The relationship between students' attitudes and satisfaction in a "Physical Education in Early Childhood" blended course

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Abstract: With the recent growth of new information and communication technologies (ICTs), web based course delivery has become a promising alternative for expanding the educational opportunities in the tertiary education. Blended learning -an alternative type of teaching- uses a combination of traditional face-to-face contact with on-line learning. The purpose of this study was to examine the relationship between students' attitudes and perceived e-learner satisfaction in a blended course. Participants were thirty two (n=32) undergraduate students, between the ages of 18-23 years old. Sixty-three percent (62.5%) of the students were male and thirty-seven percent (37.5%) were female. For the data collection at the end of this study, students completed a questionnaire with 3 sections. The first section included the students' demographic/personal data. The second section evaluated students' attitudes and the third the perceived e-learner satisfaction from the blended learning course. Pearson correlation coefficients were conducted to examine the relationship between students' attitudes and their satisfaction. The results of the corelational analyses identified a significant positive correlation between perceived e-learner satisfaction and students' general attitude toward blended learning.

Introduction

Blended learning is a type of teaching alternative that uses a combination of traditional face-to-face contact with on-line learning (Tabor, 2007). The pedagogy of a blended learning environment is "based on the assumption that there are inherent benefits in face-to-face interaction as well as the understanding that there are advantages to using on-line methods" (Clark & James, 2005). Researches have pointed out that such an environment promotes student-centered learning and encourages increased student interaction (Carmody & Berge, 2005; Gallini & Barron, 2002).

However, several questions about the use of the new approach need to be addressed. For instance, how will this new learning method affect students' learning experience, are students attitudes towards this technology positive or negative? Attitude has been defined as "a learned predisposition to respond positively or negatively to a specific object, situation, institution, or person" (Aiken 2000). Therefore, attitude affects people in everything they do and hence a determining factor of people's behavior. Positive attitudes

about distance learning courses may lead to an increased engagement in the course, which in turn may cause better outcomes (Pan, Gunter, Sivo, & Cornall, 2005). Therefore students' attitudes toward blended instruction may affect their motivation and interest in learning.

Satisfaction is ''the pleasure or contentment that one person feels when she/he does something or gets something that she/he wanted or needed to do or get'' (Collins Cobuild English Dictionary, 1999). Although students' satisfaction is not necessarily correlated with achievement (Moore & Kearsley, 2005), satisfaction seemed to be a very important component for the successful completion of the course (Chang & Fisher, 2003). While a number of advantages have been recognized in employing blended learning, insufficient learning satisfaction appeared to be an obstacle to the successful adoption of blended courses (So 2006). Students' satisfaction, attitudes and expectations, play an important role in evaluating the effectiveness of the educational process in a blended learning environment (Akkoyunlu & Yılmaz-Soylu, 2008).

The purpose of this study was to examine the relationship between students' attitudes and perceived e-learner satisfaction in a "Physical Education in Early Childhood" blended course.

Methods

Participants

Study participants consisted of 32 undergraduate students enrolled in the "Physical Education in Early Childhood" course in the Department of Physical Education and Sport Science at the Democritus University of Thrace. Twenty of the participants were male and twelve were female. The participants ranged in age from 18 to 23 years old. The convenience sample of participants was entered into the study through their voluntary participation.

The blended course

The online component was delivered using the asynchronous course management system (e-Class). E-Class included course description, course schedule, documents (course content), announcements, forums, links and student papers. The ''Physical Education in Early Childhood" course was designed and developed as a blended learning course for the purpose of this study. The course duration was 13 weeks, and the students met for a 90-minute lecture with the instructor six times, every second week. The blended learning course required self-paced learning time since the course content was online, resulting in a major reduction in classroom lecture time. Students were expected to log onto the course individually from home, work or a University computing cluster, whichever was most convenient, and read that week's course material, download resources (such as lecture transcripts and journal papers), and follow instructions to complete tasks. Assignments emphasized practical application and authentic tasks all complemented with textbook readings. Weekly quizzes and self-evaluation questions were given online. Also students participated in weekly discussions using an online forum..

Data collection instrument
For the data collection at the end of this study, students completed a questionnaire with 3 sections. The first section included students' demographic/personal data. Demographic information was collected to obtain descriptive characteristics for the students. The second section evaluated students' attitudes towards the blended learning course.

In the second section, three dimensions were used to assess the students' attitudes (Giannousi, Vernadakis, Antoniou, Derri, & Kioumourtzoglou, 2008). The first dimension "General attitude" consisted of 7 five point-likert questions such as: Blended courses are better for learning than classroom based courses. The second dimension "User control" consisted of 4 five point-likert questions such as: Blended courses allow students to learn at their own pace more than classroom based courses. The third dimension "Interaction" consisted of 8 five point-likert questions such as: Class discussion in blended courses is of better quality than class discussion in classroom based courses.

The third section evaluated students' satisfaction with the blended learning course. The satisfaction form that measured perceived e-learner satisfaction had 7 five point-likert type items which were adapted from Arbaugh (2000), such as: I was very satisfied with the course, I feel that this course served my needs well, I was very disappointed with the way this course worked out (R). The scale focused on students' satisfaction with the course, their perception of its quality, and their likelihood of taking future courses with blended instruction. In the second and third section of the scale there were positive and negative statements. The positive items were coded from 5 (strongly agree) to 1 (strongly disagree), and the negative items were coded from 1 (strongly agree) to 5 (strongly disagree) for each statement.

Reliability
The alpha reliability coefficient of the satisfaction scale was .77 indicating that the instrument was reliable. Also the alpha reliability coefficients for the attitude scale were .75 for the first factor "general attitude" .70 for the second one "user control" and .80 for the third factor "interaction", indicating that the instrument was reliable.

Results

Demographics
A total of 20 (62.5%) of the students were male and 12 were female (37.5%). Overall 5 (15.6%) students reported their age as being 19 years old, 17 (53.1) were between 20 years old and 10 (31.3) were between 21 and 23 years old.
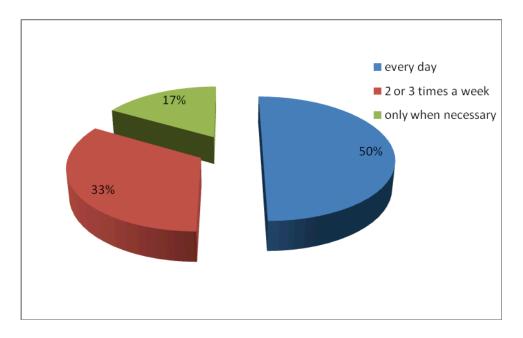The percentages of students' use of the asynchronous course management system (e-Class) are displayed in figure 1.

Figure 1. Percentages of participants' use of e-class.

Student's responses to the question ""Which teaching approach would you prefer to use?" indicated that 56.3% would choose the blended format again while the 25% preferred an online approach. Only the 18.8% of the students had chosen the traditional method.

Relationship between Students' attitudes and perceived e-learner satisfaction toward blended learning

The relationship between students' attitudes and perceived e-learner satisfaction, was investigated using Pearson correlation coefficient. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The results of the correlational analyses presented in table 1, have shown that 4 out of the 6 correlations were statistically significant and were greater than or equal to .430. The correlation of students satisfaction with the third dimension of the attitude questionnaire was positive significant. These finding suggest that the higher the general attitude toward blended learning, the higher the satisfaction.

Means and standard deviations of students' attitudes and satisfaction are presented in table 2. There were no significant differences in satisfaction between male and female students.

Table 1. Correlations among the three dimensions of the students' attitudes toward blended learning and students' satisfaction

	Satisfaction	General attitude	User control
General attitude	.773**		
User control	.131	.430*	
Interaction	.275	.549**	.735**

**p < 0.01

*p < 0.05

Table 2. Means and standard deviations of students' attitudes and satisfaction toward blended learning

	N	Average	Standard Deviation
General attitude	32	3.54	.59
User control	32	3.51	.45
Interaction	32	2.83	.57
Satisfaction	32	3.76	.58

Discussion

Blended learning has gained considerable popularity in tertiary education in recent years. Students' attitudes and satisfaction had been acknowledged as important factors in order to estimate the effectiveness of a blended learning course. The purpose of this study was to examine the relationship between students' attitudes and perceived e-learner satisfaction in a Physical Education in Early Childhood blended course.

Consistent with previous studies in the literature (Vignare & Starenko 2005; Oliver 2005), data analysis revealed that students seemed satisfied from the way the course's context was delivered to them. Satisfaction is an important component for the effectiveness of the course, since satisfied students learned more easily, were less likely to drop out of class for non-academic reasons, were more likely to take additional distance courses, and to recommend the course to others (Biner, Dean, & Mellinger, 1994). After attending the blended course, the 56% of the students expressed their preference to the blended method. Such findings corresponded to previous studies (Arbaugh, 2000), which indicated that simply asking students whether they would enroll in another distance education course could determine students' satisfaction with the course they are attending at the time. An explanation for the 25% of the students, who preferred to attend an online course in the future, could be that the students had no prior experience of online courses and since they were satisfied with the blended format they thought that they could save the time of attending classroom lectures and still have the same learning results as in the blended course. Furthermore some students (19%) expressed their preference to the traditional model. Probably because they were not familiar neither with the online learning management system nor with the self-paced learning, that the blended format required. Gender didn't appear to have any affect to students' satisfaction in contrast with other studies where females reported significantly higher levels of satisfaction with learning (Stokes, 2003).

Students also seemed to have quite positive attitudes toward the blended course, except from the interaction dimension which was quite neutral. Results had also shown that there was a significant positive relationship between perceived e-learner satisfaction and general attitudes. In other words, positive attitudes may result to higher satisfaction from

the learning environment. Positive attitudes appeared to be the first step for the adaption of blended instruction, since they may lead to increased time engaged in the course (Pan et al, 2005).

Furthermore, blended learning environments cannot be effective and thrive without considering students' needs and preferences. Obtaining student feedback about the blended learning environment is crucial for the successful design and implementation of this environment. Considering the fact that institutions are becoming more accountable in their provision of courses it is vital that not only must learners be satisfied with the course they must also be motivated to continue with it.

Conclusion

This research represents an initial attempt to examine the relationship between students' attitudes and perceived e-learner satisfaction in a blended course format. In conclusion, positive attitude towards blended learning may lead to increased students' satisfaction from this learning environment. Moreover, with the help of technology, blended learning can be used as an alternative approach in teaching and learning in Tertiary Education, in order to motivate students. The explosion of blended learning in supporting learning has made it extremely significant to investigate the determinants crucial that would enable students to use the blended model and enhance their learning satisfaction. Comprehending the essentials of what determines student learning satisfaction can provide great management insights into developing effective strategies that will allow universities to create new opportunities for their students and instructors.

As the students' satisfaction affect their motivation to learn, it is important to continue investigating the relationship between students' attitudes and satisfaction. Future research could address the factors, which may influence students' attitudes and satisfaction toward blended learning environments.

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