

Student Cheating And Alternative Web-Based Assessment

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ABSTRACT

As distance education continues to expand within the United States so does the amount of faculty concern in regard to student cheating. The purpose of this paper was to explore the concept of eCheating in web-based course environments and review the need for and the types of alternative assessments found in these environments. This paper will also include potential proactive measures that professors may employ to be better prepared for instances of eCheating. Furthermore, assessment measures and distance learning theories will be analyzed to determine successful electronic assessments and instructional design components required for effective web-based courses.

Keywords: Web-based assessment, student cheating, e-cheating, alternative assessment in online courses

INTRODUCTION

Academic dishonesty, also known as echeating in web-based course environments, has continued to be a major issue within higher education institutions. The history of academic cheating can be traced back to the late 1800's and was not considered dishonorable among students (McCabe & Trevino, 1996). Acceptance of this type of behavior has become a major concern for faculty in preparing course materials and assessing student learning. Moreover, increasing these concerns has been the addition of technologies such as the Internet that allow accessibility to electronic documents as well as the expansion of distance education offerings, specifically web-based courses. The debate as to whether or not these technologies increase cheating continues to be a controversial topic and it has even been reported by Underwood (2006) that technologies do create additional venues for cheating to arise. But there is currently no conclusive evidence to support the assumption that because of these new technologies cheating has increased.

Finn and Frone (2004) report that studies citing cases of cheating have utilized self-reported measures to determine how often students cheat on assessments. They also report that traces of cheating may be found as early as elementary school and can continue through undergraduate programs.

In a research study conducted by McCabe, Trevino, and Butterfield (2001) most graduating, college bound, high schools seniors either had "experience in cheating or at least knowledge of cheating by peers" (p.230). This suggests that while cheating is predominantly noted within higher education, student patterns and histories of cheating might begin many years before enrolling in college. Furthermore, cultural norms from previous educational experiences might allow students to believe that cheating is not morally or ethically wrong leading one to postulate that ethical assessments, as well as educational assessments, should play an essential role in the delivery of web-based courses and programs.

Research efforts have been conducted to determine predictors of cheating, however the impact of each predictor varies according to the research model. While it is hard to determine the most common motives for cheating, Finn & Frone (2004) have identified pressure to raise performance scores as well as perceived external pressure as common motives for student cheating. Other factors identified include academic "self-efficacy and identification with school" as predictors of cheating (p.116). Kasprzak and Nixon (2004) propose competitive work environments, time, and the need for specialized degrees to meet United States' residency requirements as additional incentives for cheating (p.88-89).

Cheating through the use of electronic resources, eCheating, is the most recent iteration of academic dishonesty and incorporates methods of cheating that have evolved since the emergence of educational technologies within higher education. This includes the ability for students to easily obtain prewritten papers as well as plagiarize by cutting and pasting text from electronic documents into individual papers without giving proper credit to the original author/s. Additionally, Underwood (2006) proposes that because of easy access, mobile devices have had a significant impact on cheating. As technology continues to advance, so do the ways in which individuals can utilize multiple technologies to facilitate academic dishonesty.

There seems to be a misfit between the nature of academic dishonesty and the nature of higher education. Educators continually strive to identify predictors that will proactively allow them to recognize and/or gain awareness of cheating thus minimizing the amount of academic dishonesty within the classroom both physically and virtually. As educators continue to advance their proficiency in web-based course design, the need for alternative assessments in these environments is building. Though Dawkins (2004, p. 5) found 41% of students self-reported cheated on classroom examinations, there is no substantial evidence that cheating is more likely to occur in a web-based environment as opposed to a traditional setting. But the perception of the lack of supervision and the fear of lack of quality control and assessment measures by professors continue to present challenges to the development of new assessment methods as conclusive research pertaining to cheating in web-based environments is currently very limited (Kasprzak & Nixon, 2004).

PEDAGOGICAL AND THEORETICAL CONSIDERATIONS

Social Learning Theory

While social learning theory is considered a “transition between behaviorist learning and cognitive learning” it does present a sound theory base for understanding academic cheating (Social Learning Theory, n.d.). For example, one principle of this theory that lends itself to student cheating includes “learning by observing.” When “learning by observing” is seen as acceptable classroom behavior, even students who have strong ethical backgrounds might be more likely to cheat. Further, students can learn this behavior from merely observing other students as those who learn from others are likely to transition through components of both behavioral and cognitive learning principles as well.

Social Control Theory

Because social control theory is built on dishonesty and exploiting the process of socialization it can also have implications for students within an academic environment (Boeri, Sterk, & Elifson, 2006). When educating students on proper conduct and ethical behaviors, social control theorist propose that students will be less likely to engage in activities that have a negative connotation or view as improper or unethical. To reduce the likelihood of academic dishonesty, this theorist also calls for the need of constant communication of proper academic behaviors, attention to honor codes and plagiarism documents, student development, and ethical trainings in the student’s academic life cycle.

Instructional Considerations

Differences within instructional delivery are a major pedagogical consideration relative to assessment. Traditionally delivered face-to-face courses better lend themselves to lecture based, passive and authoritarian styles of teaching while web-based course delivery tends to be self-regulated, student-centered and interactive. The need for student interaction and user control is essential in engaging online learners within the content as the distance barrier can lead to isolation and feelings of boredom within web-based courses. Instructional technologists have devoted many hours of research into determining the best models of delivery for online students and concluded that models of online delivery must be different than those used within the traditional classroom (Bonk & Graham, 2006). It is implied that if instructional delivery in a web-based course is different than that of a traditional course, assessments should also be different. With a significant increase in distance education over the last decade higher education institutions have been called to “examine characteristics of distance students and the factors leading to their success” (Eastmond, 2000, p. 345). Interest in the concept of new forms of assessment has continued to

increase as distance education offerings have expanded providing educators with new tools to assess student learning. These tools might also have an impact on the ability, or lack of, cheating in a web-based course. New models of web-based assessment may not only provide better means of gauging student learning, but also may decrease the potential for eCheating.

While preferences in instructional delivery will vary from professor to professor, some elements of delivery are considered standard for effective web-based courses such as self-paced learning and interactive components. Deubel (2003) proposes that the quality of the course will also depend on the professor's "attitude, motivation, and commitment toward distance education" (p. 2). It takes a dedicated professor who is confident in the purpose and mission of distance education to deliver quality web-based courses. Most universities have a technology center dedicated to assisting faculty in developing, understanding, and building quality web-based courses. Some offer instructional design tips for online courses that include elements such as course navigability and organization, aesthetic design, universal accessibility and multiple assessment strategies (Duzer, 2004). Similarly, student attitudes also impact student learning within web-based courses. Research conducted in 2000 indicated that students who had positive attitudes towards web-based learning, were able to adapt and excel within the web-based environment (Eastmond, 2000).

As familiarity with web-based assessment increases, it is evident that professors are shifting their view of tests from "only a measure of learning to also serve as part of the learning process" (Deubel, 2003, p. 8). Additionally, Christe (2003) has identified the need for carefully crafted essay questions, monitoring, and including honor statements to help minimize the ability for cheating within a web-based course (p. 57). Common assessment techniques within online education will be a key ingredient in future research to help identify student learning, achievement, and outcomes. It is also crucial that instructional designers, as well as professors, understand the importance of publicizing results of utilizing web-based assessments for the betterment of the academic community. Gaytan and McEwen (2007) found "meaningful feedback" to be highly effective within a web-based course as well as "projects, portfolios, self-assessments, peer evaluations, and weekly assignments" (p.117). Each of these assessment strategies requires students to be actively engaged within the course with the intent that increasing engagement will increase student achievement (Solvie & Kloek, 2007).

Ethical Considerations

It is important to remember that while academics is essential to the survival of any university, students must grow both professionally (in the classroom) and personally (outside the classroom). In many cases, this growth is facilitated at the university level by the division of Student Affairs. Students who reside on campus have many opportunities to be advised on proper procedures and experience the consequences of those who act unethically. But what happens to students at a distance who are unable to access the same resources as students who live on campus? Are they truly lacking in acceptable ethical levels or just lack the knowledge to differentiate appropriate from inappropriate behavior? Hinman (2002) suggests three approaches to include in web-based courses to reduce the probability of cheating which are the virtues approach, the prevention approach, and the police approach (p. 2). Each of these approaches is further reviewed and categorized by Olt (2002) who recommends four strategies to facilitate the implementation of Hinman's approaches within the context of web-based learning. Those strategies include a) the acknowledgement of the professor of the advantages and disadvantages of web-based assessments and then develop ways to build on the advantages and overcome the disadvantages, b) devote the time necessary to develop meaningful and effective assessments, c) require original assignments, and d) develop a written policy regarding academic integrity and provide it to all students.

Ethical gaming has also been utilized within the web-based learning environment. In a gaming environment you would provide students with the ability to engage in ethical decision making processes in which "each student must make individual choices which can then alter the experience of the particular game" (Consalvo, 2005, p. 8). This type of environment provides students a "safe" space to learn about and develop ethical decision making skills. In addition, students will be able to assess the implications associated with each of the decisions made which not only increases their awareness of ethical decisions, but also how they impact future outcomes. Similarly, there are many software applications available that utilize scenario based ethical training modules. For example, EthicsGame (www.ethicsgame.com/Exec/GGEG/Index.html), is a website that develops scenario based ethics training for

institutions to be able to incorporate ethical excellence into their web-based programs. Their programs help students identify how they would respond to ethical issues as well as how to listen and work with others who have different solutions. Such ethical trainings and games could help identify why a student might not term an action they take as “cheating” thus allowing the professor an opportunity to incorporate an appropriate course intervention to facilitate the ethical development of that student. It is the responsibility of the educator to develop well-rounded students regardless of whether or not such services are requirements of the job (Gert, 2004).

FINDINGS

Cheating in Academia

Technology appears to increase the availability of cheating by providing additional venues such as paper mills for student to engage in academically dishonest behaviors. Educators within web-based courses perceive distance to be a challenge and an increased risk in discouraging academically dishonest behavior in the classroom (Kasprzak & Nixon, 2004). While perceptions of cheating in web-based courses have increased over the last decade it seems that student cheating as a whole has seen an increase in the academic environment (Muckenfuss, 2007). Until today’s student body can be convinced that cheating is unethical and improper it will continue to challenge educators in both web-based and traditional courses (Campbell, Swift, Denton, 2000, p.738). By continuing to educate students on proper practices and communicating such practices on a more frequent basis educators can make a stand against academic dishonestly.

Alternative E-Assessments

With the growth in instructional understanding and development in web-based learning environments, educators are finding more accurate ways to assess student learning. Alternative assessments have been found to be as beneficial as traditional means of student assessment. Phillips and Lowe (2003) found that the nature of intended learning not assessment tasks could cause impracticality of online assessment (p. 427). Traditional testing generally assesses student learning through standardized testing in a controlled physical environment (Rovai, 2000, p. 142) requiring educators who firmly believe in this assessment to utilize student testing centers, proctors or even detectors in a web-based courses. Additionally online discussions and collaborations (Rovai, 2000) as well as “open book tests with time limitations, research topics selected by teachers, and progressive work products” (Kasprzak & Nixon, 2004) have all been utilized within web-based courses. Other alternative assessments include asynchronous discussion, system logs, e-presentations such as PowerPoint and Keynote, web pages, e-quizzes, group projects, e-portfolios, virtual simulations, and e-profiles of student work.

Though assisting with many student assessment issues, alternative assessment can also pose challenges for implementation. Many alternative assessments are costly, time consuming, and require pedagogical and technological expertise. Furthermore, there is a need for continuous revisions and improvements to alternative assessments to prevent students from sharing assessment information after the assessment has been utilized by an educator for an extended period of time.

IMPLICATIONS FOR FUTURE RESEARCH

Future research should be initiated to investigate the amount of cheating in traditional face-to-face courses as compared to the amount of cheating in web-based courses. This research could provide professors with empirical evidence to measure the impact (if any) of eCheating and allow instructional adjustments as warranted. Research measuring the effectiveness of ethical and/or academic integrity training in web-based environments would also provide professorial insight when structuring web-based course curriculum. Further pre and post test research should be conducted to identify behaviors and learning styles of students within web-based learning environments to determine which predictors have significant impact on cheating within web-based courses. Finally, qualitative research with professors should be conducted to determine best practices, challenges and strategies to address issues connected to eCheating within web-based environments.

CONCLUSION

Cheating will continue to remain a major issue within educational settings. While there is no easy solution that will solve academic dishonesty problems completely, educators and researchers have started to develop alternative assessments and instructional strategies that will diminish student cheating.

Student development within web-based courses and programs continues to be a concern. Many students enrolled in web-based courses are isolated from traditional services on campuses to assist them in developing physically, socially, intellectually, and spiritually. If these needs are not met, students will struggle not only academically but developmentally as well. The need for ethical training is critical to allow students to develop an understanding of social norms within the academic setting as well as to discourage them from engaging in practices associated with academic dishonesty. As educational technologies continue to advance and develop, understanding and utilizing strategies which combat student cheating will be vital to the perception of online assessment in web-based courses.

Alternative assessments should continue to be utilized and revised as web-based professors assess student learning. By incorporating additional assessment strategies such as online collaboration and student work projects educators will be better able to assess student learning and play a role in decreasing the amount of cheating that can occur. Reeves (2000) suggests incorporating “cognitive, portfolio, and presentation” based assessments into web-based courses as these means are “more likely to reveal the complexities of the outcomes of student-centered online learning environments” (p. 109).

Alternative assessment methods also provide professors with multiple opportunities to develop productive professional relationships with students, learn more about student’s academic strengths and weaknesses, and develop a deeper connection with each student. By incorporating alternative assessment into web-based courses professors will gain additional insight to the academic capabilities of students thus making it easier to identify various forms of academic dishonesty.

AUTHOR INFORMATION

Jennifer Styron is a Research Specialist in the Center for Research, Evaluation, Assessment, and Training Services and a doctoral student in the Instructional Technology and Design program at The University of Southern Mississippi. Ms. Styron’s research has included current trends and issues impacting the implementation of technology, University trend settings in online education and essential student services required for an online University. Previous experiences with distance education include monitoring and revamping Distance Education programming; coordinating marketing projects for online learning; and guiding administrators and faculty in the design and development of distance education courses.

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