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by David Diaz and Ryan Cartnal

Student attrition has been a continual topic of concern in distance education research. Drop rates for distance classes have been consistently higher than those of traditional classes (Cookson 1990; Parker 1999; Phipps and Merisotis 1999; Ridley and Sammour 1996). In fact, many educators have implied that the high drop rates—and the resulting lower success rates—of such courses should disqualify online education as a high-quality option to traditional education (*Perspective* 2001).

In turn, one of the authors of this article (Diaz 2000, 2002) posed an alternative view of the importance of drop rates. Based on the common demographic profile of online students cited in the literature (i.e., older and with more academic and life experience), he suggested that drops are not necessarily an indicator of academic nonsuccess. Diaz noted that given the differences in populations, online students may drop for different reasons than traditional students and that those reasons may have little or no relationship to students' academic abilities. He further posited that a drop may serve as a strategic ally in achieving academic goals. Dropping a class at the appropriate time may increase the likelihood of academic success and progress by obviating the need to retake a course immediately. Dropping would not adversely affect students' GPAs and could help them avoid academic probation. Students undoubtedly enter a class with the intention of completing; however, more savvy students may see value in cutting their losses. This especially applies to older, more academically experienced students.

While it would therefore be premature to regard student drop rates as symptomatic of academic failure, administrators should still consider whether attrition levels in online courses could be reduced through institutional changes that address student constraints without sacrificing educational quality. One of these institutional changes would involve greater flexibility in term length; in what follows, we provide the results of a study that explores the effect of term length as a key variable in student drop rates in an online course.

Factors That Explain and Predict Attrition

Four categories of factors have emerged to explain and predict attrition in distance education (Garland 1993; Gibson 1998):

Student situation: events that arise from life circumstances such as changes in family and employer support, employment or financial status, educational status, health, and academic self-concept.
Student disposition: personal characteristics including learning style, motivation, and perception-of-obligation (i.e., feelings of being obligated to a specific instructor or classmates to remain enrolled in the class) as well as other demographic variables such as academic preparation, GPA, ethnicity, gender, Web and e-mail competency, family size, number of dependents, and socio-economic status.
Institutional system: factors relating to the quality of the course such as the instructor's planning, preparation and delivery, and the quality of student support provided by the instructor, other faculty, staff, administrators, and the institution. Examples would include class and Web design, class size, term length, technical support, and student-services support.
Course content: the difficulty, or perceived difficulty, of the subject matter.

Institutions often cannot effectively address student drops that result from student situational or dispositional factors—insuperable financial commitments, health changes, and student motivation are not easy to manipulate. However, institutions can more easily regulate teacher and institutional preparedness. Most

colleges offer classes in segments of differing lengths. This may be due to a different overall calendar system (e.g., 16-week vs. 18-week), summer session, intersession, or other reasons for condensed term length. Although much research has been devoted to the importance of success and attrition in distance education, little if any has focused on the potential impact of term length on drop rates. The current study attempted to determine the role of term length on the dropout rate in an online health education class.

Problem and Purpose

How might a shorter term length be more conducive to success and completion? Flowers (2001) conducted a large-scale survey of students who indicated that they preferred a shorter term length. When asked to "indicate the ideal number of weeks [they] would suggest for a 3 credit online course (between 1 and 15 weeks)," students most often chose 10 weeks, followed by 15, 6, 8, and 12 weeks ("Educational Appeal," ¶ 5). Given the further finding that "time requirements" were the most mentioned obstacle to taking an online course, Flowers concluded that "[v]arying course length and timing may successfully overcome some individuals' 'time requirements' obstacles" ("Educational Appeal," ¶ 9). The time obstacle, which is a student situational factor, in this case is clearly linked by students to term length, which is an institutional system factor.

Can term length predict attrition in online classes? We have chosen term length as the focus for this study because it represents an institutional system factor that can be easily and cheaply modified to address student needs. Such a simple strategy, if effective, could be widely implemented by online learning programs and would aid the goal of expanding educational access and providing a high-quality alternative to traditional education.

The study will consider two research questions. First, is there any difference between the drop rates of online courses offered in shorter term lengths and the drop rates of traditional or online classes offered in longer term lengths? Second, are there other demographic factors that are related to drop rates?

Methods

A health education course (HE 2: General Health Education) that has been taught in an online format since Spring 1998 provides the data for this study. We compared drop rates for two 6-week summer session online sections (OL6), two online sections taught in a 9-week format (OL9), two online sections taught in an 18-week full semester format (OL18), and two traditional sections taught in an 18-week full semester format (TR18). The same instructor taught all eight classes between Summer 2002 and Fall 2004. The online courses were taught in a completely online mode, which included Web-based orientations, lectures, exams, discussion, and independent Web-based assignments. There were no face-to-face meetings. Online distance students were taught according to the same course outline, used the same textbook, covered the same lecture material, and completed the same multiple choice tests as the on-campus students.

There were three main differences between on-campus and online groups: the delivery mode for the lectures, the mode of teacher/student and student/student communication, and the mode for the assignments. The online classes reviewed multimedia slides (multimedia presentations converted to HTML) and lecture notes from a CD/Web hybrid (Diaz 1999) while the traditional classes heard instructor lectures in person and participated in face-to-face discussion. The online classes made heavy use of a class Web site and used a message board and e-mail for online communication and discussion with other students and the instructor. The assignment load for the online students consisted almost entirely of Internet-based, independent assignments with some collaborative work done via the message board. The traditional classes completed some online assignments but participated most frequently in classroom discussion assignments and other non-Internet assignments. Exams for all students were timed and allowed students to use open books and open notes.

The time restriction imposed by shorter term lengths limited only the number of assignments for online

students. That is, the online students in shorter term lengths completed the same number of exams and the same types of assignments (message board discussion and independent Web-based) as the other online student groups, but they did not complete as many assignments as students in longer term classes. The average total possible points for 18-week online classes was 255, for the 9-week online was 235, and for the 6-week online was 215. The average total possible points for traditional classes was 256. The reason for this discrepancy was that even though more assignments were completed within a given time frame in the shorter term length classes, the instructor was unable to assign the same total number of assignments due to the mode of administration of exams. Since the exams in the online classes were completed within a 72-hour window, students were not given other assignments during the exam week. This limited the total number of assignments in the 9-week classes to about 15 and in the 6-week classes to 12. In the traditional classes, students completed approximately 1 assignment per week, not including exams, over an 18-week period for a total of 17 assignments while in the 9-week and 6-week online classes, students completed an average of 2 assignments per week not including exams.

In his previous study, Diaz (2000, 2002) concluded that there was no reason to assume that drops are synonymous with academic nonsuccess. In the current study we therefore defined "academic success" as a class grade of "C" or better and "academic nonsuccess" as a course grade of "D" or "F"; as a separate category, we defined "attrition" or "drop rate" to include all students who withdrew themselves (or were dropped by the instructor) prior to the last official drop date.

We employed a quasi-experimental (post hoc) research design—with nonrandom sampling and descriptive statistics—to compare differences between the different student groups in the study. We collected the following demographic data to use as predictor variables: term length, gender, ethnicity, age, current class load, units and/or degrees completed, and all-college GPA. Comparisons between groups were made using results from demographic data and instructor grade sheets, and data was collected retrospectively over five semesters.

Results and Discussion

The demographics clearly illustrate that the online student population is significantly different than the traditionally taught students. The online learner is typically older, more academically experienced (i.e., has taken more college units and completed more degrees), and more academically proficient (i.e., has a higher all-college GPA) than the typical traditional student (Diaz 2000; Gibson and Graff 1992; Thompson 1998). Our online students matched these characteristics: they were older (Figure 1), had more life experience, and had more extensive academic experience (Figure 2) and proficiency (Figure 3) than their counterparts in the traditional classes. Drop rates for all three online class modalities were less than the traditional class, and the shorter two term lengths (i.e., 9-week and 6-week) experienced the lowest drop rates (Figure 4).

The lower drop rates for the online sections versus the traditional sections in this study clearly do not conform to the typical pattern of higher attrition in online courses indicated by other researchers. At the very least, this suggests that attrition rate in online learning is not simply determined by the delivery format per se but is rather affected by factors related to student situation, student disposition, institutional system, and course content.

In turn, demographic variables in subject groups do not fully account for the pronounced differences in drop rates among the courses in this study. Even if one assumes that demographic variables related to student age, prior educational experience, and GPA have an impact on drop rates for online courses, the drop rates would not display such sharp discrepancies between OL18 (22.1%) on the one hand and OL9 (7.7%) and OL6 (7.4%) on the other hand. Demographic characteristics between OL18 and OL9/OL6 subject groups did not display nearly the same level of discrepancy as the drop rates for those same groups; shorter term length clearly appears to have been a significant factor in the respective drop rates of each group.

We reasoned that shorter term lengths may create a sense of urgency that helps keep students on task and

heightens their awareness of impending deadlines. We have observed that in 18-week semester classes, many students fall into a lapse of concentration. This can affect students in traditional as well as online classes; however, it may be more of a problem in an online setting where a lack of face-to-face contact and the attendant lack of a focal point may exacerbate the inattention to class matters. Shorter term length facilitates the regularity and frequency of assignments, exams, and other projects, providing the necessary structure and routine that might otherwise be lacking.

While further demographic data on the subject groups (i.e., the relative number of part-time or full-time working students) was not available, the results appear to confirm the plausibility of our reasoning. This reasoning could be explored in a future study by utilizing an entrance survey that solicits information related to work status as well as an exit survey that asks students to qualify their reasons for success or lack thereof. Yet it would appear reasonable enough to assume that shorter term lengths would not only foster greater continuity and regularity in online courses but would also address the needs of students faced with the challenge of maintaining their schedules because of work commitments.

There are, of course, drawbacks to shorter terms. A student must be able, in whatever length of term, to master the technology. Without ample time to work through technical difficulties, the student may become hopelessly behind in a course at the very outset. Anecdotally, the majority of correspondences that the lead instructor has with online students during the first two to three weeks of the semester are related to technical problems. These include problems with playing the hybrid CD-ROM, problems submitting homework with the Web-based form, and problems accessing the course management system. These are problems that are not applicable to students in the traditional class sections and would certainly need to be taken into account when offering reduced term lengths for online courses.

Conclusion

We recommend that institutions consider offering online distance learning classes in shorter term lengths. There is evidence to suggest that students prefer a shorter term length because it successfully addresses the most mentioned obstacle to taking an online course: time requirements (Flowers 2001). Our study suggests as well that students in shorter term online courses have a greater success rate and a reduced drop rate. At the same time, short-term online classes also provide the opportunity to quickly re-enroll and complete the course in a subsequent attempt in the event of poor performance, thus lessening the academic impact of a drop. Finally, as our data suggests, shorter term length is related to reduced drop rates in the population of students that typically enroll in online classes.

Term length is only one institutional system factor that can be manipulated to help impact attrition rates. Others can also be studied and addressed as can student situation factors and student disposition factors. We also recommend student readiness surveys, computer skills surveys, and other Web-based questionnaires as components that might help teachers pinpoint reasons for student success in an online environment. The more teachers understand about students' reasons for dropping a class and the more accurately they can determine initial student risk, the more effective they can be in intervening to prevent student drops.

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