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Unofficial Student Online Discussion Boards:

Enhancing Learning or Encouraging Cheating?

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Jennifer P. Hodges

Research Assistant

Michigan State University

609 E. Greenlawn

Lansing, MI 48910

(cell) 517-282-0874

(work) 517-432-2497

(fax) 517-432-2509

jphodges@msu.edu

Abstract

Although one of the most important values of higher education is academic integrity, research indicates that cheating is pervasive on college campuses. One of the emerging complexities in examining academic integrity is the use and impact of online environments. The purpose of this study was to explore the online behaviors of undergraduates through the examination of student postings on an unofficial, unmonitored online discussion board. The analysis of the discussion boards resulted in three categories of postings: Help Room, Double Check, and Cheating. Focus groups yielded six themes about the use of discussion boards: Approaches to using the discussion boards, Professor influence, Impact of course content and characteristics, Student responsibility, and Cultural norms of discussion boards. Online discussion boards are ripe with insights about how technologically savvy students are experiencing college.

Although one of the most important values of higher education is academic integrity, research indicates that cheating is pervasive on college campuses (McCabe & Trevino, 1993, 1997; Whitley, 1998; Whitley & Keith-Spiegel, 2002). There are differences in opinion about the primary factors that influence students' decisions to engage in collegiate cheating, especially the relative importance of situational factors (e.g., class size) and the influence of peers (Dalton, 1998; McCabe & Trevino, 1993, 1997; Roth & McCabe, 1995; Whitley, 1998). To effectively promote the value of academic integrity, more information is needed about the complex and multiple influences that impact students' decisions about cheating behaviors.

One of the emerging complexities in examining academic integrity is the use and impact of online environments. Much of the research that has examined the impact of the Internet on academic integrity has focused on plagiarism (Lester & Diekhoff, 2002; Scanlon & Neumann, 2002; Underwood & Szabo, 2003). Research has also been conducted on the effectiveness of the use of online course tools designed and moderated by an instructor (e.g., Hofstad, 2003). Not much in known about the effect on academic integrity and learning of students' use of unofficial, unmonitored online discussion boards.

Literature Review

Recent research on academic integrity has focused on the influence of peers on a student's decision to cheat. Scanlon and Neumann (2002) found that students estimated peer cheating at a higher level than it actually occurred. McCabe and Trevino (1993, 1997) found that peer approval or disapproval and perceived level of cheating among peers were the most influential factors in a student's decision whether or not to cheat. They also speculated that large schools may have a more difficult time communicating institutional policies, which increases the

importance of peers. Hall and Kuh (1998) suggested that discrediting the opinion that everybody cheats is a key strategy for curbing collegiate cheating.

Much has also been written on the role faculty play in discouraging academic dishonesty. Pincus and Schmelkin (2003) found differences in the ways that faculty approached situations of academic dishonesty as well as significant disagreements about what actions constituted academic dishonesty. Student and faculty opinions also vary about the behaviors that constitute cheating as well as the severity of certain cheating behaviors. Students tend to view cheating more leniently than faculty do, distinguishing between cheating they allow to happen, such as not reporting someone they see cheating, and cheating in which they personally engage, such as buying a term paper (Graham, Monday, O'Brien & Steffen, 1994). Faculty and students agree that intentional cheating, bringing a cheat sheet to a test, is more severe than opportunistic cheating, looking at someone else's paper if it is exposed (Whitley & Keith-Spiegel, 2002). The disagreements and confusion over what constitutes academic dishonesty impact student behavior (Kibler, 1998).

Several studies have detailed situational factors that impact cheating behavior, such as class size (Cummings & Romano, 2002; Ford & Richardson, 1994; Hall & Kuh, 1998; Lester & Diekhoff, 2002; McCabe & Trevino, 1993, 1997; Whitley, 1998). Cheating is more common in large, lower-level courses because of increased student anonymity, ease of cheating, and low perceived risk of being caught. Lower-level courses are typically populated by younger students, a population more likely to cheat. Unfortunately, modifying the size of lower-level courses is often not feasible for large institutions.

A relatively new situational factor impacting academic integrity in college classrooms is the Internet. Much of the research examining the relationship between Internet use and cheating

has focused on the issue of plagiarism. The expanding availability of texts and information online has further confused the definition of what constitutes academically dishonest behavior (Scanlon & Neumann, 2002). A consensus as to whether the Internet has caused an increase in cheating behaviors has not been reached (Lester & Diekhoff, 2002; Underwood & Szabo, 2003). Some believe that the ease of use and convenient availability of the Internet has increased cheating, while others have found that the Internet is just one more tool for students who were already prone to cheating.

In addition to utilizing the Internet to access information, today's college students also use it to communicate with their peers, as illustrated by the popularity of social networking sites such as Facebook and MySpace. This interaction creates online communities that can influence students' attitudes and behaviors (Tapscott, 1998). The purpose of this study was to explore the online behaviors of undergraduates in two large lower-level undergraduate courses at a large Midwestern research university (pseudonym MRU) through the examination of student postings on an unofficial, unmonitored online discussion board and student focus group reactions to those postings. Specifically the study was designed to address the following research questions:

1. What are the characteristics of the college student conversations that occur on an unofficial, unmonitored online discussion board focused on an academic course?
2. What impact does the availability of an unofficial, unmonitored online discussion board have on academic integrity in an academic course?
3. How do students perceive the conversations that occur in an unofficial, unmonitored online discussion board focused on an academic course?

Research Design

This study involved two components: 1) an analysis of the student postings on the discussion boards related to an introductory Accounting course and an introductory Chemistry course, and 2) student focus group discussions about the content and interpretation of the postings and the usage of online tools in academic courses.

The online environment explored in this study (pseudonym allcollege.web) was created in 1997 by an alumnus of MRU. The site has no official affiliation with MRU and predates the popularity of social networking sites. It was created as a place for students to collaborate on online homework problems. When this study was conducted, allcollege.web boasted 45,906 registered students, 86,740 class discussion entries, and 11,849 professor ratings. The site requires that students certify that they are not a professor or administrator at MRU by clicking on a box prior to logging-in. The site is primarily used by MRU students to discuss courses and instructors. The course specific discussion boards allow students to initiate message threads to which other students can respond. The message threads are not monitored in any way and remain active for 30 days.

The two courses chosen for this study were an introductory Accounting course and an introductory Chemistry course. The courses were chosen based on enrollment, number of postings, and course usage within competitive majors. In the Spring 2004 semester, Accounting had an enrollment of approximately 800 students in two sections and Chemistry had approximately 1000 in three sections. Accounting had 147 message threads on its allcollege.web discussion board and Chemistry had 600, the most of any course listed on allcollege.web. These characteristics were used to increase the likelihood of finding online situations which would impact academic integrity. As noted above, cheating is more likely in large courses populated by younger students and in courses which are considered competitive (Whitley, 1998).

Data Collection and Analysis – Discussion Board Postings

In an effort to capture the characteristics of the college student conversations that occurred on allcollege.web for the two courses, the entire semester's postings for each course were collected. In previous instances at MRU when students were accused of academic integrity violations related to allcollege.web only snapshots of the postings were examined (Roeschke, 2004). The researcher felt that the full context of the postings was necessary to explore the characteristics of allcollege.web and its impact on academic integrity in the courses.

A combination of quantitative and qualitative approaches to content analysis was used to examine the postings (Love, 2003; Whitt, 1992). The postings on allcollege.web are organized online by message thread. Several aspects of the postings were quantified. For example, the number of posts per week and per day were calculated and compared to activities occurring in the course over that time period. In addition to the quantified aspects, inductive reasoning was used to sort the message threads into categories. The analysis was guided by Lincoln and Guba's (1985) concepts of unitizing and categorizing.

All 147 message threads from the Accounting course's discussion board were analyzed. Because of the large number of message threads contained in the Chemistry course's discussion board, only a sample of those threads was analyzed. The sample was chosen based on the calendar of events (syllabus) of the class. The sample included two online homework sets and one exam.

Data Collection and Analysis Method – Student Focus Groups

Four student focus groups were conducted. The focus groups served three purposes: to triangulate the categories developed by the researcher in the content analysis of the discussion board postings, to learn how students described the impact of allcollege.web on academic

integrity in their courses, and to discover how the students perceived the conversations that occurred on allcollege.web.

The focus group protocol had two sections. In section one, the participants were asked about their knowledge of and experiences with online academic environments. In section two, the participants were asked to read and react to several excerpts from postings on allcollege.web. The focus groups were tape-recorded, transcribed, and analyzed using the inductive reasoning approach mentioned above (Lincoln & Guba, 1985).

A total of seventeen students participated. The groups included ten females and seven males. Five sophomores, five juniors, and seven seniors participated. They're majors represented the following colleges: Business, Communication, Education, Engineering, and Natural Science. An effort was made to recruit students who had completed at least 42 credits (half-way between sophomore and junior standing). This was done to increase the likelihood that the students might have taken the Accounting course or Chemistry course under investigation. Also, by this number of credits it is likely that the participants had experienced at least one class with an allcollege.web discussion board, even if it wasn't the Accounting or Chemistry course under investigation.

Results

The content analysis of the message threads resulted in three categories of postings: Help Room, Double Check, and Cheating. These categories were confirmed through the focus group conversations. In addition, the focus groups resulted in five themes regarding the impact of the availability of an unofficial, unmonitored online discussion board on academic integrity and students' perceptions of the conversations that occurred on the discussion board.

Discussion Board Posting Categories

"Help Room" postings were discussions of problems that were similar to those one might hear in a study group or help room. Those who posted didn't ask for answers but asked for explanations of the process for solving the problems, typically after explaining what they'd already unsuccessfully attempted. Help Room postings accounted for 62% of the Accounting postings and 53% of the Chemistry postings. One students described this category as follows:

> If you were sitting with your friends and your friend knew how to do the problem and he explained it to you step by step, you wouldn't consider that cheating. I don't see that much of a difference between going online when you have this wonderful world wide web and all this stuff that we can utilize to find out how to do it.

"Double Check" postings typically involved one person asking for the answers with a clarification that they'd already completed their own work and now wanted to double check that they'd completed it correctly. Double Check postings accounted for 21% of the Accounting postings and 13% of the Chemistry postings. This student thought that use of allcollege.web to "Double Check" was a responsible way to use the discussion boards.

> I thought it was really nice how a person tried it on their own and they weren't able to do it so they're asking for help to see where they went wrong. That's a responsible thing I think to ask because you might not see it, but someone else can just look at it and say oh that should be a positive sign, that should be a negative sign.

"Cheating" postings were simply requests for answers with no explanations, or postings of answers with no explanations. Cheating postings accounted for 17% of the Accounting postings and 30% of the Chemistry postings.

Focus Group Themes

During the focus groups, participants were asked about their overall experiences with course related online technology including official tools such as Blackboard, Angel, and the online homework system, as well as unofficial tools such as allcollege.web. In addition, they were asked to describe the characteristics of postings the researcher had culled from allcollege.web. The focus groups yielded six themes about the use of discussion boards: Approaches to using the discussion boards, Professor influence, Impact of course content and characteristics, Student responsibility, and Cultural norms of discussion boards.

Students were very open about their use of allcollege.web. A few students proudly proclaimed their participation in course discussion boards and were not at all apologetic about cheating, "By and large when it concerns homework, I will usually go straight to [the site]. I don't have time to do the homework so I'll just go and copy it down and do whatever." In contrast, other students seemed embarrassed to admit their participation. Most students defended their participation in the discussion boards and insisted it was not cheating,

> I know I used the word cheating but I still, this might sound kind of lame, but I still don't necessarily consider it cheating because when I go on and look at the forum, I'm trying to find an explanation of this equation or how you solve this problem and once I see it, then I usually say oh and I understand how to do it.

Overall, most participants agreed that quality teaching could curtail online cheating. Participants held professors responsible if students were going to the site because the material hadn't been taught well. A few students noted that online interaction by the professor influenced students action, "I think that his spending the time to do that [interact with the students online] really encouraged people to use maybe methods that he wanted us to use instead of just you

know going to [the site].” Finally, students expected professors to know what was going on in the allcollege.web environment, but at the same time they felt strongly that professors shouldn’t illegally log-on to the site to spy on them.

Participants also noted that the content and characteristics of the course played a role in students’ online behaviors. Most mentioned that discussion boards were more frequently utilized in science courses because of the nature of the content and the structure of the assignments. Also, participants agreed that class size had a strong impact. They also felt that a person’s usage of allcollege.web depended on the value they placed on the course content.

> Do chem majors cheat in chemistry class if that’s what they want to do for the rest of their life? Me personally, if I know I need to learn that for medical school or whatever, I can’t afford to cheat. It’s going to come back to get me, so I won’t. I’ll take the time to study and learn it.

Although much of the focus group conversations focused on external factors that led to students’ usage of allcollege.web, most participants did acknowledge that the students themselves were responsible for their own actions. Some students claimed that they used the cite to get their homework in on time, but then went back and learned the material later, “If you’re stressed out about it and just want to get done, then fine. But me, I’ll go back and make sure I know it.” A few students argued that learning did occur through the action of posting to the discussion board, “Sometimes it helps you if you spent a long time trying to figure out the equation then you go online and write up an explanation. It kind of cements it in your mind.”

As they were examining the allcollege.web postings, participants commented on the behaviors they expected of their fellow students. They noted that postings were often polite,

"You do say please and thank you. It's one of the only places where I see people using please and thank you." Participants also commented on the expectation of reciprocity:

> I know when I'm completely lost on a question I go to [the site] and usually someone will explain something in a way and a light bulb goes off and I understand it. And so when there's a question that people seem to be having trouble with and I understand it, I want to go on and put up a post that will hopefully do the same thing for somebody else, because if nobody puts up posts then it won't work. You've got to give and take.

Finally, students noted that if someone is perceived to be holding back information and not following the norm of reciprocity, being polite is no longer required.

Discussion

The focus group conversations demonstrated that situational factors have an effect on the frequency and purpose of allcollege.web usage. Consistent with previous academic integrity research, the participants believed that class size had a strong impact on the ways in which they and their peers utilized allcollege.web. It's important to remember that the participants did not equate usage of allcollege.web with cheating. It wasn't the increased anonymity or low perceived risk of being caught that contributed most to the class size effect, it was the perception that it was difficult to ask questions and get clarification in a class with several hundred students.

An additional course-related situational factor that the participants mentioned as having an impact on allcollege.web usage was course content or subject matter. This factor has not been adequately explored in the academic integrity literature. Most studies have asked students about cheating in general but not explored content specific behaviors.

It's difficult to say whether the participants' comments regarding faculty influence are congruent with available research on the role faculty play in encouraging academic integrity because much of that literature concerns faculty opinions or compares faculty opinions with student opinions. This study revealed that student opinions and behavior can be shaped by their perception of faculty opinion and behavior, as demonstrated by the impact of faculty willingness to interact online.

Conclusion

The participants' comments regarding allcollege.web illustrate that the impact of the availability of an unofficial, unmonitored online discussion board on academic integrity is not black and white. More research is needed to discern whether the site encourages cheating or enhances learning. The participants contended that whether or not using allcollege.web constituted cheating behavior depended upon the motivation of the user and the user's prior attempts at completing his/her own work.

This study does not offer concrete answers to the question of the use of unofficial online discussion boards and academic integrity. I do hope that it will serve as a catalyst to broaden the conversation about the use of the Internet by students beyond the issue of plagiarism. I believe that student initiated online conversations have the potential to enhance learning. Our challenge as educators is to create learning environments which take advantage of that potential without giving rise to irresponsible actions. In addition, we need to teach our students how to utilize the Internet as a powerful tool for learning rather than a convenient tool for cheating.

Although this study focused on online interactions related to specific academic courses, an investigation of students' online conversations can also provide valuable information about students' perceptions of their college experiences. Student affairs professionals and faculty could

use this data to enhance learning both inside and outside of the classroom. Administrators could use the information to better understand the impact of policies related to academic integrity. Online discussion boards are ripe with insights about how technologically savvy students are experiencing college.

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