Association for Information Systems AIS Electronic Library (AISeL)

SAIS 2006 Proceedings

Southern (SAIS)

3-1-2006

Demographics of Digital Cheating: Who Cheats, and What Can We Do About It?

Priscilla Berry pberry1@ju.edu

Barry Thornton

Russell K. Baker

Follow this and additional works at: http://aisel.aisnet.org/sais2006

Recommended Citation

Berry, Priscilla; Thornton, Barry; and Baker, Russell K., "Demographics of Digital Cheating: Who Cheats, and What Can We Do About It?" (2006). *SAIS 2006 Proceedings*. 15. http://aisel.aisnet.org/sais2006/15

This material is brought to you by the Southern (SAIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in SAIS 2006 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

DEMOGRAPHICS OF DIGITAL CHEATING: WHO CHEATS, AND WHAT WE CAN DO ABOUT IT!

Priscilla Berry Jacksonville University pberry1@ju.edu

Barry Thornton Jacksonville University bthornt@ju.edu

Russell K. Baker Jacksonville University rbaker1@ju.edu

Abstract

The demographics and attitudes of students to cheating on a small, southern, urban, liberal arts institution were surveyed in terms of gender, extra-curricular activities, church attendance, age, and classification (undergraduate and graduate). Some of the prominent literature on demographics and academic violations is reviewed. The study concludes that at least 90% of students surveyed engage in some form of cheating, and students did not view digital cheating as an academic violation. This sample indicated that there is no significant difference in propensities to cheat among the variables included in this survey. Some possible measures are listed to help deter cheating on college campuses.

Keywords: Digital Cheating, student demographics and cheating, academic integrity violations, computerized cheating

Introduction

We cannot, as an educational institution or professors on a college campus, eliminate cheating completely. It was said by a great master that the poor you have with you always. If students are without social or economic standards, universities cannot teach this. It is only if a student comes with a moral conscience and some knowledge of a social and moral standard, that we have any hope of moving them into a higher level of accountability. Students come to us as they are with propensities to honesty or dishonesty. The smaller studies made with our students and the larger studies of Donald McCabe, the acknowledged leader in the field of surveying academic integrity issues, show that at least 66% of students on college campuses do not consider cheating to be of a serious nature (McCabe & Drinan, 1999) (Baker & Berry, 2005). When surveys on all types of cheating are evaluated, the area that shows a significant increase with digital access is plagiarism. We are in a digital environment today that provides for more ease in cheating, and the world's wealth of information is readily plagiarized. The escalation in the "cut and paste" area of cheating is the result of an attitude that is present initially in the student but is enhanced by the Internet. The sense is that if it is online, it is free, and students can take it without fear or guilt. If it has no author, or no date, it obviously cannot be cited, and may be written as original thought. Taking information from the internet is not wrong in the minds of students because everyone does it, including colleges. A notorious example in our town occurred, when a private college forged its report to the Southern Association of Schools by copying their statistical data on retention and graduation rates from an online prospectus of another institution of higher learning. The college was placed on probation and many individuals were fired, but the cheating scandal hit the front page of the newspaper. So much for role modeling!

Students often have excuses, and they frequently wait until the last minute. The pressure for grades is intense, and frequently cited as an excuse for the "snatching" from the internet. College is no longer, for many students, an educational experience, a journey to acquiring knowledge for living the enlightened and productive life, it is only a means to an end..., and cheating is often the means to the end.

The purpose of our study is to investigate student attitudes to academic integrity violations at a small, southern, urban, liberal arts institution. Students in the College of Business took an online survey, and we asked if they used technology or the internet to cheat. These students were also asked to provide information on other factors that the literature shows may be related to academic dishonesty: gender, participation in extracurricular activities, church attendance, age, and classification (undergraduate or graduate). The goal is to determine how wide spread cheating is at our University, and to assess demographic pressures to cheat, particularly as it relates to digital cheating.

Who Cheats

Exactly what is the profile of the student who cheats? Is it helpful in curbing cheating, to know if there is more cheating in say the freshman class and therefore, we need to have programs in place immediately for freshman on cheating? Does cheating occur with more frequency with extracurricular activities, and can we have more counseling in place to help students balance their choices? This topic is worthy of review by every institution so that there is an awareness of your institution's profile. Probably with each entering freshman class, this data should be gathered. It is important to know the specific profile of the students who rely on cheating according to Donald McCabe to develop a strategy that will help prevent cheating (McCabe, Trevino, Butterfield, 1990). McCabe notes that while patterns of cheating may not be changing dramatically, the percentages of students who consider cheating not serious are rising. He also notes that a shift did occur in gender cheating. From 1963 to 1993, the number of women reporting incidences of cheating rose from 59% to 70%. This percentage placed women approximately equal to men, who reported a gain in cheating from only 69 to 70% (McCabe & Trevino, 1996).

Age and class rank are also major demographic areas to be considered. The research that everyone reviews on class rank is work by W. J. Bowers on student dishonesty in which he concludes that underclassmen cheat more than upperclassmen. Bowers reports the survey information from 5000 college students on issues of academic honesty. Bowers indicates that underclassmen report more incidences of cheating than upperclassman (1964).

To teach in the college classroom is to know the student excuses for not meeting deadlines for assignments, and often these excuses become rationales for cheating. Some of the seminal research indicates that students who participate in extracurricular activities such as athletics and sororities and fraternities are more likely to cheat (Stannard & Bower, 1970) (Bowers, 1964).

A current study by Brown and Choong (2005) investigated the academic dishonesty in business students who attended a Catholic versus a secular university. The hypothesis being that students who receive religious education with emphasis on moral and values would be less disposed to cheating. The authors concluded: "The inability of researchers to find a consistent relationship between ethics and values education and more honest behavior raises the question whether this type of education [Catholic/Religious] is at all a viable alternative to improving the ethical and moral level of behavior in our universities and work place" (p. 211).

Methodology and Analysis

A sample of size n = 63 students enrolled in Jacksonville University's College of Business at both the undergraduate and graduate level took an online survey

(http://express.perseus.com/perseus/surveys/1734848031/420c3a16.htm?ProjectID=1108097558&GroupID=173484 8031) asking questions about digital cheating and a variety of demographic factors. From this data, six binary variables were created.

In addition to the variable that concerns digital cheating, five additional demographic variables were created. These five variables are GENDER, CLASS, AGE, EXTRA, and CHURCH. It should be noted that for the variable EXTRA, the following activities were considered extracurricular: employment, athletics, social, and professional fraternities, ROTC, student government, and interest clubs. The following table provides the pertinent facts about all the variables under analysis.

Table 1. Description of Variables

Variable	Value = 0	Value = 1
CHEAT	No (11.1%)	Yes (88.9%)
GENDER	Male (60.3%)	Female (39.7%)
CLASS	Undergraduate (57.1%)	Graduate (42.9%)
AGE	Under 21 (44.4%)	21 or older (55.6%)
EXTRA	No (9.5%)	Yes (90.5%)
CHURCH	Less than once a month (61.9%)	Once a month or more (38.1%)

Since the level of data for the variables to be analyzed is categorical, the chi-square test of independence is used to determine if any of the five demographic factors are related to digital cheating. Therefore, there are five separate null hypotheses. Each null hypothesis states that digital cheating is not related to the demographic variable of interest. Likewise, there are five alternate hypotheses that state that digital cheating is related to the demographic variable under consideration.

To determine if the null hypothesis should be rejected, it is necessary to find the critical value of chi-square. Each test is done at the five percent level of significance, and each test has one degree of freedom. In this case, the appropriate critical value of chi-square is 3.84. Now it is possible to construct a decision rule. If the computed value of the chi-square test statistic is greater than 3.84, reject the null hypothesis.

The following table shows the computed value of the chi-square statistic for each of the five tests of concern.

Demographic Variable	Computed Chi-Square	
GENDER	0.033	
CLASS	0.656	
AGE	0.804	
EXTRA	0.829	
CHURCH	0.303	

Table 2. Results of Analysis

The sample data suggests that there is no relationship between GENDER, CLASS, AGE, EXTRA, CHURCH, and CHEATING in the population from which the sample was selected. The analysis of the sample data suggests two things about digital cheating in the Jacksonville University College of Business. First, the evidence shows that digital cheating is a serious problem, with approximately 90% of the students indicating that they had engaged in at least one form of digital cheating. Second, based on the results of the chi-square test of independence, there is no significant difference in the proportion of students who admit to cheating in any of the categories of interest. Therefore, we can conclude that cheating is widespread across all categories surveyed.

What We Can Do About It

It is clear that specific actions must be taken to address cheating, dishonesty, and plagiarism on college campuses. We are entering just an initial stage of survey and dialogue at Jacksonville University, a small, southern, private university with approximately 3,500 students (graduate and undergraduate). The Davis College of Business on the University Campus is researching and crafting its own plan. The University as a whole has debated these issues for

years and to date has only a general statement on academic dishonesty. The position is that academic integrity issues are to be handled by the classroom instructor, and reported to the Provost and Senior Vice President for Academic Affairs. There is a process described in the catalog that follows a general chain of command, but without any real explanation of penalties and enforcement measures (Jacksonville University Catalog). The unstated fear of the University, like most institutions, is two fold. Any statement of precise punishment would cause a decline in enrollment or any real enforcement of punishment would lead to litigation. Even tenured faculty, as we begin our own debate, are hesitant to go beyond discussion and basic agreement that something needs to be done and policies put in place. The dialogue is filled with ideas and strong sentiments for support; as long as no one is called on to do the hard work. The challenge shakes out into two dilemmas. The amount of personnel hours and work required for implementation and the fear of reprisals.

An institutional framework for dealing with plagiarism as outlined, for example, by Chris Park (2004) at Lancaster University, UK in *Rebels without a Clause* (2004) sounds so complete and solid. The difficulty, as it seems, is that establishing the framework requires more time and money than creating a new degree program for a college and more personnel than an already beleaguered faculty can conceive. In Park's excellent article, just the initial number of personnel necessary for the procedure for dealing with plagiarism issues, once it is detected, includes at least five or more faculty members. There are Academic Markers who report (could be the instructor or graduate assistant), a Course Convenor, who annotates and distributes hard copies of the plagiarized work to all involved, and an Academic Officer, who investigates. The Academic Officer arranges a panel meeting, which must be chaired by a Non-Member of the department. A Student Registry, also described by Park as part of this process, is a body that keeps records of all faculty reports of student misconduct and presents this and other research to the Academic Officer. The Student Registry, as described, sounds like it would require a database and clerical support. The panel that hears the petition reports to the Standing Academic Committee. The students can also have representation in all stages of this process. The count of personnel is now to at least five faculty members, plus members of a Standing Academic Committee, and a Student Registry with staff and data equipment and permanent space to store files and equipment. (Park, 2004)

These procedures for detecting, trying, and punishing varying degrees of offenses are delineated with excellent information in Park's article, and there is some acknowledgement that these matters might not appear on the student transcript as they go on to graduate school or seek employment. (Park, 2004) This is probably a wise conclusion on the part of Lancaster to avoid costly litigation, which would surely result if schools attempt to place any comments concerning cheating or academic violations on permanent records or transcripts.

Park's approach is a valuable and well- planned approach to dealing with an issue that is currently discussed at our University. Faculty is reading and dialogue is beginning with the current literature and the results of our survey, and the college is joining the seven-year-old Academic Integrity Association at Duke University with its 300 institutional members. The plan outlined by Park, however, seems overwhelming in practical terms. Having all stakeholders buy into the plan, and help "embed the framework into the institution's policies" seems monumental (Park, 2004, 296). Convincing the Administration of the requirements for development and staffing and, thereby, funding of the practices and procedures required for curbing plagiarism is quickly juxtaposed to the deferred maintenance issues on campus and the need for a new Fine Arts Complex, just to name two priorities. We have difficulty convincing the Administration to fund faculty development for professional conferences or providing the support staff to underpin on-going research.

The second dilemma for the institution, wishing to put in place strong procedures and practices is decried in many current studies relating to why professors are reluctant to report cheating, which is the necessary first step before any policy or practice comes into play. Keith-Spiegal, Tabachnick, Whitley, and Washburn (1998) in their survey of 127 psychology instructors found that dealing with cheating was the most distasteful part of their jobs. Their study cites the stress created by reporting cheaters, and a rationalization that cheating will not save the poor students from failing, and the major deterrent to a professional commitment to reporting cheating: "The Fear Factor" (215). This second dilemma is very real at our University, and well pronounced in current literature. Carol Inners, (1998) documents a case at Fordham University, which is all too typical, where an English professor knew the work of this student was plagiarized because of previous writing samples. The professor challenged the student; the student reported the teacher to the administration. The administration backed the student, and the professor's contract was not renewed. There is a general reluctance to report cheating on college campuses because students are so on the offensive. Students report professors for incompetence and worse, before professors can report them for cheating (Schneider, 1999).

Even the courts have to date not been successful at eliminating term-paper mills (Jeffes, 2002). Many continue to blame professors for not doing enough to stop plagiarism, for not being more creative with assignments, or for not holding students more accountable. Yet the case studies clearly show the teachers most often lose when they bring charges against students (Taylor, 2003). The process is long and often humiliating or worse for the professor and even more denigrating to the system is that in the end, nothing happens to the students (Selingo, 2004).

Conclusion

The results of our analysis indicate that digital cheating is an area of concern in the Jacksonville University's College of Business. We are definitely dealing with a different breed of student today. When we dialogue in workshops on digital cheating, we lay out many of the cheating methods we know of personally or have read of in the literature. Most recently in one such workshop, we were making the point that students in large numbers were buying papers from paper mills and submitting them as their own work. One site, *Cheater.com*, reported in 2001, it had 100,000 hits per day. We can be sure that number has increased today. The sites for plagiarism detection experience significantly less traffic (Bruster, summer 2004). At this same workshop, we contributed information on the possibility of students ordering a term paper in a foreign language and using the translation software like *Babel Fish* to translate the paper into English, needing to make only minor changes. It would not be traceable through anti-plagiarism sites. For our students, who took the survey, this digital world is alluring.

However, the real problem is to understand, in addition to demographics, the kind of student we are teaching, they are the *Netgens*, as Bruster refers to them (2004). These students run across many demographic lines. The Internet Generation of students wants to be in a world where they are comfortable, where they do know something. This arena would be the digital world. The speed and immediate access to research information is exciting, and it is important to understand this excitement and the backdrop for the cyberspace kids. They grew up on Big Bird and everything has resolution in 30 minutes, and they did not have to do anything (interact in any way) to get the answer. It is a completely different worldview than of most professors, who teach on our campus. The value system is not the same. We cannot change this. Nevertheless, we can use this survey data, and challenge others to gather data specific to each academic environment, to know which students are most at risk for cheating on our campus and together develop a culture that helps curbs academic integrity violations.

Our survey results led us to these conclusions: Faculty dialogue is essential. Honor Codes with signed pledges by incoming freshmen are a strong deterrent. Creating assignments in the classroom with a timetable for deliverables is an excellent method for deterring plagiarism. Writing the syllabus with specific policies outlined for academic integrity violations is a requirement. Having students use sites like *turn-it-in.com*, and submit the results with the assignment, helps to deter the propensities to digital cheating. Using other software like LAN School, that shows all computer activity to determine if digital cheating is occurring, is a tool that is a major deterrent to online cheating in the classroom. To continue to survey our students' attitudes is mandatory, and we must admit to the facts the surveys present. To ignore cheating is to have a culture of dishonesty continue to grow and destroy our academic institutions, and destroy the value of trust that forms the fabric of our lives together.

References

- Baker, R. and Berry, P. (2006). Student Attitudes on Academic Integrity Violations. *Florida Association of Teacher Educators e-Journal.* Publication Date (February 27, 2006).
- Bowers, W. J. (1964). Student dishonesty and its control in college. New York: Bureau of Applied Social Research, Columbia University.
- Brown, Bob S. & Choong, Peggy (2005, June). A Investigation of Academic Dishonesty among Business Students at Public and Private United States Universities. *International Journal of Management* 22 (2), 201-214.
- Bruster, Bernadette, (2004, Summer). Cut and Paste from Cyberspace: Competency's Changing Face. *The Delta Gamma Bulletin, Panola College, Texas*, 38-40.

Inners, Carol. (1998, March 9) Students are pulling off the big cheat. Insight on the News 14 (9), 41.

Jacksonville University. Jacksonville University Catalog (2004-2005). Jacksonville, Florida.

- Jeffes, Errin J. (2002, Spring) The Courts' Response to Student Cheating with the Help of Term Paper Mills: Implications for Student Affairs Administrators. *College Student Affairs Journal 21* (2), 68-77.
- Keith-Spiegel, Patricia, Tabachnick, Barbara G., Whitley, Bernard E., Jr., and Washburn, Jennifer (1998). Why Professors Ignore Cheating: Opinions of a National Sample of Psychology Instructors. *Ethics and Behavior* 8(3), 215-227.
- McCabe, D., & Bowers, W. (1994) Academic dishonesty among males in college: A thirty year perspective. *Journal of College Student Development 35* (1), 5-10.
- McCabe, D,. & Drinan, P. (1999, October 15) Toward a Culture of Academic Integrity. *The Chronicle of Higher Education 15*, B7.
- McCabe, Donald L., Trevino, Linda K., Butterfield, Kenneth D. (1999, March/April). Academic Integrity in Honor Codes and Non-Honor Code Environments. *The Journal of Higher Education* 70 (2), 211-233.
- McCabe, Donald L., Trevino, Linda K. (1996, January/February). What We Know About Cheating In College. *Change* 28 (1), 29-33.
- Park, Chris. (2004, August) Rebels Without a Clause: towards an institutional framework for dealing with plagiarism by students. *Journal of Further and Higher Education* 28 (3), 291-306.
- Schneider, Alison. (1999, January 22). Why professors don't do more to stop students who cheat. *The Chronicle of Higher Education 45* (20) A8, 3 pgs.
- Selingo, Jeffrey. (2004, September). The Cheating Culture. *Prism-Magazine 14*, Retrieved November 3, 2005, from http://www.prism-magazine.org/sept04/feature_cheating.htm.
- Stannard, C. I. & Bowers, W. J. (1970). The college fraternity as an opportunity structure for meeting academic demands. Social Problems, 17, 371-390.

Taylor, Kelley R. (2003, April). Cheater, Cheater... Principal Leadership 3 (8), 74-77.