



ECONOMICS TEACHERS' PERCEPTION OF DISTANCE AND E-LEARNING: TEACHING AND LEARNING AMIDST COVID-19 PANDEMIC

Chinyere Felicia UGWU¹ & Sunday OGBU²

*Department of Science Education, University of Nigeria Nsukka^{1,2}
felicia.chinyere@unn.edu.ng¹, sunday.ogbu@unn.edu.ng²*

Abstract

Purpose: *The aim of this is to explore Economics teachers' perception of distance and e-learning in Nsukka Education zone, Enugu State, Nigeria. This study is necessitated by the fact that secondary schools are being locked down in the country as a result of Covid-19 pandemic and stakeholders are advocating for e- learning.*

Design / Methodology / Approach: *Descriptive survey research design was employed for the study. Two research questions and one hypothesis guided the study. The population of study was 69 Economics teachers distributed among the 59 public secondary schools in the zone. The sample size was 59 economics teachers selected through purposive sampling technique. The instrument for data collection was a two-cluster questionnaire titled "Economics Teachers' Perception of Distance and E-learning Questionnaire (ETPDEQ)" developed by the researchers. The internal consistence coefficients for the two cluster of ETPDEQ were 0.81 and 0.76 respectively. Collected data were analyzed using mean, standard deviation and t-test statistics.*

Findings: *The paper revealed that economics teachers have negative perception of distance and e-learning education.*

Practical Implications: *In order to move with developed countries in providing quality education amidst Covid-19 pandemic, Economics teachers must have positive perception of E-learning and key into utilization of various e-learning format for instruction delivery.*

Originality /Value: *The value of this paper lies in its identification of Economics teachers' perception of distance and e-learning. This will enable stakeholders take necessary actions and decisions regarding e-learning in the country.*

Keywords: *Perception, e-learning, distance education, Economics, Covid-19 and Pandemic.*

Paper type: *Empirical*

Introduction

Education is an essential tool for development of individual and nations. In Nigeria today, there is high demand for education because it contributes to the nations' over all development and serves as an important tool to ensure that there is an effective transfer of the values, aims and aspiration of an economy and its national development (Nwaubani et al., 2018). Similarly, Udoh and Jacob (2016), states that education consists of two components which are inputs and outputs. These inputs and outputs form a way in which the educators investigate and assess the educational system in order to improve its performance and also

examine the effects of one component on the other. Many subjects are studied at different levels of institutions in Nigeria towards realizing the goal of education as an instrument for effective national development. At the secondary school level, one of the subjects that are studied is Economics.

According to Oleabhiele (2018) and Pettinger (2020), the importance & applications of Economics principles as a major pre-requisite for the achievement of national development have been recognized worldwide. In Nigeria, as well as in other developing countries, Economics is considered as an essential subject taught in the senior secondary school level as it is vital to the future health of

any nation's economy and gives our students the foundation for a successful financial future, empowers consumers by giving them the knowledge and skills to improve their economics well being and equally strengthens our nations' economy. Unfortunately, teaching and learning has come to a halt as a result of the crisis caused by the (COVID – 19) Pandemic.

Pandemic according to Vales (2020) is an outbreak of disease that becomes widespread and affects a significant portion of the population causing a high degree of mortality. Hickok (2020) sees pandemic as the global outbreak of a disease and states that there are many examples of pandemic that took place in history, but the most recent is COVID-19 pandemic which was declared as such by the World Health Organization on March 12, 2020. As the COVID-19 pandemic increases, many government agencies and institutions are implementing policies that could control the spread of the disease. As a result of this, government instructed that all academic institutions should be closed down temporarily, which affected academic delivery (Arora & Srinivasan, 2020).

School closures due to coronavirus (COVID-19) are affecting learners worldwide. According to David, et al, (2020) and; Burgess and Sievertsen (2020), the closure of schools by the end of March 2020, affected over 180 countries and 87.4% of learners (over 1.5 billion students). Reimers, at al., (2020) stated that for educators, the COVID-19 pandemic is a transformative challenge, and there is no pre-planned arrangement that can guide appropriate solution. Education leaders are expected to quickly design method and educational programmed with specific contexts in mind during this period of the pandemic. The overall goal is to facilitate the design process and implementation for the method to the challenges facing educational system and to protect the learners' educational opportunities during the pandemic.

Federal Ministry of Education (FME) and Universal Basic Education Commission (UBEC) have set up a separate Task Team responsible for planned and organized educational activities

during this period of COVID-19 pandemic. The objectives of the task team are to provide guidance, information, and resources to support students across Nigeria's 36 states and Federal Capital Territory to continue their educational activities and also study individually at home (FME and UBEC 2020). To ensure the success of the above idea, leaders of public and private educational institutions have decided to adopt alternative methods for students and teachers to continue with their teaching and learning as attending school normally is not possible (FME, 2020; UBEC 2020). Therefore, there is indeed need for other alternatives to the conventional mode of education. Alternative strategies such as distance and e-learning program become necessary to support the continuity of teaching and learning during the period of COVID-19 pandemic.

Due to its connotations and variety of usage, e-learning is always difficult to define and as such it has been defined in many ways. E-learning according to Olojo, et al., (2012) and Sisco et al (2015), is a computer assisted learning, and pedagogical change in education for students-centred and collaborative learning towards building 21st century skills. It comprises all forms of electronically supported learning and teaching processes in order to increase the quality, efficiency and dissemination of education and to deliver instruction to learners who are at remote locations from a central site (Arkorful & Abaidoo 2014; Eke 2011 Natarajan & Marg 2015). It provides easy access to any type of information required for academic purpose through the use of internet facilities such as World Wide Web (www) based technology and other software. This approach offers potential values to traditional teaching and learning approach due to the fact that a great number of learners can access information at a time especially now that students are at home so that distance will not stand as a barrier during the period of COVID-19. Some states in Nigeria have already joined in the uses of e-learning. For example, the Oyo state government, a state within Nigeria, has been running the School-On-Air Program to ensure teaching and learning activities continue during the period of close down of schools.

Airtel has provided 500mb of free data to each student participating in the program to enable them access it (FME and UBEC 2020). According to the Oyo state Task Force, the program which is being run on the radio and television channels of the Broadcasting Corporation of Oyo State (BCOS), was already taking care of academic activities of students between 60% to 70% of the students' population.

Although students that have access to digital devices, internet services may be limited in most countries, supporting governments in establishing effective online educational program will free up institutional capacities and resources to enable them change their focus to providing alternative teaching and learning activities for those students who do not have the same opportunities (Reimers, et al., 2020). This idea of selection of online educational resources intended for students, teachers and parents aim at supporting government and stake holders in education as they research and assess different methods to adopt to ensure that educating students continue during the COVID-19 pandemic. While some believe that the unplanned and rapid move to online learning-with little or no training, insufficient information that a particular computer network or internet connection can send in a particular time will result in a poor user experience that will not be conducive enough to achieve its objectives, others believe that a new hybrid model of education will emerge with significant benefits (Reimers 2020). Since this integration ensures academic continuation during this period of COVID-19 Pandemic, it becomes important and timely to assess Economics teachers' perception of the use of distance and e-learning method of teaching during this COVID-19 Pandemic period.

Perception refers to the process whereby one becomes aware of what is within the immediate environment through the sense organs. According to Ugwu (2017) and Ede (2018) perception refers to the map by which one interprets things or ideas. It has been noted that teachers have positive perceptions of the use of e-learning in secondary school (Yanti et al., 2018). The challenges facing distance and e-learning have been identified to include high cost online learning materials such as internet

services, computers and inadequate power supply (Oluniyi, 2012) This work however seeks to find out the views of teachers on the use of computer-associated instructions, or internet-base learning program for students and teachers to continue with their lessons since attending school is not possible. It equally explored the influence of gender on teachers' perceptions of distance and e-learning in Nsukka Education Zone, Enugu State, Nigeria, even though it has been shown that gender does not influence Turkish teachers' perception and utilization of distance and e-learning Gunduz et al., (2018). Considering the fact that few students have access to digital devices and internet, it becomes necessary to investigate on the teachers' perception of the use of distance and e-learning in teaching and learning during the period of COVID-19 pandemic.

Statement of the Problem

Students are expected to receive quality education at all time. However, the outbreak of Covid-19, with concomitant lockdown of educational institutions, has denied many students, especially those at examination classes this fundamental human right. In order for students not to be denied basic education, most countries of the world, especially developed countries adopted online education. Nigerian government, during the lockdowns, although encouraged teachers to join their foreign counterparts in delivering online instructions to students, however, not much was achieved. Students were complaining of being idle and kept demanding that schools should be opened for them to study. With the warning by Presidential Task Force on Covid-19 of imminent surge in the Covid-19 outbreak, there is the possibility of schools witnessing another phase of lockdown. This will spell doom to the future of Nigerian students if distance and e-learning education functional in the country. For all these reasons, the researchers considered imperative and timely to assess Economics' perceptions of (and perceived challenges of) distance and e-learning. Specifically, the study sought to determine:

1. Economics teachers' perceptions of distance and e-learning in Nsukka Education Zone;

2. Economics teachers perceived challenges of distance and e-learning in Nsukka Education Zone;
3. Influence of gender on teachers' perception of distance and e-learning;
4. Influence of gender on teachers perceived challenges of distance and e-learning.

Research Question

The following research questions guided the study:

1. Research Question One: what are the Economics teachers' perceptions of distance and e-learning education?
2. Research Question Two: what are the teachers perceived challenges of distance and e-learning Education in Nsukka Education Zone?

Hypothesis

The following hypotheses, tested at 0.05 level of significance guided the study:

- H₀₁: there is no significant difference between male and female Economics teachers' perception of distance and e-learning education;
- H₀₂: there is no significant difference between male and female Economics teachers' perceived challenges of distance and e-learning education.

Literature Review

Economics which is one of elective subject in the secondary education level was introduced in Nigeria secondary school education curriculum in 1966 as a result of emerging national Economic crises (Onuoha, et al. 2018 & Ede 2018). Economics is vital as it gives students the foundation for a successful financial future, empowers consumers by giving them the knowledge and skills to improve their economic well being and equally strengthens nations' economy as it affects everyday life. Despite the importance of Economics, teaching and learning the subject has been affected by the lockdown and crisis caused by COVID-19 pandemic.

COVID-19 is infectious disease caused by the most recently discovered corona virus which

had not been previously identified in humans. The rise of the Corona Virus launched significant concerns for the global health care system (WHO and Vales 2020). According to Rasmitadila, Aliyyah, Rachmadtullah (2020) the outbreak of COVID-19 Pandemic across the world and countrywide lockdown has seriously altered almost all aspect of life, including education which lead to closure of schools, colleges and universities for an undefined period of time. In the midst of this lockdown period and in order to provide uninterrupted learning opportunities, many schools were forced to implement distance education or online learning, as an alternative to face to face method of teaching and learning (UNESCO 2020a, Mohalik, R. and Sahoo, S.S 2020). Alhumaid, Ali, Waheed et el. (2020) investigated the e-learning acceptance, especially during COVID-19, as a substitute for the formal classroom learning environment in Pakistan. The researchers found out that the weak e-learning system in Pakistan is a significant obstacle to the growing educational challenges. The question regarding e-learning acceptance in Nigeria has not been answered. More so, teachers' perception of e-learning drives the level of implementation of e-learning in any country. In this current study, carried out in Nigeria, the researchers focused not on teachers' acceptance of e-learning but rather on Economics teachers' perception of distance and e-learning in the period of Covid-19 pandemic.

E-learning system also provide delivery of learning content for students via the internet; record of learning progress and portfolio; management of learning content, assessment and course, web-base instruction which serves as an alternative strategy to education for effective delivery of learning (Harry 2014; Hadullo et al., 2017; Balogh, et al., 2013). In early February 2020, China implemented an online learning exercise to ensure that teaching and learning activities for students was not interrupted. Also Bulgaria in early April 2020, the Ministry of Education and Science launched an e-learning system (Rasmitadila, Aliyyah, Rachmad et el. (2020). Rasmitadila et el. in their study discovered that the challenges that teachers face in an online environment include four sub-themes, namely, technical obstacles,

student conditioning, the participation of students, and online teaching experience. Some tertiary institutions in Nigeria have introduced e-learning system of instruction but most secondary schools especially public secondary and primary school have not adopted e-learning. This could be as a result of inadequate knowledge of teachers perceptions of distance and e-learning in Nigeria.

The sudden change from traditional approach of learning to a new approach integrated with technology did not give any chance to students and teachers for making a proper plan for lesson delivery, assessment, technical arrangement or support (Mohalik, R. & Sahoo, S.S. 2020). Mohalik and Sahoo observed in their work that students and teachers are found to have e-readiness with digital devices and financial ability to access online learning but struggling for electricity supply and internet connectivity. The current study is not on teachers' and students' readiness to apply e-learning. It must be noted that one who has negative perception on an issue cannot be ready to accept the issue. Hence, the researcher considered a study on teachers' perception of e-learning as a pre-requisite for readiness.

Guidance Note on Education Systems' Response to COVID-19 stated that most government rolled out awareness campaign through schools on the means on hygiene and sanitation to students. The guidance note revealed that during the school closure, some countries are simply putting resources on their web site and making available more products, but not necessarily online classes. Others, like Spain are asking teachers to prepare online content and offer online classes as infrastructure and familiarity with the tools seem to be driving successes and challenges of delivery learning activities. China with robust connectivity, is offering distance learning successfully whereas others like Vietnam, Mongolia with limited effective internet, cell phone or television are finding it difficult to reach all students equally. In a policy brief: It was revealed that in half of 21 European countries examined, Grad 4 pupils from lower socio-economic backgrounds were half as likely to have access to the internet as their more advantaged peers. Espino-Diaz, Fernandez-Caminero, Hernandez-Lloret et al.

(2020) carried out a research work on the consequences of the pandemic in the field of education and their result showed that the World Education Monitoring Report concluded that only 40% of adults in upper- middle-income countries are able to send an email with an attachment to students. It further showed that the sudden change of teaching and learning activities from the face to face model to the online modality reveals the existence of three gaps: the access gap; the use gap and the gap in teacher skills, availability of resources, and adaptation of online platforms to carry out teaching and learning process. This directly shows the need of the educational system to provide effective school environment that promote respect and positive emotions, in order to facilitate teaching and learning process.

Methodology

The study employed a descriptive survey design. A descriptive survey design deals with description of the characteristics of individual(s) or event(s) or object (s). Descriptive survey design is considered appropriate for this study as teachers' characteristics, in terms of their perceptions of distance and e-learning are sought and described. The population of the study is 69 Economics teachers distributed in the 59 public secondary schools in Nsukka Education Zone, Enugu State. The sample size was 59 Economics teachers drawn using purposive sampling technique. The choice for purposive sampling technique was to ensure that one most senior Economics teacher was selected from each of the 59 secondary schools in the zone. The instrument for data collection was Economics Teachers' Perception of Distance and E-learning Questionnaire (ETPDEQ) comprised of two clusters; Cluster A and Cluster B. Cluster A was developed by the researchers while Cluster B was adapted from Oluniyi (2012). The items in the Cluster B were used by the author to measure students' perceived challenges of distance and e-learning education. In this study, the researchers considered the items appropriate for measuring teachers' perceived challenges of distance and e-learning education. Cluster A contains 10 items arranged in 4-point Likert type scale that measure teachers' perceptions of distance and e-learning. Cluster B equally contains 10 items

arranged in 4-point Likert type scale that measure teachers' perceived challenges of distance and e-learning education. In Both Cluster A and Cluster B, the teachers indicated their level of agreement with the items using the following 4-point scale: Strongly Disagree (SD) = 1, Disagree (D)=2, Agree (A) = 3, Strongly Agree (SA) =4. The instrument was subjected to face validation by 4 experts in Educational Measurement and Evaluation, University of Nigeria Nsukka. After validation the instrument it was trial tested on sample of 40 Economics teachers in private secondary schools in the zone to determine the internal consistency of the clusters. The reliability indices obtained using Cronbach Alpha revealed alpha coefficients of 0.81 and 0.86 for cluster A and B respectively. This indicated that the instrument is reliable. The researchers visited the 59 public secondary schools in the zone using on spot administration and retrieval of questionnaire, but were able to find 51 Economics teachers that responded to ETPDEQ. Efforts to meet the remaining 8 Economics teachers were

unsuccessful. Pre-analysis of data obtained from the 51 Economics teachers reveals evidence of response set in 3 of the retrieved ETPDEQ. These 3 copies were discarded leaving only the data from 48 Economics teachers which were used for the final analysis. The responses from the 48 teachers were subjected to analysis using SPSS version 25. The two research questions guiding the study were answered using mean and standard deviation while t-test statistic was used in testing the two hypotheses that guided the study. In answering the research questions, a mean score greater than or equal to 2.5 indicated *negative perception* while a mean score below 2.5 indicated *positive perception* for Cluster A similarly, a mean score greater than or equal to 2.5 indicate *agreement* with statement while a means score below 2.5 indicated *disagreement* with the items.

Research Question One: what are the Economics teachers' perceptions of distance and e-learning education?

Table 1: Mean and Standard Deviation Teachers' Perceptions of Distance and E-learning Education.

S/N	Statement	Mean	SD	Decision
1.	Distance and e-learning is more appropriate for students in tertiary education level.	3.14	1.21	Negative
2.	Most topics in Economics cannot be effectively taught through e-learning system.	2.65	0.97	Negative
3.	Distance and e-learning cannot effectively be implemented in public schools in my state.	2.72	0.85	Negative
4.	Distance and e-learning could deepen the decrease in the quality of education if fully adopted at secondary education level.	3.03	1.02	Negative
5.	Distance and e-learning system is a waste of resources as compare to conventional classrooms.	2.39	0.99	Positive
6.	Distance and e-learning is very difficult to implement even by experience teachers.	3.15	1.03	Negative
7.	Parents would prefer conventional classrooms where students could be easily disciplined over e-learning mode.	2.88	0.98	Negative
8.	I don't have enough skills to implement e-learning system	3.40	0.96	Negative
9.	Distance and e-learning will not even reduce teachers' workload and increase their effectiveness.	2.67	0.88	Negative
10.	Curriculum and scheme of work cannot be covered through distance and e-learning system	2.03	0.94	Positive
Grand Mean		2.81		Negative

Table 1 reveals the mean and standard deviation of Economics teachers' perceptions of distance and e-learning in education in

Nsukka Education Zone. The mean ratings for the ten (10) items ranges from 2.03 to 3.15 with standard deviation scores that range from

0.85 to 1.21 for the ten (10) items. Two items; item 5 and item 10 have mean scores of 2.39 and 2.03 with standard deviation of 0.99 and 0.94 respectively. The remaining 8 items have mean scores greater than 2.5. It means that the mean values of 8 items are greater than the cut of point of 2.5 while the mean values of 2 items are below the cut of point. Since a

mean value greater than 2.5 indicates negative perception of distance and e-learning, it is means that teachers have negative perception of distance and e-learning.

Research Question Two: what are the teachers perceived challenges of distance and e-learning Education in Nsukka Education Zone?

Table 2: Mean and Standard Deviation of Teachers' Perceived Challenges of Distance and E-learning Education

S/N	Statements	Mean	SD	Decision
1.	Ineffective teaching	3.11	1.05	Agree
2.	High cost	3.90	1.01	Agree
3.	Lack of face-to-face interaction with students	3.42	1.02	Agree
4.	Lack of face-to-face interaction with fellow teachers	2.54	0.91	Agree
5.	Low quality	3.02	1.22	Agree
6.	Inadequate electrical supply	3.88	0.95	Agree
7.	Poor internet services	3.94	0.87	Agree
8.	High dropout rate among lazy students	3.24	1.06	Agree
9.	Difficulties with computer usage	2.89	0.94	Agree
10.	Unfamiliarity with the concept of online learning	3.73	0.97	Agree
	Grand Mean	3.37		Agree

Table 2 reveals the mean and standard deviation of Economics teachers' perceived challenges facing distance and e-learning in education in Nsukka Education Zone. The mean ratings for the ten (10) items ranges from 2.54 to 3.90 with standard deviation scores that range from 0.87 to 1.05 for the ten (10) items. It means that the mean values of teachers' perceived challenge in all the items

are greater than the cut of point of 2.5. Hence it is concluded that teachers have agreed that all the challenges captured in the items are indeed constraints to distance and e-learning education in the zone.

Hypothesis One: there is no significant difference between male and female Economics teachers' perception of distance and e-learning education

Table 3: t-test Summary of the difference between Male and Female Economics Teachers' Perception of Distance and E-learning.

Gender	N	Mean	SD	df	t	p-value	Decision
Male	19	29.07	4.08	46	0.63	0.53	Not Sig.
Female	29	30.13	4.86				

Table 3 reveals the mean score of male and female Economics teachers on perceptions of distance and e-learning education are 29.07 and 30.13 with standard deviation of 4.08 and 4.86 respectively. When a t-test statistic was calculated for the distribution of males and females for their perceptions of distance and

e-learning, there was no significant difference found between the males and females ($t=0.63$, $df=46$, $p=0.53$)

Hypothesis Two: there is no significant difference between male and female Economics teachers' perceived challenges of distance and e-learning education

Table 4: t-test Summary of the difference between Male and Female Economics Teachers' Perceive Challenges of Distance and E-learning Education.

Gender	N	Mean	SD	df	t	p-value	Decision
Male	19	35.51	5.11	46	0.87	0.39	Not Sig.
Female	29	36.02	5.63				

Table 4 reveals the mean score of male and female Economics teachers on perceptions of distance and e-learning education are 35.51 and 36.53 with standard deviation of 5.11 and 5.63 respectively. When a t-test statistic was calculated for the distribution of males and females for their perceived challenges of distance and e-learning, there was no significant difference found between the males and females ($t=0.87$, $df=46$, $p=0.39$).

Discussion

The data in Table 1 shows the mean perception ratings of Economics teachers on distance and e-learning education in Nsukka Educational Zone, Enugu State. From the table, it is revealed that Economics teachers have negative perception of distance and e-learning education. These findings contradict Yanti et al (2018) who noted, among others, that secondary teachers in Pasaman, city of West Sumatera perceive e-learning as an easy to apply technology in education. The reason for these contradiction findings could be attributed to the background knowledge and application of e-learning in the two populations. Yanti et al (2018) used a sample of secondary school teachers who had knowledge of and had applied e-learning teaching various school subject unlike the present study where the respondents have not applied e-learning in formal settings. From Table 2, the findings equally reveal that Economics teachers perceive ineffective teaching, high cost, lack of face-to-face interactions, inadequate electrical power supply, poor internet access, high dropout rates among lazy students, difficulties in using computer and unfamiliarity with concepts of online learning as challenges of distance and e-learning in the zone. These findings in agreement with Oluniyi (2012) who noted that students perceived technological access, poor quality of leaning using as great challenges associated with e-learning, especially in

developing world. The findings of this study further show that there is no significant gender difference among Economics teachers on both their perceptions of distance and e-learning education and their perceived challenges of distance and e-learning. These findings in line with Gunduz and Isman (2018) who observed that male and female pre-service teachers did not differ in their perceptions of distance and e-learning in Turkey. The reason for non-significant difference could be attributed to both male and female teachers' similar experience in using distance and e-learning in instructional delivery.

Conclusion

Based on the findings of the study, it is concluded that Economics teachers have negative perceptions of distance and e-learning and that gender does not influence teachers' perception of distance and e-learning instruction delivery. It is also concluded that perceived challenges of distance and e-learning include ineffective teaching, high cost, lack of face-to-face interaction, poor internet access, inadequate electrical power supply and teachers' unfamiliarity with online learning.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. Government and school proprietors should organize seminars, workshops and conferees for teachers on how to deliver online instructions.
2. Government should make distance and e-learning materials, such as computers and internet access available to both teachers and students.
3. Curriculum planners should review the curriculum with a view to making it more conformable to online instructions.

- Parents should be educated, through Parent-Teachers Association (PTA) on the need to encourage distance and e-learning education.

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