas, or how to transform old ones to suit new purposes.

We do not advocate changing university policies concerning plagiarism. What we are proposing is that, in the classroom, we more consciously distinguish between writing *de novo* and writing with

templates, forms of writing, and formulaic phrases. We can also acknowledge the multiple sources of confusion for our students and alert them to complicated decisions that will be an essential part of their education as engineers and professionals.

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