Distance learning in higher education during the COVID-19 pandemic: advantages and disadvantages

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Abstract

The study, which utilized survey method, aimed to investigate the advantages and disadvantages of distance learning during COVID-19 pandemic over the conventional learning from the point of view of the university administrators and lecturers. The data were collected using quantitative method via an in-depth interview form administered to randomly selected 14 administrators and 13 lecturers in different universities in North Cyprus. The data were analyzed using descriptive statistics and variance analysis. The results showed that except for one participant, majority of the participants stated that they had experienced educational challenges during Covid-19 pandemic. In addition, the participants encountered some problems such as the assessment and evaluation challenges (9.7%), technical challenges (41.9%), learners' participation challenges (19.4%), and effectiveness of teaching challenges (29.0%).

Keywords: COVID-19 pandemic, distance learning; conventional learning; lecturers, administrators

1. Introduction

The Concept of distance learning first appeared in 1840 then within a few years the distance education programs become available in the UK, Germany, USA and Japan. The intense increasing relevance of distance learning brought the possibilities of access non-location bounded and time independent instructions through the use of synchronous and asynchronous means (Williams and Shea, 2003). With the growth interest of distance learning, technology served instructions to learners without an educator's presence. Since, it promotes flexibility at any time regardless of context and availability to learners and educators at any time regardless of the time of content, distance learning led to many higher educational institutions to implement courses on the Internet that has provided an opportunity to meet the demands for education has been expanded to worldwide (Canaran and Mirici, 2020). In addition, distance learning has also provided

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lifelong learning phenomenon for significant growth in learners' capacity building needs (O'Neill, 2004). In order to establish various categories of graduate, under-graduate, technical, vocational and training courses via internet, distance learning made it possible to attend the categories at any time and in anywhere.

In higher education distance learning settings, activities generally are engaged in synchronous course and asynchronous activities and task. In synchronous course, learners are engaged in interactive and focused opportunities which are for helping learners build a basic understanding of technology-enhanced instruction, the use of technology in courses and effective online design. On the other hand, asynchronous activities and tasks include quizzes, group work assignments, group's discussion, feedback and project. In addition, interactive video-based activities, facilitator meetings, live webinars and keynote speaker is used for asynchronous activities and tasks.

The distance education needs essential skills and abilities which is more concerned with the role educators' in teaching to design technology-enhanced effective instruction through high-quality, and fully online professional program. Anticipated impacts include in distance learning for educators (1) educators empowerment in selecting and integrating technology tools in their instruction, (2) increased pedagogical knowledge and skills of educators in designing and developing high-impact instruction that leads to enduring understanding, (3) improved learners engagement through the use of technology in online and face-to-face classes, (4) forming a professional learning community in which educators from diverse background collaborate, share, reflect, and support each other, and (5) changed roles in educators to become a mentor leading and facilitating professional teaching (Loomis,2000;Vuorela and Nummenmaa,2004).

Distance learning is non-location bounded and time independent through the use of synchronous (live conferences) and asynchronous (flexible assignments) means. All activities and content is housed Information and Communications Technology System (ICT) which is a virtual classroom enabling educators to interact (Moran, 1997).

Distance learning in higher educational setting are organized as modules, small learning units separated by subjects. Distance learning in higher educational settings should be organized with attention focused on (1) differentiation with technology includes essential knowledge to differentiate content, product, and process using differentiation strategies and technology tools, (2) technology-enhanced instruction focuses on a research-based instruction model that enables participants to design online and face-to-face instruction framed by technology integration theories, (3) effective teaching methods and assessment is aimed at providing skills for participants to incorporate best, evidence-based methods of teaching and assessment into their classroom. Participants establish a repertoire of meaningful, engaging, and innovative ways of delivering instruction, (4) performance tasks and online lessons provide practical insights and structure to develop authentic assessment (Khan, 1997).

The overall goal distance learning, educators is to build their capacity in three types of knowledge (technological, pedagogical, and technological pedagogical) and in designing and developing technology-enhanced, effective instruction (Anderson, 2004; Alanso, 2005). The theory of action of effective technology-enhanced instruction, facilitate effective teaching through high-quality, collaborative, and fully online activities in order for learners to be engaged in understanding-based, interactive learning. In order to meets the demands of effective technology-enhanced instruction educators should be able to (1) select the most appropriate technologies in terms of their purpose in instruction, (2) develop perspective on how to effectively integrate and use technologies in their lesson plans, (3) differentiate instruction using technology, (4) discuss the best use of technology in delivering and assessing the content, (5) establish a knowledge base in regards to online and face-to-face instruction, (6) gain practical insights on online course development and online teaching, (7),design technology-enhanced effective instruction using a research-based instructional design model that promotes differentiation, collaboration, interactivity, and appropriate use of assessment, (8) form a professional learning community to support their own and others' professional learning (Simens,2004;Taylor,2001).

Recent evaluations of distance learning have been an emphasis on the advantages and disadvantages of distance learning. Researchers endeavored to determine whether distance learning is better than conventional learning or not? Researches shown that distance learning as computer-mediated audiovisual learning vehicles promotes more cost-benefit and flexible than a conventional instruction. (Gilbert, 1997; Annetta, 2000; Litwin, 2002). In addition, the recent data indicated that learners have access to learning resources more than in past through distance learning (Moore and Kearsley, 1996; Williams and Shea, 2003). On the other hand, researchers shown that distance learning has disadvantages which are relevant to misuse of technology, adaptation of effective technology based instruction to the ways of effective teaching and poor practices by managing assessment and evaluation process of learning (Perrenoud 2002; Wahlstrom et al.,2003; Valentine,2002). Moreover, most of studies have attempted to examine whether distance learning differs from conventional learning. The majority of these studies indicated no significant differences between two types learning methods (Diaz, 2000).

The main research question of the study was; "What are the advantages and disadvantages of distance learning over the conventional learning during the COVID-19 pandemic?". Based on this main research question, the study also explored the following sub-research questions:

What are the viewpoints of the administrators and lecturers, in terms of the COVID-19 pandemic, about;

  a. the educational challenges?

  b. overcoming the educational challenges?

    c. the strategies to overcome the challenges?

    d. the advantages of distance learning over conventional learning?

    e. the disadvantages of distance learning over conventional learning?

2. Method

2.1. Research Design

The study adopted survey method using qualitative data. The details of the research design are as follows:

2.2. Participants

The participants of the study were composed 14 university administrators (51.9%) and 13 lecturers (48.1%) in different universities in North Cyprus. The participants consisted of 12 females (%44.4) and 15 males (55.6%). The average age of the participants was 42.52 (SD=10.4). The demographic information of the participants is given in Table 1 below.

Table 1. Demographic variables

NO Gender		Average Age	Educational Background		Average Working experience (year)	Status		
Male	Female		MA	PhD		Head of department	Director of Graduate School	Lecturer
15	12	42.52	3	24	8.37	9	5	13

2.3. Data Collection Instrument

The data of the study were collected through an in-dept. interview form developed by the researcher. The form was composed of eight research questions to investigate the advantages and disadvantages of distance learning during COVID-19 pandemic over the conventional learning from the point of view of the university administrators and lecturers.

3. Results

Findings of the study are given under each related research question as in the following:

3.1 *The research question concerning about the educational challenges during COVID-19 pandemic process*

According to results, all of the participants except for one stated that they had experienced educational challenges during COVID-19 pandemic (See table 2).

Table 2. Participants' Answers about Educational Challenges during COVID-19 Pandemic

Participants	Answers	N	%
P1, P3, P4, P5, P6, P7, P8, P9, P10, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P24, P25, P26, P27	YES	26	96.3
P23	NO	1	3.70

In terms of what educational challenges have university administrators and lecturers encountered during COVID-19 pandemic, the answers of the participants were divided in sub-groups according to the educational challenges that university administrators and lecturers have encountered them during COVID-19 pandemic as (1) assessment and evaluation (2) technical problems (3) participation of learners (4) effectiveness of teaching. According to results, the participant's encountered the assessment and evaluation challenges (9.7%), technical challenges (41.9%), learners' participation challenges (19.4%) and effectiveness of teaching challenges (29%). See table 3.

Table 3. The Sub-groups about educational challenges that have been encountered by participants during COVID-19 pandemic

Sub-groups	Participants	N	%
Assessment and evaluation	P2, P4, P8	3	9.7
Technical problems	P2, P5, P6, P7, P13, P15, P16, P17, P18, P20, P22, P24, P26	13	41.9
Learners' participation	P3, P13, P14, P17, P20, P22	6	19.4
Effectiveness of teaching	P4, P9, P11, P12, P19, P20, P24, P25, P27	9	29.0

3.2. The research question concerning overcoming the educational challenges during COVID-19 pandemic

The results revealed that 70.4 % of the study's participants have overcome the educational challenges during COVID-19 pandemic however 29.6 % of the study's participants have not overcome the educational challenges during COVID-19 period. See table 4.

Table 4. The participants' answers about overcoming the educational challenges during COVID-19 pandemic

Participants	Answer	N	%
P1, P2, P4, P5, P8, P10, P11, P12, P13, P14, P16, P17, P19, P20, P21, P22, P24, P25, P27	Yes	19	70.4
P3, P6, P7, P9, P15, P18, P23, P26	No	8	29.6

3.3. The research question about what strategies have university administrators and lecturers used to overcoming the educational challenges during COVID-19 pandemic

The answers of the participants were divided in sub-groups according to strategies that lead to overcoming the educational challenges during COVID-19 pandemic as (1) assessment and evaluation (2) technical problems (3) learning methodology and material (4) time management (5) relationship with learners. According to results, the participants have overcome the assessment and evaluation challenges (15.8%), technical challenges (15.8%), time management (10.5%), learning methodology and material (31.6%) and relationship with learners' (5.3%). See table 5.

Table 5. The Sub-groups about strategies that lead to overcoming the educational challenges during COVID-19 pandemic

Strategies	Participants	N	%
Technical	P4, P16, P24	3	15.8
Assessment and evaluation	P1, P2, P8	3	15.8
Learning materials	P4, P5, P11, P12, P13, P19, P20, P21	6	31.6
Relationship with learners	P14, P17, P2, P24	4	21.1
Time management	P10, P25	2	10.5
Others	P27	1	5.3

3.4. The research question concerning the advantages of distance learning over conventional learning

According to results, 93.3 % of the participants stated that distance learning had more advantages than traditional learning. However, 48.1 % of the participants stated that there were no more advantages of distance learning than traditional learning. See table 6.

Table 6. The participants' answer about whether distance learning has more advantages than traditional learning

Participants	Answer	N	%
P2, P3, P7, P8, P10, P11, P12, P13, P16, P19, P20, P21, P23, P24	Yes	14	51.9
P1, P4, P5, P6, P9, P14, P15, P17, P18, P22, P25, P26, P27	No	13	48.1

The participants stated the advantages of distance learning as; (1) flexible, and (2) economic. According to results, distance learning has more flexible than traditional learning (71.4%). In addition, the results revealed that distance learning more economic than traditional learning (21.4%). See table 7.

Table 7. The advantages of distance learning than traditional learning

Advantages	Participants	N	%

Flexibility	P2, P3, P8, P10, P11, P13, P16, P20, P21, P24	10	71.4
Low cost	P7, P12, P23	3	21.4
Diğer	P19	1	7.1

In addition, 81.5% of the participants stated that distance learning has disadvantages than traditional learning. However, 18.5% of the participants stated that distance learning has not disadvantages than traditional learning. See table 8.

Table 8. The participants' answer about whether distance learning has more disadvantages than traditional learning

Participants	Answer	N	%
P1, P2, P3, P4, P8, P9, P11, P12, P13, P14, P15, P16, P17, P18, P19, P20, P21, P22, P24, P25, P26, P27	Yes	22	81.5
P5, P6, P7, P10, P23	No	5	18.5

3.5. The research question about the disadvantages of distance learning over traditional learning

The answers of the participants were divided in sub-groups according to disadvantages of distance learning as (1) effectiveness of teaching (2) assessment and evaluation and (3) technical struggle. According to results, distance learning may decrease of effectiveness of teaching (59.1%). Meanwhile, the result shown that distance learning may also negatively effect assessment and evaluation practices in learning environment (27.3%). Regard to distance learning, technical struggle may also negative factor which effect learning environment (4.6%). See table 9.

Table 9. The disadvantages of distance learning than traditional learning

Disadvantages	Participants	N	%
Effectiveness of teaching	P1, P4, P9, P14, P15, P16, P17, P20, P21, P22, P24, P25, P26	13	59.1
Assessment and evaluation	P2, P8, P12, P13, P19, P27	6	27.3
Technical	P3	1	4.6
Other	P11, P18,	2	9.1

4. Discussion

During the COVID-19 pandemic, educators have faced big challenges to convert their classes to online and have found them in an urgent need to adapt and use technologies to deliver instruction to their students. The best way to meet these needs and help educators overcome these challenges is through stakeholder analysis. According the study results, university administrators and lecturers stated that they have experienced

educational challenges during COVID-19 pandemic however just only one lecturer (3.7%) stated that he has not been experienced educational challenges during COVID-19 pandemic. Since, one-shot trainings in the form of two-hour Zoom conference with no follow-up and expert support have been abundant during the peak period of COVID-19 distance learning are deemed ineffective by educators because they don't use and incorporate what they have taught into traditional classroom. Educators need more rigorous, high quality professional development opportunities through which they develop skills and gain knowledge for a better online, technology-based delivery of instruction.

Even though the opportunities for educators to attend professional development programs at universities these distance learning capacity development programs addresses these issues are abundant, most require monetary and time investments which are unlikely to be satisfied by educators. It was observed from the study that, university administrators and lecturers have encountered educational challenges during COVID-19 pandemic as (1) assessment and evaluation (2) technical problems (3) participation of learners and (4) effectiveness of teaching. Meanwhile, they have overcome the educational challenges during COVID-19 pandemic using strategies such as online assessment and evaluation practices, getting technical support, changing learning methodology, time management and getting close relationship with learners.

In the study, it was claimed that distance learning has more advantages than traditional learning. To deal with establish a knowledge base in distance learning, there is ongoing debate about whether distance learning is better than traditional learning. In the study, 93.3% of the participants stated that distance learning has more advantages than conventional learning. This finding is congruent to the findings of researches which shown that distance learning as computer mediated audiovisual learning vehicles promote more cost-benefit and flexible learning benefit than conventional instruction. (Annetta, 2000; Litwin, 2002). In the study, it similar stated that distance learning has more flexible and economic than conventional learning.

However, disadvantages of distance learning were divided in sub-groups in the study as (1) effectiveness of teaching (2) assessment and evaluation and (3) technical struggle. According to results, distance learning may decrease of effectiveness of teaching while it may also negatively affect assessment and evaluation practices in learning environment. Regard to distance learning, technical struggle may also negative factor which effect learning environment. This finding is congruent to the findings of researches which shown that distance learning has disadvantages which are relevant to misuse of technology by educators, adaptation of effective technology based instruction to the ways of effective teaching and poor practices by managing assessment and evaluation of learners (Perrenoud and Valentine,2002).

5. Conclusions

The distance education needs essential skills and abilities which is more concerned with the role educators' in teaching to design technology-enhanced effective instruction through high-quality, and fully online professional program thus the study aims to answer the question of what are the advantages and disadvantages of distance learning over the conventional learning from the point of view of the university administrators and lecturers. The overall goal distance learning, educators is to build their capacity in three types of knowledge (technological, pedagogical, and technological pedagogical) and in designing and developing technology-enhanced, effective instruction (Anderson, 2004; Alanso, 2005).

Recent evaluations of distance learning have been an emphasis on the advantages and disadvantages of distance learning. Researchers endeavored to determine whether distance learning is better than conventional learning or not? Researches shown that distance learning as computer-mediated audiovisual learning vehicles promotes more cost-benefit and flexible than a conventional instruction. In addition, the recent data indicated that learners have access to learning resources more than in past through distance learning. On the other hand, researchers shown that distance learning has disadvantages which are relevant to misuse of technology, adaptation of effective technology based instruction to the ways of effective teaching and poor practices by managing assessment and evaluation process of learning. Moreover, most of studies have attempted to examine whether distance learning differs from conventional learning. The majority of these studies indicated no significant differences between two types learning methods.

This finding is congruent to the findings of the study which shown that distance learning has not only advantages which are relevant to (1) cost-benefit learning environment, (2) flexibility in learning, (3) content availability but also it has disadvantages which are relevant to (1) misuse of technology by educators, (2) adaptation of effective technology based instruction to the ways of effective teaching, (3) poor practices by managing assessment and evaluation of learners.

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