Challenges of Maintaining Academic Integrity in an Age of Collaboration, Sharing and Social Networking

Kirsti A. Dyer
Madonna University and Columbia College, CA
Columbia, CA USA
kdyer@madonna.edu and dyerk@yosemite.edu

Abstract: The challenges facing faculty and academic institutions today in maintaining academic integrity come from several different areas. One is the increased availability of technology and connectivity. Another comes from the characteristics and viewpoints of today's college students and third is the environment where the students live—namely a society where cheating seems commonplace. The current generation of college students, often referred to as the Millennials, have grown up with the Internet during an age of technology where collaborating, sharing and social networking are part of everyday life. Sadly, the increased technology use by students has also resulted in increased *misuse* of technology in the classroom and encouraged unauthorized or unpermitted collaborations. Among educators, librarians, directors and administrators there is a growing opinion that the current generation of college students may not know how to write properly. Students also may not understand the importance of academic integrity which leads to unintentional violations of academic policies. Continuing to maintain academic integrity in the classrooms and the institutions can be accomplished by promoting academic integrity, educating students and including new technologies and new styles of teaching. This paper will also explore several of the recommended strategies being utilized to promote academic integrity.

Introduction

For most educational institutions *Academic Integrity* is a fundamental value upon which the school, college or university institution depends upon for its students, faculty and administrators to support, maintain and uphold. Academic Integrity is viewed as a cornerstone for the majority of academic institutions. According to the University of California (U.C.), Davis Office of Student Judicial Affairs (2008a):

> *Academic integrity exists when students and faculty seek knowledge*
> *honestly, fairly, with mutual respect and trust, and accept responsibility*
> *for their actions and the consequences of those actions.*

Academic misconduct or dishonesty occurs when there is a violation of the Academic Integrity Policy. When academic integrity is compromised, "there can be no trust or reliance on the effectiveness, accuracy, or value of a University's teaching, learning, research, or public service activities" (U.C. Davis, 2008a).

At many institutions violations of academic integrity policies include *cheating* (intentionally using or attempting to use unauthorized materials, information or study aids in any academic exercise), *facilitating academic dishonesty* (intentionally or knowingly helping, or attempting to help another to violate a provision of the institutional code of academic integrity) and *plagiarism* (the deliberate adoption of reproduction of ideas, words or statements of another person as one's own, without acknowledgement, including group work and written assignments) (Columbia College, 2009). At Columbia College academic misconduct, "violates the assumptions at the heart of all learning" and "destroys the mutual trust and respect that should exist between student and professor." (Columbia College, 2009) Milliron and Sandoe write that "Academic dishonesty demoralizes and disadvantages those following the rules and undermines the credibility of higher education" (Milliron & Sandoe, 2008).

Students, who earn their grades through academic dishonesty, plagiarism or cheating, undermine the core values and the cornerstones of academic intuitions. They achieve their degree or their credentials deceptively not by honest efforts (Harris, 2009). In addition, academic misconduct is more than just going against the rules; it can have long-term consequences for students. Students' academic records, their ability to matriculate and to pursue higher education and their reputation can be permanently marred by making poor choices. This Japanese Proverb makes the point, "*The reputation of a thousand years may be determined by the conduct of one hour*" (Kipfer, 2009, p. 253).

Research has suggested that cheating in high school is a strong predictor of cheating in college (Harding, Mayhew, Finelli & Carpenter, 2007) and that academic dishonesty is a predictor of workplace dishonesty (Harper, 2006). Studies have also suggested that the increased technology use by students has resulted in increased *misuse* of technology in the classroom and encouraged unauthorized or unpermitted collaborations (McCabe, 2005; Pugliese, 2007; Selwyn, 2008). Instructors and institutions are adopting a variety of different teaching methods, academic policies and guidelines to promote academic integrity, prevent plagiarism and cheating and make certain that students earn their degrees reliability and honestly.

This paper will examine the various challenges faculty and academic institutions today in maintaining academic integrity and also explore recommended strategies currently being used by different instructors and institutions to continue to maintain academic integrity during an age of ever-present collaboration, sharing and social networking.

Challenges in Maintaining Academic Integrity

Promoting and maintaining academic integrity in an age of collaboration, sharing and social networking has been challenging for educators, librarians, educators and administrators. These challenges come from several different sources: the increase and availability of new types of technology, the difference in the characteristics and viewpoints of the millennial generation and the changing society and environment in which they live to name just a few. Each of these different challenges offers educators new opportunities to change their pedagogical approach (Besnoy, 2005).

Increased Technology and Internet Use Leads to Increased Academic Dishonesty

One of the disadvantages to the increased use of technology writing and for doing assignments is that the Internet has created new opportunities to students to become better cheaters (Kennedy, 2006). Dr. Stephen Pugliese, Vice President for Student Affairs at Immaculata University points out that "the many advances in technology, such as the World Wide Web, email, instant messaging and others may have compounded issues of plagiarism, cheating and student discipline" (Pugliese, 2007). Don Campbell, Journalism Lecturer at Emory University goes so far as to label the increased Internet cheating in college an epidemic or "The Plagiarism Plague" (Campbell, 2006).

The introduction of word processing and computer programs and webpages has made it easy for student (and instructors) to 'cut and paste' information and 'write' assignments, papers and exams. (Dyer, 2010) Austin and Brown from Middle Tennessee State University reported the connection between the Internet, computers and academic dishonesty in 1999 noting that "the use of computers has made academic dishonesty easier" (Austin & Brown, 1999). A new challenge for educators comes in teaching students the correct way to use 'copy and paste' to actually write papers and not plagiarize papers and other online media.

In their 2004 study of more than 60,000 students from more than 420 four-year colleges and universities at Indiana University, Laird and Kuh cite concerns about information technology. They note the Internet introduces more opportunities for misbehavior, which they label "cyberplagiarism" or the "students' inappropriate use of material taken without attribution from online sources" (Laird & Kuh, 2004). They also discovered that nearly 90% (87%) of students surveyed indicated that their peers at least "sometimes" copy and paste information from the World Wide Web or Internet for reports and papers without citing the source. One quarter, 25% of first-year students and 31% of seniors said their peers did this frequently (Laird & Kuh, 2004). In another 2004 study, Szabo and Underwood surveyed Nottingham Trent University students. They discovered that more than 50% of the students indicated "an acceptance of using the Internet for academically dishonest activities." In addition they found that 60% of students felt teachers would be unable to detect cheating and that for 30% the benefits of plagiarism outweighed the risk of discovery (Szabo & Underwood, 2004).

In a study of 125 private institutions of higher education in the Tri-State area of New Jersey, New York and Pennsylvania, researchers found that the Internet provided another way for "technology assisted infractions of academic integrity or a code of student conduct." They found that the Internet use made plagiarism, file tampering and computer hacking all easier for students. (Pugliese, 2007) In their 2006 study at the Jacksonville University of college business students Berry, Thorton and Baker concluded that at least 90% of the students surveyed engaged in some form of cheating. Perhaps a bit of a surprise for instructors, these students did not view digital cheating as an academic violation (Berry, Thornton & Baker, 2006). Stephens, Young and Calabrese at the University of Connecticut concluded from a 2007 study of over 1,300 undergraduate students at two universities that students collaborate when it is not permitted and copy

from others during an exam. They also discovered that digital plagiarism ('cut and paste' from the Internet) has surpassed conventional (book) plagiarism (Stephens, Young & Calabrese, 2007). Neil Selwyn at the University of London found during a 2008 self-report study of 1,222 U.K. undergraduate students that more than 90% of respondents self-reported online misbehavior during the past 12 months. In addition, surveyed students described the Internet as "a more conducive environment for misbehavior" creating a safe haven for misbehaving (Selwyn, 2008).

Another challenge facing instructors from the Internet and the new technology is that very often the millennial generation is more adept than their instructors at using it; this skill discrepancy is creating a digital divide between students and instructors who may be unaware of all of the ways of misusing the new technology tools (Vie, 2008). The new technologies also make it easier for students to misbehave. With cell phones and smartphones students can take pictures of exam questions and send digital images to friends who can quickly text back an answer. They can use computers and smartphones to surf the Internet for the answers to online assignments, quizzes or exams (Dyer, 2010). In the Tri-State study, researchers discovered that the new technologies, cellular phones and personal digital assistants played significant roles on "infractions of academic integrity and a code of student conduct." (Pugliese, 2007)

The Millennial Generation, NetGens or iGens

They have been called Digital Natives (Prensky, 2001), Millennials (Oblinger, 2002), Net Generation (Oblinger & Oblinger, 2005), Copy and Paste Generation (Forgas, Negre, & Ramírez, 2005), Gen Me, iGen and Look at Me Generation (Twenge, 2006), Generation Y (Bartlett-Bragg, 2007), Generation NeXt (People's Press, 2007), the Loop Hole Generation (Summverville & Fischetti, 2007), Electronic Natives (Garcia & Qin, 2007), the Tethered Generation (Tyler, 2007), Generation M (Vie, 2008), the Share-It Culture (Kulmala, 2010) and Generation M2 (Kaiser, 2010b). By whatever name or classification, these are the current generation of younger college students. Depending on whom you read, GenMe's were born sometime between 1970 - 1990 (Twenge, 2006), Gen Y students were born in the years 1982 - 2000 and the Net Gen in the years 1994 - 2000 (Bartlett-Bragg, 2007), but all were born at a time the Internet was readily available. This generation, considered to be a generational cohort (Milliron & Sandoe, 2008) has grown up with all types of digital technology: computers, mobile phones, smartphones, MP3's, DVD's and video games included as part of their daily lives (Prensky, 2001).

Donald McCabe, Professor and founding president of the Center for Academic Integrity at Duke University has been studying academic integrity for over 15 years. After surveying thousands of students over the years, he has concluded that the technological savviness and peer connectivity of the Net Generation contribute to their high incidence of cheating (or academic dishonesty) (McCabe, 2005; Milliron & Sandoe, 2008).

The NetGens or iGen students are plugged into the latest technology with iMacs, iPhones, iPods, and in April 2010—iPads. This generation is constantly connected not only to each other, but also to the rest of planet in a world that is always "on." According

to a recent Kaiser Foundation Study (2010a), two-thirds (66%) of the 8- to 18-year-olds now own cell phones, over three-quarters (76%) own iPods or other MP3 players and 84% have access to the Internet in their homes (Kaiser, 2010b). These technology tools have become a significant, if not essential part of their day. Millennial students or Net Gens may carry multiple electronic devices to stay connected to friends, family and the Internet (Oblinger, 2002).

The Millenials have become adults in an age of collaboration, sharing and social networking, first playing together in organized play groups, then chatting and texting each other on the phone and socializing daily, on various social networks. College students type, tweet and text to update their status on social networking sites like Twitter, Myspace and Facebook. For these students, sharing, networking and socializing occur on a day-by-day if not hour-by-hour basis. (Dyer, 2010) According to Tyler's article on the Net-Generation or the tethered generation, students spend "72 hours per week of connect time by phone and IM, seeking advice and input on the smallest decisions" (Tyler, 2007) which works out to over 10 hours a day. (!) In Laird and Kuh's 2004 study of over 60,000 students they reported that over half of all students (first-year students, 51%; seniors, 58%), frequently communicated with their classmates online to complete academic work (Laird & Kuh, 2004). With the increase in cellphone use since 2004 and based on Tyler's findings, students are likely to also be communicating with their classmates now by phone as well to complete assignments.

For this millennial generation, the Internet has been available to them to do research and homework, whether though a computer or a smartphone. Since grade school, these students have worked together on group projects, accessing the Internet. Today's students can easily find information on a variety of topics and sources online with just a few clicks of a mouse. With a few more clicks they can copy and paste "free" online resources to "write" assignments or research papers (Dyer & Ianniello, 2009) and copy and paste song clips together into mash ups—combing two or more pre-existing pieces of music into a new song (Urban Dictionary, 2003). Students may not be aware that these papers and mash ups could not only be infringing on copyrights but could also be violating academic integrity policies. Amrita Madray, Assistant Professor in the Reference Services Department at Long Island University points out part of the problem is that the "digital technology has made it particularly easy for students to incorporate portions of other people's writing into their own work" (Madray, 2007).

Another classroom challenge facing educators teaching the Millennial generation is explaining to them that sharing, copy and pasting and creating mash-ups may not always be an acceptable way of completing assignments and writing papers. Students need to understand that information on the Internet is not necessarily "free." They also should learn the correct ways of writing, citing sources and completing assignments without plagiarizing their sources.

Characteristics and Viewpoints of Current College Students

As already mentioned, Academic Integrity researcher Donald McCabe identified two key defining characteristics of the Net-Generation students: their technological savviness and peer connections or connectivity (Milliron & Sandoe, 2008) that have important implications for online education. There are other characteristics of this generation that may put them at risk for academic dishonesty. Reviewing some of the note-worthy characteristics and viewpoints of the millennial generation may make it easier for educators to understand current college students' perspectives and views of education.

According to Dr. Jean Twenge, Associate Professor of Psychology at San Diego State and author of *Generation Me*, the Millennials or Gen Me, as a group, put themselves first, believing that the needs of the individual should come first (Twenge, 2006). They believe it is essential to stay connected and use many different devices to do so. They also want their teachers to be using the newest technologies to teach them in entertaining ways, because they easily get bored. (Oblinger, 2002). This generation looks for loop holes and short cuts to get out of their assignments and coursework. (Summverville & Fischetti, 2007). Millennials have always had the Internet available for assignments and researching and unfortunately are under the mistaken belief that information, music and video clips on the Internet is free for the taking and remixing and does not require an attribution (Frand, 2000; Berry, Thornton, & Baker, 2006; Madray, 2007). Valerie Milliron and Kent Sandoe from California State University, Chico in a 2008 *Innovate* article on "The Net Generation Cheating Challenge," offered some harsh criticism of this generation's disregard of academic integrity. They write

> *Net-Generation students' disregard of societal norm regarding academic honesty coupled with their nearly constant connectivity to each other can severely undermine assessments, whether it is done online or via more traditional methods* (Milliron & Sandoe, 2008).

In 2000 Dr. Jason L. Frand, emeritus Professor of Information Systems at UCLA, wrote "The Information-Age Mindset: Changes in Students and Implications for Higher Education" highlighting the attitudes and viewpoints of information-age students. One key point made in this paper was that the lines between consumer and creator are blurring. This vagueness is of concern to educators because in the digital world, the lines between the source of information and student are also blurring (Frand, 2000).

> *In a file-sharing, cut-and-paste world, the distinctions between creator, owner and consumer information are fading. The operative assumption is often that if something is digital, it is everyone's property…**there is no distinction between the owner, the creator, and the user of information**.*

The millennial generation also has differing views towards plagiarizing, ownership and collaboration than generations past. In addition to a blurring of the lines between information and student (Frand, 2000), many do not feel that plagiarizing is really stealing (Kennedy, 2006). 'Copy and paste' is how they have always written their

assignments. In a February 2010 blog post by Tomorrow's Professor, it was reported that many students "were not corrected in high school when they copied text from a website into a paper without citing the source" (Tomorrow's Professor, 2010).

McCabe's 2005 survey of more than 80,000 students from 83 participating college campuses in the United States and Canada, revealed some concerning statistics and trends in regards to unauthorized collaboration, paraphrasing or copying information from written or Internet sources. Some of the greatest discrepancies between student and faculty differences came in the category of "Perceived Seriousness of Different Behaviors Related to Written Work." Only 32% of undergraduates surveyed indicated that "Working with others on an assignment when asked for individual work" was a serious offence, compared to 82% of faculty who indicated it was a serious behavior. For "Paraphrasing/copying few sentences from written source without footnoting it" 56% of undergraduates found in a serious offence compared to 84% of faculty and if the paraphrasing or copying few sentences without footnoting it was from the Internet, 57% of students found it a serious offense compared to 82% of faculty. McCabe's findings support the importance of social networks to students. "Receiving unpermitted help from someone on an assignment" was only a serious offence for 44% of undergraduates compared to 85% of faculty members (McCabe, 2005). The differences between students and faculty perceptions of what constitutes a serious behavior may explain a lot of the students' attitudes towards assignments and collaboration that often perplex faculty.

Sharing, Collaborating, Social Networking and Cheating?

For many college students socializing on different social networks where they can type, tweet and text their status updates is a big part of their day. Some of the common social networks include Twitter, MySpace, Facebook, LinkedIn, MyYearbook, Flikr and YouTube (Hoffman, 2009). Hoffman points out that in some social networks members are invited to "participate in discussions or blogs, co-create and edit content with wiki-like tools, and link in and tag external resources from other web sites paralleling social bookmarking." (Hoffman, 2009) MyYearbook.com, a social networking site for high school and college students, offers free content from CliffsNotes (MyYearbook.com), which could have implications in both high school and college classroom settings.

Educators may have difficult convincing a generation who has grown up collaborating, that they do not always need to do so, particularly on schoolwork. According to McCabe's 2005 academic integrity survey results, a majority of undergraduates (56%) did not view unauthorized or unpermitted collaboration as a serious problem. McCabe further comments, that with all of the increased demands on students, "it becomes very easy for students to justify collaborative efforts, especially on assignments they conclude have limited learning value or place demands on the students which they consider excessive" (McCabe, 2005).

In a collaborative, sharing culture, the Share it Culture (Kumala, 2010) may also disclose homework questions, resources and papers. Course information and materials are finding their way to online social networks and with it concerns being raised by faculty and

administrators about potential academic misconduct. In 2008 charges of academic misconduct were filed against Chris Avenir, a computer engineering student, at Ryerson University in Canada. He was charged one count of academic misconduct for starting an online chemistry study group of 146 students to share homework and questions on Facebook (Brown, 2008; CBS News, 2008). This Facebook study group raises other concerns. Another student, TacoCat (TAllison1, 2008) posting on the Slashdot forum offered these thoughts about the incident:

> *What makes this different [Facebook] is that most people work out the problem with their peers and then move on, not keeping the answers out on the table for the next group of students. Its collaborative problem solving, not collaborative problem/answer posting.*

> *The real damage can be that no one learns anything other than how to sign-up to Facebook and troll for answers.*

Many Millennials see no difference between an online study group and a face-to-face study group. For them the social networking sites are virtual study halls for a wired generation. A Facebook study group could be a place where students can meet to chat about homework and work on assignments together like an online library. But the goal of collaborative learning and collaborative efforts is on problem solving, not answer sharing or answer 'trolling' (searching online for answers). To have more legitimate problem solving TacoCat recommend several volatile methods (less permanent) such as instant message, email or chat without archives as better choices for online study groups rather than having visible archived records that are easily searched (TAllison1, 2008). To allow authorized collaborations, study groups can be easily set up by instructors in online courses for those students who want to study together.

Using cell phones and smartphones and forming Facebook groups study groups are just some of the examples of how technology savvy students may be leaving their instructors behind and boldly finding news ways to use the new technology in education.

Students' Reasons for Academic Dishonesty or Academic Misconduct

As previously discussed, this generation has different characteristics and viewpoints about education, cheating and collaboration. McCabe noted that the differences between students and faculty perceptions of what constitutes a serious behavior may explain a lot of the students' attitudes towards assignments and collaboration that faculty do not understand (McCabe, 2005). Additionally, Millennials face different pressures and demands from past generations which may lead to academic dishonesty or misconduct.

There are many reasons why today's college students may look for shortcuts to complete assignments, take exams and work through the materials to complete a course. There are also reasons why they may commit acts of academic dishonesty or misconduct. Some of these reasons are intentional, some may be unintentional. Internal forces, external forces and lack of education are some of the main reasons why students may succumb to

plagiarism or fall victim to academic misconduct. Common reasons why students commit academic misconduct are summarized in Table 1.

Table 1. Reasons Students Fall Victim to Academic Misconduct.

Common Reasons for Academic Misconduct or Plagiarizing

Internal Forces

- Fear of failure.

- Lack of interest (bored).

- Natural Economizers. Looking for the short cut through the course.

- Poor time management or writing skills.

- Thrill seeking (small number).

External Forces

- Demanding schedules and pressures.

- Struggling to balance work, family and school demands.

- More opportunities with newer technology, websites and services.

- Believe that the faculty it too lazy to stop it.

- Cheating is necessary to maintain a competitive G.P.A.

- Different cultural views on plagiarism.

Lack of Education, Information and Skill

- Perception that cheating is easy.

- Unaware or uneducated about what constitutes plagiarism or academic integrity.

- Fail to see a relevance or reason for completing the assignment.

- Little to no knowledge of proper citation protocols.

- Poor writing skill.

(Harris, 2009; Kovner, 2008; McCabe, 2005; Penn State, 2008; USA Today, 2008; Weeks, 2009)

Many of today's college students are non-traditional students. According to the 2002 NCES report on the Condition of Education (NCES), 73% of all students enrolled in undergraduate programs were nontraditional students (Copper, 2008). Nontraditional undergraduates did not enter postsecondary enrollment in the same year that they completed high school, attend part-time for at least part of the academic year, work full time, are considered financially independent from a legal guardian, have dependents other than a spouse, frequently are single parents and may not have a high school diploma. (NCES, 2002). As noted by McCabe, 2005 "it becomes very easy for students to justify collaborative efforts, especially on assignments they conclude have limited

learning value or place demands on the students which they consider excessive" (McCabe, 2005). With the pressures of school, work and family all combined, it is possible to see how today's students might be tempted to look for shortcuts to complete their course requirements.

Millennials also live during a time when it difficult to get into college and even harder to find a good job. Twenge points out that while their expectations are very high, the GenMe's world is getting more competitive and their career options are getting bleaker (Twenge, 2006). One, not necessarily constructive, strategy for handling it is that more people are cheating to get ahead (USA Today, 2008).

Living in an Environment of Cheating

The Millennials or Generation Me (Twenge, 2006) live in society where presidents, politicians, sports figures, actors and CEO's have affairs and cheat on their spouses, their taxes, their companies and the government. Jennifer Salopek in her look at "Cheaters and Chumps" writes, "in America, cheating has become an accepted way to get what you want and to get ahead, and if you don't do it, you're a chump" (Salopek, 2004). GenMe's may truly believe that those who do not cheat are viewed as chumps.

For educators it is very challenging to teach students not to cheat and maintain academic integrity in a culture where plenty of people seem to be cheating, especially when it appears that at times the cheaters are getting away with it. One of the most compelling reasons for maintaining academic integrity in the University setting comes from the Center for Academic Integrity President, Donald McCabe (McCabe, 2005).

> *The constant flow of media reports about lapses in integrity among politicians, academics, business people, and just about every other profession one can think of, can create the belief that everyone cheats to get ahead and if you want to be competitive and thrive in today's world, you'll have to do the same.*
>
> *Universities may provide our last chance to deliver a different message to young adults…*

Another reason for encouraging academic integrity is provided in the Columbia College (2009) description of Academic Integrity. At this college, academic misconduct is deemed "unfair to students who earn their grades honestly." At the University of California, Davis students are taught that dishonest academic behavior or academic misconduct defeats the educational goals of the University and diminishes the value of a student's educational experience (U.C, Davis, 2006). Bruce Mitchell, associate provost, academic and student affairs at the University of Waterloo summarized the academic integrity issue as a being a long-term objective for their students (Weeks, 2009). "This is bigger than just academic integrity. We're talking about people living their lives with integrity and conducting themselves in an appropriate and proper way."

Convincing Millennial students that it is important to maintain academic integrity may be challenging for a generation known for wanting immediate, tangible benefits. With academic integrity, benefits are not readily seen and are long-term. Academic Integrity helps to build students' esteem, improves self-confidence and develops skills for completing assignments, courses and ultimately degrees. (U.C. Davis, 2008b) Perhaps the most tangible long-term benefit is earning a degree and a diploma from a reputable university that has real added value in the workplace. People want the professionals they engage—like doctors, attorneys, engineers and professors—to have earned their degrees, not to have cheated their way through professional schools. Dr. Robert Harris educator-blogger at Virtual Salt (http://www.virtualsalt.com) writes about some of the key concerns with students who plagiarize (Harris, 2009):

> *Plagiarizers by their actions declare that they are not at the university to gain an education, but only to pretend to do so, and that they therefore intend to gain by fraud the credentials (the degree) of an educated person.*

To prevent plagiarizing and educate students about academic integrity, government Professor William M. Taylor from Oakton Community College in Illinois (now emeritus) distributed a six-page letter to his students and took the time at the beginning of the term to explain academic integrity and his expectations of them. (Dembicki, 2008). In the letter to his students Taylor wrote (Taylor, n.d.):

> *To take an easy example, would you want to be operated on by a doctor who cheated his way through medical school? Or would you feel comfortable on a bridge designed by an engineer who cheated her way through engineering school. Would you trust your tax return to an accountant who copied his exam answers from his neighbor?*

Hopefully the answer for most students would be becoming the person who earns his or her degree legitimately.

McCabe believes that "Universities may provide our last chance to deliver a different message to young adults" (McCabe, 2005), where students learn they do not have to cheat to get ahead, even though we live in a society that appears to be doing so. David Callahan, author of the controversial book, *The Cheating Culture*, believes in order to change, "we all must choose to be chumps rather than cheats." He theorizes by doing so, there will be fewer people who are cheating, so the assumption that "Everyone is cheating" ultimately becomes just a myth. (Salopek, 2004).

Maintaining academic integrity during an age of collaboration, sharing and social networking has brought challenges from new technology, new student viewpoints and changing social conduct. Fortunately there are many effective approaches that have been used by educators, librarians, directors and administrators help maintain Academic Integrity in the classroom and at institutions.

Approaches for Maintaining Academic Integrity

This technology savvy, peer-connected generation of college students is pushing educators and administrators, challenging them to learn more and do more. Teaching techniques, pedagogy and policies that faculty learned, have grown up with and used are changing and transforming to accommodate the new technologies and new learning styles. As students find new ways to communicate, collaborate, 'copy and paste' and take advantage of all the new electronic devices, educators and academic institutions are scrambling to learn how to use the new technologies, ensure academic integrity and close the current digital divide. (Pugliese, 2007, Vie, 2008)

Science Librarian Amy Besnoy from University of San Diego, points out that with all of the new technology, educators may need to change their approaches to teaching and the use of technology.

> *"With technology moving so rapidly and students having gadgets that enable them to dance around academic integrity by cutting and pasting, photographing notes and text messaging test answers to each other, do we throw in the ethical towel or do we, as educators, consider this an opportunity to change our pedagogical approach?"(Besnoy, 2005)*

Instead of "throwing in the ethical towel" educators can maintain Academic Integrity at colleges and universities using several different approaches. The first is a proactive approach to promote academic integrity, educate students with proper writing skills and consider redefining plagiarism. The second is a reactive approach to police students looking for cheating, plagiarism and facilitating academic dishonesty and enforce academic integrities policies. The third is an adaptive approach to embrace and incorporate newer styles of teaching and uses of new technologies into courses.

Promote Academic Integrity

Fortunately for instructors, the findings are not all bad. Research on plagiarism from Don McCabe indicates there is an "inverse correlation between the rate of plagiarism and the emphasis on academic integrity by institutions or instructors" which indicates that promoting academic integrity in educational and integrity programs can really make a difference in reducing academic dishonesty. (Groark, Oblinger & Choa, 2001)

Promoting an environment of academic integrity in the institution and teaching students about academic integrity are two effective ways of maintaining academic integrity. One way to promote an environment of academic integrity is through university-wide programs that raise awareness like the University of Maryland initiative (Stover & Kim, 2005). Other ways include creating an honor code like the Mississippi State University (Lipka, 2009), Babson College in Massachusetts (Babson College, 2010) or the University of California, Davis (U.C. Davis, 2008a). At U.C., Davis students sign an honor statement on exams that their work is their own, that it is honest and that they have taken no unfair advantage (U.C. Davis, 2006). At Babson College students pledge "to be

true to my work, my word, and my friend" and "pledge my honor that I have neither received nor provided unauthorized assistance during the completion of this work" (Babson College, 2010).

Institutions can also promote academic integrity and focus on the positive aspects of integrity throughout the school and campus environment. Students usually respond better to student-led programs than faculty-mandated policies. By developing student or peer groups like the Integrity at Elizabethtown College (Matias, 2004) or at University of California, Davis (2006) students can promoted academic integrity on campus and teach each other peer to peer that cheating is not cool (Groark, Oblinger & Choa, 2001).

Poster Campaigns to promote Academic Integrity are a highly visible way to educate students and increase knowledge of Academic Integrity on campus. Some examples of posters created to raise awareness of Academic Integrity include those at University of Windsor (2007, 2008) and Concordia University (n.d.) in Figure 1 or the Academic Integrity at Elizabethtown College in Figure 2 (Matias, 2004).

Figure 1: Academic Integrity Posters. University of Windsor. (2007, 2008). Concordia University. (n.d.a)
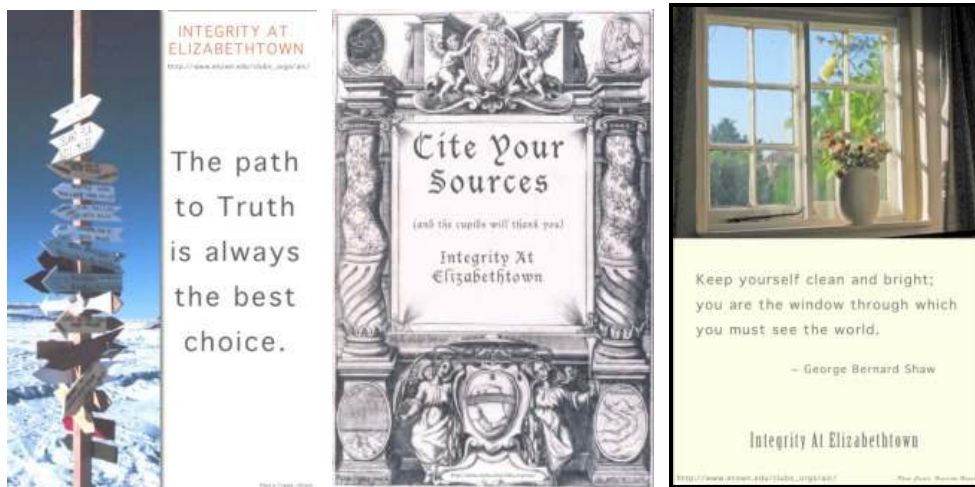

Figure 2: Academic Integrity Posters. Integrity at Elizabethtown. (Mathias, 2004)

Other campaigns take a more direct educational approach like Concordia University's "What is Plagiarism?" (n.d.) and "Why Do Student's Cheat?" (Unknown University) in Figure 3 or the "Read it, Write it, Cite it." Plagiarism Poster (NJIT, n.d.a). from Academic Integrity @ NJIT, New Jersey Science and Technology University.

Figure 3: Academic Integrity Campaign. Concordia University. (n.d.b). Unknown University. (n.d.)

Some approaches are more confrontational, or thought-provoking like the "Would you date a cheater?" campaign created for the Judicial Affairs at the University of California Santa Barbara (2006) in Figure 4 or the "If You Didn't Learn It, You Didn't Earn It" Cheating Poster (NJIT, n.d.b) also from the Academic Integrity @ NJIT.
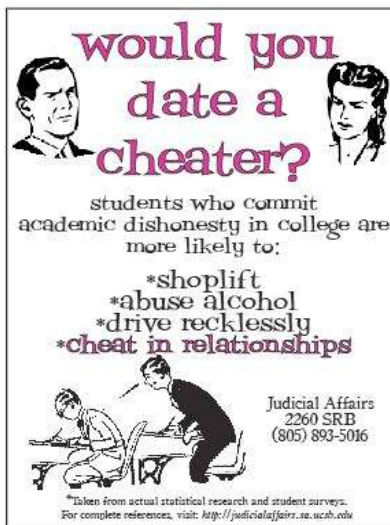

Figure 4: Academic Integrity Campaign. U.C. Santa Barbara (2006).

These different poster campaigns show how visual aids can be effective, methods to raise awareness, reinforce academic integrity in students and serve as compelling reminders of some of the consequences of academic dishonesty.

Educate Students about Proper Writing Skills to Increase Academic Integrity

There is a growing opinion among educators, librarians, directors and administrators that the generation of college students may not know how to write and may need to be taught proper writing and citation skills and copyright policies in college. (Auer, 2001; Barnbaum, n.d.; Blum, 2009; Bugeja, 2004; Dee & Jacob; 2010; Frand, 2000; Howard & Davies, 2009; Lampert, 2004; Madray, 2007; Snow, 2006; Weeks, 2009) Some believe that the students may have never been taught proper writing skills (Valentine, 2006). Students, who have never learned, simply may not know what plagiarism is, how to properly cite their sources, or that information on the Internet is not "free." (Frand, 2000; Berry, Thornton, & Baker, 2006; Madray, 2007) Amrita Madray, Assistant Professor in the Reference Services Department at Long Island University, points out that "Many students believe that information on the Internet is free for the taking" and can be used without attribution (Madray, 2007). Lack of knowledge may lead to incidents of unintentional plagiarism from negligence (Bugeja, 2004). Amrita Madray explains further, "For faculty to assume that students are capable of writing assignments honestly and correctly, or better still, that they possess the basic essentials to write, is misleading and can lead to plagiarism" (Madray, 2007) Teaching students about writing and to cite all of their sources, including the Internet, can help to prevent occurrences of unintentional plagiarism.

Megan Houghton, associate Vice-provost for students' success and learning support services, at the University of Calgary believes that in many cases students who do cheat, do so because they are unaware of proper academic protocol. (Weeks, 2009) Dr. C. Barnbaum from the Department of Physics and Astronomy at Valdota State University in Georgia writes (Barnbaum, n.d.):

> *Most of the plagiarism committed by students is unwitting and is due to their ignorance about what constitutes plagiarism. If you do not know exactly what plagiarism is, you cannot avoid doing it."*

Teaching students about proper citation methods and other aspects of academic honesty is an effective approach to address these types of issues. The University of Calgary teaches their students when they first start attending the university (Weeks, 2009). Another approach is the one used by Bill Taylor who would distribute a letter at the beginning of his class (Taylor, n.d.; Dembicki, 2008). Instructors and institutions can make use of campus writing and academic centers to educate students about plagiarism and proper writing skills. Dr. Karén Clos Bleeker, President of the Community College of Denver, advocates talking to students about academic integrity as one of the easiest ways to educate students about the benefits of academic integrity. She believes that students will "rise to the occasion if they know what our expectations are" (Dembicki, 2008).

Research has shown these types of approaches to be very effective. In a recent 2010 study of nearly 600 students Dee and Jacob demonstrated that giving students a web-based tutorial on plagiarism is more effective in deterring the behavior than threatening students with detection and punishment. They found that incidents of plagiarism could be reduced

by as much as 65 percent when students participated in a "15-minute Web-based tutorial that [taught them] what constitutes plagiarism and how to avoid it." (Dee & Jacob, 2010)

Johnson, Patton, Bimber, Almeroth and Michaels at University of California, Santa Barbara took a longer to teach students and used additional strategies with their plagiarism deterring trial in 2004. Their study in detecting cheating was based on the observation that "college students exploit information technology extensively to cheat on papers and assignments." Their goal was to deter students directly, using soft-deterrence strategies, but also to "detect and punish any cases of the most negligent or incorrigible efforts at cheating." For the study, they utilized several techniques including oral and written warnings, webpage about plagiarism and plagiarism detection tools to first deter and then detect potential plagiarism. The researchers achieved their goal of directly deterring students from plagiarizing with less than 1% (0.008% or only 5 out of 590 papers) that were found to have shared text, a much lower rate than they had predicted based on other studies. (Johnson, Patton, Bimber, Almeroth, Michaels, 2004)

Dr. Susan Blum, Professor of Anthropology at the University of Notre Dame, believes instructors should view academic integrity as a constellation of skills, taught by professors to their students. She feels this method is "the most promising approach for getting students to follow the rules of academic citation, and the one with the least likelihood of providing a shortcut" (Blum, 2009).

Based on the advice of these teachers, their institutions and research (Blume, 2009; Dee & Jacob, 2010; Dembicki, 2008; Johnson et. al, 2004; Taylor, n.d.; Weeks, 2009), simply educating the Millennial generation may prove to be successful in preventing plagiarism. Some of the available resources for teaching students about plagiarism include the plagiarism tutorials at the Center for 21st Century Teaching Excellence at University South Florida, (http://www.cte.usf.edu/plagiarism/plag.html), Rutgers University Libraries (http://library.camden.rutgers.edu/EducationalModule/Plagiarism), the University of Mississippi (http://www.lib.usm.edu/legacy/plag/plagiarismtutorial.php), and You Quote it, You Note it! at Vaughn Memorial Library (http://library.acadiau.ca/tutorials/plagiarism).

Another approach to maintaining academic integrity is by redefining plagiarism as a literary term. Kathryn Valentine, Associate Professor at New Mexico State University and Director of their Writing Center, has redefined plagiarism. For her plagiarism is more of a literary practice than an infraction of academic integrity (Valentine, 2006).

> *Plagiarism is a literacy practice that involves social relationships, attitudes, and values as much as it involves rules of citation and students' texts.*

With Valentine's definition, instead of disciplining and penalizing those who are plagiarizing, she advocates educating students about the proper ways to write and the rules of citation (Valentine, 2006). When viewed as a writing skill or a literary practice, taking the time to ensure that students learn how to write, how to properly cite their sources, how to paraphrase and how to follow assignments can help to prevent plagiarism due to lack of knowledge and writing skills.

Prevent Plagiarism by Policing, Enforcing and Reporting

When promoting academic integrity and educating students about plagiarism and cheating are not enough, instructors can turn to other methods. One is to police using plagiarism detection tools and search assignments. Another method is to encourage faculty to report incidents of plagiarism and final one is to ensure that clear and consistent academic integrity policies are enforced.

There are many different tools available for detecting possible plagiarized papers. Google, Sparknotes.com, Copyscape.com, Plagiarismdetect.com, Plagiarism Checker, Turnitin, WriteCheck, SafeAssign and CrossCheck are some of the many programs available to check for paper originality or plagiarism. (Dyer & Ianniello, 2009).

Another effective strategy adopted or modified by many institutions is a new grade designation to indicate a failure due to academic dishonesty. In 2003, Barton Community College in Kansas assigned an "XF" grade to a student who plagiarized an assignment. Students receive the special "XF" designation for failing a class due to cheating (Kansas, 2003). Wichita State University in Kansas adopted a XF/XW (withdrawal) Grade Policy in 2005 as a way to "denote a failure to accept and exhibit the fundamental value of academic integrity." (Wichita, 2005) Simon Fraser University in Canada assigns a "FD" to indicate the failure is for academic dishonesty. These "XF's" and "FD's" appear on the student's official university transcript (Weeks, 2009).

Educators need to do more than just monitor for plagiarism they also need to report academic misconduct. McCabe and Pavela note that "faculty members who ignore or trivialize academic dishonesty send the message that the core values of academic life aren't worth enforcing" (McCabe & Pavela, 2004). Mary Bart, Editor of *Faculty Focus*, encourages instructors to "Report all cheating when you see it, rather than ignore it or handle it on your own." By reporting academic dishonesty, this action may ensure that the instructor develops a reputation as "someone who does not tolerate cheating or look the other way" (Bart, 2009).

In addition to defining Academic Integrity and establishing academic policies for institutions, there also needs to be some agreement between the faculty and administrators as to how the academic policies are to be enforced at the institution. Unless clear academic policies exist at an institution, instructors may adopt different academic integrity or plagiarism policies. Dr. Eleanour Snow, from the Department of Geology at University of South Florida, writes that instructors "need to give a consistent message to students, with clear expectations and consequences that are universally applied; and they need to communicate with each other so that students cannot plead ignorance of the standards each time they encounter a new professor" (Snow, 2006). It becomes clear that it takes a village, or in this case, the entire institution, to reduce cheating and plagiarism (Dyer, 2010).

Embrace New Ways of Teaching and Adjust Teaching Styles

Educators are changing the tried and true teaching techniques used by in the past and adjusting their teaching styles to accommodate the new technologies and new learning styles of the millennial generation.

Table 2. Approaches for Maintaining Academic Integrity.

Ways to Maintain Academic Integrity

Promote, Educate and Redefine

- Promote and raise awareness of academic integrity in the school and on campus.

- Forming peer groups or student groups to monitor and promote academic integrity.

- Teach students about the relation of academic integrity to professional ethics and their future chosen career.

- Link assignments to learning objectives. Students who understand the point of the assignment are more likely to do their own work.

- Educate students about the proper methods for writing papers and citing sources.

- Train faculty about ways to address and promote academic integrity in the classroom.

- View academic integrity as a constellation of skills to be learned.

- Redefine plagiarism to be a literary practice, one which can be deal with through education about proper writing techniques.

Police, Enforce and Report

- Make plagiarism detection tools available for faculty at the institution.

- Train faculty how to utilize technology-based tools to detect plagiarized assignments.

- Report all incidents of Cheating, Academic Dishonesty and Plagiarism.

- Enforce Academic Integrity policies, consistently.

Embrace New Ways of Teaching and Adjust Teaching Styles

- Change teaching techniques and styles to accommodate new technologies.

- Develop unique, innovative assignments and projects.

- Incorporate social networking sites, podcasts, vodcasts, blogs and wikis in courses.

- Adopt teaching styles more conducive to the millennial student's learning styles.

- Utilize new ways of teaching like meta-collaborations, open Internet exams.

(Bart, 2009; Blum, 2009; Dyer, 2010; Groark, Oblinger & Choa, 2001; Hobson, 2009; Howard & Davies, 2009; Kulmala, 2010; Snow, 2006; Tomorrow's Professor, 2010; U.C. Davis, 2006; Vencat, 2006; Vie, 2008)

Numerous teachers are incorporating newer technologies like social networking sites, podcasts, vodcasts, blogs and wikis into their courses and especially in their online classrooms (Vie, 2008). Instructors are also changing their assessment styles, writing assignments, quizzes, discussion board questions and exams to focus on evaluating a student's ability to analyze and interpret information (Dyer, 2010). There has been a shift away from questions that just require regurgitation of facts and figures (Hobson, 2009) and a move towards being analytical and imaginative. A recent blog post in Tomorrow's Professor advises professors to be creative and inventive as a way of preventing plagiarism. "The more inventive you are, the less likely it is that students will fulfill the assignment in a fraudulent manner" (Tomorrow's Professor, 2010). The innovative project that Rebecca Howard and Laura Davies from Syracuse University assign is to have students use Wikipedia as the starting source of information and then guide them to find additional sources of information to verify the claims made in Wikipedia (Howard & Daves, 2009). Dan Kulmala, Ph.D. associate professor of English at Fort Hays State University advocates writing papers with students or what he terms a meta-collaboration. With this assignment he writes an essay with his students as a way of being more "in tune" with the assignment. Kulmala also uses Facebook, YouTube and the e-Portfolio, Epsilen (supported by the New York Times Knowledge Network) to share his own writing with students. (Kulmala, 2010).

Some of the top institutions in the United States and Europe gone so far as to "legalized cheating" by allowing their students to take open Internet exams and access information online via laptops or PDA's. (Vencat, 2006). The country of Denmark allows their students full access to the Internet during their final exams. (Hobson, 2009) The thought behind giving open Internet exams is that open exams are more like real-life work situations where all of the information would be readily accessible. (Vencat, 2006).

Conclusion

Today's educators face the challenge of maintaining academic integrity in the face of new technology, widespread social networking, changing attitudes and social conduct. Convincing students that academic integrity is still important can be very difficult against the backdrop of a society where cheating seems to be common. Fortunately there are many effective approaches that have been used by educators, librarians, directors and administrators help maintain Academic Integrity. A summary of the different ways to maintain academic integrity have included in Table 2 on the previous page.

This humorous ecard shown in Figure 4 is available in the graduation section of the Someecards.com website. The message on the card, "Congratulations on plagiarizing Wikipedia enough time so earn a degree," highlights a not so terribly amusing issue for instructors teaching the millennial generation.

Figure 4: Plagiarizing to Earn a Degree (Someecards.com)

Educators want their students to do more than copy and paste to complete their work and assignments while earning a degree. Of course if instructors adopt the innovative approach suggested by Howard & Davies, using Wikipedia as a starting point for research project, even Wikipedia can be turned into a teaching tool, instead of a possible plagiarizing source (Howard & Davies, 2009).

While the methods of delivery of information and assignments change and may need to adapt to accommodate a new generation and with a new style of learning, what remains constant is that the students still need to do the work and *earn* their degrees. To paraphrase an old commercial by John Houseman (for Smith Barney investment banking) as it applies to college students, "*We want them to get their degrees the old-fashioned way…to earn it, not to plagiarize it.*"

Instructors and institutions are adopting a variety of teaching methods, guidelines, honor codes, peer education and academic policies to promote academic integrity. Furthermore instructors and others are also educating students about plagiarism and academic integrity as another effective way of promoting academic integrity. Many of the practices incorporated by the author into her own online courses to educate students about Academic Integrity include those suggested in this paper:

- An academic integrity statement in the course syllabus
- A collaboration statement in the course syllabus with clear rules on acceptable and unacceptable collaborative work.
- A survey requiring reading and initialing the course policies from the syllabus
- A required plagiarism tutorial.
- An honor code statement answered prior to each exam and the final.
- A link between course assignments and course learning objectives.

The challenges to maintaining academic integrity in an age of collaboration, sharing and social networking can be met in several ways. Suggested methods include learning how to use new technologies, having a better understanding of student's views towards education, adopting teaching styles and creating an atmosphere that promotes, encourages

and endorses academic integrity in schools colleges and universities. In a time of changing social views, McCabe reminds educators and administrators that the Universities may be the last chance to provide a different message, a message of integrity to students. (McCabe, 2005) Teaching students about academic integrity can help them live their lives with integrity and eventually become trusted and respected members of society. With any luck this millennial generation of college students may learn how to continue doing the right thing, even if no one is looking, long after they have left the academic institution.

References

Auer, N. (2001). Mouse Click Plagiarism: The Role of Technology in Plagiarism and the Librarian's Role in Combating It - Statistical Data Included. *Library Trends*. Retrieved March 8, 2010 from http://findarticles.com/p/articles/mi_m1387/is_3_49/ai_75278304/

Austin, M. & Brown, L. (1999). Internet Plagiarism: Developing Strategies to Curb Student Academic Dishonesty. *The Internet and Higher Education 2*(1), 21-33.

Barnbaum, C. (No Date). PLAGIARISM: A Student's Guide to Recognizing It and Avoiding It. Valdosta State University. Retrieved January 8, 2010 from http://www.valdosta.edu/~cbarnbau/personal/teaching_MISC/plagiarism.htm

Bart M. (2009). Tips to Reduce Cheating in the College Classroom. Faculty Focus: Effective Classroom Management. Retrieved February 18, 2010 from http://www.facultyfocus.com?p=8360

Bartlett-Bragg, A. (2007). Gen Y: The changing face of adult education. Presented at Learning Technologies, 2007. Retrieved January 28, 2010 from http://www.slideshare.net/AnneBB/gen-y-the-changing-face-of-adult-education

Babson College. (2010). Student Responsibilities. Undergraduate Honor Code. Retrieved March 9, 2010 from http://www3.babson.edu/babson2ndgen/Ugrad/Experience/Responsibilities/HonorCode/Students.cfm

Berry, P., Thornton, B., & Baker, R. (2006). Demographics of digital cheating: Who cheats, and what we can do about it. In *Proceedings of the ninth annual conference of the Southern Association for Information Systems*, ed. M. Murray, 82-87. Jacksonville, FL: Jacksonville University, Davis College of Business. Retrieved March 16, 2010 from http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.124.2599&rep=rep1&type=pdf

Besnoy, A. (2005). Academic Integrity in a Cut and Paste World: Lost Cause or Pedagogical Possibility? International Conference on Technology, Knowledge & Society. Retrieved March 6, 2010 from http://t05.cgpublisher.com/proposals/198/index_html

Blum, S. (2009). Academic Integrity and Student Plagiarism: a Question of Education, Not Ethics. *Chronicle of Higher Education 55*(24). February 20, 2009. Retrieved January 15, 2010 from http://chronicle.com/article/Academic-IntegrityStud/32323/

Brown, L. (2008). Facebook user can stay at Ryerson. *The Star*. Retrieved January 24, 2010 from http://www.thestar.com/News/GTA/article/347688

Bugeja, M. (2004). Don't Let Students "Overlook" Internet Plagiarism. *The Education Digest 70*(2), 37-43.

Campbell, D. (2006). The Plagiarism Plague. *National Crosstalk 14,*1-16. Retrieved March 19, 2010 from http://www.highereducation.org/crosstalk/ct0106/news0106-plagiarism.shtml

CBC News. (2008). Student won't be expelled over Facebook study group. Retrieved January 15, 2010 from http://www.cbc.ca/canada/toronto/story/2008/03/18/facebook-avenir.html

Columbia College. (2009) Academic Integrity. Columbia College 2009-10 Catalog. 18-19. Retrieved January 24, 2010 from http://www.gocolumbia.edu/catalog_schedules/General_Information.pdf

Concordia University. (n.d.a) What is Concordia's Academic Code of Conduct? Used with permission. Retrieved March 8, 2010 from http://provost.concordia.ca/academicintegrity/code/

Concordia University. (n.d.b) What is Plagiarism? Academic Integrity. Used with permission. Retrieved March 8, 2010 from http://provost.concordia.ca/academicintegrity/plagiarism

Copper, B. (2008). Changing Demographics: Why Nontraditional Students Should Matter to Enrollment Managers and What They Can Do to Attract Them. *SEM Source. AACRAO Consulting*. Retrieved January 23, 2010 from http://consulting.aacrao.org/2009/02/27/changing-demographics-why-nontraditional-students-should-matter-to-enrollment-managers-and-what-they-can-do-to-attract-them/

Dee, T. & Jacob, B. (2010). Rational Ignorance in Education: A Field Experiment in Student Plagiarism. National Bureau of Economic Research. NBER Working Paper No. 15672. January 2010. Retrieved February 20, 2010 from http://www.nber.org/papers/w15672

Dembicki, M. (2008). Talk about dishonesty. Discussing academic integrity, class expectations with students can go a long way. *Community College Times*. Retrieved March 18, 2010 from http://www.communitycollegetimes.com/article.cfm?ArticleId=889

Dyer, K. (2010). Challenges of Teaching the Copy and Paste Generation. Desktop Seminar. @ONE. Presented March 11, 2010.

Dyer, K. & Ianniello, R. (2009). Copy and Paste Generation: Promoting Academic Integrity and Preventing Plagiarism. Presented at Online Teaching Conference 2009.

Forgas, R. Negre, J. & Ramírez S. (2005). The "Copy and Paste" Generation: Plagiarism Amongst Students, a Review of Existing Literature. *International Journal of Learning 12*(2), 161-168. Retrieved January 8, 2010 from http://ijl.cgpublisher.com/product/pub.30/prod.616

Frand, J. (2000). The Information-Age Mindset: Changes in Students and Implications for Higher Education. *Educause*. Retrieved January 25, 2010 from http://www.educause.edu/library/ERM0051

Garcia, P. & Qin, J. (2007). Identifying the generation gap in higher education: Where Do the Differences Really Lie? *Innovate 3* (4). Retrieved March 17, 2010 from http://innovateonline.info/pdf/vol3_issue4/Identifying_the_Generation_Gap_in_Higher_ Education-__Where_Do_the_Differences_Really_Lie_.pdf

Groark, M, Oblinger, D & Choa, M. (2001). Term Paper Mills, Anti-Plagiarism Tools, and Academic Integrity. *Educause*. 40-44, 46-48. Retrieved March 8, 2010 from http://net.educause.edu/ir/library/pdf/erm0153.pdf

Harding, T., Mayhew, M., Finelli, C., & Carpenter, D. (2007). The Theory of Planned Behavior as a Model of Academic Dishonesty in Engineering and Humanities Undergraduates. *Ethics & Behavior 17*(3), 255-279.

Harper M. (2006). High tech cheating. *Nurse Education Today 26* (8), 672-679.

Harris, R. (2009). Anti-Plagiarism Strategies for Research Papers. Virtual Salt. Retrieved January 15, 2010 from http://www.virtualsalt.com/antiplag.htm

Hobson, J. (2009). Danish pupils use web in exams. BBC News. Retrieved January 25, 2010 from http://news.bbc.co.uk/2/hi/uk_news/education/8341886.stm

Hoffman E. (2009). Evaluating Social Networking Tools for Distance Learning. TCC 2009 Proceedings. Retrieved January 24, 2010 from http://www.learningtimes.net/tcc/2009/265/

Howard, R. & Davies, L. (2009). Plagiarism in the Internet Age [Part of a special issue entitled Literacy 2.0]. *Educational Leadership 66* (6), 64-7.

Johnson, D., Patton, R., Bimber, B., Almeroth, K., & Michaels, G. (2004). Technology and plagiarism in the university: Brief report of a trial in detecting cheating. *AACE Journal 12*(3), 281-299. Retrieved March 8, 2010 from http://www.aace.org/pubs/aacej/temp/02patton281-299.pdf

Kaiser Family Foundation. (2010a). Daily Media Use Among Children and Teens up Dramatically from Five Years Ago. Press Release. Retrieved January 23, 2010 from http://www.kff.org/entmedia/entmedia012010nr.cfm

Kaiser Family Foundation. (2010b). Generation M2: Media in the Lives of 8- to 18-Year-Olds. Kaiser Family Foundation Study. Retrieved January 23, 2010 from http://www.kff.org/entmedia/mh012010pkg.cfm

Kansas College Gives First "XF" Grade to Plagiarist. (2003). *Community College Week*. Retrieved March 18, 2010 from http://edweb.sdsu.edu/bober/kansasstate.pdf

Kennedy R. 2006. Digital Plagiarism: The Role of Society and Technology. *Orange Journal*. Retrieved March 13, 2010 from http://orange.eserver.org/issues/5-1/kennedy.html

Kipfer, B. (2009). *1,001 Ways to Live in the Moment*. San Francisco, CA: Chronicle Books.

Kovner, K. (2008). 10 Things Your College Student Won't Tell You. *Smart Money*. Retrieved January 16, 2010 from http://www.smartmoney.com/spending/rip-offs/10-things-your-college-student-wont-tell-you-19913/

Kulmala, D. (2010). Meta-Collaboration: Writing with Students to Engage Learning. *Faculty Focus*. Retrieved January 25, 2010 from http://www.facultyfocus.com/articles/effective-teaching-strategies/meta-collaboration-writing-with-students-to-engage-learning

Lampert, L. (2004). Integrating discipline-based anti-plagiarism instruction into the information literacy curriculum. *Reference Services Review*. *32*(4), 347-355.

Laird, T. & Kuh, G. (2004). Student Experiences with Information Technology and their Relationship to Other Aspects of Student Engagement. Presented at the Annual Meeting of the Association for Institutional Research. Retrieved March 19, 2010 from http://nsse.iub.edu/pdf/AIR2004EngagementWithITFinal.pdf

Lipka, S. (2009). Colleges Sharpen Tactics for Resolving Academic-Integrity Cases. *Chronicle of Higher Education 55*(31), A20. Retrieved January 15, 2010 from http://chronicle.com/article/Colleges-Sharpen-Tactics-fo/16451/

Madray, A. (2007). Developing students' awareness of plagiarism: crisis and opportunities. *Library Philosophy and Practice*. Retrieved January 23, 2010 from http://www.webpages.uidaho.edu/~mbolin/madray.htm

Matias, J. (2004). Elizabethtown College Academic Integrity Posters. Used with permission. Retrieved January 8, 2010 from http://www.rubberpaw.com/integrity/

McCabe, D. (2005). Cheating among college and university students: A North American perspective. *International Journal for Educational Integrity 1*(1). Retrieved March 16, 2010 from http://www.ojs.unisa.edu.au/index.php/IJEI/article/viewFile/14/9

McCabe, D., & Pavela, G. (2004). The [updated] principles of academic integrity. *Change, 36*(3), 10-15.

Milliron, V., & Sandoe, K. (2008). The Net Generation cheating challenge. *Innovate 4*(6). Retrieved March 14, 2010 from http://innovateonline.info/pdf/vol4_issue6/The__Net_Generation_Cheating_Challenge.pdf

MyYearBook.com. Free Study Guides – CliffNotes. Retrieved January 25, 2010 from http://www.myyearbook.com/index.php?mysession=Y2xpZmZzbm90ZXNfY2xpZmZzb m90ZXNfbWFpbiZzb3J0PXRpdGxlX3NvcnQ=

NCES. (2002). The Condition of Education 2002. Retrieved January 25, 2010 from http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2002025

NJIT. (n.d.a). Read it, Write it, Cite it. Plagiarism Poster. Academic Integrity @ NJIT, New Jersey Science and Technology University. Retrieved March 8, 2010 from http://integrity.njit.edu/poster.html

NJIT (n.d.b). If You Didn't Learn It, You Didn't Earn It. Cheating Poster. Academic Integrity @ NJIT, New Jersey Science and Technology University. Retrieved March 8, 2010 from http://integrity.njit.edu/poster.html

Oblinger, D. (2002). Boomers, Gen-Xers, and Millennials: Understanding the "New Students." *Educause*. Retrieved January 9, 2010 from http://www.educause.edu/library/ERM0342

Oblinger, D & Oblinger, J, Editors (2005). Educating the Net Generation. *Educause*. Retrieved January 27, 2010 from http://www.educause.edu/educatingthenetgen

Penn State. (2009). Why Students Plagiarize. *Teaching and Learning with Technology*. Retrieved January 15, 2010 from http://tlt.its.psu.edu/plagiarism/facguide/causes

People's Press. (2007). A Portrait of "Generation Next": How Young People View Their Lives, Futures and Politics. Retrieved January 26, 2010 from http://people-press.org/report/300/

Prensky, M. (2001). Digital Natives, Digital Immigrants. On the Horizon. *MCB University Press 9*(5):1-6. Retrieved January 8, 2010 from http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

Pugliese S. (2007). Technology Pervasiveness and the Relation to Reported Infractions of Academic Integrity and Codes of Student Conduct at Private Colleges and Universities. Presented at the Institute for College Student Values. Retrieved March 19, 2010 from http://studentvalues.fsu.edu/Pugliese.pdf

Salopek, J. (2004). Cheaters & Chumps. ASAE (American Society of Association Executives) & The Center. Retrieved January 8, 2010 from http://www.asaecenter.org/PublicationsResources/EUArticle.cfm?ItemNumber=11616

Selwyn, N. (2008). A Safe Haven for Misbehaving? *Social Science Computer Review.* *26*(4), 446-465.

Snow, E. (2006). Teaching Students about Plagiarism: An Internet Solution to an Internet Problem. *Innovate* 2(5). Retrieved January 8, 2010 from http://www.innovateonline.info/index.php?view=article&id=306

Stephens, J. Young, M & Calabrese T. (2007). Does Moral Judgment Go Offline When Students Are Online? A Comparative Analysis of Undergraduates' Beliefs and Behaviors Related to Conventional and Digital Cheating. *Ethics & Behavior 17*(3), 233-254.

Stover, M & Kim K. (2005). "Institutional Responses to Plagiarism in Online Classes: Policy Prevention, and Detection." *18th Annual Conference on Distance Teaching and learning,* 4-6. Retrieved January 23, 2010 from http://www.uwex.edu/disted/conference/Resource_library/proceedings/02_73.pdf

Summerville, J. & Fischetti, J. (2007). The loophole generation. *Innovate 4*(2). Retrieved January 8, 2010 from http://www.innovateonline.info/index.php?view=article&id=343

Someecards.com. (No Date). Graduation Cards. Retrieved January 8, 2010 from http://www.someecards.com/card/congratulations-on-plagiarizing-wikipedia-enough

Szabo, A. & Underwood, J. (2004). Cybercheats: Is Information and Communication Technology Fuelling Academic Dishonesty? *Active Learning in Higher Education 5,* 180-199.

TacoCat/TAllison1. (2008). Student Faces Expulsion for Facebook Study Group. *Slashdot.* Retrieved January 24, 2010 from http://yro.slashdot.org/yro/08/03/07/0355244.shtml

Taylor, B. (n.d.). Integrity: Academic and Political - A Letter to My Students. In Academic Integrity Articles. Retrieved March 17, 2010, from http://www.academicintegrity.org/educational_resources/pdf/Letter_To_My_Students.pdf

Tomorrow's Professor. (2010). 1001. Plagiarism and Assignments That Discourage It. *Tomorrow's Professor Blog*. Retrieved February 24, 2010 from http://tomprofblog.mit.edu/2010/02/23/1001-plagiarism-and-assignments-that-discourage-it/

Twenge, J. (2006). Generation Me. About the Book. Retrieved January 23, 2010 from http://www.generationme.org/aboutbook.html

Tyler, K. (2007). The tethered generation. *HR Magazine 52*(5), 41-46.

Urban Dictionary (2003). Definition of Mash Up. Retrieved January 28, 2010 from http://www.urbandictionary.com/define.php?term=mash+up

U.C. Santa Barbara. (2006). Academic Integrity Campaign. 2006 – 2007. Office of Judicial Affairs. Retrieved May 27, 2009 from http://judicialaffairs.sa.ucsb.edu. Retrieved January 29, 2010 from http://twitter.com/UCSBjudaffairs

U.C. Davis. (2006). Promoting Academic Integrity at UC Davis. Office of Student Judicial Affairs. Retrieved January 23, 2010 from http://sja.ucdavis.edu/files/Promoting-Academic-Integrity.ppt

U.C. Davis. (2008a). What is Academic Integrity? Office of Student Judicial Affairs. Retrieved January 26, 2010 from http://sja.ucdavis.edu/academic-integrity.html

U.C. Davis. (2008b). Why Academic Integrity Matters. Retrieved January 27, 2010 from http://sja.ucdavis.edu/academic-integrity-page2.html

University of Windsor. (2007). Honour Poster. Academic Integrity Poster Campaign. Academic Integrity Office. Used with permission. Retrieved March 8, 2010 from http://www.uwindsor.ca/aio/academic-integrity-poster-campaign

University of Windsor. (2008). Honesty Poster. Academic Integrity Poster Campaign. Academic Integrity Office. Used with permission. Retrieved March 8, 2010 from http://www.uwindsor.ca/aio/academic-integrity-poster-campaign

USA Today. (2008). Students cheat, steal, but say they're good. *USA Today*. Retrieved January 8, 2010 from http://www.usatoday.com/news/education/2008-11-30-students-dishonesty_N.htm

Unknown Institution. Why Do Students Cheat? Sample Poster. The Center for Academic Integrity. Clemson University. Retrieved March 8, 2010 from http://www.academicintegrity.org/educational_resources/educational_materials/sample_posters/why.php

Valentine, K. (2006). Plagiarism as literacy practice: Recognizing and rethinking ethical binaries. *College Composition and Communication. 58*(1),89-109. Retrieved March 14, 2010 from http://college.holycross.edu/academics/writers_workshop/pdfs/plagiarism.pdf

Vie S. (2008). Digital Divide 2.0: "Generation M" and Online Social Networking Sites in the Composition Classroom. *Computers and Composition. 25*(1), 9-23.

Vencat, E. (2006). The Perfect Score. Newsweek. Retrieved January 8, 2010 from http://www.newsweek.com/id/46953

Wichita State University. (2005). XF/XW Grade Policy. Distance Education. Wichita State University. Retrieved March 18, 2010 from http://webs.wichita.edu/senate/XF-XW%20grade.htm

Weeks, C. (2009). Schools look to push new punishment for cheaters. The Globe and Mail. Retrieved January 15, 2010 from http://www.theglobeandmail.com/life/schools-look-to-push-new-punishment-for-cheaters/article1251548/