Online Education: Promise and Problems

Theresa Capra

Assistant Professor of Education Mercer County Community College West Windsor, NJ 08550 USA caprat@mccc.edu

Abstract

Online education has experienced dramatic expansion and growth. Institutions of higher learning continue to increase online course offerings in an effort to satisfy student demand. Although this growth is impressive, it does not occur without consequences. Higher education is struggling with an increase of student withdrawal and failure rates in online courses. This article explores this phenomenon with a review of current literature and research on the topic—with particular attention paid to the community college environment. Additionally, recommendations for practitioners, and for future research, are discussed.

Keywords: distance learning, virtual learning, Internet courses, community college students, two year schools, achievement, motivation, withdrawal, and retention.

Online education has permeated our society with dramatic growth that has ushered in a new era of teaching and learning. The University of Phoenix, Online Campus has the highest enrollment of students in the nation with over 224,000 students (National Center for Education Statistics, 2009). Institutions of higher learning are increasing online course offerings in response to student demand: over 90% of higher education institutions offer Internet courses (Callopy & Arnold, 2009). The promise and potential of distance education is laudable; it has the ability to make education more convenient and accessible. Advances in Internet technology have made this possible since learning can occur "asynchronously': anytime, anywhere, anyplace (Sloan, 2010). Even though online learning has experienced exponential growth at all educational levels, expansion has been most astounding at the associate level, which accounts for more than 50% of the total online student population (Allen & Seamen, 2008)

While this promise is impressive, it is not without unintended negative consequences. For many institutions, online education is creating an interesting paradox: growing demand and enrollment coupled by higher withdrawal and failure rates. Institutions of higher learning, particularly community colleges, report that withdrawal rates in online courses have surpassed traditional courses by at least 20% (Aragon & Johnson, 2008). Nishikant (2009) argues that online education is very different from traditional classrooms, which have a tendency to be dominated by the instructor with limited student interaction. As such, online learning has created a new paradigm in respect to the way in which people perceive the teaching and learning process (Nishikant, 2009). As online education continues to advance, issues specific to this instructional modality, such as technologically preparing students while maintaining course rigor and quality, resonate throughout higher education (Instructional Technology Council, 2010).

Problems for Instructors and Students throughout Higher Education

As online learning continues to alter the educational landscape, new issues confront instructors and students. For example, faculty has a tendency to cite an increase in workload as a challenge when teaching an online course (Sammons & Ruth, 2007). In fact, preparing to teach in an online format for the first time generally requires at least ten hours of training outside of a regular teaching load (Instructional Technology Council, 2010). Similarly, students struggle with the enormous level of autonomy and time management required to complete an online course (Brophy, 2010). The perception of social presence and interaction seems to be a concern common to both teachers and students. In contrast to traditional teaching, it has been noted that instructors rarely engage in pedagogical dialogue about online instruction; online professors tend to "teach" and "develop" courses in isolation (Duncan & Barnett, 2009). Similarly, researchers have found that students' overall perceived learning is correlated to the sense of

social presence facilitated in the course (Herbert, 2006; Morris, 2009; Tello, 2007). Thus, students who perceive a lack of social interaction or instructor presence may be more inclined to withdraw (Tello, 2007). In addition to withdrawal and failure, it has been noted that online students have a tendency to earn lower grades on assignments when compared to students in a traditional classroom. Many reasons have been offered to explain this trend, such as submitting assignments late and misreading or neglecting instructions (Rolfe, 2007).

Keeping up with the technological expertise required to thrive in online learning communities is an issue for all members of these communities. The demand for online courses has increased so rapidly that some researchers have highlighted the inability of faculty to keep up with the evolving expertise required to function in this environment (Stumpf, McCrimon, & Davis, 2005). For students, it is a matter of not only being prepared for the autonomy of the online environment, but being ready for the rigor of an online learning environment. Students who are not technologically prepared for an online course can negatively impact the instructor as well as other students. When students who are uncomfortable with the necessary technology and or the learning platform enroll in an online course, they may require assistance beyond what an instructor or help desk can provide (Levy, 2003).

The Promise of Online Learning for Community College Students

Despite the emerging challenges associated with online learning, student demand for this flexible learning environment continues to rise. It has been predicted that this surge will not plateau but instead continue to ascend because of such factors as higher fuel costs, which make learning from home advantageous and practical (Allen & Seamen, 2008). Although the promise of online education is appealing to a variety of students, its potential is especially recognized by community college students who have a tendency to seek flexibility when choosing a schedule. According to a 2009 survey conducted by the Instructional Technology Council, community college students are particularly attracted to online education for its flexible nature. Also, it has been established that a community college student is more likely to take a distance education course than a traditional 4-year student (Horn & Nevill, 2006). This is not surprising since these students tend to be regarded as "nontraditional" in a variety of ways. First, "when compared to students attending 4-year colleges, community college students are more likely to be older, female, Black or Hispanic, and from low-income families" (Horn and Nevill, p. iv). Next, community college students tend to have family and work obligations beyond the classroom that can limit their time to attend face-to-face classes. Finally, 61% percent of community college students are declared financially independent in contrast to 35% percent of 4 year students (Horn & Nevill). When considering these factors, it becomes clear that online learning can provide community college students with increased educational opportunities.

The Problems for Community College Students

Although community college students find online learning desirable, course completion rates are low. Ironically, the very reason that community college students prefer online learning (flexibility to balance outside commitments) may stand as an impediment to their success. In an effort to explain why community college students drop online courses with greater frequency, Aragon and Johnson (2008) surveyed 305 students from a rural community college. They found that most students indicated a lack of time due to personal commitments as a main reason for course withdrawal or failure. Additionally, grade point average (GPA) was noted as a strong predictor for success. Students who successfully completed their online course had an average GPA of 2.47 compared to 1.66 for non-completers (Aragon & Johnson). This finding is particularly relevant to community colleges where open-enrollment policies generally lead to an underprepared population (Dzubak, 2007). Research notes that community college students are more likely to be taking remedial courses than their 4-year counterparts (Horn and Nevill). In light of this, the expansion of online education in community college settings raises issues of how to academically prepare and support students in this autonomous and rigorous learning environment.

Confronting the Problems with Research

Perhaps research can help educators understand and possibly confront the problems preventing the smooth expansion of online education. The impact of Internet-based education has been the subject of numerous studies. Variables such as student satisfaction, self-efficacy, motivation, and achievement have been measured with quantitative procedures (Conklin, 2008; Tello, 2007; Welsh, 2007). Additionally, the questions of whether or not an online classroom can provide the same level of instruction as a traditional classroom, as well what constitutes a high quality online classroom have been examined. Chickering and

Gamson (1987) set out to define what comprises sound instructional practice in traditional undergraduate classrooms. The authors found that seven principles generally embody quality instruction. The principles are as follows:

- 1. encourage student-faculty contact,
- 2. encourage cooperation among students,
- 3. encourage active learning,
- 4. give prompt feedback,
- 5. emphasize time on-task,
- 6. communicate high expectations,
- 7. and respect diversity.

Although these principles were originally designed for traditional classroom-based learning, Ritter and Lemke (2000) demonstrated that these principles are applicable to online education. Through a study that captured the perceptions of 236 online students over a 2 year period, the authors discovered that students believe that Internet classes provide a quality learning experience. Furthermore, the study affirmed the fact that nontraditional students can benefit from the flexibility and regular access to course materials provided by online education. Overall, Ritter and Lemke postulate that Internet-based instruction which reflects the seven principles could be just as good, if not better, than traditional learning.

Gaps in Research Concerning Community College Settings

Research can help to inform educators about the instructional needs of a student population. For community college educators locating relevant literature can be challenging because most research concerning higher education, including the evaluation of online education, is based on 4-year institutions (Marti, 2009). For example, Townsend, Donaldson, and Wilson (2004) examined five major higher education journals between 1990 and 2003 and found that only 8% of the articles referenced community colleges (Marti, p. 1). Marti (2009) contends that the mission of community college, which emphasizes education for all, is unique making it difficult to generalize research generated at the university level. Furthermore, Aragon and Johnson (2008) assert that community college leaders and educators lack knowledge about online learners, including enrollment and withdrawal patterns, which can limit understanding of core issues.

In addition to a dearth of research about community college students, existing research about this population tends to focus on quantitative data, which fails to represent a student voice. For example, Yen and Liu (2009) investigated the high incidence of online failure at a suburban community college in Maryland. This empirical study found that learner autonomy, which has been noted as a forecaster of success in an online course (Lim & Kim, 2003), is a useful predictor of online achievement. Recommendations emphasized the importance of identifying at risk students, but failed to represent the perceptions and views of individual students. Efforts to depict the typical online learner in a community college setting have revealed that community college students who enroll in online courses tend to be white, female, employed full-time, older (26-55), married or divorced, with children, and yielding higher family incomes (\$60,000 yearly average). Moreover, the typical online learner is described as a visual learner (Halsne, 2002). More recently, it has been acknowledged that there is a widening gender gap in relation to online learners—more than 50% of online students are female (Instructional Technology Council, 2010). While this information is useful for educators and school leaders, it does not fully encompass the diversity found throughout many community colleges. And since many public institutions, including community colleges, have declared that online learning is "critical" to their long-term strategy and planning, procuring ample research could be a determining variable in achieving this goal (Allen & Seamen, p. 2).

Conclusions and recommendations

For online instructors in a community college setting, these issues are palpable. Although research has demonstrated the favorable impression students possess toward online education (Allen & Seamen), withdrawal and failure rates limit the potential and blight the progress. Perhaps research will not uncover a universal panacea to confront this challenge, but in the interim there are strategies online instructors can employ to increase retention and success. First, provide ample directions and instructions for students throughout the course. Do not assume that students will infer or realize anything. Explicitly state

all requirements in a clear and organized way. It is helpful to introduce each learning module with concise, but specific, instructions. Consider putting instructions and valuable information in multiple places: the syllabus, a welcome message, an introductory blog, and a calendar of assignments. This may increase the likelihood of the message being received and understood.

Second, be responsive, communicate daily, provide frequent feedback, and respond to inquiries expeditiously. There simply is no substitute for an effective teacher. The Bill and Melinda Gates Foundation (2010) funded a large research project to investigate effective teaching and learning. The Measure of Effective Teaching Project (MET) has affirmed the significance of a quality teacher as well as the credibility of student perceptions of the learning environment (MET, 2010). Although the research examined the public K-12 sector, the influence of a teacher is germane to all levels of education.

Naturally, it is not possible for a professor to be on call. While this is true, communication, which is important in all instructional environments, is critical in a virtual classroom. The more interactive and available an instructor is, the more likely that a student, especially an equipped one, will continue on to the finish line. Hermans, Haytko, and Mott-Stevenson (2009) used a variation of the Technology Acceptance Model (TAM, developed by Davis in 1989) to measure student satisfaction with web based instruction in university level business courses. They highlighted a strong relationship between satisfaction with the instructor and satisfaction with the course. A final conclusion was postulated that as online education and its variations expand, the significance of the course instructor should not be overlooked. This finding is parallel to other studies that underscore the pivotal role of the instructor in distance education courses (Morris, 2009; Eom, Wen, & Ashill, 2006).

Lastly, reflect on pedagogical practice and seek ways to improve. Because online teachers tend to work in isolation, there are limited opportunities for reflection and sharing of best practices (Duncan & Barnet, 2009). Institution wide professional development is generally aimed at best practices for the traditional classroom. However, the expansion of online instruction is ripe for discussion. This new pedagogical paradigm invites a different understanding of classroom culture. Educators must recognize and accept that excellence in online teaching transcends a fancy course design.

References

- Allen, I.E., & Seaman, J. (2008). Staying the course: Online education in the United States. Retrieved April 17, 2008, from Sloan-C Web site: http://www.sloan-c.org/publications/survey/pdf/staying_the_course.pdf
- Aragon, S., & Johnson, E. (2008). Factors Influencing Completion and Noncompletion of Community College Online Courses. *American Journal of Distance Education*, 22(3), 146-158. Retrievedfrom ERIC database.
- Basile, A., & D'Aquila, J. (2002). An Experimental Analysis of Computer-Mediated Instruction and Student Attitudes in a Principles of Financial Accounting Course. *Journal of Education for Business*, 77(3), 137. Retrieved from Academic Search Premier database.
- Brophy, N. (2010, August). The Impact of E-Learning on Student Engagement. *Bright Hub Education*. Retrieved from http://www.brighthub.com/education/online
- Chickering, A, W., & Gamson, Z. F. (1987). Seven Principles for Good Practice in Undergraduate Education. Retrieved from http://honolulu.hawaii.edu/intranet/committees/FacDevCom/quidebk/teachtip/7princip.htm
- Collapy, R., & Arnold, J. (2009). To Blend or Not to Blend: Online and Blended Learning Environments in Undergraduate Teacher Education. *Issues in Teacher Education*, *18*(2), 85-101. Retrieved from ERIC database.
- Conklin, E. (2008). Student academic achievement in online and traditional courses at a New York State community college. Retrieved from ProQuest database. (AAT 3312893)
- Dzubak, C, M. (2007, September). What Skills and Whose Standards: Why are Students Underprepared? *The Facilitating Newsletter of the Association of the Tutoring Profession.*
- Duncan, H., & Barnett, J. (2009). Learning to Teach Online: What Works for Pre-Service Teachers. *Journal of Educational Computing Research*, 40(3), 357-376. Retrieved from ERIC database.

- Eom, S,B, Wen, J, H, & Ashill, N. (2006). The Determinants of Student Perceived Learning Outcomes and Satisfaction in University Online Education: An Empirical Investigation. *Decision Sciences Journal of Innovative Education*, 4 (2), 215-235.
- Halsne, A. (2002, May 1). Online versus Traditionally-Delivered Instruction: A Descriptive Study of Learner Characteristics in a Community College Setting. Retrieved from ERIC database.
- Herbert, M. (2006). Staying the course: A study in online student satisfaction and retention. *Online Journal of Distance Learning Administration*, *9*(4).
- Hermans, C, M, Haytko, D & Mott-Stenerson, B. (2009, September). Student Satisfaction in Webenhanced Learning Environments. *Journal of Instructional Pedagogies.* (1), 1-19.
- Horn, L., and Nevill, S. (2006). *Profile of Undergraduates in U.S. Postsecondary Education Institutions:* 2003–04:With a Special Analysis of Community College Students (NCES 2006-184). U.S. Department of Education. Washington ,DC: National Center for Education Statistics.
- Instructional Technology Council. (2010). 2009 distance education survey results: Tracking the impact of e-learning at community colleges. Washington, D.C. Retrieved from http://www.itcnetwork.org/images/stories/ITCAnnualSurveyMarch2010Final.pdf
- Lim, D., & Kim, H. (2003). Motivation and Learner Characteristics Affecting Online Learning and Learning Application. *Journal of Educational Technology Systems*, *31*(4), 423-439. Retrieved from ERIC database.
- Levy, S. (2003, Spring). Six Factors to Consider when Planning Online Distance Learning Programs in Higher Education. *Online Journal of Distance Learning Administration*. 6 (1).
- Marti, C. N. (2009). Dimensions of Student Engagement in American Community Colleges: Using the Community College Student Report in Research and Practice. Community College Journal of Research and Practice.
- Morris, T. A. (2009). Anytime/anywhere online learning: Does it remove barriers for adult learners. In T. Kidd (Ed.), *Online education and adult learning: New frontiers for teaching practices*. Hershey, PA: IGI Global.
- Nishikant, S. (2009). The paradigm shift for adult education: from educational slavery to learning freedom of human brain with synaptic learning. In T. Kidd (Ed.), *Online education and adult learning: New frontiers for teaching practices*. Hershey, PA: IGI Global.
- Ritter, M., & Lemke, K. (2000). Addressing the Seven Principles for Good Practice in Undergraduate Education' with Internet-enhanced Education. *Journal of Geography in Higher Education*, 24(1), 100-08. Retrieved from ERIC database.
- Rolfe, C. (2007). Getting the Bugs out of the Distance Learning Experience. *College Quarterly*, 10(3), 1-35. Retrieved from ERIC database.
- Sammons, R, & Ruth, S. (2007). The Invisible Professor and the Future of Virtual Faculty. *International Journal for Instructional Technology and Distance Learning. 4*(1), 3-17.
- Schuetz, P, & Barr, J. (Eds.). (2009). Are Community Colleges Underprepared for Underprepared Students? New Directions for Community Colleges: No. 144. California: Jossey Bass.
- Sloan Consortium Commons. (2010). Glossary of Online Terms. Retrieved from http://commons.sloanconsortium.org/document/glossary-alphabetic-listing-definitions-about-online-learning-jaln
- Stumpf, A., McCrimon, E., & Davis, J. (2005). Carpe Diem: Overcome Misconceptions in Community College Distance Learning. *Community College Journal of Research and Practice*, 29(5), 357-367. Retrieved from ERIC database.
- Tello, S. F. (2007). An analysis of student persistence in online education. *International Journal of Information and Communication Technology Education*, *3*(3), 47-62.

- United States Department of Education, National Center for Education Statistics. (2010). *Digest of Education Statistics*, 2009 (NCES 2010-013).Retrieved from http://nces.ed.gov/fastfacts/display.asp?id=74
- Welsh, J.B. (2007). *Identifying factors that predict student success in a community college online distance learning course.* Retrieved from Dissertations & Theses: Full Text database. (AAT 3300982)
- Yen, C., & Liu, S. (2009). Learner Autonomy as a Predictor of Course Success and Final Grades in Community College Online Courses. *Journal of Educational Computing Research*, *41*(3), 347-367. Retrieved from ERIC database.

Manuscript received 3 Jan 2011; revision received 31 May 2011.



This work is published under a Creative Commons Attribution-Non-Commercial-Share-Alike License

For details please go to: http://creativecommons.org/licenses/by-nc-sa/3.0/us/