Factors Influencing Student Choice of Distance or Face-to-Face Courses

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Statement of Problem

Distance learning is rapidly evolving from an alternative instructional option to a mainstream course delivery system (Lucas, 1998). This change is propelled by the rapid growth of the Internet and by cost-conscious high school and university administrators (Berman & Tinker, 1998; Young, 1998). Educational institutions perceive that their survival depends on offering distance learning courses and degree programs (Healy, 1997, March 28; Kiernan, 1998). Even though some students do not learn well in a distance format (Galusha, 1998; Young, 1998), some institutions are beginning to offer distance learning-only courses as a way to meet demand and decrease costs. This study asks whether students who choose distance learning have different learning needs and characteristics than those who choose face-to-face systems. This focus was seen as a way to begin exploring issues that arise when courses are offered in distance learning formats only and students may have no choice of learning environments.

Prior research focused primarily on the demographic characteristics of students who choose distance learning, and the characteristics of effective and ineffective distance learners. Guernsey (1998) and Wallace (1996) found that the profile of the "typical" distance learner is becoming increasingly similar to that of the non-distance learner, at least at post-secondary levels. High school students who choose distance learning are more likely to be those with higher GPAs who are seeking an alternative to traditional curriculum (Berman & Tinker, 1997). Effective distance learners are found to be those with: self-motivation and ability to structure their own learning (Hardy & Boaz, 1997), previous experience with technology (Richards & Ridley, 1997), good attitude toward subject matter in the distance learning course (Coussement, 1995), and learning and temperament styles suited to this environment (Gibson & Graf, 1992). Most students who choose distance learning seem to do so for convenience (Klesius, Homan, & Thompson, 1997).

The current study was an effort to identify a combination of choice factors that can predict whether students will choose distance learning or face-to-face learning environments. Results of previous studies indicated that students valued both the logistical convenience of distance formats (Klesius, Homan, & Thompson, 1997) and the increased control over learning it gave them (Roblyer, 1999); however, a high degree of interaction with instructor and classmates during learning also seemed important to many students (Smith, 1996, May). Some studies found that students' ability to use technology could be a determiner of success with distance learning (Richards & Ridley, 1997). Four variables likely to contribute to student preferences included: (a) Interaction (the need for interaction with the instructor and other students in the course; (b) Control (desire for control over the pace and time of learning activities; (c) Logistics (preference for closer, easier-to-access instructional opportunities; and (d) Technology (experience, skill, and comfort with using computer resources).

Methods

Of the total 63 participants in high school and community college courses, 60 volunteered for this study. Forty-three participants had elected to take the distance delivery section, while seventeen chose the traditional course format. Because students were not randomly assigned and the levels of the independent variables are nonorthongonal, the differences in cell sizes are controlled in the logistic regression analysis. A *Survey of Perceptions About Course Delivery Systems* asked students to answer items indicating the importance of the four factors on a 5-point Likert-type scale (5 = very important to 1= not important on all four subscales). Correlations among the subscales ranged from .084 to .341.

Analysis and Conclusions

A direct logistic regression analysis was performed on choice of course delivery (distance or traditional) as the outcome and the four predictor variables: interaction, control, logistics, and technology experience. Logistic regression has no assumptions about the distributions of the predictor variables and, thus, the predictors do not have to be normally distributed, linearly related or of equal variance within each group (Tabachnick & Fidell, 1996). A test of

the full model with all four predictors against a constant-only model was statistically reliable, $x^2(4, N = 60) = 33.576$, $p < .001$, indicating that the predictors, as a set, distinguished between students choosing distance or traditional instruction. Prediction success was impressive, with 76.47% of traditional and 88.37% of distance students correctly predicted, for an overall success rate of 85%.

Our results indicate that the learning needs of students who choose distance learning formats differ in key ways from those of students who choose a traditional class format. Three factors were found to be related to choice: control, interaction, and logistics. Further studies are anticipated to determine if students' experience with distance formats affects predictors and if learning environment preferences are related to course satisfaction or achievement.

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