Vice Chancellor and Provost’s Committee on Academic Integrity

Research on Academic Integrity
Introduction

The Research Subgroup of the Vice Chancellor and Provost Committee on Academic Integrity was charged with conducting research in order to answer the following questions:

2. Are there cheating demographics?
3. Are there cultural differences when it comes to cheating?
4. Does cheating occur more at certain types of institutions?
5. What educational efforts are most effective with cheating? How do we create a campus culture in which students do not cheat?
6. Should we solicit from the corporate world its codes of conduct and introduce such to campus?
7. What are the standard definitions for cheating, plagiarism etc. (not limited to written)?
8. How can we use the information we collect to counter cheating?

The subgroup read journal articles from the CAI Assessment Guide as well as others from the more recent literature (2000-2004). The group also reviewed the articles listed in “Print Materials on Academic Integrity” from the CAI 2004 Conference for additional readings.

This report addresses the above questions in two main categories: (1) cheating and academic integrity and (2) educational responses.

Cheating and Academic Integrity

Much has been written about the prevalence of student cheating. This section discusses which students are more likely to cheat, why and how they cheat, and whether or not students of different cultural backgrounds view cheating differently.

Who Cheats?

While student cheating is prevalent on campuses, its prevalence is only moderately higher than it was 30 years ago (McCabe and Trevino, 1996). Bowers in 1963 (as cited by McCabe and Trevino, 1996) studied 5,000 students on 99 campuses of all sizes, and McCabe and Trevino’s 1996 survey of 6,000 students at 31 campuses suggest that there are remarkably few differences in reports of academic dishonesty on tests and exams and written assignments. Robinson, Amburgrey, Swank, and Faulkner (2004) studied cheating habits of 118 students at a rural college and found that the extent of cheating mirrored the rates reported from urban campuses. In a current review of 107 studies related to cheating among college students, an average of 70% had cheated; 43% had cheated on exams, 41% had cheated on homework assignments and 47% had plagiarized (Whitley, 1998).
According to McCabe and Pavela (1998), the following types of individuals are more likely to cheat: male students; people with Type A personalities; students with lower GPAs; and students with a weaker work ethic. Women, once less likely to have reported cheating (Bowers, 1963, as cited by McCabe and Trevino, 1996), are now nearly as likely to report having cheated as men, and McCabe and Trevino (1996) speculate that this may in part be a factor of more women majoring in fields that have historically been male dominated. Harding (2004) surveyed 650 students at 12 colleges and universities and noted that engineering students are among the most likely to cheat. Business students were the only group of students more likely to engage in academic cheating (Harding, 2004).

Those students who put studying before leisure activities, study on a daily or near daily basis, and take studying seriously are reported to have an academic ethic that tends to counteract cheating (Rau and Durand, 2000). Nowell and Laufer (1997) found that students who work while going to school are more likely to cheat. Pino and Smith (2003) found that students at a medium size state university who watch more television and participate in student clubs are more likely to commit acts of academic dishonesty. However, this was not true for Greek students when they controlled for academic ethic. Eberhardt, Rice, and Smith (2003) found that Greek students were similar to non-Greek students in their frequency of cheating on exams.

Szabo and Underwood (2004) studied science students at a large institution in the UK and their perceptions of plagiarism on the Internet. They present personal and situational factors that have an impact on cheating. Self esteem (Love and Simmons, 1998), moral reasoning (Tankersley, 1997), fairness to others, desire to learn, and guilt or fear (Davis and Ludvigson, 1995) are personal factors that tend to discourage individuals from cheating. Negative personal attitudes, lack of awareness of policies (Roig, 1999), lack of competence, and a view that knowledge is irrelevant (Kibler, 1993) are personal reasons why individuals do cheat. The following section discusses additional reasons for student cheating.

Why Do Students Cheat?

Achievement vs. scholarship. One common explanation for cheating is that students are under pressure to achieve good grades (Dalton 1998, Kibler 1993b, Higbee and Thomas 2002), so that they can excel in college, be admitted to good professional and graduate schools (Rudolph and Timm, 1998) and, eventually, succeed their careers. Researchers have noted that students appear to value achievement more than scholarship (Kibler 1993b), viewing cheating as “a necessary means to a desirable end” (Dalton, 1998).

Situational factors. Higbee and Thomas (2002) list factors such as test anxiety and the classroom environment, and McCabe and Pavela (1998) mention the likelihood of “getting caught”, low severity of punishment, and degree of understanding and acceptance of university policy. Cheating is also linked to dissatisfaction with course content that seems irrelevant to students’ future goals, and to class activities that do not actively engage students in learning (Rudolph and Timm, 1998). Other factors include:
- time constraints, difficulty of the task, and lenient penalties (Kibler 1993a);
• large class size (Nowell and Laufer, 1997);
• ready availability of papers and other ways to cheat that offer temptation (Capano, 1991, Kibler, 1993a, Wilhoit, 1994); and
• an instructor’s laissez-faire attitude (Love and Simmons, 1998).

Some researchers have found links between student cheating and the professional status of the instructor. Nowell and Laufer (1997) found that classes taught by nontenure track faculty were associated with higher levels of reported cheating. Kerkvliet & Sigmund (1999) reported that students taught by teaching assistants were 32% more likely to cheat than students taught by faculty.

According to Dalton (1998), academic integrity standards and test environments are often poorly defined and administered. Students receive mixed messages about cheating, and students and faculty often lack adequate understanding of what cheating is.

Situational factors that help dissuade a student from cheating include instructor knowledge of the area, probability of being caught (Love and Simmons, 1998), effort required to cheat, danger of damaging well-being in society, directed and specific assignments (Davis, 1994), and the need for the knowledge in the future (Love and Simmons, 1998).

External influences. Students’ behaviors and perspectives towards cheating are influenced long before they attend college. Rudolph and Timm (1998) state that students cheat in college because they learned to do it in high school. Reasons may include a weakening of “social prohibitions” against cheating (e.g., changing influence of religious institutions, families, etc.) (Dalton, 1998), the popularity of the Internet, and “misbehavior in the White House” (Cole and Kiss, 2000, p. 6).

In his book, The Cheating Culture, David Callahan (2004) explores the existence of increased cheating in our society and offers the following reasons:

1) New pressures-in an increasingly competitive economy with fewer safety nets
2) Bigger rewards for winning
3) Greater temptation
4) Trickle-down corruption

Lack of good role models: Dalton (1998) emphasizes that research shows peers are the biggest influence on college students, and the peer culture often condones cheating (i.e., peers don’t report students). When universities don’t set a culture where academic integrity is valued, then students take their cues from other students, whose standards are lesser.

Faculty must also serve as role models for students. Instances of academic dishonesty are more common when faculty are considered “weak” in their policies on cheating (Cole and Kiss, 2000).
How Do Students Cheat?

Rudolph and Timm (1998) cite Ghering and Pavela (1994) for four types of academic dishonesty: cheating, fabrication, facilitating academic dishonesty, and plagiarism. Behaviors include using others to take a test, unauthorized information/tools or verbal signals, copying, stealing completed assignments of another student and submitting them, stealing grade books and altering grades, stealing exams, altering scored tests, and collaborating without permission.

Cole and Kiss (2000) cite these specific behaviors in today’s high-tech environment: modifying sentences from papers submitted to online “paper mills”, such as plagiarism.org, and using technology during standardized tests such as “tiny video cameras, silent pagers, and infrared signaling devices.”

Cultural Differences

While there is not a great deal of research on cultural differences regarding cheating behavior, most of the studies to date have looked at comparisons of attitudes and behaviors among business students in different cultures. For instance, compared to U.S. students, Japanese college students report a greater tendency to cheat, minimize the severity of cheating, and are less disturbed when they witness cheating in class (Diekhoff, Labeff, Shinohara & Yasukawa (1999). Polish business students reported higher frequencies of cheating than U.S. business students and attributed greater responsibility to instructors for reducing the opportunities to cheat in their classes (Lupton, Chapman & Weiss (2000).

Lupton and Chapman (2002) found relatively similar results between American (55%) and Russian business students (64%) in terms of admitting cheating at some point during college, but the same students revealed dramatic differences in reporting that they had cheated in the particular class in which the data was collected. Only 3% of American students admitted cheating while some 38% of Russian students acknowledged cheating. Some 68% of American students admitted to conveying exam information to peers in a later section of the class; compared with nearly 92% of Russian students.

Magnus, Polterovich, Danilov & Savvateev (2002) studied students in four countries regarding their perceptions of those who cheat or assist another in cheating, and those who report someone who has cheated. College students in provincial Russia, urban Russia (Moscow), the Netherlands, Israel, and the U.S. were given a scenario in which a student informer reported observing another student cheating by copying exam answers from a third student, with that student’s consent. Russian students had very negative perceptions of informers, while Israeli and the Netherlands students had negative views in contrast to U.S. students’ somewhat positive attitude toward informers.

Regarding movement across cultures, the authors posit that if the educational system in a given culture is relatively free of cheating, newcomers (e.g., foreign students) may find it more beneficial to observe the norm even if they are inclined to cheat. Likewise, as
students move further along in their educational career, the costs of cheating become greater (e.g., a graduate student risks devaluing an accumulated investment in his or her education if caught cheating). Studies by Kerkvliet & Sigmund (1999) and Magnus (2002) reached similar conclusions: students cheat less as they move from high school to college to graduate school, regardless of cultural background.

A study by Rawwas, Al-Khatib, and Vitell (2004) examined specific beliefs and values of American and Chinese marketing students in relation to the degree that they perceive forms of academic dishonesty to be acceptable. The study led to a number of results including: (1) overall, opportunism was the most significant determinant of all types of academic misconduct (receiving/abetting dishonesty, obtaining an unfair advantage, fabricating information, and ignoring prevalent practices), and (2) while there were no significant differences between groups regarding fabricating information, Chinese students were more likely to believe that “receiving and abetting academic dishonesty” and “obtaining unfair advantage” were not wrong, while Americans were more likely to believe that “ignoring prevalent practices” were not wrong. Since being “opportunistic” was such a large determinant of attitude toward cheating, authors believe that faculty could significantly reduce cheating by being more vigilant in trying to reduce such opportunities.

In addition to studies that have examined attitudes toward cheating and participation in cheating behaviors, there is a small body of research on educational strategies for teaching ESL (English as Second Language) students how to avoid plagiarism and other forms of academic dishonesty. Shi (2004) conducted an empirical study of how Chinese ESL and native English students borrow words and phrases from source readings in their writing. Shi found that when students were asked to either “write a summary” of a passage or “write an opinion” based on the same passage, both native English and ESL students used significantly fewer words from the source text when writing opinions as opposed to summaries.

Shi argues that ESL students may be more likely to copy texts in near-verbatim style because of inadequate summarizing skills (e.g., failure to delete unimportant information, generalize or combine ideas, and capture the gist of the source text) rather than intent to plagiarize. She also claims that underlying these differences are serious pedagogical issues with regard to helping international students better understand how to write academically in English. One concern is that university professors are not as sensitive as they need to be to the difficulties international students face in trying to paraphrase an author’s ideas, often not realizing the difference between faithful imitation and re-interpreting the author’s way of expressing an idea. Another concern is that appropriate pedagogical strategies need to be developmental, which may mean that for international students “freewheeling imitation” may need to be seen as an initial step toward learning to use sources well. Thus, at early developmental stages in their writing, such students will need to plagiarize before they can effectively learn to move to more sophisticated ways of appropriating texts.
In a second study in this area, Yamada (2003) examined definitions and advice about plagiarism on 10 North American college websites. Her aim was to better understand how plagiarism is problematized and explained and whether or not that was very helpful to ESL/EFL students. She points to several educational strategies (e.g., more emphasis on deductive inferential thinking, analogical thinking) that could be used to better demonstrate how students can avoid plagiarizing.

**Educational Responses**

A number of solutions have been recommended in order to minimize cheating and establish a culture of academic integrity on campus. This section outlines actions that can be taken by the institution as well as individual instructors and defines the concept of the “honor code” as it appears in the academic integrity literature.

**Honor Codes**

McCabe and Pavela (2000) define traditional honor codes as those with “provisions such as unproctored exams, a written pledge that students are asked to sign attesting to the integrity of their work, and a strong (often exclusive) student role in the judicial system that addresses allegations of academic dishonesty” (p. 32). Others may also include “non-toleration provisions that encourage or require students to report any cheating they see among other students.”

Some institutions that do not have traditional honor codes may have other policies in place to help promote academic integrity. Those policies that include strong student participation in the judicial process may be considered “modified honor codes,” according to McCabe and Pavela (2000).

McCabe and Pavela (1998) suggest that development of an honor code is one effective approach to creating an environment where faculty and students share an “understanding and acceptance of the institution’s policies on academic integrity”; however, they stress that it is not the *only* approach. McCabe, Trevino and Butterfield (2002) state that traditional honor codes have, in fact, been found to help reduce cheating (as also indicated above). They also note that traditional honor codes are typically more common on smaller campuses, where it may be more feasible to develop the sense of “campus community” needed to form the basis of an honor code. The authors found that modified honor codes, while not as effective as traditional honor codes (but still more effective than no code at all), may be more practical for larger institutions.

**What can the Institution Do?**

McCabe and Trevino (1996) discuss longitudinal studies by McCabe in 1993 and 1996 and Bowers in 1964, which suggest that one of the key ways to elevate academic integrity (AI) among students is to establish a strong culture of AI on the campus. Bowers (as cited by McCabe and Trevino, 1996) noted “the most important determinant of changes in cheating between high school and college is the level of disapproval of cheating among a
McCabe’s research (1996) shows that “students consistently indicate that when they feel part of a campus community, when they believe faculty are committed to their courses, and when they are aware of the policies of their institution concerning academic integrity, they are less likely to cheat.” McCabe and Pavela (2004) have developed 10 points for fostering a healthy AI climate by both the institution and individual faculty.

Another key factor appears to be the presence of a well-publicized honor code. McCabe’s research at several universities, as well as the experiences of the SU School of Management (von Dran, Callahan and Taylor, 2001), indicate that some form of academic integrity policy contributes to a better climate and makes a difference. For example, McCabe and Pavela (2004) say the introduction of a modified honor code on three campuses resulted a self-reported cheating rate (on tests and written assignments) of 33% of students surveyed compared to a 45% rate at nine colleges without a code.

McCabe and Pavela also theorize that current students, which they label as “the Millennial Generation” (post-1982), are “disillusioned by the corporate excess of the 90s” and thus respond more openly than their predecessors in setting a new educational climate.

Kibler (1993b) agrees that a comprehensive approach to AI is needed, and a clear understanding in policies, procedures, sanctions, and educational strategies must factor in students’ moral development. Kibler outlines a framework that includes promoting an ethic of academic integrity and making sure all of the policies and procedures are clearly documented, communicated, and supported through education and training activities. The Research Subgroup strongly recommends that members of VPCAI review Figures 1-2 and Tables 1-6 from this article as they provide very specific intervention options in the following categories: honor codes, communication strategies, training strategies, faculty assistance strategies, disciplinary policies, and disciplinary process/programs.

Pavela (1999) offers 15 “principles for the design of college ethical programs,” which stress basic ethical values and that ethical development occurs in environments encouraging active learning. He also reinforces the importance of involving students in discussions regarding academic integrity policies and educational programs.

McCabe and Pavela (1998) say the institution can promote AI by reinforcing the likelihood of getting caught and showing that unethical actions have penalties. Rudolph and Timm (1998) suggest that academic honesty be included in the mission statement, external publications and internal communication. Cole and Kiss (2000) suggest required essays on academic integrity on admissions applications and publication of student misconduct in the campus newspaper (without names of individual students).

Callahan (2004) provides lessons to academia about forging a new social contract, such that people can believe that those who play by the rules can get ahead, everyone has some say in making the rules, and the same penalties apply to all who break the rules. He also encourages more efforts to teach integrity.
**What Can Faculty Do?**

McCabe and Pavela (2004) believe faculty must take more of a role in AI. Their survey of 2500 faculty in 2002-3 showed “fewer than two-thirds … put anything about AI in their syllabi and 44 percent said they’d ignored at least one suspected incident of cheating.”

Educational efforts with faculty should address their misconceptions and concerns. Von Dran, Callahan and Taylor (2001), in summarizing Maramack and Maline, say the reasons faculty don’t confront academic dishonesty more are because of unfamiliarity with institutional procedures, difficulty in proving cases, fear of litigation, concern about damaging students’ careers, and embarrassment that such instances reflect badly on their teaching skills.

McCabe and Pavela’s (2004) top 10 principles ask faculty to delineate expectations, develop fair and creative assessments, reduce opportunities for cheating, encourage student responsibility and respond when dishonesty occurs. They also tell faculty to “help students understand the potential of the Internet – and how that potential can be lost if online resources are used for fraud, theft and deception” (p. 13).

Sterngold (2004) believes (although he doesn’t cite research) that most professors don’t realize students are weak in research/evaluation skills and faculty are unwilling to teach them. He and Howard (2002) suggest anti-plagiarism methods such as taking papers in steps, reviewing drafts, affirming writers for their attempts, requiring print-outs of research, choosing some required sources, among many ideas. Rudolph and Timm (1998) note that a strong student-faculty relationship is the best deterrent to cheating. Cole and Kiss (2000) add these suggestions: assign topics that cannot be changed at the last minute, require detailed citations and serve as a role model by citing sources in lectures.

Dalton (1998) cites Wingspread (in an acclaimed study), who states educators must start being pro-active in talking about values in education. Dalton (1998) also proposes “the test environment is… the single most important ingredient in controlling cheating behavior.” He recommends three strategies that should be combined for best results: (1) rules and penalties, (2) moral/character education, and (3) well-thought out testing environment, including clear instruction, seating arrangements, sufficient test monitors, and alternative test forms. Other specific techniques include alternate forms of tests, numbered tests, seating chart so the instructor knows who sat next to whom in an exam, monitoring of apparel (caps, sunglasses, digital players), a standard marketing system to prevent answer changes after grading, and careful security of the grade book.

**Conclusions**

Students cheat for a variety of reasons: situational, societal, and personal. It is important for peers to provide positive role models for each other and for faculty to encourage behaviors of academic integrity. Faculty may want to consider special needs and
perspectives of international students, particularly those for whom English is a second language when it comes to creating assignments and enforcing policies.

A strong campus culture of AI and a sense of community are necessary to reduce cheating. An honor code, as defined by the AI literature, is one way to foster such a culture; a “modified honor code”, or an AI policy that allows for active student participation in the judicial process, may be the best option for large institutions.

Students and faculty need a clear and common understanding of policies. Students should be involved in developing an AI policy. Faculty need to take accountability by setting expectations and creating learning situations that reduce cheating: focus on research skills, testing environments, etc.

References


