Abstract

There is increasing concern about cheating in the secondary schools. This article describes the prevalence of dishonesty in testing, motivation for student cheating, new forms of deception using technology tools, initiatives to protect security of tests, methods students use to obtain papers without crediting the original source, tools for detecting plagiarism, guidelines to minimize cheating, emergence of cyber laws defining offenses and penalties, and rationale for getting parents involved in supporting academic integrity and ethical behavior.

Many parents believe that growing up now presents more complicated challenges for adolescents than in the past (Sclafani 2004). Teenagers need to develop certain attributes so that they are able to cope with the predictable difficulties they will face as they grow older (Peterson and Seligman 2004). A national sample of 1,600 parents with students in middle school and high school was surveyed about the relative importance of teaching 11 values relating to character development (Farkas et al. 2002). The value ranked highest, chosen by 91 percent of the parents as absolutely essential to teach their children, was “to be honest and truthful.”

One method to assess parent performance, in their own estimate, is to compare the percentage identifying a particular goal as essential with the percentage stating they have succeeded in teaching that attribute to children. The results revealed a large gap of 36 percentage points between the 91 percent of parents who declared that honesty and truthfulness are fundamental lessons and the 55 percent reporting that their instruction had been successful. These findings indicate that, even for those values that parents regard as indispensable, significant differences exist between their intentions and what they have been able to accomplish.
Prevalence of Dishonesty

Teachers and students also are appropriate sources to assess whether lessons about honesty and truthfulness have been learned. A nationwide survey of 36,000 secondary students found that 60 percent admitted to cheating on tests and assignments (Josephson Institute of Ethics 2006). Some might assume that teens who cheat are characterized by marginal abilities causing them to resort to dishonesty as the only way to keep pace with more intelligent classmates. However, when 3,000 students chosen for scholastic recognition in the prestigious Who’s Who among American High School Students were asked about their experiences, 80 percent acknowledged cheating on teacher-made and state tests (Lathrop and Foss 2005). The high proportion of these academic achievers who engaged in deception reflects a 10 percent increase since the question was initially presented to honor students 20 years ago. Among the adolescent leaders who acknowledged that they had cheated on tests and assignments, 95 percent said that they were never caught and consider themselves to be morally responsible individuals.

Cheating is not a phase of development characterizing middle school and high school students alone. Evidence abounds that dishonesty is ubiquitous in colleges and universities (Cizek 2003; Johnson 2004; Lipson 2004). The University of Michigan convened a national meeting of scholars to address the growing national concern about originality, imitation, and plagiarism in such diverse fields as journalism, the arts, and science (Lipson, Biagioli, and Vicinus 2005). The Center for Academic Integrity, located at Duke University, represents 250 colleges that are collaborating to find ways of restoring ethical behavior in higher education (McCabe and Pavela 2004). The members of this consortium are developing principles to define the conditions of integrity that should be expected of students and building strategies to help faculty members influence students to adopt honesty as an essential element of lifestyle.

Cheating in school also is becoming an international concern. For example, 900 college students in China were surveyed about their involvement in dishonest testing practices (The Epoch Times 2005). The results indicated that 83 percent had cheated. Frustration over cheating in later adolescence prompted Peking University, the country’s most prestigious institution, to announce that starting in 2006 students caught plagiarizing would be expelled from the school (Dan 2005). A government committee has been debating a policy for dealing with cheaters for several years, and recently submitted its recommendations for a Chinese National Examination Law to the central cabinet of legislators for review. The proposed penalties for cheating in college would include jail sentences of up to seven years (Dongdong 2005). Widespread cheating among middle school, high school, and college students also has been reported in Australia, England, India, Japan, Korea, Spain, and Scotland (Callahan 2004).
Cheating can influence admission to higher education, favoring dishonest students while placing peers who are honest at a disadvantage. The Educational Testing Service (ETS), in Princeton, New Jersey, was concerned that scores on the Graduate Record Exam (GRE®), administered to more than 500,000 prospective graduate students each year, not be compromised. ETS first became aware that it had security problems in 2002 when a number of Chinese, Taiwanese, and South Korean students boosted their verbal scores by memorizing questions and answers that previous test takers had posted on the Web. Radical changes were made to the October 2006 version of the GRE to protect the integrity of test results (ETS 2005).

Similarly, the Graduate Management Admissions Test (GMAT), taken by students in nearly 100 countries, is considered an essential criterion for decisions on business school applicants. According to officials in McLean, Virginia (Ludwig and Silverstein 2006), the GMAT will not be altered because it requires students to respond to an individually tailored series of questions designed to gauge mathematics and verbal ability levels. However, because of incidents where individuals have taken the test for others, the GMAT now is requiring that each respondent provide a fingerprint when checking in and each time entering the examination room. That unique fingerprint, along with a digital photograph and signature, become a permanent part of a test taker’s record.

Unfortunately, cheating in schools doesn’t stop with students. In this current environment of high-stakes testing, faculty members’ and administrators’ salaries and career paths increasingly are tied to students’ academic performance. Some teachers and principals have been fired for providing test answers to students, prompting changes in responses by students while they are being tested, altering answers after the tests are completed and before they are submitted to school district officials for processing, and providing students more time to complete examinations than is permitted by test directions (Axtman 2005).

The extent to which educators are willing to go to fabricate student achievement is illustrated by a case that received great attention in Long Island, New York. A student taking the 2005 Regents’ annual high-stakes test was caught with blue writing on his hand that matched all of the correct responses. The source of answers was quickly traced to the student’s father, an assistant principal who was responsible for state examinations in a nearby school district (Lambert 2005). Public outrage over this type of illegal activity is prompting new initiatives and policies to protect the evaluation process. In Ohio, teachers are obliged to sign a code of conduct and warned

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that inappropriate monitoring of examinations could lead to the revocation of their license. Kentucky administers six different versions of its state tests to frustrate the practice of teaching students answers that might be easier known by faculty members if only a single version of the measure existed (Callahan 2004).

Dishonesty is not unique to students and educational professionals. It also is widespread among adults in the workplace and presents similar challenges involving integrity, trust, and giving credit where credit is due (Evans and Wolf 2005; Maciariello 2005). One estimate is that the unauthorized copying and distribution of software alone costs businesses $12 billion a year (Schwartz 2001).

**Motivation for Cheating**

Why do students from all age groups and achievement levels participate in cheating? One line of speculation is that dishonesty in school is merely a reflection of the broader erosion of ethical behavior which has become commonplace in societies that tend to support self-centeredness over concern for others (Sommers and Satel 2005). Another observation is that concern about high-stakes testing is a cause for deception, particularly by students having difficulty meeting minimal competency skills required for high school graduation (Callahan 2004). Other observers contend that teachers are partially responsible because they ignore evidence of character failure and choose not to hold students accountable (Peterson and Seligman 2004). Educators agree that a growing number of parents seem obsessed with wanting their children to perform better than classmates, regardless of the steps taken to get the desired results (Baker and LeTendre 2005; Nichols and Good 2004).

One way of accurately determining why students cheat is to poll them. Polling, more than any other education reform, could show students that faculty members and the adult community are interested in their points of view and want to understand them. Toward this goal, the authors designed and field tested a number of polls for adolescents that are administered on the Internet (Strom and Strom 2005; 2006).

One of these polls addresses cheating in school and includes items regarding observed prevalence in classes, reactions to deception by classmates, punishment for test abuse and plagiarism, and teacher use of software to detect cheating. Students are asked to identify situations that constitute cheating, conditions that might legitimize dishonest behavior, characteristics of cheaters, frequency of involvement in cheating, and motives for misconduct. This sample item reflects student motivation and justification.

*The main reasons that peers in my classes gave for cheating are:*

- I need good grades to get into college.
Most adolescents agreed that the identified options reflected prominent reasons for cheating. For the “other” option, students often mentioned “lack of access to free competent tutoring” and “adults teach this kind of behavior by example.”

Every school district should have policies and procedures on cheating so that faculty members can respond to incidents without being subjected to duress. Whereas 80 percent of the students responding to the Who’s Who among American High School Students survey admitted cheating on tests, a separate survey administered to their parents found 63 percent felt certain that their child would not cheat in any circumstance (Lathrop and Foss 2005). Perhaps those parents believed that teaching the distinction between right and wrong is sufficient without also helping adolescents link this understanding with a sense of responsibility to behave honestly and truthfully at school.

A familiar outcome is that educators feel vulnerable to threats of lawsuits by parents when their child is accused of cheating. Many teachers worry that they may erroneously accuse a student of cheating and then have to suffer dreadful consequences. Indeed, 70 percent of educators agree that concern about parent reaction discourages them from identifying and punishing cheaters (Whitley and Keith-Spiegel 2002). A disappointing and unintended outcome is student awareness that misconduct seldom produces punishment and, therefore, poses a low risk.

**Technology and Test Monitoring**

Teachers are advised to be vigilant when administering tests. A perennial form of student dishonesty involves referral to messages that have been written on parts of their body, clothing, or belongings kept nearby. A common practice has been to remind test takers not to glance at the papers of others during a test.

Emergence of technological devices has spawned new and more sophisticated approaches to deceptive conduct. Students with handhelds or cell phones can “beam” or call data silently from across a classroom or, with a cell phone, from anywhere off campus. During a test, such tools frequently are hidden under the table or in baggy pockets. Both devices could be equipped with text messaging, instant messaging, e-mail, and a camera or video recorder that makes capture or transmission of answers a relatively
easy task. Cell phones could have a hands-free function allowing users to listen to sound files (e.g., prerecorded class notes). Applying the same method of sound files, others make use of music-playing devices such as iPods®. The listening piece connected to a cell phone or some music-playing device could be concealed beneath a student’s long hair that covers ears from the teacher’s view (Cizek 2003).

Some teachers appropriately permit use of personal data assistants (PDAs) and graphing calculators during tests because those tools offer helpful functions for solving problems. However, educators must be aware that whenever a device displays data on the screen, it also might have a minimized screen containing cheat data that can be accessed for a few seconds and then entirely hidden (minimized) with just the press of a key. In a similar way, screen protectors include decorative patterned holograms intended to allow only the user to observe the screen and prevent viewing by onlookers from other angles. If a teacher permits calculators or PDAs, certain ground rules should be understood. Technology contributes to learning and assessment, but devices must be applied in responsible and ethical ways.

When the same course has multiple sections, tests typically are scheduled on different days and times. This practice allows students to buy questions from someone who already has completed the examination. In such cases, buyer and seller are both engaged in cheating. A more daring risk involves paying a person to take a test for someone else.

In an effort to help educators identify cheaters, Fremer and Mulkey (2004), experts within the emerging field of test fraud and piracy, put together a list of the “ten most wanted test cheaters.” They have given each of these test-taking thieves a name and a description of his or her underhanded efforts.

To help thwart cheating, the identity of all students in an examination should be verified, and the test for all sections of a course should be scheduled on the same day and at the same time. In addition, teachers should modify course tests each semester to lessen the likelihood of cheating by students able to access the previous answer keys. Administration of multiple versions of a test, with items appearing in different sequence, proves frustrating to anyone who tries to borrow answers by peering over the shoulder of another student. Changing the seating location of students is also beneficial during testing because students are less likely to copy from classmates whose record of achievement is unknown. When a teacher leaves the room or permits students to do so during an examination, the chances for cheating increase. No student should be out of a teacher’s sight while taking a test (Johnson 2003).
ing periodic open book examinations and allowing students to bring notes can increase their familiarity with the course content, improve their review process, and reduce the incidence of cheating.

Though some considerations described here may seem unduly cautious, collectively these steps do much to prevent dishonesty and support the integrity of a test environment. Students take academic honesty more seriously when they see their teacher make an effort to ensure fair and honest conditions for assessment. Barbara Davis (2002) at the University of California in Berkeley provided helpful tips about preventing cheating, scoring, and returning test results; handling fraudulent excuses to postpone an examination; turning in late assignments; missing classes, and clarifying expectations for course performance.

Delaware, North Carolina, South Carolina, and Texas are among the growing number of states contracting with Caveon, the nation’s first test security company that monitors annual assessments for the No Child Left Behind Act. This company has developed a process called “data forensics” that searches for unusual response patterns, such as students getting difficult questions correct while missing easy questions, abnormally high pass rates for one classroom or school, and tests where incorrect answers have been erased and replaced with correct ones. The service includes protection of existing instruments from fraudulent practices, erecting barriers to prevent unauthorized access to copyright materials, and applying sophisticated statistical and Web patrolling tools that track cheaters and hold them accountable by providing evidence to school administrators (Foster 2003).

 Ethics and the Internet

In 2000, Congress passed the Children’s Internet Protection Act requiring public schools and libraries to install filters that minimize student exposure to objectionable materials like pornography. Another feature of the same legislation included guarantees to safeguard copyrighted materials of authors and artists whose music and ideas are available on the Internet.

However, a national rush to ensure that all age groups have an opportunity to be online has overlooked the essential training necessary to support ethical behavior on the Internet. Today, a rapidly growing population of young computer pirates choose to bootleg music and misrepresent themselves as authors of assignments and projects without identifying original sources.

When students lack training regarding ethical practices for searching the Internet, they may suppose it is all right to present the words and views of another person as

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their own thinking. Web sites such as www.schoolsucks.com warehouse term papers that students can access without cost. Also, sources such as www.termpaper.com have costs associated with them. That particular site is a data bank of 20,000 on-file papers for purchase from $20 to $35. Another general site is http://academictermpapers.com, which offers 30,000 ready-made research papers at $7–$120 per page and even more expensive pricing for the preparation of custom papers designed to fit the unique needs of a client.

Plagiarism on the Internet is a monumental problem that educators in middle school, high school, and college are struggling to confront (Axtman 2005). However, cyber law proposals that define offenses and penalties have begun to emerge as agenda that, in the future, could be determined in the courts rather than by teachers and school administrators. Ronald Standler (2000), a copyright attorney, has an informative essay about plagiarism that illustrates the wide range of issues involved along with results of court cases at www.rbs2.com/plag.htm.

Parents share responsibility for helping their daughters and sons realize that, similar to visiting the library, looking up a topic on the Web is only the initial step in conducting research. Copying materials from books, journals, or sources on the Internet and portraying these products as one’s own invention is dishonest and defined as cheating. Deceptive practices by students have been reported as moving downward to earlier grades because of growing access to the Internet. The Center for Academic Integrity (McCabe and Pavela 2004) surveyed middle schools throughout the nation and found that 73 percent of seventh graders and 66 percent of sixth graders admitted to regularly borrowing materials without giving credit to their sources. The practice of cut-and-paste plagiarism is widespread, with students acting as though whatever they find on the Internet can be submitted as their own work.

Prevention of Plagiarism

Teachers want their students to practice search skills on the Internet, but are plagued by the increasing level of plagiarism. To encourage originality and prevent students from taking credit for the writing of other people, school districts are turning to a service that quickly can identify academic work that is plagiarized. This service, which detects whenever more than eight words are used in a paper without identifying the original source, can serve as evidence to confront misbehaving students and parents. This prevention resource, already applied by public schools in many states and the authors of this manuscript with their college students, can be found at www.turnitin.com. On a typical day, 30,000 papers are submitted to the service for checking.
More than 30 percent of those documents include plagiarism. The cost of this service can be substantial, however. For a high school of 1,400 students, the software license for one year and related materials, including digital portfolios, amounts to $5,200. Bruce Leland (2002), a professor at Western Illinois University, provided suggestions for teachers on how to deal with plagiarism and what to tell students about ethical expectations at www.wiu.edu/users/mfbhl/wiu/plagiarism.htm.

Adolescents rarely are asked to evaluate the merit of assignments their teachers give them, but one conversation with a student about the work he is asked to do put the onus for plagiarism and other forms of cheating back on educators. Jamal, a sophomore from Montgomery, Alabama, suggested that focusing only on the inappropriate motives of students is misleading. Jamal suggested, “Maybe a bigger problem is that teachers require students to memorize instead of teaching them how to think. You can cheat if all you are going to be tested on are facts, but it is much harder to cheat when you are asked to attack or defend a particular position and actually write an essay.”

Jamal’s outlook may not reflect the consensus of classmates. Nevertheless, his view that teachers could minimize cheating by developing more challenging tasks, which are less vulnerable to cheating, is gaining support. Assignments that motivate students to learn by doing, that encourage reciprocal learning in cooperative groups, that support self-directedness, and that foster original thinking are essential shifts in teaching that will allow students to become actively involved in construction of their own knowledge. Traditionally, teachers have prepared primarily for the direct instruction to be presented in class and spent little effort on developing assignments that permit students to learn on their own.

These suggestions regarding assignments can help teachers reduce the likelihood of dishonest behavior by students.

1. The purpose of every project should be clear, identify anticipated benefits, and invite dialogue regarding methods, resources, and the types of products that are acceptable for submission.

2. Relevance for the students should be established. The connection between curriculum and real life is confirmed when students can get credit for interaction with other generations or cultures whose experience goes beyond the perspective that is offered by the teacher and text.

3. Encourage students to express their feelings and describe the processes used to reach their conclusions. These presentations are more interesting to write and more satisfying to read (Johnson 2004).

4. Emphasize higher-order thinking and creative behavior. Instead of reporting only knowledge, student participation should involve practice with higher-level abilities identified in “A Revision of Bloom’s Taxonomy: An Overview” (Krathwohl 2002).

5. Go beyond the customary scope for problem solving. Students frequently are presented questions to which the teacher already knows the answers or could readily find them. Generating alternative solutions and then making choices is often the key to overcoming challenges in life (de Bono 1999).
6. Encourage varied types of information gathering. Submissions might include a hard copy of located Web data accompanied by the same information summarized and interpreted in a student’s own words, results drawn from polls or interviews, and descriptions of steps in an experiment.

7. Identify the criteria that will be used for evaluating the quality of performance. When students know in advance the criteria by which their work will be judged, they can concentrate on the work without being anxious and reporting at the end “I wasn’t sure if this is what you wanted.”

8. Allow students to reflect, revise, and improve their final product. Having access to suggestions from classmates who have read their work and being expected to revise their product supports perseverance and teaches students how to accept constructive criticism.

9. Consider the use of oral critique. This method allows students to make their views known verbally, permits classmates to practice offering helpful criticism, enables teachers to call for clarification when points are unclear, and eliminates the use of technology tools for deception.

**Student Integrity and Maturity**

Legalistic syllabi and tough policies alone are unreliable ways to prevent cheating. Instructional efforts are needed as well. Students are able to understand that honesty is an important indicator of developing maturity. Indeed, maturity cannot materialize without a sense of obligation to treat other people fairly. Adolescents can benefit from periodic discussions about the need to maintain integrity across all sectors of life. They also can be informed of seldom-considered damaging effects of cheating, such as gaps in knowledge and skills that can adversely impact later success when the foundation of knowledge necessary to understand processes in higher-level courses has not been acquired.

Academic dishonesty results in another significant long-term disadvantage. The moral compass students need to guide personal conduct in class and outside of school can be thrown off-course. This message is effectively portrayed in *The Emperors Club* (2002), a film starring Kevin Cline. As a teacher and assistant principal at St. Benedict’s High School for Boys, he motivates students to choose a moral purpose for their lives in addition to selecting occupational goals. The story illustrates how great teachers can have a profound influence on students and how cheating during the teenage years can become a lifelong habit. An interactive Web site for this film, [www.theemperorsclub.com](http://www.theemperorsclub.com), includes an interesting quiz on how to define morality.

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Educators cannot provide all the guidance students require to adopt honesty as a lifestyle. Some parents tell daughters and sons that cheating is a fact of life in the world of work, which has forced them to cheat to succeed. When parents condone dishonesty and deception as normative and defensible, educators have far more difficulty countering the message that the prevalence of cheating makes the practice acceptable (Carter 2005). Schools could provide workshops for parents that focus on the range of cheating issues adolescents face and offer agenda questions for discussions at home about honesty, integrity, trust, and maturity. In this way, mothers and fathers would be enlisted to sustain efforts that nurture these valuable attributes in their children. Successful academic performance rooted in honesty enables students to take pride in work that is their own and to make known when tutoring is needed to improve learning (McCabe and Pavela 2004). Ultimately, the success of individual students depends on the positive values they adopt and the level of maturity they are able to attain. These aspects of healthy development warrant greater attention in a society that aspires to provide world leadership.

**Conclusion**

Adolescents offer many reasons for cheating at school. The most common explanations are: “I didn’t have time to do the work,” “This course is not important to me,” “Everyone else is cheating,” and “I have to get good grades.” Motivating teachers to address the problem could begin by considering relevant questions in faculty meetings. What can schools do to turn things around before the nation becomes one of adults who got where they are by cheating? What can educators do to become better models of ethical conduct? How can parents help their children embrace honesty? What can be done to ensure that moral development is part of the curriculum to support student development? What are the effects when students present other people’s ideas without giving credit to the source? How do students respond to a poll about the incidence of cheating and the ways faculty deals with this issue? How do we feel about honest students being denied educational opportunities because others gain unfair advantage using deceptive practices? Do we believe that honesty could become a norm in secondary education? What efforts have we made to obtain input from students through their organizations and focus groups? Should we concentrate only on the detection of cheating or also strive to raise the standard of student morality at this school?

Teenagers are in the process of formulating lifelong attitudes about social justice and determining their expectations for personal conduct. They have much to gain from reflective discussions regarding how honesty and dishonesty impact the well-being of individuals, families, businesses, and communities. Discussions should take place as appropriate in all subjects of the curriculum. The promotion of integrity requires high priority.
priority. Parents must become partners with teachers. Schools should reinforce the continued guidance from parents and provide them with questions on ethical lessons for home discussion. Skeptics may doubt whether schools or parents can affect honesty later than early childhood. However, most of the public has faith in the power of education at any age to equip students with competencies they need to become successful. Secondary schools could provide curricula that illustrate how honesty serves as the sole basis for survival of trust, equality, fair treatment, and maturity. The curricula also should emphasize how motivation to learn, effort to persevere, and recognition of achievement that is earned can be influenced by ethics. When students receive such an orientation and respond by adopting integrity as their lifestyle, the beneficiaries are everyone in society.

References


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