

Online or On Campus?

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Abstract: This paper discusses online, blended, and face-to-face learning at the graduate level. Distance education is becoming used more often by institutions of higher education throughout the United States. Two graduate courses are compared in the present study. One course was offered as a blended course over a three-week summer period and the other course was offered online over a 14-week semester long period. These two courses were taught by the same instructor and had the same student course assistants. The research is based on the information gathered by the course assistants comparing survey results of students enrolled in the courses. The course assistants found that most of feedback provided by the students concerning distance education was positive. The included charts depict information gleaned from surveys taken by students in the courses. The authors also have included student quotes based on these courses. This paper expands on ways research may be done to develop how distance education courses are taught.

Introduction

Distance education has become very popular in Institutions of Higher Education (IHEs) today. More than ever before, students at many different colleges and universities are taking classes online. There are even some IHEs that offer entire degrees where the students take all of their coursework online. Students never have to attend a class face-to-face and yet still obtain an authentic degree.

At Buffalo State College, there are various courses in the graduate Educational Computing program that are offered online. Some courses are 100% online and some use a blended approach. A blended course meets face-to-face once or more during the semester along with completing coursework online. Two examples of these courses are “The Microcomputer in the Instructional Program” and “Computer Applications in

Education Administration.” These courses are offered through the SUNY Learning Network (SLN), which provides over 4,300 online courses per year. Two of the authors of this article were former students and then course assistants for both of the distance education courses mentioned above.

Review of Literature

With the popularity of distance learning graduate classes on the rise, there have been studies conducted to examine the advantages and disadvantages of completing courses online versus the traditional face-to-face courses. The findings of some of these studies are presented later in this paper. Is there a difference in achievement between students who take courses online and those who do not? Is the dropout rate higher for online courses? Are online courses more difficult than face-to-face courses? Is there less interaction between classmates during an online course? Is a blended approach the way to go? These are some of the questions that other research studies have addressed (Dutton, Dutton & Perry, 2002; Neuhauser, 2002; Smith, Ferguson & Caris, 2001; Summers, Waigandt & Whittaker, 2005).

Distance education is becoming used more often by IHEs. “Web-based instruction in higher education has grown exponentially, with more than a thousand universities offering courses over the Web in the United States alone” (Wingard, 2004, p. 26). The 2005 Sloan survey of online learning in higher education found that there were over 2.5 million students learning online in the fall 2005 semester (Allen & Seaman, 2005). IHEs are changing their way of educating students by offering more and more classes online.

Some studies have shown that students who take courses through distance education outperform students who take traditional face-to-face courses. Dutton, Dutton, and Perry (2001) found in one particular course that online students scored higher than lecture students on both the final exam and the final course grade. On the other hand, they found that the online students were less likely to complete the entire course than lecture students. In another study, Shea, Pickett & Sau (2005) surveyed 913 college faculty, who were asked to analyze the performance levels between students who took their course online and students who took their course in a face-to-face setting. The results were that, “the majority felt there was no difference, although approximately 33 percent of respondents thought that their online students performed better than classroom-based students, and only about 9 percent felt that their classroom students performed better” (Shea, Pickett, & Sau, 2005, p. 9).

It is important to look at the perspective of the students who take distance education courses to find out what they think about the experience. According to a survey given to 20 students who took an online course, Leonard and Smita (2005) found that students believed the online course to be more challenging than a traditional face-to-face course, but also reported enjoying the experience. Fifty percent of these students felt they had more interaction with their classmates than they would have had during a face-to-face course. In addition, 60 percent reported having a higher quality learning experience with the distance education course.

Distance education courses can be being offered completely online or in a blended approach. Rovai and Jordan (2004) define blended learning as "a hybrid of classroom and online learning that includes some of the conveniences of online courses without the complete loss of face-to-face contact" (para. 1). As college instructors are learning more about technology, they are incorporating technology into their courses. "It is often claimed that faculty are more likely to adopt Web-enhanced and hybrid options, rather than complete online teaching and learning (due in part to the complexity and time investments of the latter)" (Shea, Pickett, & Li, 2005, p. 3). Rovai and Jordan (2004,) also stated that, "Blended learning is an important building block of the new schoolhouse that offers students both flexibility and convenience, important characteristics for working adults who decide to pursue postsecondary degrees" (§ 12).

There is also the question of whether or not there are benefits to using a blended approach to get both the online and face-to-face experience. Hiltz and Turoff (2005) stated that, "Face-to-face courses skillfully blended with online learning technologies and methodologies are generally rated by students as significant improvements over traditional face-to-face (only) classes" (p. 60).

Some instructors use only limited course content online, while others have classes 100% online. These completely online classes are attracting a large audience of students. It appears that faculty members that have taught for a long period of time are more Web experienced and use technology more in their courses (Wingard, 2004). It takes considerable time and dedication for college instructors to make a shift to the world of distance education instruction. Shea, Pickett, and Li (2005) stated that,

Appropriate emphasis on interactive pedagogy, faculty training, technical support, and recognition of the time-investment needed to develop and deliver online instruction will advantage institutions that are wishing to increase access to their instructional programs, and will help ensure they are delivered in a high quality online format. (p. 18)

Additionally, "research has found that blended courses have the potential to increase student learning outcomes while lowering attrition rates in comparison with equivalent fully online courses" (Dziuban, Hartman, & Moskal, 2004, p. 5). Therefore, having some face-to-face contact may be beneficial for some students. Distance learning is not a "one size fits all" solution.

"Students consistently report that blended learning represents a university model that is more congruent with their lifestyles. They say they become substantially more active in their learning and gain technological empowerment that expands beyond the confines of 'the course'" (Dziuban, Hartman, & Moskal, 2004, p. 9). These students find that by combining an online course with a classroom setting enhances their learning and helps them to better understand their course materials.

Description of Courses

This study focuses on two different courses taught by the same instructor. One course, The Microcomputer in the Instructional Program (EDC 672), was offered during a three week summer session in August 2005. This class was a blended course, as it was online but also met face-to-face (F2F) two mornings a week. The other course, Computer Applications in Education Administration (EDC 707), was 100% online with no F2F meetings in the fall 2005 semester lasting 14 weeks long. This class had one F2F orientation meeting before the semester. Both courses were taken at Buffalo State College using the SUNY Learning Network (SLN).

The Microcomputer in the Instructional Program (EDC 672)

EDC 672 was offered during a three week summer session (July 25 – August 13) in 2005. The emphasis throughout this course was on practical instructional applications of computer technology in the classroom. The goal was to help students gain confidence and skills in the use of computers and computer-related technologies to enhance their performance in their classrooms, and therefore improve their students' achievement.

This course was a total of three weeks in length and used a blended approach. The students had weekly online assignments and discussions to complete along with two projects. The class not only completed coursework and discussions online, but also met face-to-face twice a week for three hours each time. There was one professor and two course assistants.

Students used class time to work on assignments, ask questions, have discussions, and address topics not covered online. Presentations by the instructor and the students also were done during class meetings. More importantly, class time was used to further the discussions that were started online. Students in this three-week course were expected to complete the same amount of coursework covered in a full 14-week semester.

Computer Applications in Education Administration (EDC 707)

EDC 707 was offered during the fall 2005 semester. The course focused on providing students with an introduction to administrative computer applications. It was designed to show students how to use technology to become more effective and efficient in the classroom and school office.

This class ran a full 14 weeks and was almost entirely online. There was one F2F class meeting before the semester started. Students completed all assignments, discussions, and projects online. The only way students communicated with each other was electronically through discussion threads, a class bulletin board, and e-mail. The instructor and two course assistants for this course were the same as the aforementioned EDC 672.

Data

The graduate students in both EDC 672 and EDC 707 were all Educational Computing majors. There were 18 students in EDC 672, while in EDC 707 there were 22 students. Almost all students taking these classes had an undergraduate degree in education.

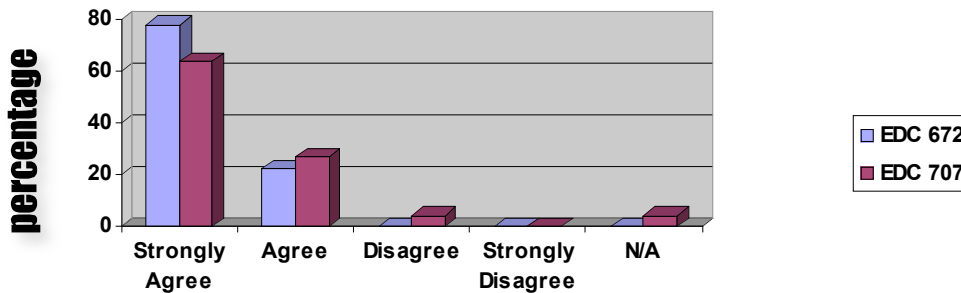
Data Collection

Students from both courses participated in an online survey that was created and made available at www.freeonlinesurveys.com. Most of the questions asked students to express agreement or disagreement based on a five-point Likert Scale (Strongly Agree, Agree, Disagree, Strongly Disagree, Not Applicable). There were also a couple of open-ended questions where students were asked to respond with their opinions in sentence form. Results from the survey were available for viewing directly from the Web site. The site showed the percentage of responses for each survey question. It also compiled all of the open-ended responses into one list under each question. Information was also extracted from the student responses given to other surveys within the courses.

Results

Comparative data based on surveys given to both classes indicates that the majority of students preferred distance education classes over face-to-face classes because of the flexibility and independence offered (see questions 1 and 2). Another important factor when considering an online course was convenience. Many students strongly agreed that completing coursework online was more convenient than face-to-face courses (see question 3). This feeling may be connected to the fact that many graduate students work full time and/or have families. The graduate students appreciate the 24/7 availability of asynchronous online courses.

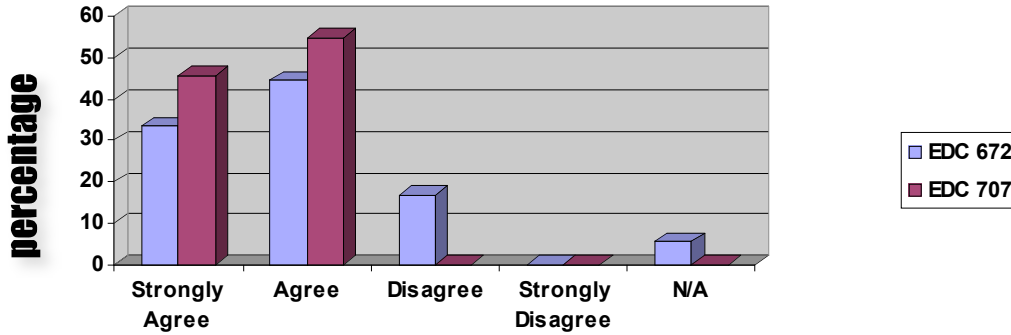
Figure 1. Results from survey question: I liked the flexibility and independence offered through this online course.



Out of 39 responses from both classes, 28 students strongly agreed with this statement and nine students agreed. Only one student disagreed and one student found this statement to be not applicable. The results showed what was previously stated, that the majority of graduate students surveyed liked the fact that they could work on their coursework whenever and wherever they felt like it. As one student said, “I liked the

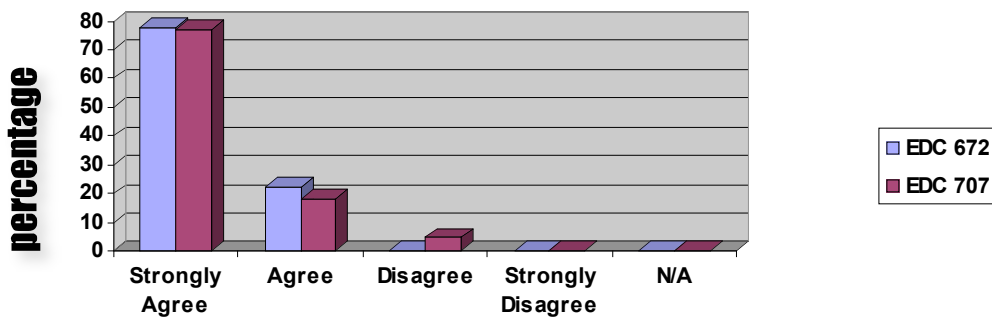
convenience of doing the assignments on my time, and still being able to interact with the classmates.”

Figure 2. Results from survey question: I prefer online classes over face-to-face classes.



All of the students in EDC 707 either strongly agreed or agreed with this statement. Out of the 18 students in EDC 672, 6 students strongly agreed, eight students agreed, three students disagreed, and one student found this statement to be not applicable. So, for the majority of students taking online courses, they would prefer to not have to meet face-to-face for a course. Most graduate students are holding a full time job and taking care of a family on top of taking one or more graduate courses. These students feel that by working on their coursework whenever they wanted to, whether it is “4:00 am or 11:00 pm,” was preferred to having to be on campus for a 4:30 pm course on Tuesdays, for example.

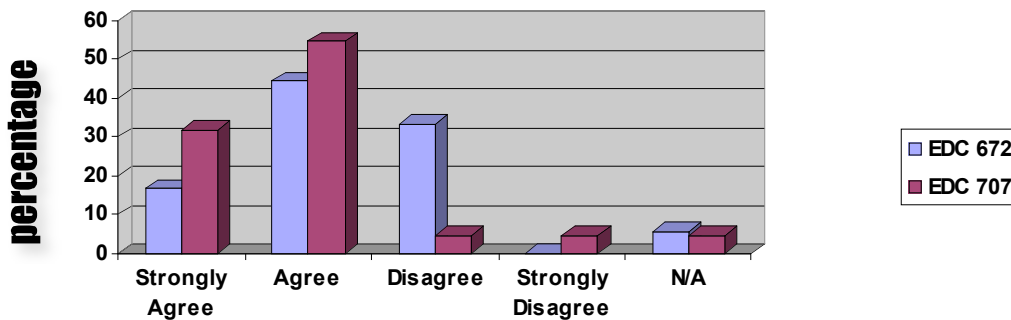
Figure 3. Results from survey question: Compared to meeting regularly in a classroom setting, completing coursework online is more convenient for me.



The results in question 3 corroborated the results in the first two survey questions. Most of the students felt that completing coursework online was very convenient. Out of 39 total responses, 38 students either strongly agreed or agreed with this statement and one student disagreed. By completing coursework online, a graduate student can work on course assignments when it matches their “free” time, apart from work and family obligations. Using the numerous resources from the Web that the instructor presents, most students have little problem completing assignments in a timely fashion, unless a server goes down, which did happen briefly once or twice. The instructor and course assistants, so as not to interfere with weekly assignments, quickly corrected those minor problems.

Even though EDC 672 met twice a week, the students still felt that it was more convenient for them to finish coursework online. These students felt that they could do more online from their own computers, rather than have to meet in a classroom setting and do assignments.

Figure 4. Results from survey question: Compared to meeting regularly in a classroom setting, completing coursework online promotes greater student participation and interaction.

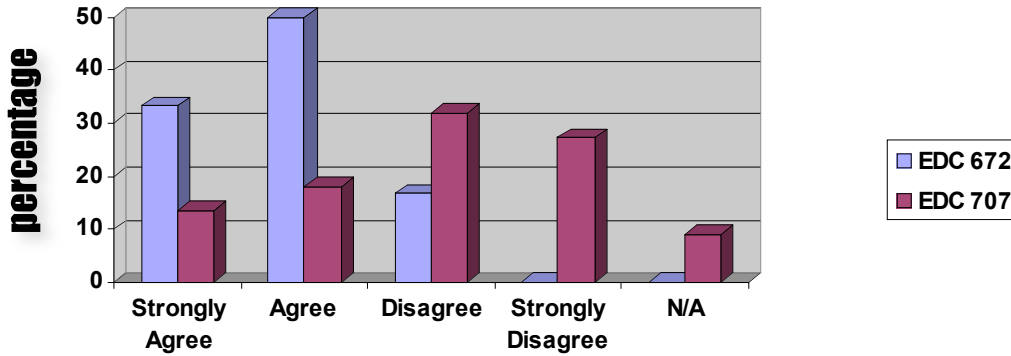


Based on responses given, many students agreed that completing coursework online promotes greater student participation and interaction. Out of the 39 students, 29 either strongly agreed or agreed with this statement. This may be attributed to the fact that some students may feel apprehensive to speak or socialize in a classroom setting because of shyness or even embarrassment. By using discussions online, many students felt they could comment more freely than being embarrassed when a class full of your peers is staring at you. A lot of students have an issue with speaking in front of a crowd. By having online discussions, this helped to alleviate those problems.

In EDC 672, six students disagreed with the statement. This is partly because these students felt that by having a meeting face-to-face, the students could meet each other and get to know each other better. When “meeting” online, it is not as personable and some students do not feel that you can get to know a person that way. It can be difficult to put a face with a name in an online course. The face-to-face meetings helped them to address common concerns and problems. They felt that meeting a peer in person was more apt to promote their interaction. In EDC 707, one student said, “I miss the face-to-

face interactions that on campus classes offer.” In EDC 672, one student stated, "I would rather have discussions face-to-face."

Figure 5. Results from survey question: My course preference would be a blended approach, a combination of meeting in a classroom setting and completing coursework online.



The results from question 5 were more spread out than the responses to the other survey statements. Students had mixed feelings about whether they would prefer a blended approach to the course as opposed to having it completely online. Most students in EDC 707 still prefer to take the course as an online course. It all comes down to having the time to complete coursework. Graduate students do not have a lot of time to work on their graduate classes. They are so busy in their life that completing an assignment online without having to drive to a campus is more efficient for them.

However, perhaps because students in the EDC 672 actually met twice a week during the three weeks, the majority agreed with the statement, indicating that they preferred a blended approach. The majority liked meeting face-to-face and being able to socialize with other graduate students like them. This may have been because there was so little time to complete all the expectations of the instructor and it helped to have the chance to converse with others who are experiencing the same course and workload.

Discussion

Based on the results of the surveys, participating students preferred distance education courses over face-to-face courses. It seemed that the flexibility and convenience of online courses were the desirable factors contributing to the decision for students to take an online course. When asked what was most liked about taking an online course, one student stated, "flexibility to work where and when I choose." Another student stated, "Not having to travel to campus." Students did not indicate that they preferred online courses over F2F meetings (even in a blended course) because of stated pedagogical reasons. Their reasons stemmed more from the convenience and flexibility afforded by distance education courses.

As far as the length of courses go, those who took EDC672 over a three-week period were more likely to state that three weeks is a sufficient amount of time for a class. The

course assistants believe that this is because these students actually experienced taking a full course over a three-week period. Those who did not take the course in three weeks may find it hard to believe that it could be accomplished in that amount of time. Between both the three-week and 14 week courses, the course assistants concluded that there was less student procrastination in completing assignments for those in the three-week course. They had such a short period of time to complete assignments that they were forced to keep on top of everything. There were many more instances of students submitting assignments late or at the very last minute in the 14-week course than in the three-week course.

EDC 672 was offered as a blended course for the first time, which led to a few problems. The instructor and course assistants were not sure how to utilize the class time efficiently. The problem was determining which topics and assignments should be covered face-to-face and which should be online. In fact, one of the concerns from the students who took the blended course was that class time was not beneficial to them. They felt that coming to the campus was not an efficient use of their time and would have rather had that time to work on assignments. When asked what students liked about the blended course, one student stated, "The face-to-face was not necessary." Another student claimed, "The face-to-face meetings could have been taken out because they were not beneficial." The instructor and course assistants agreed with some of the student's complaints but were not sure how to address them. It was difficult trying to figure out what should be done during the class meetings and what should be completed online from home. In the end, it worked itself out.

As graduate students themselves, the course assistants felt that taking a course that was 14 weeks long and condensing it into a three-week course was going to be a challenge. But, by working closely with the instructor, this was a feat they were ready to undertake. The three-week course ran smoothly and the students taking the course were glad they did take it. The instructor wanted students taking this shortened course to have as much information that a 14-week semester long course would get. Some students taking these courses during a 14-week long semester did not understand how to effectively manage their time. The authors felt that those who took the three-week course were better prepared for anything the instructor might throw at them during 14 weeks.

Summary

This paper discussed online, blended, and face-to-face learning in two graduate courses. This study focused on the length of courses and compared online versus blended courses. The results of the study indicated that students prefer online courses over face-to-face courses. The study also showed that students who participated in the three-week course were more likely to say that three weeks is a sufficient amount of time to complete a course.

Two of the authors of this article were previous students in both of these courses. They both took these courses with this same instructor in previous semesters. Neither of them took the course as a three-week semester long course. This three-week concentrated

course was a new experience for the instructor teaching the course and for the course assistants.

By being both students and course assistants for these courses, the students concluded that the biggest problem facing online courses is lack of intrinsic motivation and self-discipline on the part of the students taking the course. Since there is no specific meeting time, online students have to be motivated to work independently on assignments and projects to be successful in these types of courses. The authors witnessed on numerous occasions between these two classes how easy it was for students to fall behind by not keeping up with assignments and discussions. The students who did the assignments on time and participated in the class discussions were more successful in these courses.

References

- Allen, I. E., & Seaman, J. (2005). Growing by degrees: Online education in the United States, 2005. *The Sloan Consortium*. Retrieved March 17, 2008, from <http://www.sloan-c.org/resources/survey.asp>
- Dutton, J., Dutton, M., & Perry, J. (2001). Do online students perform as well as lecture students? *Journal of Engineering Education*, 90(1). 131-136.
- Dutton, J., Dutton, M., & Perry, J. (2002, July). How do online students differ from lecture students? *Journal of Asynchronous Learning Networks*, 6(1). Retrieved March 17, 2008, from http://www.sloan-c.org/publications/jaln/v6n1/pdf/v6n1_dutton.pdf
- Dziuban, C. D., Hartman, J. L. & Moskal, P. D. (2004). Blended learning. *Educause Center for Applied Research Bulletin* 2004(7). 2-12. March 17, 2008, from <http://www.educause.edu/ir/library/pdf/ERB0407.pdf>
- Hiltz, S.R., & Turoff, M. (2005). Education goes digital: The evolution of online learning and the revolution in higher education. *Communications of the ACM*, 48(10). 59-64.
- Leonard, J., & Smita, G. (2005). Education at the crossroads: Teaching and students' perspectives on distance learning. *Journal on Research on Technology in Education*, 34(1). 51-57.
- Neuhauser, C. (2002). Learning style and effectiveness of online and face-to-face instruction. *American Journal of Distance Education*, 16(2), 99-113.
- Rovai, A. P., & Jordan, H. M. (2004). Blended learning and sense of community: A comparative analysis with traditional and fully online graduate courses. *International Review of Research in Open and Distance Learning*, 5(2). Retrieved March 17, 2008, from <http://www.irrodl.org/index.php/irrodl/article/view/192/274>.
- Shea, P., Pickett, A., & Li, C. S. (2005). Increasing access to higher education: A study of the diffusion of online teaching among 913 college faculty. *International Review of Research in Open and Distance Learning*, 6(2). Retrieved January 10, 2007, from <http://www.irrodl.org/index.php/irrodl/article/view/238/851>
- Smith, G. G., Ferguson, D., & Caris, M. (2001, April). Teaching college courses online vs face-to-face. *THE Journal*. Retrieved March 17, 2008, from <http://thejournal.com/articles/15358>

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- Summers, J. J., Waigandt, A. & Whittaker, T. A. (2005, March). A comparison of student achievement and satisfaction in an online versus a traditional face-to-face statistics class. *Innovative Higher Education*, 29(3). 233-250.
- SUNY Learning Network, (n.d.). Retrieved March 17, 2008, from <http://sln.suny.edu/index.html>
- Wingard, R. (2004). Classroom teaching changes in web-enhanced courses: A multi-Institutional study. *Educause Quarterly*, 27(1). 26-35.