

Is Technology Contributing to Academic Dishonesty?

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Feature Editor

Academic dishonesty is a frequent topic of discussion among university faculty. Several factors have contributed to renewed interest in this topic recently: a perceived increase by experienced faculty in the incidence of cheating and plagiarism, data suggesting that student attitudes are more casual toward academic dishonesty than in the past, the publicizing of several high profile cases of academic dishonesty involving both students and academics, and more students apparently placing a higher priority on high grades.

It is generally accepted that only a fraction of academic dishonesty is detected and reported.¹ Ryan reports data from 1997-1998 suggesting that 1 in 6 papers submitted for 2 separate college classes were entirely or almost entirely copied from other sources.² In a survey of 2,100 students on 21 campuses in 1999 by McCabe, approximately one third of students admitted to serious cheating on tests (copying on exam, use of crib notes, or helping others on a test) and about half admitted to serious cheating on written assignments (plagiarism, collaboration with others, failure to footnote, falsifying lab data, submitting a "paper mill" manuscript or copying from the Internet).³ In high school, the problem is apparently worse: In a 2001 survey of 4,500 high school students, McCabe reported that 74% participated in one or more instance of serious cheating on tests.⁴ McCabe also reports that almost 41% of college students surveyed in 2001 admitted to cutting and pasting material from the Internet without citation and that 68% don't believe the behavior represents serious cheating.^{3,4} In 1999, by comparison, only 10% of students admitted to cutting and pasting plagiarism, illustrating that the use of the Internet for cheating is clearly on the rise.³

As we increasingly use more sophisticated technology as an integral part of our teaching activities, and as students become more competent in using it, opportunities for academic dishonesty increase. Most academic dishonesty will present in one of two ways: cheating on examinations, and plagiarism.

Cheating on examinations has always been with us, but before computer testing technology became commonplace we minimized it through a combination of preventive and investigative processes. Preventively, we would require a group of students to take a test simultaneously, proctor the exam carefully, use an environment where visual contact was difficult and personal items were prohibited, and sometimes even distribute multiple versions of the same test. After the test, investigation of item analysis would help us determine whether any students answered tests too similarly. Before computer testing, we had developed a set of procedures that we believed dissuaded most students from cheating, and these activities were part of our testing ritual familiar to both teachers and students.

The rapid adoption of computer testing technology has substantially altered the testing environment and increased the opportunities for cheating. Computer-based testing, and in particular Internet-based testing, makes it possible for students to take tests at any time and any place, eliminating some traditional methods used to prevent cheating.

Unless all students are taking a computerized test simultaneously in a proctored environment, cheating is relatively easy. On-line unproctored tests give students the opportunity to use outside materials, look up answers on the Internet or on their PDAs while taking the test, and to work as a team when using multiple computers in the same room. When tests are administered asynchronously, students taking the test at a later time can learn the test content from those who have already taken it. Complicating things even more, screen capturing utilities make it easy for students to print copies of computer-administered tests, making it likely that your test will be circulated among students shortly after the first administration and available to future classes for years to come.

Plagiarism, or the act of misrepresenting someone else's work as your own, has, of course, always been a problem in the academic environment. But before widespread use of personal computers, plagiarism mostly consisted of papers

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written by others being retyped and submitted or false references being added to avoid the work of doing the research. Since pre-personal computer submissions required the work be manually typed, the amount of time saved by committing plagiarism compared to doing the assignment honestly was not substantial, and plagiarism was thought to be confined to relatively small subgroups. The personal computer has obviously made typing, editing, and reformatting much easier. Even more recently, the Internet has brought a seemingly unlimited source of potentially copyable content a few convenient keystrokes away.^{5,6} Now, the time saved by plagiarising can be substantial, and to a time-pressed student the temptation may be irresistible. Not only is a wide variety of ready to submit papers available for sale on the Internet, many high-quality manuscripts are published in full length. These works can be copied easily and then reformatted to appear to be done entirely by the student. In PA education coursework this plagiarism opportunity is particularly tempting since it is common for assignments to be easily answerable by passages from medical textbooks, which are increasingly available on-line.

Why do students choose to cheat? Neils gives four major reasons: (1) In contemporary culture, the stakes of academic achievement have become so high that students are afraid to fail, (2) academic institutions may encourage competition with more emphasis on rankings and scores than on overall learning, (3) curricula may inadvertently encourage cheating by trying to cover too much factual information in too short a time, encouraging students to get the “right” answers over grasping the material on a deeper level, and (4) students may not actually understand what plagiarism really is.⁷

How many of our students are inclined to cheat? Hinman divides students into 3 groups: the 15% of students who would not cheat under any circumstance, the 15% who will routinely look for a way to cheat, and the 70% of students who may choose to cheat if they feel others are doing so and that the risk of getting caught is low (opportunistic cheaters).⁸ Following from this, he proposes 3 responses to cheating: a cultural approach in which students don't want to cheat, a prevention approach where opportunities to cheat and pressure to cheat are minimized, and a police approach where cheaters are caught and punished to create a deterrent effect.

Another researcher, Harris, lists several reasons why students cheat: students are natural economizers, with a “do what is necessary” ethic; they face many choices and some put off low priorities that do not interest them; they have poor time management skills; they doubt their writing and research ability; and some just like to break the rules.⁹

So what can be done about academic dishonesty? The first step is that faculty need to recognize that cheating is not an uncommon behavior and commit to doing something about it. In a 1999 survey of 1,000 faculty on 21 campuses, McCabe noted that one-third of faculty were aware of students cheating in their classes but did nothing to address it.³

Several actions can be taken to reduce cheating. The first step is to make sure your course syllabus clearly addresses academic dishonesty and its consequences. Sherry suggests starting the semester with a frank discussion about values and academic integrity, making it clear inauthentic work will not be tolerated, clarifying the class expectations about permissible collaboration, and repeatedly discussing the appropriate use of citations.¹⁰

Where computerized evaluation systems are used, faculty should rethink whether these processes present opportunities for academic dishonesty, and if so, work to devise methods for eliminating these opportunities. High-stakes testing may need to be delivered only to classes assembled in proctored rooms, and testing that can't be made more secure may need to be supplemented by further testing where security is tighter. In some cases the assurance of academic integrity may come into conflict with the decentralization goals of distance education, and creative approaches—such as the hiring of off-site proctors—may be necessary.

One author challenges us to take the difficulties created by the Internet's facilitation of academic dishonesty one step further, suggesting that the phenomenon is telling us something about our current teaching model.¹¹ He suggests that the traditional research paper is not useful in teaching how to find information and express original ideas. One alternative would be to assign more process-oriented work, like compare/contrast/synthesize challenges, and to require students to interact with faculty at several steps of the process, such as the research stage, the outline stage, and the drafting stage.

The prevalence of cheating suggests that the relationship between grades and learning may have become more tenuous, where the case for mastering a body of knowledge has gotten lost in the race for high grades. This may be related to the assumption by many of our students and also many faculty that knowledge is mastery of a body of information as opposed to the acquisition of a set of process skills. This is unfortunately illustrated often by our student's requests to tell them only what they need to know to get a good grade.

Regardless of how we feel about our curriculum's contribution to academic dishonesty, the first step in improving our academic ethical environment is accepting the possibility that the potential for cheating is widespread. In fact, in light of data that suggests increasing student acceptance of cheating behavior and increased admission of cheating by students, it is likely that if we haven't recently detected any academic dishonesty it is because we haven't been looking. When one combines these changes in student ethics with how much easier committing plagiarism has become thanks to the PC and Internet, we can understand why cheating is on the rise.

Once we accept that cheating is likely happening even in our own programs, we can look at ways to reduce the prevalence. We can try the virtuous model of trying to build a

culture where students don't want to cheat by frequently and convincingly discussing academic honesty. We can apply preventive measures by decreasing our student's opportunities to cheat. We can make cheating unacceptable by clearly defining up front what is not tolerated and being clear on what the consequences will be. Threatened consequences should be carried out to demonstrate that cheating carries a cost and to reassure honest students that their efforts are respected.⁹ There is some data to suggest that student-designed honor codes that are administered by student honor committees can help reduce the student culture's tolerance of cheating, so these mechanisms should be created and empowered if possible.⁸

It appears that technology and other cultural factors may be synergizing to produce the perfect storm of increasing academic dishonesty. It is our duty as educators of the next generation of health care professionals to confront the issue of maintaining academic integrity and the ethical values it represents.

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