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Avoiding the Plagiarism Pitfall: Preventing Plagiarism in Undergraduate Research

Abstract

For faculty teaching in academia, plagiarism is a common concern. With the ever-increasing availability of electronic information, many worry that it is becoming a greater problem than ever before. To manage the problem, instructors often seek ways to detect plagiarism once it has already occurred in student work. Unfortunately, this process often involves considerable time and effort, and instructors may feel they are compromising their roles as educator and mentor by instead becoming “plagiarism police”. At the same time, efforts at detection may not meet with success – if discovering that a student has plagiarized can be called a success – because it is not always easy, or even possible, to identify plagiarized work.

Instead of focusing on detection, then, this paper promotes ways to prevent plagiarism before it occurs. An essential first step toward prevention is gaining an understanding of the myriad reasons why students plagiarize. This understanding will help the instructor with the next steps: educating students and raising their awareness of plagiarism, and developing teaching strategies that reduce opportunities for cheating while helping students avoid plagiarism-prone situations. This paper, then, will begin with an examination of why students plagiarize, and will go on to explore strategies for preventing plagiarism before it happens, in four ways: by creating student awareness; encouraging students to be better time managers; designing plagiarism-resistant assignments; and enlisting the help of others at one’s institution.

Introduction

For instructors teaching in a university setting, plagiarism is a common concern. With the ever-increasing availability of electronic information, many worry that it is becoming a greater problem than ever before (Auer & Krupar, 2001, p. 415; McKeever, 2006, p. 155-6; McLafferty & Foust, 2004, p. 186). To manage the problem, instructors often seek ways to detect plagiarism in the work of their students, turning to librarians, detection software, and the literature for advice.
However, while one can employ strategies to combat plagiarism once it has occurred, detection is in many ways not an ideal solution.

It is often difficult – sometimes impossible – to identify plagiarized works. While in some cases writing quality might suggest that work was not done by the student, in other cases plagiarized material may not be so different in quality from the student’s own work, making it harder to spot (Auer & Krupar, 2001, p. 421). Also, some students are simply “better” plagiarizers than others, more skilled at hiding or integrating borrowed passages or falsified sources – making it more likely that instructors will detect accidental plagiarizers than deliberate cheaters. Finally, the sheer effort of vetting student papers to find evidence of plagiarism can be a barrier, unless plagiarism detection products are employed – and these tools are neither foolproof nor free of controversy (Foster, 2001; McKeever, 2006; Strawczynski, 2004; McGill 2004; Anti-Cheating 2006).

Indeed, even when plagiarism has been detected, instructors often feel powerless to address it. Julia Christensen Hughes and Donald McCabe, in the first cross-institutional study of academic misconduct in Canada (in press), found that “in response to suspected cases of academic misconduct, many faculty (46%) and TA’s (38%) reported having ignored the incident.” These statistics appear shocking until we look at the reasons given by those respondents, which often relate to a sense of powerlessness - for example, “the dominant explanation was the lack of evidence or proof (85% of faculty and 79% of TAs)”. Other challenges reported include a lack of time and administrative support to pursue such cases. Clearly, even when educators have detected plagiarism, the problem often goes unresolved.

Finally, by focusing their efforts on detection, instructors may skip something fundamental about plagiarism – a clear understanding of why students plagiarize – and may compromise their role as educators by taking on the less desirable role of “plagiarism police”. Michael Freedman (2004) poetically describes this frustrating experience when he writes, “…the angst of detecting others who have plagiarized gnaws at the pit of my stomach… I dread reading the student work when once I looked forward to the delightful prospect of encountering new ideas and revelations from wonderful students” (p. 546-7).
Freedman (2004) goes on to describe detection as “a misdirected and often wasteful use of time”, and argues that, “we must reject a reactive stance that puts us on the defensive and erodes the empowering mentor/mentee relationship” (p. 547). These words reflect the position of this paper and the workshop on which it was based. In the following paragraphs we promote proactive efforts to understand and prevent plagiarism before it occurs, over reactive attempts to catch students who have already plagiarized. The paper will examine why students plagiarize, and focus on developing preventative strategies in two ways: by raising student awareness of plagiarism; and by designing assignments that reduce opportunities for cheating while helping students avoid plagiarism-prone situations.

**Why do students plagiarize?**

This is not a straight forward question to answer. There are some famous cases in the academic world of distinguished researchers and writers who have been accused and found guilty of plagiarism. One of the more famous cases in the last few years was Stephen Ambrose, an award winning writer of history and biography. His punishment was simply a warning, or as Kaltenbaugh (2005) states, a slap on the wrist that had no effect whatsoever. Thus, it is incorrect to think that secondary or post-secondary students are the only ones who plagiarize – but it is at those levels of education where people should be taught about plagiarism and methods to prevent it. Before looking at some approaches to help prevent plagiarism, it is important to understand some of the reasons why students do plagiarize.

Many things happen in people’s lives that interact or conflict. When it comes to students working towards their degrees or diplomas, they have various responsibilities they need to juggle: time, work, family, and studies are some of the main ones most people can relate to. It is not uncommon today for students to have a part-time or full-time job. This along with their studies creates a very long work week. As well, there may be family commitments: picking the kids up after piano lessons or hockey practice and then making sure they are fed and do their homework. There is also the classic issue of procrastination (Szabo & Underwood, 2004; Gresham, 2002). Feelings of time pressure may lead people to use what they think of as a shortcut to help themselves out.
Related to these personal pressures are some social pressures – for example, the pressure to do well. Instead of concentrating on learning, people simply want the grade: the end result becomes more important than the process. Szabo & Underwood (2004) discuss how Behaviourist Theory helps explain people’s choices. They want positive outcomes; therefore, those who are driven for success may cheat to get the desired marks, while those who are not driven and want to avoid poor marks may cheat to fulfill their needs (p. 181).

There is also peer pressure to contend with: social approval from friends is a powerful influence, so if peers cheat, a student might wonder, “what’s the big deal? They didn’t get caught, so why worry about it?” For people who have low self-esteem or are still trying to find their place in the world, using any means necessary to get the desired result can be very tempting (Szabo & Underwood, 2004; Gibbons, Mize, & Rogers, 2002; Hughes & McCabe, 2006). Peer pressure may also discourage students from reporting a fellow student who is cheating. Even when they feel that plagiarism is wrong or unfair, they may worry that exposing a classmate will affect their social place amongst students. Research shows that students will not report on their peers (Hughes & McCabe, in press).

Other individual characteristics that may explain why people plagiarize are attitude and behaviour. Those with a strong work ethic, greater self-esteem, a greater tendency to feel guilty about doing something wrong, a tendency to treat people fairly, or a strong desire to learn are much less likely to plagiarize (Hughes & McCabe, in press). Students who focus on their studies and are less involved with extra-curricular activities are also less likely to use shortcuts in completing their tasks. People with opposite attitudes, or who lack maturity and experience, are more likely to use any means necessary to complete tasks (Szabo & Underwood, 2004; Gibbons, Mize, & Rogers, 2002). Another attitude that can lead to plagiarism is the “pragmatic” or “business approach” to life. Unless something concrete is to be gained, time studying may be seen as a waste. Knowledge may be seen as irrelevant (Gresham, 2002).

Besides looking at the student side of the issue, there is also the instructor’s perspective on why students cheat. Faculty members and their teaching assistants often believe that student’s do not fully understand the institution’s policies regarding plagiarism. There may also be a difference of opinion or
different understanding between students and instructors as to what constitutes cheating. For example, students may not understand faculty expectations regarding collaborative projects, where they are expected to work together, but hand in “individual” work. Also, for assignments where individual work is required, students may turn to each other to help because of the time pressures already discussed. Collaboration is an effective teaching method but unclear expectations can lead students to think that copying from each other in such a situation is not considered cheating (Hughes & McCabe, in press; Hughes & McCabe, 2006; Szabo & Underwood, 2004). Communication and clarification is a necessity in such cases.

Classroom or institutional culture may even create a situation where students are encouraged to cheat because they believe the repercussions are insignificant. As already examined, faculty may feel that they lack the proof, time, or institutional support to pursue suspected cases of plagiarism. They may also feel that even when they can prove their case, the penalties adopted by the institution are ineffective. Finally, faculty may fail to take action because they are themselves unfamiliar with the institution’s policies regarding plagiarism, or simply because they wish to avoid conflict (Hughes & McCabe, in press; Hughes and McCabe, 2006).

Similarly, student perception of faculty attitudes may have an impact on plagiarism. If the instructor seems disengaged from a student’s interests and academic life, the student might feel that plagiarism is acceptable because “no one cares, not even the professor”. Also, with the many responsibilities of faculty, it is easy for students to believe that if they do cheat, they will not be caught, or that if they are caught the punishment will be minimal (Hughes & McCabe, in press; Hughes & McCabe, 2006; Gibbons, Mize, & Rogers, 2002). Correspondingly, if students feel dissatisfied with the quality of their educational experience, or believe that the institution is not concerned with their aspirations, they may question why they should care about academic integrity.

At the classroom level, then, instructors should work to ensure that assignments have meaning for students and are not perceived as mere “busy work.” At the institutional level, the university should work to help all students realize that the learning process is more important than the grades. Knowledge is most relevant
when it is placed in a context that students understand (Hughes & McCabe, in press; Szabo & Underwood, 2004).

At the centre of all these classroom, and institutional, level concerns is the number of students in the institution. More people than ever before are attending post-secondary schools and this creates added pressure for administration. More students does not translate into more instructors or more support for instruction. Instead, there is usually less time for quality interaction between a student and instructor (Hughes & McCabe, in press; Szabo & Underwood, 2004).

Culture and technology are two other factors that should be considered when examining why students plagiarize. Awareness of cultural differences is very important when working with international students. Sowden (2005) and Hughes & McCabe (2006) both discuss how the idea of intellectual property is very much a western concept. Students from non-western cultures may not be as familiar with issues like plagiarism. Hughes & McCabe (2006) also ask if students who are learning English can or should be held to the same standards as those whose first language is English (p.53)? Some cultures believe that when knowledge becomes common to the whole society, recognizing the individual efforts in creating this knowledge is not important – group consensus outweighs individual understanding (Sowden, 2005). An awareness of cultural differences can help instructors to prevent situations in which international students might inadvertently plagiarize.

Technology is blamed by many for making it easier for students to plagiarize than ever before. It is so effortless to cut and paste material from one document into another. The many paper mills available on the web also make it easier for people to find a finished product they can call their own. And technology creates blurred boundaries. With physical books and articles, it is easier to recognize the concept of intellectual property. Electronic access, however, can create a sense of “one whole source” making it difficult to recognize the individual pieces that make up the whole. There is also an incorrect assumption held by many that anything on the web is part of the public domain and therefore does not need to be properly acknowledged (Gresham, 2002; Kaltenbaugh, 2005).
Whatever the reasons are, understanding why students plagiarize is the first step toward finding a solution. The second step is to teach students what plagiarism is and why it is important, and to help them learn to prevent it. The next part of this paper will discuss ways to prevent plagiarism so that less work – ideally none – is needed for detection.

Avoiding Plagiarism-prone Situations

Understanding why students plagiarize is essential to knowing how to prevent it. The instructor who understands the causes is well equipped to develop teaching practices that educate students about plagiarism, and that help them to avoid situations in which it typically occurs. The following four strategies help prevent student plagiarism in a variety of ways: these strategies include creating student awareness; encouraging students to be better time managers; designing plagiarism-resistant assignments; and enlisting the help of others at your institution.

Creating Student Awareness

Many students do not even hear the word plagiarism until they are in college or university. Simply pointing them to a written campus policy is not enough to educate them about this issue. Hughes & McCabe (in press) state that in their survey, only 11% of faculty and 17% of TAs felt that students have a solid understanding of campus policies regarding cheating. In addition, only 12% of faculty and 17% of TAs felt that these policies were highly effective. These are discouraging numbers, but even more discouraging, perhaps, is the fact that only 66% of faculty provides information on their outlines or syllabuses about cheating, or plagiarism, and only 52% discuss the important issue of honesty and integrity with their students! Instructors should make plagiarism awareness an integrated part of every undergraduate course they teach, using class time to explore what plagiarism is and where it fits within the whole process of academic integrity. Students should be engaged in defining what they believe plagiarism is and why they see it as being important, or not important, in their lives. They should learn not only how to cite papers properly, but also why this process is central in sharing ideas, giving due credit, and gathering support for
their own ideas. Seeing that instructors take academic integrity seriously will help students realize that they also need to take it seriously.

**Encouraging Time Management**

Although it is a key part of plagiarism prevention, education is only the first step. Realistically speaking, there are students who, fully aware of the academic standards, plagiarize anyway. It is therefore essential to understand why they make that choice – and without a doubt, students plagiarize due to lack of time.

Szabo and Underwood (2004) identify time pressure as a “situational factor” that can encourage students to cheat (p. 184). Nicole Auer and Ellen Krupar (2001) report that in one year, over half the undergraduate plagiarism cases at their institution took place during exam time (p. 416). When faced with the competing demands of life and work, along with rapidly closing deadlines, normally honest students may be tempted to cheat. By integrating some time management “checks” into the structure of a course, instructors can help students avoid this situation.

For example, one approach is to divide large assignments into smaller, task-oriented components, with due dates distributed throughout the term. To begin, students might be asked to produce a topic proposal, due early in the semester, giving them plenty of time to seek advice and feedback. This might be followed by an outline of the final paper; an annotated bibliography showing research done and how it will be incorporated; and early written drafts.

Distributed due dates can help students avoid the end-of-term panic brought on because they can’t find a topic, or are unsure of the research process, or didn’t realize how time consuming the assignment would be. It also shows student ownership of the final product, by allowing the professor to observe and influence the planning and development of the work.

As an alternative, the instructor might ask students to complete a series of smaller assignments, due at intervals throughout the semester. Again, this helps to avoid the last-minute pressures of a large end-of-term assignment.
It is interesting to note that student maturity is a factor associated with time management. For example, Trueman and Hartley (1996) found that students over the age of 25 reported significantly better time management skills than did younger students (pp. 204-7). Christensen Hughes and McCabe (in press) found that maturity is a “characteristic associated with high rates of student cheating”. When considered together, these findings suggest that time management is especially important for plagiarism prevention among undergraduates.

**Designing “Plagiarism-resistant” Assignments**

Although no assignment is plagiarism “proof”, certain strategies can be applied to create assignments that are meaningful, effective, and resistant to some of the common forms of plagiarism. We have already examined one approach in the above discussion of time-managed assignments. To follow are some other strategies instructors might consider.

1. **Give clear, written instructions**
   We recommend, no matter what the subject or course level, that instructors provide written guidelines when giving assignments to students. This may seem like simple advice, but as reference librarians we frequently meet students seeking help with research assignments that they do not fully understand, and for which they have little documentation. We also meet students who, despite attempts to note in-class instructions, find they have missed key elements. By providing clearly written guidelines, the professor can help students avoid confusing or stressful situations that may motivate them to plagiarize – and also better equip them to receive research help when they need it.

   Inclusion of specific expectations, such as citation style and/or the length and format of the final product, can be simple but effective plagiarism preventors. Also, a written reminder of course or institutional policies regarding plagiarism will reinforce in-class discussion. By creating clear, written expectations for an assignment, students have specific, custom criteria that must be incorporated into the end result – and instructors should be wary of student work that deviates from those guidelines.
ii. Make the assignment research-oriented
A research-oriented assignment takes the “less visible” part of student work – the independent research process – and brings it forward, showing what research has been done by the student, and how. For example, students may document this process by keeping a journal of their research efforts; they may be asked to indicate what library resources they have used or submit printouts of their index search strategies. Some instructors require students to submit copies of the first page of sources used, or to annotate items in their bibliography, describing why they were selected.

By placing emphasis on the research process, the instructor sees whether students are engaging their information literacy skills to carry out thorough, effective research, and also knows that the research component of an assignment was carried out by the student. Assignments that stress the research process resist plagiarism in the form of downloaded or purchased papers or falsified bibliographies, and encourage students to commit to the information-gathering process.

iii. Be creative with the design of the assignment
An assignment can be creatively designed in terms of format or topic. Non-traditional assignments will be less of a target for plagiarism, simply because they are less readily available for download or purchase than the traditional “term paper”. Although the “classic” paper topics have that status for good reason, they are often the easiest targets for cheat sites. For example, a Google search for the classic English paper topic, “Gatsby and Pursuit of the American Dream” yields eight paper mill sites within the first ten results - all offering pre-written essays on this topic. The other two hits lead to an online study guide, and a journal article that has been reproduced online – both potential sources for cut-and-paste plagiarizers. For the student with little time and poor research skills, this provides a strong temptation.

The paper-mill pitfall can be avoided by asking students to write on topics that are in some way specific or unique. For example, topics with a current or a local focus are less likely to exist in the form of a ready-made paper (Iowa, 2005). While it is probably not difficult, for instance, to find a pre-written about urban
recycling, it would be much harder to find essays about the effectiveness of such a programme in Mount Pearl, Newfoundland.

Non-traditional research assignments may also require students to format or present their work differently. Some of the approaches already explored, such as research-focused and time-managed assignments, require students to present their work in alternative formats not typically found on cheat sites. The Memorial Libraries webpage, “Ideas for Library/Information Assignments” (2006), offers a number of other suggestions for developing assignments that encourage students to find, evaluate and use information and prevent it in non-traditional formats.

Creatively designed assignments may be effective not just because they are harder to download, but also because they successfully engage students. Auer and Krupar (2001) note that students are more likely to cheat when they “have the least amount of themselves invested in the paper”. Notably, they also point out that “while a student can still commission a paper written on a more inventive topic, it is usually much more expensive…creating a fiscal barrier to plagiarism” (p. 427).

iv. Specify that students use/integrate certain sources

The literature on plagiarism prevention often suggests that instructors place certain requirements on research assignments, for example by requiring students to integrate a particular source; find and use recent publications; or cite a variety of types of sources (Iowa 2004). While this model can work in the context of a traditional assignment topic or format, it is effective for the same reasons that a non-traditional assignment is effective: by creating these expectations, ready-made papers become less available. For example, of those eight paper-mill essays, it is unlikely that any would contain an article published within the last few months, or one that an instructor has specified as a key source.

Please note, however, that we do recommend caution when applying this approach. Well intentioned but overly-restrictive research requirements can have the opposite-of-intended effect, placing students in the stressful position of not being able to complete the task within the given parameters. For example, a bibliography that “must include at least five books” may be difficult to create, if
several students are writing on the same topic and library resources are limited. In this case, the instructor could be inadvertently creating a situation where students feel tempted to falsify a bibliography. When applying parameters like these to an assignment, it may help to consult the library to ensure that resources are available to support the exercise.

v. **Change assignments regularly**

Finally, no matter how specific or creative, it is a good idea to regularly change the assignment in some way. Aside from the benefit of keeping the exercise fresh, interesting and current, this approach also prevents “paper recycling” – the resubmission of papers written by other students in previous semesters. Christensen Hughes and McCabe (in press) write, “faculty can minimize the opportunity or temptation for students to engage in these behaviors by ensuring that laboratory assignments and research projects are sufficiently different from term to term”.

Even if the instructor is likely to recognize the recycled assignment, by taking steps to avoid that situation s/he also avoids the “angst”, as Freeman puts it, of coming across a student who has plagiarized (2004, p. 546).

**Enlist the Help of Others at Your Institution**

The battle to prevent plagiarism is never one that should be fought alone. At any academic institution, support services exist to help instructors and students avoid the plagiarism pitfalls. When planning plagiarism-prevention strategies, the instructor should know what support is available, and consider (in the words of one faculty member at our campus) “bringing in the hired guns”.

1. **The library**

There are a number of ways in which the academic library is a valuable resource for plagiarism prevention. As already discussed, students often plagiarize due to lack of awareness – of what constitutes plagiarism, but also of how to effectively find, use, and integrate information. Students may plagiarize simply because they lack confidence in their research skills and feel fearful of this process. By enlisting the help of the library to provide information literacy instruction, the instructor can reduce research-related anxiety and avoid this plagiarism pitfall. Professors should also promote student use of library reference services – a
student who seeks help at the reference desk is less likely to be overwhelmed by the research and choose to plagiarize instead.

Plagiarism awareness is in itself another element of information literacy, and librarians can help to raise student consciousness of this issue. As Sharkey & Culp (2005) write, “as librarians we support not only information retrieval but the whole process of research and development of information literacy skills…[including] teaching students about plagiarism” (p. 109). Many libraries offer plagiarism-oriented sessions for students, designed to help them understand what it is and what the academic standards are, as well as how to effectively use and cite information.

Finally, instructors should consider consulting the library on research assignments they have developed. A reference or instruction librarian can provide advice on how “workable” an assignment is from a library research perspective, and help the instructor “test” the assignment by working through the research process. This will help to ensure that students can complete the assignment effectively using available library resources.

2. Other on-campus groups
In addition to the library, most universities have other support services available to help with plagiarism prevention. Where they exist, instructors may be able to call on the campus writing centre or academic integrity office for support.

Tutoring services offered by a university writing centre can rescue students who are tempted to plagiarize due to writing-related anxieties. Like the library, campus writing centers may also help to prevent plagiarism and raise student awareness through in-class instruction. The Writing Centre at Memorial University offers in-class sessions on topics such as finding and developing a research topic; quoting and paraphrasing information; and effective citation methods. Recently the Writing Centre and the library have been working together to create sessions designed to give students a broader picture of the research and writing process, and help them develop the skills necessary to carry research assignments from start to finish.
Finally, at institutions that include an academic integrity office, it may be possible to enlist the help of experts there who will give classroom sessions on academic honesty, plagiarism, and the institutional standards surrounding these issues. This office may also be a resource to which the instructor can turn for further advice on how to prevent and manage plagiarism.

Conclusion

It is a labour-intensive process to develop strategies for preventing plagiarism. It involves truly knowing one’s students and developing new and creative teaching strategies. But the results of helping students realize that they are members of an academic community that maintains standards of academic integrity will help them not only as undergraduates, but throughout their academic careers. By taking the time to understand why plagiarism can arise and taking steps to prevent it, either by implementing some or all of the methods suggested here or by developing new strategies for plagiarism prevention, an instructor can seriously reduce the chances of plagiarism happening. In doing so, the pitfalls are avoided and a better learning environment is created for the students, the instructor, and the institution of which they are all a part.

References


