### Communities of Integrity in Online Courses: Faculty Member Beliefs and Strategies

#### Lori McNabb

Assistant Director, Student and Faculty Services
University of Texas System TeleCampus
Austin, TX 78701 USA
Imcnabb@utsystem.edu

#### Alicia Olmstead

Assistant Integrity Officer City of Austin Austin, TX 78701 USA alicia.olmstead@gmail.com

#### **Abstract**

This paper describes an investigation into beliefs about academic integrity of faculty members who teach both online and on-campus within the University of Texas System, and their opinions regarding differences between the two environments. The research shows that the majority of faculty members surveyed did not believe that there is a difference in cheating between online and on-campus courses. Additionally, this paper shares the results of a project to determine strategies for creating communities of integrity in online courses. Twelve strategies for faculty members to create an environment of academic integrity were identified within three categories: design, communication, and collaboration.

**Keywords:** academic integrity, online learning, faculty opinions, virtuous communities, learning communities, course communications, collaborative learning, student cheating

#### Introduction

Much has been done in the way of studying the trends of on-campus cheating. There have been thorough examinations of those who cheat and the methods that they employ. Significantly less research has been done on cheating methods and trends in online education. The recent emphasis on online student authentication has generated a discussion about academic integrity within the university distance education community. The role of technology in cheating, as well as cheating tendencies in online courses, is beginning to be investigated.

Longitudinal research shows cheating, in general, has been an ongoing problem within academia (McCabe, Treviño, & Butterfield, 2001). With the advancement of technology come both educational opportunities and obstacles for students and faculty members. Educational opportunities include distance education programs that provide an alternative to the traditional classroom for students needing flexibility, and a seemingly endless supply of resources and information. Educational obstacles are found in the form of advanced electronic gadgets that could double as cheating tools, the blurred line between acceptable and unacceptable study practices such as approved group study versus unapproved collaboration, and the increasing occurrence of cut-and-paste Internet plagiarism.

This paper discusses two studies done within the University of Texas System. Researchers investigated the beliefs of faculty members who teach both online and on-campus. These experienced faculty members were asked to compare opportunities for and the likelihood of student cheating in online and on-campus courses, along with the ability to implement each of three approaches to encouraging academic integrity: the virtue, prevention, and policing approaches (Hinman, 2002; Olt 2002).

This research was done on behalf of the UT TeleCampus (UTTC), the distance education utility for the University of Texas System. Launched in 1998, UTTC has facilitated more than 65,000 enrollments and has a course inventory that contains approximately 330 courses (UT TeleCampus, 2008).

The proposed 2006 Higher Education Opportunity Act (Boehner, 2006), included a requirement that accreditors assure that any institution offering distance education programs has "processes by which it establishes that the student who registers in a distance education course or program is the same student who participates, completes academic work and receives academic credit." This requirement inspired the staff at UTTC to begin looking at ways to encourage academic integrity within the courses offered by the 15 campuses within the UT System via UTTC. This effort was timely as the proposed legislation was recently passed and will go into effect in July 2010 (Epper, Gilcher, McNabb, & Lokken, 2008).

Gallant proposes the following five categories of academic dishonesty, stating that these "terms transcend group boundaries and roles" (Gallant, 2008, p. 10):

- "Plagiarism—using another's words or ideas without appropriate attribution or without following citation conventions:
- 2. Fabrication—making up data, results, information, or numbers, and recording and reporting them;
- 3. Falsification—manipulating research, data, or results to inaccurately portray information in reports (research, financial, or other) or academic assignments;
- 4. Misrepresentation—falsely representing oneself, efforts, or abilities; and,
- 5. Misbehavior—acting in ways that are not overtly misconduct but are counter to prevailing behavioral expectations."

It is important to note that only one category, Misrepresentation, is addressed if the emphasis of an academic integrity effort is focused solely on student authentication. Instead, UTTC staff members wanted to consider the issue of academic integrity and how to encourage it more broadly. This led them to inquire about the beliefs of the faculty members teaching online through UTTC, as well as a desire to develop resources and recommendations for faculty members wanting to integrate academic integrity efforts within their curriculum.

#### **Literature Survey**

Academic Integrity in Higher Education

Bill Bowers conducted the first published large-scale study on student cheating in 1964, and reported that three-fourths of higher education students engaged in cheating (McCabe et al., 2001). Thirty years later, similar studies were conducted. These later studies indicated no significant increase in the amount of overall cheating (McCabe et al., 2001; Brown & Emmet, 2001). The researchers did identify increases in cheating on tests and exams, but no significant differences in regards to written assignments (McCabe et al., 2001).

One suggested reason for the long-term consistency in self-reported cheating on written assignments is the change in perception of plagiarism by students. For example, many students today do not recognize un-cited paraphrasing as plagiarism (McCabe et al., 2001), nor may they recognize information taken from the Internet as intellectual property needing to be cited (Lee, 2003).

Another area in which the line between right and wrong has been blurred in the minds of students is that of collusion. This is indicated by the substantial increase in self-reports of unpermitted collaboration from 11% of students surveyed by Bowers, to 49% in 1993 (McCabe, 2005).

Hinman (2005) reported that students typically fall into one of three categories of behaviors and values. The first group, students who never cheat, needs a campus culture that supports their values. On the opposite end of the spectrum are chronic cheaters, for whom preventive measures should be in place. These students require that a campus community be ever vigilant in its attempts to prevent cheating and catch cheaters. The third group, those who occasionally cheat, are the students whose behavior is most likely to be impacted by campus and faculty efforts to encourage academic honesty. Hinman writes that this group—students who sometimes cheat—are the ones most likely to be affected by the ease with which students can cheat with the aid of educational technologies.

#### Technology and Academic Integrity

Technology and the Internet can both facilitate cheating. Students taking online exams can benefit from collaborating with others, access to resources, and the ability to have someone take an assessment on their behalf (Eplion & Keefe, 2007). Students plagiarizing assignments can buy papers from paper mills or get content for free from digital libraries, online journals and reference materials, or online news (Sterngold, 2004).

There is evidence that, although cheating is not on the rise, cheating with technology is increasing. In 2005, McCabe wrote that campus administrators had growing concerns about Internet plagiarism. Only 10% of students reported participating in cut-and-paste Internet plagiarism in 1999 (McCabe, 2005). By 2005, this number rose considerably to 41%.

#### Academic Integrity and Online Education

While many studies have been conducted to determine the state of cheating in traditional courses, few have focused solely on online classes. Many believe that an online class lends itself more easily to cheating due to the lack of face-to-face contact between the students and instructor. Researchers have indicated, however, that the reasons given for cheating are not different for the two delivery methods. Varvel (2005, p. 2) concluded, "no evidence currently is found to support that a student is more likely to cheat online."

In an effort to determine whether cheating is more prevalent in online classes, as opposed to oncampus, a study was performed in 2002 in which 796 undergraduate online students completed surveys regarding their experience in their online courses. The results of the survey showed that the level of cheating in an online course was consistent with that of an on-campus class during a single semester (Grijalva, Nowell, & Kerkvliet, 2006). The researchers' conclusion supports Varvel when stating, "as online education expands, there is no reason to suspect that academic dishonesty will become more common" (Grijalva, et al., 2006, p. 184).

On the other hand, there is a shared perception among many students and faculty members that it is easier to cheat in an online environment than in an on-campus class. In a recent study, both groups were asked about the ease of cheating when learning online. Results indicated that the majority of both students and faculty members believed that an online environment was more conducive to cheating. Noteworthy, however, is that the majority of students and faculty members surveyed had never been involved in an online course. Of those who had taken or taught an online course, the percentage that believed it easier to cheat was reduced (Kennedy, Nowak, Raghuraman, Thomas, & Davis, 2000).

The Center for Academic Integrity (1999) in its report, "Fundamental Values of Academic Integrity," proposes a definition of institutional academic integrity that encompasses honesty, trust, fairness, respect, and responsibility:

"An academic community of integrity advances the quest for truth and knowledge by requiring intellectual and personal honesty in learning, teaching, research, and service (p. 5); fosters a climate of mutual trust, encourages the free exchange of ideas, and enables all to reach their highest potential (p. 6); establishes clear standards, practices and procedures and expects fairness in the interactions of students, faculty and administrators (p. 7); recognizes the participatory nature of the learning process and honors and respects a wide range of opinions and ideas (p. 8); and, upholds personal accountability and depends upon action in the face of wrongdoing" (p. 9).

A useful approach for addressing academic integrity was outlined by Hinman (2002) and applied to online education by Olt (2002). This three-part effort includes the policing, prevention, and virtue approaches. The goal of the policing approach is to catch and punish students engaging in academic dishonesty. The prevention approach's goal is to limit opportunities for student cheating as well as the pressure to cheat. The goal of the virtue approach is to encourage students to strive for academic excellence and integrity.

#### **UTTC Research Study**

Using the Center for Academic Integrity's definition of academic integrity and Hinman's (2002) three-part approach as a framework, this study presents the results of an examination of the beliefs of faculty members regarding academic integrity in online courses, and ways in which faculty members have successfully developed communities of integrity in online courses. The questions were approached through two research sub-projects, one quantitative on faculty beliefs and one qualitative on ways to develop communities of integrity.

The research questions were as follows: (a) How do faculty members perceive the differences between the likelihood of and opportunities for students to cheat in online courses as compared to on-campus courses?; (b) How do faculty members perceive the ease with which the policing, prevention, and virtue approaches can be implemented in online courses as compared to on-campus courses?; and (c) What are ways in which faculty members are successfully creating communities of integrity in online courses?

#### **Faculty Member Beliefs**

#### Methodology

Invitations to participate in a survey were sent to 256 faculty members who had taught or were teaching online via UTTC. Seventy-six surveys, or about 30%, were completed. The UTTC faculty survey investigated faculty members' beliefs about the behaviors of undergraduate and graduate students in oncampus and online courses. The questionnaire asked the UTTC faculty members about the likelihood of UT System students participating in academic dishonesty. Faculty members were also asked to compare on-campus and online courses in relation to: (a) the likelihood that students will cheat; (b) the ease with which students can cheat; and (c) the ability to police cheating, prevent cheating, and create communities in which students do not want to cheat (the virtue approach).

#### Results

Overall, 83% of respondents had experience teaching on-campus undergraduate courses and approximately three-quarters had experience teaching graduate courses on-campus. Participants' experience teaching on-campus is detailed in Figure 1. A majority of the faculty members surveyed were very experienced on-campus educators; about three-quarters reported more than 10 semesters of experience teaching undergraduates and 58% had more than 10 semesters of experience teaching graduate students.

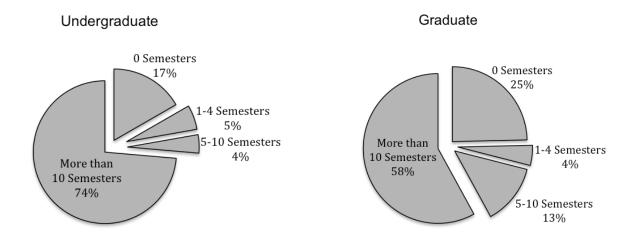


Figure 1. On-campus Teaching Experience of UTTC Faculty Survey Participants

It is important to note that, as all the survey participants taught via UTTC, all had online teaching experience. Specifically, 69% of the faculty members surveyed had online teaching experience with

undergraduate courses. A smaller but significant number—58%—of faculty members had the same experience with graduate courses. Participants' experience with online teaching is detailed in Figure 2.

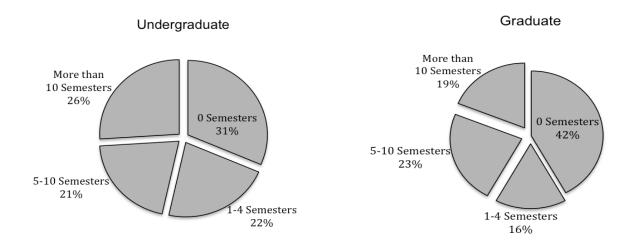


Figure 2. Online Teaching Experience of UTTC Faculty Survey Participants

#### Outcomes

Whether the survey question was about the likelihood of students cheating, the opportunities students have to cheat, policing cheating, preventing cheating, or creating communities averse to cheating, most respondents did not believe that there was a difference between on-campus and online courses. Additionally, for every question, the participants who did not believe that the environments were the same were most likely to believe that an on-campus environment is superior to an online environment.

Beliefs regarding the frequency with which students in the UT System engage in academic dishonesty. The majority of the faculty members surveyed believed that students within the UT System—studying by any medium—engage in academic dishonesty at least occasionally. More than 60% of the faculty members surveyed agreed that graduate students cheat occasionally. On the other hand, a majority of the faculty members did not agree about their perceptions of the frequency of cheating among undergraduate students.

UTTC faculty members were significantly more likely to believe that undergraduate students participate in academic dishonesty than they were to believe the same about graduate students. While 43% of the faculty members believed that undergraduate students cheat often or very often, only 6% believed the same about graduate students. Responses to the question, "How frequently do you believe students in the UT System engage in academic dishonesty?" are detailed in Figure 3.

Beliefs regarding opportunities students have to engage in academic dishonesty. Approximately one-half of the faculty members surveyed believed that opportunities for undergraduate students to cheat are equivalent in on-campus and online courses, and those beliefs varied little between those about undergraduate as opposed to graduate students. Nevertheless, many faculty members did not agree; about one-third believed that, for undergraduate students, an online course is most conducive to cheating. Specifics regarding beliefs about opportunities to cheat in both on-campus and online courses are shown in Figure 4.

<u>Beliefs regarding the likelihood that students will engage in academic dishonesty.</u> When asked about the possibility that students will engage in academic dishonesty, 57% and 64% of faculty members saw no difference between the delivery methods, when teaching undergraduate and graduate students respectively. Of the faculty members who did not consider the two methods to be equivalent, most believed online classes to be inferior. This is especially true of faculty perceptions of undergraduate

students; about one-quarter of the faculty members believed that undergraduates are most likely to cheat in an online course. Information on faculty member beliefs regarding the likelihood that students will cheat is shown in Figure 5.

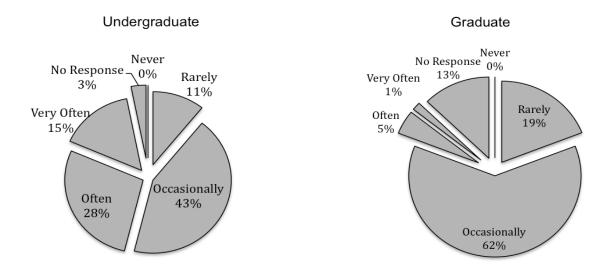


Figure 3. Faculty Member Beliefs Regarding the Frequency with which Students in the UT System Engage in Academic Dishonesty

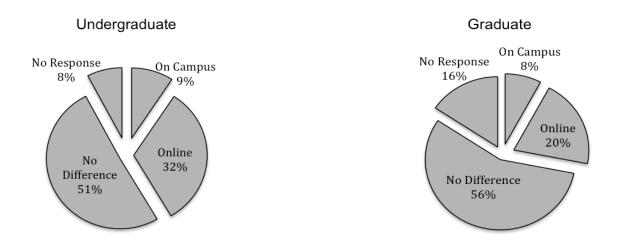


Figure 4. Faculty Member Beliefs Regarding the Opportunities Students Have to Engage in Academic Dishonesty in Online and On-Campus Courses

Beliefs regarding the ease with which academic dishonesty can be identified (the policing approach). Almost one-half of survey participants believed that the ability to catch cheaters is the same in either an on-campus or online course. Other faculty members—34% for undergraduate and 24% for graduate courses—thought an on-campus environment is a better venue in which to identify cheating. A look at beliefs regarding the effectiveness of the policing approach in on-campus and online courses is shown in Figure 6.

# No Response On Campus 6% 11% Online 26% Difference 57%

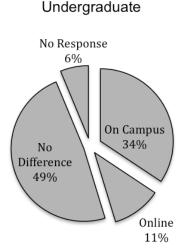
## No Response On Campus 13% 10% Online 13%

Graduate

No Difference

64%

Figure 5. Faculty Member Beliefs Regarding the Likelihood Students will Engage in Academic Dishonesty in Online and On-Campus Courses



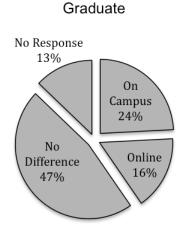


Figure 6. Faculty Member Beliefs Regarding the Ease with which Academic Dishonesty can be Indentified in Online and On-Campus Courses

<u>Beliefs regarding the ease with which academic dishonesty can be prevented (the prevention approach).</u> Survey results regarding prevention of cheating are in Figure 7. Approximately one-half of the faculty members surveyed believed that it is as easy to prevent cheating in an online course as it is to prevent it on-campus. Nevertheless, approximately one-third thought it was easier to prevent cheating in an on-campus course.

Beliefs regarding the ease with which a community of integrity can be created (the virtue approach). One-half of the faculty members believed that there is no difference between an on-campus and online course when creating an academic community of integrity in an undergraduate course and slightly more had the same confidence about the delivery methods when teaching graduate courses. Nevertheless, a significant number—37%—felt that an on-campus course is best for creating a community of integrity

with undergraduate students, and 22% percent indicated the same belief about graduate students. A look at beliefs regarding the ability to create communities of integrity in on-campus and online courses is shown in Figure 8.

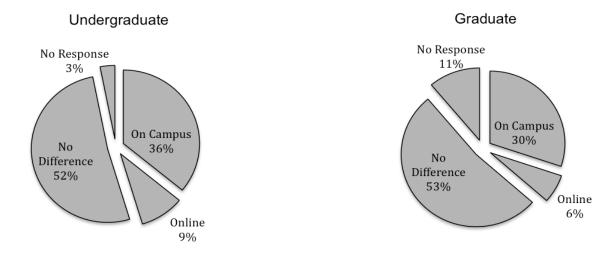


Figure 7. Faculty Member Beliefs Regarding the Ease with which Academic Dishonesty can be Prevented in Online and On-Campus Courses

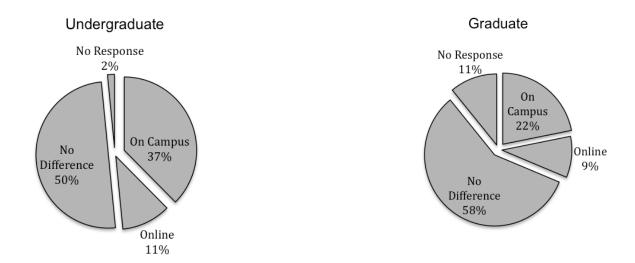


Figure 8. Faculty Member Beliefs Regarding the Ease with which a Community of Integrity can be Created in Online and On-Campus Courses

To summarize the responses to questions about the policing, prevention, and virtue approaches, about one-half of faculty member respondents thought that any of the three approaches are equally likely to be effective in either type of course, however a significant number of faculty members had concerns about online courses. This is especially true when teaching undergraduate students; about one-third of the faculty members believed that an on-campus course is more effective in implementing any of the three approaches with undergraduate students.

#### **Developing Communities of Integrity**

#### Methodology

Using the Center for Academic Integrity's definition of a community of integrity, a one-question survey was developed in which participants were asked to share an idea for creating a community of integrity in an online course. This anonymous survey was announced on listservs frequented by faculty and staff members involved in online education. Fifty-nine individuals responded. The research team reviewed the responses from the online survey and grouped like ideas together, forming six categories. Two focus groups were held in which each group of participants was asked to review half of the categories and rank the ideas presented. The focus group participants consisted of faculty and staff members involved in online education. They represented eight academic campuses and four medical branches within the UT System.

#### Results

Input from the focus group discussions regarding the presented ideas were analyzed for commonalities. Three distinct themes emerged from the discussions into which the ideas were grouped, namely design, communication, and collaboration. The rankings of the presented ideas were tallied and prioritized. The twelve ideas with the highest ranking were selected, with each of the three established themes being represented.

#### Outcomes

Below is a summary of the focus group findings for each of the three categories, along with the twelve corresponding ideas generated.

<u>Course, assignment, and assessment design.</u> Focus group participants believed that some assignment and test designs lend themselves to cheating more than others. In addition, a faculty member can design tasks that challenge and interest students, require team collaboration, and provide opportunities for students to contribute on a personal level, all of which facilitate student honesty. Participants also believed that a clear understanding of the grading criteria, in the form of a rubric, helps students comprehend the level and type of participation needed in order to succeed. In other words, taking away the guesswork allows students to focus more on learning and less on the mystery of achieving the desired grade. Following are the top responses within the area of design:

- 1. Incorporate critical thinking discussions into online classes, allowing students to contribute their experiences, successes, and problems pertaining to the topic being discussed.
- 2. Have assignments and activities in which appropriate sharing and collaboration is essential to successful completion.
- 3. Foster a community of integrity by choosing authentic learning tasks that require group cohesiveness and effort. This includes posing authentic questions for students; creating assignments that are distinctive, individual, and non-duplicative, or about what individual students self-identify as their personal learning needs; and, helping students turn their attention to exploring an issue, rather than focusing on grades.
- 4. Provide rubrics, or detailed grading criteria, for all assignments at the beginning of the course so that learners can know and understand how they will be scored.

<u>Communications with students</u>. Focus group participants identified the most ideas used to create a community of academic integrity in the area of communication, making it clear that communication is an integral component in successfully creating the community. The focus group participants viewed successful communication to be the responsibility of the faculty member, since most of the responses within this category focus on information provided by the faculty member to the students, rather than two-way communication. The top ideas within the communication category are:

- 5. Clearly state your expectations for the students as well as what they should expect from you.
- 6. Include a statement in the syllabus encouraging honest work, so that students can contribute their own unique perspective to the class. This allows students to understand that differing points of view enhance the learning experience for everyone.
- 7. Develop a class honor code and ask students to commit to it.

- 8. Provide a definition of academic integrity and cheating. Clearly explain what is considered dishonest and unacceptable behavior.
- 9. Create an awareness of campus policies that include stating the academic honesty policy within the online learning environment and discussing it in the early stages of the course. It is also important to provide a link to the campus website on academic integrity.
- 10. Create an environment where opinions are valued and grading is unbiased. This welcomes all ideas, and encourages participation by dispelling fears of giving an incorrect answer.

<u>Collaboration between students</u>. While the role of collaboration was believed to be significant in creating a community of academic integrity, focus group participants found it to be the most difficult on which to elaborate. Of the twelve ideas presented for all three categories, only two fit into the category of collaboration. Participants viewed successful collaboration as involving students as stakeholders in the process of creating the desired community, as well as valuing respect for others. The top ideas within the collaboration category are:

- 11. At the start of the course, ask students for their input on how to create a community of integrity. This establishes the students as stakeholders in the community through the process of its formation.
- 12. Require students to acknowledge and further each other's work. By respecting the contributions of others and actively working to help others learn, students develop a sense of team and ownership.

#### **Discussion**

The results of this study indicate that faculty members do not see significant differences in online and oncampus courses when it comes to academic integrity. Additionally, the researchers identified best practices for creating communities of integrity in online courses, and found that they can be developed in online classes through means very similar to those for on-campus courses.

Faculty Member Beliefs Regarding Academic Integrity within the UT System

The majority of the faculty members surveyed believed that students within the UT System engage in academic dishonesty at least occasionally. Nearly half believed that undergraduate students cheat either often or very often. As can be seen in Figure 9, UTTC faculty members were significantly more likely to believe that undergraduate students participate in academic dishonesty than they were to believe the same about graduate students.

Hard, Conway and Moran found that faculty members' beliefs about the frequency of student academic misconduct, "were significantly closer to student self-reports of academic misconduct" than were estimated by students (Hard et al., p. 1074). If UTTC faculty members are equally insightful regarding their students, cheating by undergraduates is a considerable problem in both online and on-campus courses, and extra efforts should be made to address undergraduate cheating within the UT System.

Faculty Member Perceptions Regarding Academic Dishonesty in Online and On-Campus Courses

Regardless of whether they were asked to consider the opportunities for or the likelihood of cheating, or the ability to successfully implement one of the three suggested approaches to developing a community of integrity (policing, prevention, or virtue) there was remarkable consistency in the faculty member responses.

The most likely response by a faculty member was to express a belief that there is no difference between online and on-campus courses when it comes to academic integrity. At least 50% of faculty members expressed that belief for each of the five research areas (likelihood of cheating, opportunities to cheat, the policing approach, the prevention approach, and the virtue approach).

Of the faculty members who did not believe online and on-campus learning environments are equally effective for creating communities of integrity, most preferred on-campus courses, especially for undergraduate students. This belief was consistent across all issues investigated. Faculty members were particularly likely to prefer an on-campus course when implementing the virtue approach.

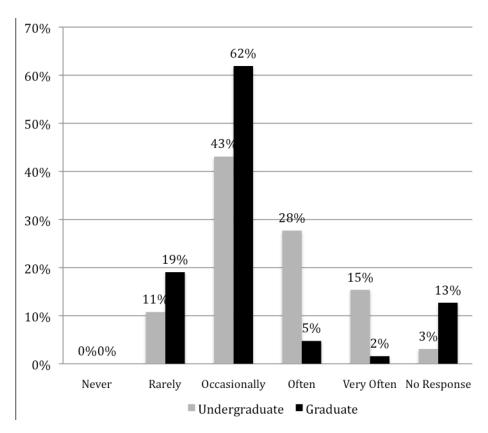


Figure 9. Comparison of Faculty Member Beliefs Regarding the Frequency with which Undergraduate and Graduate Students Engage in Academic Dishonesty within the UT System

The number of faculty members who prefer an online course is small, but not insignificant. Further, in each of the five research areas, at least 60% of faculty members believe that an online course is as effective or more effective than an on-campus course when encouraging academic integrity.

As this study only encompassed online educators, it is difficult to know if the opinions of the faculty members surveyed are reflective of the entire UT System. There is some evidence that there are correlations between experience with teaching online and beliefs about cheating in online courses (Hard et al., 2006; Kelley & Bonner, 2005). Additionally, it is important to note that all the faculty members surveyed taught via the UT TeleCampus and have shared experiences such as faculty training, course quality standards, instructional technologies, and student and faculty member supports. Therefore, the faculty members surveyed were a relatively homogeneous group.

Researchers have detected a predictable cycle regarding faculty members' perceptions of cheating and action taken by them. Hard, Conway, and Moran (2006) found that faculty members who believe that cheating is isolated are less likely to engage in prevention or policing efforts, while Kelley and Bonner (2005) found that faculty members who perceive cheating to be pervasive are more likely to view academic dishonesty to be a serious problem in their class. If faculty member beliefs drive similar actions within the UT System, it would indicate a strong interest in and motivation to encourage behaviors of integrity by students, especially in undergraduate courses where the perceived level of academic dishonesty is highest.

The results of this study suggest that levels and types of academic dishonesty are similar in an online environment to that found on-campus, and that successful efforts to encourage integrity are similar regardless of whether the course is online or on-campus. This may indicate that online classrooms should be integrated into the campus academic integrity program, rather than separate programs being created specifically for online courses.

Additionally, as campuses create policies and procedures to encourage academic integrity in online classes, the effectiveness of those efforts may be undermined by differing opinions regarding cheating in online classes between faculty members who have taught online and faculty members and administrators who do not have experience with online teaching. This study found that faculty members engaged in teaching online believed that academic dishonesty is no different in online and on campus courses. Other researchers have found that faculty members who do not teach online believe academic dishonesty is more likely to occur in an online course (Hard et al., 2006; Kelley & Bonner, 2005).

There is evidence of awareness that faculty members teaching online may have opinions about online classrooms that differ from their peers and others. When discussing the new student authentication requirements for online courses, a representative of the Department of Education noted that while "many faculty members are confident that they know their online students as well as or better than students in their face-to-face classes," it is important to, "understand that the congressional delegations are less clear about what happens in distance education courses and they are concerned the online environment provides greater opportunity for fraudulent behavior" (Epper, et al., 2008). This discrepancy in opinions is also reflected in studies conducted within the UT system that found that administrators are, "more concerned about controlling academic honesty in Web-based courses than in the traditional classroom" (Olsen & Hale, 2007).

The most effective way to determine which of the prevailing opinions regarding cheating in online courses within the UT System is correct would be to determine the cheating behaviors of students in online classes as compared to on-campus. The researchers recommend a study aimed at student perceptions of cheating, in an attempt to verify the differences, if any, in the degree of self-reported cheating between online and on-campus courses.

Strategies for Creating Communities of Integrity in Online Courses

There is evidence that the design of an online course can contribute to any of the three approaches—policing, prevention, and virtue—and facilitate academic honesty (Olt, 2002). Studies also show that students want faculty members to communicate expectations, focus on learning rather than grades, and encourage the development of good character in their classrooms (McCabe & Pavela, 2004). Additionally, research has shown that a student who perceives that they have a positive relationship with their instructor is not only more likely to learn, they are also less likely to cheat (Stearns, 2001).

The findings of the UTTC study mirror conclusions from other researchers (Olt, 2002; McCabe & Pavela, 2004). The three main areas of design, communication, and collaboration have been shown in previous studies to be influential in creating communities of integrity in the classroom. These same areas were identified as the driving forces behind the classroom successes of the UTTC faculty members, as they discussed and ranked the ideas gleaned from the listserv survey when developing the list of twelve strategies for creating a community of integrity.

The strategies generated in this study for creating an environment of academic integrity within an online class are not unique to an online environment but rather are best practices that can be applied to both online and on-campus environments. The way in which assignments and assessments are designed, students participate in class and interact with one another, and honest and open communication is encouraged are effective for both online and on-campus classes. The researchers believe that the methods and strategies developed for creating an environment of academic integrity are useful for either venue.

The best practices generated in this study relate to the area of virtue and creating an environment where students will not want to teach. The researchers recommend additional research be conducted to generate similar best practice lists for the areas of policing and prevention.

#### Conclusion

The results of this study can be expressed with the old saying: "as much as things change, they stay the same." The researchers found that online educators within the UT System do not see significant differences between online and on-campus courses when it comes to academic dishonesty or efforts to encourage academic integrity.

Additionally, the development of a list of best practices to encourage communities of integrity in online courses is a useful tool for faculty members who are striving to develop learning environments based on honesty, trust, fairness, respect, and responsibility. Even though the recommended ways in which to implement the twelve ideas were intended to be unique to the online classroom, they are equally useful in an on-campus course.

#### References

- Boehner, J. A. (2005, February 8). Part H Program Integrity, Section 495 Accreditation. In *H.R. 609 College Access and Opportunity Act of 2006*. Retrieved December 5, 2006, from The Library of Congress Web site: <a href="http://thomas.loc.gov/cgi-bin/bdquery/z?d109:h.r.00609">http://thomas.loc.gov/cgi-bin/bdquery/z?d109:h.r.00609</a>:
- Brown, B. S., & Emmett, D. (2001, December). Explaining variations in the level of academic dishonesty in studies of college students: Some new evidence. *College Student Journal*, *35*(4), 529-539.
- Eplion, D. M., & Keefe, T. J. (2007, April). Practical tips for preventing cheating on online exams. *Faculty Focus*. Retrieved April 3, 2007, from <a href="http://www.magnapubs.com//\_ff/\_4//-1.html">http://www.magnapubs.com//\_ff/\_4//-1.html</a>.
- Epper, R., Gilcher, K., McNabb, L., & Lokken, F. (2008, October 1). What's around the corner? Clarifying student authentication in the Higher Education Opportunity Act of 2008. Webcast presented by WCET, <a href="http://www.wcet.info/2.0/index.php?q=node/973">http://www.wcet.info/2.0/index.php?q=node/973</a>.
- Gallant, T. B. (2008). Moral panic: The contemporary context of academic integrity. *ASHE Higher Education Report*, 33(5), 1-12.
- Grijalva, T. C., Nowell, C., & Kerkvliet, J. (2006, March). Academic honesty and online courses. *College Student Journal*, 40(1), 180-185.
- Hard, S. F., Conway, J. M., & Moran, A. C. (2006, November/December). Faculty and college student beliefs about the frequency of student academic misconduct. *Journal of Higher Education*, 77(6), 1058-1080.
- Hinman, L. M. (2002, March). Academic integrity and the World Wide Web. *Computers and Society,* 32(1), 33-43.
- Hinman, L. M. (2005). Virtual virtues: Reflections on academic integrity in the age of the Internet. In R. Cavalier (Ed.), *The impact of the Internet on our moral lives* (chapter 3). Albany, NY: SUNY Press.
- Kelley, K. B., & Bonner, K. (2005, March). Digital text, distance education and academic dishonesty: Faculty and administrator perceptions and responses. *Journal of Asynchronous Learning Networks*, 9(1), 43-52.
- Kennedy, K., Nowak, S., Raghuraman, R., Thomas, J., & Davis, S. F. (2000, June). Academic dishonesty and distance learning: Student and faculty views. *College Student Journal*, *34*(2), 309-315.
- Lee, F. R. (2003, October 4). Are more people cheating?; Despite ample accounts of dishonesty, a moral decline is hard to calculate. *The New York Times*. Retrieved July 19, 2006, from <a href="http://select.nytimes.com/search/restricted/article?res=F20F1FF3E580C778CDDA90994">http://select.nytimes.com/search/restricted/article?res=F20F1FF73E580C778CDDA90994</a>
- McCabe, D. (2000, November). *An overview of research on academic integrity*. Lecture presented at Tenth Annual Meeting Center for Academic Integrity, Colorado Springs, CO.
- McCabe, D. (2005, June). Levels of cheating and plagiarism remain high. Honor codes and modified codes are shown to be effective in reducing academic misconduct. In *CAI research*. Retrieved May 17, 2006, from The Center for Academic Integrity Web site: <a href="http://www.academicintegrity.org/cai\_research.asp">http://www.academicintegrity.org/cai\_research.asp</a>
- McCabe, D. L., & Pavela, G. (2004, May/June). Ten [updated] principles of academic integrity. *Change*, 36(3), 10-16.

- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (2001a). Cheating in academic institutions: A decade of research. *Ethics & Behavior*, 11(3), 219-232.
- McCabe, D. L., Treviño, L. K., & Butterfield, K. D. (2001b, January/February). Dishonesty in academic environments. *The Journal of Higher Education, 72*(1), 29-46.
- Olt, M. R. (2002, Fall). Ethics and distance education: Strategies for minimizing academic dishonesty in online assessment. *Online Journal of Distance Learning Administration, V*(III). Retrieved November 10, 2006, from State University of West Georgia Web site: <a href="http://www.westga.edu/~distance/ojdla/fall53/olt53.html">http://www.westga.edu/~distance/ojdla/fall53/olt53.html</a>
- Olson, J. N., & Hale, D. F. (2007, Winter). Administrators' attitudes toward web-based instruction across the UT System. *Online Journal of Distance Learning Administration, X*(IV). Retrieved March 1, 2009, from http://www.westga.edu/~distance/ojdla/winter104/olson104.html
- Stearns, S. A. (2001). The student-instructor relationship's effect on academic integrity. *Ethics & Behavior*, 11(3), 275-285.
- Sterngold, A. (2004, May/June). Confronting plagiarism: How conventional teaching invites cybercheating. *Change*, *36*(3), 16-21.
- The Center for Academic Integrity. (1999). *The fundamental values of academic integrity* [Pamphlet]. Durham, North Carolina: The Center for Academic Integrity.
- UT TeleCampus overview. (2008). Annual report 2008. Retrieved March 1, 2009, from UT System TeleCampus Web site: http://telecampus.utsystem.edu/aboututtc/dataandinfo/annualreport2008.aspxl
- Varvel, V. E., Jr. (2005). Honesty in online education. In Pointers & clickers, ION's technology tip of the month. Retrieved November 10, 2006, from Illinois Online Network Web site: <a href="http://www.ion.uillinois.edu/resources/pointersclickers/2005\_01/index.asp">http://www.ion.uillinois.edu/resources/pointersclickers/2005\_01/index.asp</a>

Manuscript received 24 Mar 2009; revision received 15 May 2009.



This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 2.5 License