

УДК 378.018.4:371.26

STUDENTS PERCEPTION AND ASSESSMENT OF DISTANCE LEARNING IN HIGHER EDUCATION SYSTEM

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The main purpose of the research study is to investigate the students' perceptions and assessment of the distance and on-line learning effectiveness. The paper discusses the results of the study performed in the group of 125 students before and after completing the distance-learning course in Health Psychology. It indicates that the students see some relative advantages of distance and on-line learning in relation to traditional methodologies (saving time, fitting in better with the schedules, inability to take more courses). At the same time, the study confirms that students seem to be ambiguous when comparing the effectiveness of distance and on-line learning to traditional methodologies.

Key words: information technology, distance learning, on-line learning, traditional methodology, distance-learning course.

Introduction

Since some time colleges and universities try to meet the needs of students by developing online courses and degree programs. As a result a growing number of teachers feel the necessity to adapt their courses for online conditions. This study is due to the author's personal interests in effectiveness of teaching online and finding ways to promote faculty development to meet the challenges of the XXI century. Experiences with teaching online suggest that some teaching practices may be more compatible with the dynamics of distance learning (DL) formats.

The traditional teaching system for higher education has been a classroom setting with a professor giving a lecture and students listening and writing notes. Interaction between the professor and student has been viewed as an essential learning element within this arrangement. However, innovations in educational delivery mechanisms have challenged this paradigm. Advances in information technology (IT) are enabling use of new educational methods such as distance learning (DL). In addition, the advances in IT have ushered in a new paradigm, on-line learning (OL).

Much of the literature provides specific information about developing a teaching courses online with particular reference to the enabling technologies and the design of course materials. Another large part of literature deals with comparisons of student performance in the traditional classroom with the

performance of students in the online classroom. They are considered outside the scope of this study. Recently, a number of skills and effective strategies have been identified as indicators of successful online teaching. This study will analyze perceptions of those students who are involved in online teaching and learning at university level schools. The study is significant because it adds new research, rooted in accepted classroom theory and practice, to the literature for higher education distance learning. This research provides background for curriculum designers and facilitators of distance learning classes, regardless of the field.

Some published studies show that increasing number of higher education institutions in Europe and USA use DL on daily basis. For example, already 10 years ago a third of American colleges and universities offered distance education courses (NCES 1997). Now this proportion is much higher. This trend is expected to grow in the future, especially in private colleges. In this situation the college teachers are being challenged to develop own DL courses and to prepare appropriate on-line instructional texts. Part of the teachers, especially an older generation, has not experience in DL-mediated teaching. The results of some studies suggest that their involvement in on-line education often depends on personal interests in using computers and development of new educational methods (DeVeaux 2001).

Methodological aspects of the study

Main purpose of this research study is to investigate student perceptions and assessment of the effectiveness of distance and on-line learning. Perceived effectiveness was chosen for at least two reasons: (1) methodological difficulties of measuring learning process (as we know, experimental study must have a control and experimental group over time in a controlled settings), (2) student perception is interesting for teachers and faculty administration. Another purpose of this study is to investigate how students perceive those dimensions of OL and DL that might provide an relative advantage when compared to the traditional teaching methodology.

Research Questions

1. What are the student perceptions about online teaching, especially DL?
5. What differences occur in students' attitudes toward DL before and after completing the courses?

Participants

Total of 125 students participated in the study. They were selected from population of students of University of Information Technology and Management in Rzeszow (WSIZ), which is a private educational institution. The sample was drawn from classes which took place in online courses offered in each academic year. They represented such courses like Public Health, Journalism and Economics. Approximately 56% of the respondents were female and 44% were male with an average age of 22.3 years. All of the respondents had taken a courses that

combined traditional and DL methodologies. The students ranged from sophomores to graduate students with juniors accounting for 62.5% and seniors representing 29% of the respondents. The remaining 8.5% of the respondents were either sophomores or graduate students. No freshmen filled out the survey, which was expected as freshmen do not generally take OL courses at the university where the questionnaire was administered. The sample appears to be a reasonably representative of the population of the WSIZ college.

Procedures

Permission to conduct the research was requested from the university authority. A written statement for all participants stating they were guaranteed anonymity was provided at the beginning of each survey. They were also told how the data collected would be used. The survey was then administered to students before and after the university classes. In this case it was summer semester of 2007/08 academic year, after completing the course in Health Psychology (author was the lecturer in this course and was responsible for its DL version).

Instrument

For the purpose of this study a special questionnaire was developed. It consisted of 10 statements (items) concerning the research problems. All statements have mostly a positive connotation in relation to on-line teaching. The questionnaire items were modified in the presence of two independent experts who reviewed them. Based on their recommendations, statements that were ambiguous were either eliminated or reworded to eliminate the ambiguity. Each item was rated on a 7-point scale (1=*Strongly Disagree* and 7=*Strongly Agree*).

Results

Table 1. Student rating of questionnaire items over time

Questionnaire items	Time I		Time II	
	M	SD	M	SD
1. Most students believe that DL is more effective than traditional teaching	6.1	0.76	5.2	1.65
2. I hope that OL will offer a significant advantages to me	6.1	0.82	4.7	0.77
3. During a course with both traditional and OL methodologies, I learn better through the OL part	5.8	0.91	5.4	0.84
4. I prefer more OL courses than traditional courses	4.7	0.71	6.0	1.34
5. I think that I can learn the same amount in a DL course as in a traditional course	5.7	0.85	4.9	0.67
6. I hope that on-line courses will not make me any big troubles	4.5	0.56	5.2	0.64

7. I expect that I can make the same grades in an OL course as in a traditional course	5.2	0.78	5.5	0.86
8. I would like to have more courses taught using the OL methodology	5.5	1.67	5.8	0.93
9. I believe that easily accessible technical assistance will be available to me throughout the duration of the DL course	4.6	1.27	5.8	1.47
10. I will be provided with an information which help me in securing materials concerning DL course	5.4	1.15	5.1	1.74

Discussion of the results

The survey contains 10 items where the questions were asked regarding on-line learning (OL), with special regard to the distance learning (DL). An analysis of these 10 items took into consideration only differences between answers given in time I and II which were significantly different (.05 level).

The first goal of our study is to determine student perceptions of the effectiveness of OL. Five indicators in the survey that relate to effectiveness of OL are shown in table 2.

Table 2. Assessment of effectiveness of OL and DL in time I and II

Questionnaire items	Significance of difference (t^{I-II})
1. Most students believe that DL is more effective than traditional teaching	0.05
3. During a course with both traditional and OL methodologies, I learn better through the OL part	n.s.
4. I prefer more OL courses than traditional courses	0.05
5. I think that I can learn the same amount in a DL course as in a traditional course	0.05
7. I expect that I can make the same grades in an OL course as in a traditional course	n.s.*

* - not significant

Students seem to be ambiguous regarding the effectiveness of OL when compared with traditional methodologies. However, when asked if they believe that OL is more effective than traditional courses (item 1), they slightly - although significantly - differ between time I and II responses. In time II they were less inclined to admit that DL could be more effective than traditional teaching. Also students believe that they can make the same grades in an OL course (item 7). When asked if they learn better through an OL portion of a combined course (item 3), they agreed with the statement but the difference was not significant. In addition, students seem to prefer OL over traditional courses (item 4). Finally,

although in time I students tended to agree that they could learn the same amount of knowledge in an OL course, in time II they were less enthusiastic about that (item 5).

Table 3. Relative advantages of OL and DL in time I and II

Questionnaire items	Significance of difference (t^{I-II})
2. I hope that OL will offer a significant advantages to me	0.05
6. I hope that on-line courses will not make me any big troubles	n.s. *
8. I would like to have more courses taught using the OL methodology	n.s.
9. I believe that easily accessible technical assistance will be available to me throughout the duration of the DL course	0.05
10. I will be provided with an information which help me in securing materials concerning DL course	0.05

* - not significant

The second goal of our research is to determine what dimensions of OL/DL provide advantages relative to traditional methodologies. Table 3 lists 5 indicators of OL/DL benefits. Items 2, 6, 8, 9 and 10 seem to indicate that OL is quite beneficial to students. It appears that in time I the students expect some relative advantages of OL in comparison to traditional way of teaching scheduling (item 2), and are ready taking more courses of this type (item 8). In addition, the direction for item 10 seems to indicate that OL may enable students to get substantial information which will be helpful in completing the course. They expected also an easy access to technical assistance which will be available to them throughout the duration of the DL course (item 9) and that participation in it will be relatively easy (item 6).

The time II results do not confirm some early expectations of examined students. First of all, they expressed a significant change in their attitude towards a possible advantages connected with participation in OL (item 2). The results obtained in time II confirm that most of them were disappointed because of taking OL course. It did not provide with so many advantages as they expected before the beginning of the course. In this case, the difference between time I and time II results was statistically significant ($p < 0.05$). At the same time they admitted that taking the DL courses did not make a big troubles to them (item 6). The difference between time I and II results was not significant.

Conclusions

This study had two primary goals: 1/ to find out if students believe that OL/DL teaching methodologies are as effective as the traditional methodology and 2/ what differences occur in students' attitudes toward DL before and after

completing the courses? Our research indicates that students perceive that OL/DL has a significant relative advantages to traditional methodologies. These advantages include saving time for students, fitting in better with their schedules, and enabling students to take more courses. They do not believe that they learn more in OL courses and have concerns related to being able to learn better through a combined courses (traditional teaching and DL together). What is especially important for the students, they think that they can make the same grades using a DL course as during traditional one. Interestingly, the students seem to be ambiguous when comparing OL to traditional methodologies. Generally, they prefer traditional courses to OL courses, although they want more OL courses. After completion of OL students seem to have generally more negative beliefs about its value than before the start of a course. Generally, students do not perceive that DL is as effective as traditional methodologies.

Limitations

This study should be treated as a pilot study and it has some obvious limitations. It surveyed students in Health Psychology course only which is relatively difficult subject. Results therefore cannot be generalized to general population of students. In addition, students surveyed were at one university and these results cannot be generalized to students at other universities. In regards to the DL findings, it may be that the university where the students are surveyed is not effectively using DL methodologies although instructors do receive extensive DL training. It may also be that the technology used is not enabling effective DL.

Future Research

Future research should include students from different courses and from other universities. Doing so would enable one to generalize the findings more broadly because distance and on-line learning appear to be the teaching methodologies of the future. As universities move more courses to OL/DL, administrators need to consider student perceptions in order to make an appropriate changes in their structure.

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СПРИЙМАННЯ ТА ОЦІНЮВАННЯ СТУДЕНТІВ ДИСТАНЦІЙНОГО НАВЧАННЯ У СИСТЕМІ ВИЩОЇ ОСВІТИ

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Мета дослідження – вивчення уявлень та оцінок студентів, ефективності дистанційного інтерактивного навчання. Розглянуто результати опитування, проведеного у групі 125 студентів перед і після завершення дистанційного навчального курсу з психології здоров'я. Зазначено, що студенти виокремлюють деякі переваги дистанційного діалогового навчання порівняно з традиційними методиками (збереження часу, краще визначення планів роботи, можливість вивчення більшої кількості курсів тощо). Водночас стверджено, що студенти непереконливі в ефективності дистанційного інтерактивного навчання порівняно з традиційним.

Ключові слова: інформаційна технологія, дистанційне навчання, діалогове навчання, традиційні методики, дистанційний навчальний курс.

Стаття надійшла до редколегії 10.06.2008

Прийнята до друку 25.09.2008