

**INFLUENCE OF E-LEARNING APPROACHES ON PUPILS' LEARNING INTEREST
DURING THE COVID-19 PANDEMIC IN SELECTED PRIVATE PRIMARY SCHOOLS
IN ASABA METROPOLIS**

BY

Adewunmi F. AYO-VAUGHAN, Ph.D
Department of Curriculum and Instruction
Federal College of Education (Technical) Asaba
email:oluwanikanlomola@gmail.com

Abstract

The use of e-learning in the teaching-learning process has come to stay. This study was carried out to examine the influence of e-learning approaches on pupils' learning interest during the covid-19 pandemic in selected private primary schools in Asaba metropolis. Two research questions guided the study and descriptive survey research design was employed. An estimated number of 80 teachers and 300 pupils at primary 5-6 levels made up the population. Purposive and simple random sampling techniques were used to select four schools, twenty teachers and sixty pupils (80 respondents) that made up the sample size. The instrument used for data collection was a questionnaire titled Teachers' and Pupils' Perception on E-learning and Pupils' Learning Interest Questionnaire (TPPEPLIQ). The instrument was validated and tested for reliability and found reliable with a reliability coefficient of 0.89. Data collected were analysed using descriptive statistics. The study found that most teachers used various e-learning approaches during the COVID-19 pandemic era and that these e-Learning approaches utilized by teachers during the Covid-19 pandemic influenced pupils' learning interest to a high extent. It was recommended that e-learning approaches should be utilized by primary school teachers as a regular classroom practice and not just for the fact that a pandemic necessitated it. In addition, private primary school teachers should explore the use of blended learning strategies.

Keywords: Learning interest, E-learning, E-learning approaches, COVID-19 Pandemic

Introduction

In this age of Information and Communication Technology (ICT), the world has practically become a global village in carrying out its activities. The field of education is not left out. Most western countries have digitalized their education system with the use of various e-learning strategies that have transformed their traditional classrooms to virtual classrooms. Electronic-learning (e-learning) is not only a kind of virtual or distance education to deliver content by electronic means through the use of the internet, infrared or CD-Room, but is aimed at effective learning in real time.

In Nigeria, the COVID-19 pandemic exposed how unprepared teachers and the entire society was in the face of daunting challenges that confronted the education system, though some e-learning platforms were explored. However, the extent to which teachers were able to cope and the influence of the e-learning approaches used on learning interest is yet to be determined. By way of clarification of concepts, Basak, Wotto and Belanger (2018) stated that the term electronic learning (e-learning) is used indifferently or in a complementary way with mobile learning (m-learning) and digital learning (d-learning) to mean technological learning. However, e-learning is the alternative of traditional classroom teaching and it can also be used to complement it.

On the other hand, Clark (2007) stated that m-learning complements both traditional classroom teaching as well as e-learning. Furthermore, m-learning allows learners to interact with their learning resources no matter the distance in learning environments. In other words, through m-learning, students can easily buy e-books and download to their devices (Geist, 2011) and it is no longer a novelty for learners, but it is a mainstream, pervasive learning delivery medium relied upon by thousands of post-secondary education institutions and millions of

workforce (Cherian & Williams, 2008). The third concept d-learning, is a tool which addresses numerous classroom challenges that are faced by educational institutions (Digital Learning, 2011). D-learning is a term that is increasingly replacing e-learning and it concerns the use of information and communication technology (ICT) in the open and distance learning (Basak, Wotto & Belanger, 2018).

In summary and by way of definition, e-learning refers to the use of computer network technology, primarily over or through the internet, to deliver information and instructions to individuals (Wang et al., 2010). Furthermore, e-learning is a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It also includes the delivery of content via internet, intranet/extranet (LAN/WAN), audio and video tapes, satellite broadcast, interactive TV, and CD-ROM” (DeRouin et al., as cited in Nore’n Creutz & Wiklund, 2014). E-learning can therefore be defined as the technological or the methodological e-learning approaches that are perceived as creative by the potential users (Fischer, 2013). These technological or methodological e-learning approaches can be used to facilitate education at all levels without exception of even the primary level of education.

The National Policy on Education (FRN, 2013) describes primary education as the education given to children aged 6 – 12 years. It further acknowledged that, since the rest of education system is built upon it, the primary education level is the key to success or failure of the whole system. Primary education is the foundation of formal education system. It is expected, at this level that every child at the age of six should be admitted into the primary school which has a six-year duration. Primary education does not only lay foundation of other levels of education in Nigeria and other nations but it is the foundation of the sociopolitical and

economic advancement of any nation (Nigeria inclusive) (Amaele, 2006). The truth is that no matter how magnificent a building may seem or how expensive it may be, if it lacks solid foundation, it is doomed to collapse. It may not only collapse, causing economic waste, but may result to the death of its occupants (Afolayan, 2014).

The six cardinal objectives of the Primary education in Nigeria, according to the Federal Republic of Nigeria (2013) in her National Policy on Education are to:

- a) inculcate permanent literacy, numeracy and the ability to communicate effectively;
- b) lay a sound basis for scientific, critical and reflective thinking;
- c) promote patriotism, fairness, understanding and national unity;
- d) instill social, moral norms and values in the child;
- e) develop in the child the ability to adapt to the changing environment; and
- f) provide opportunities for the child to develop life manipulative skills that will enable the child function effectively in the society within the limits of the child's capability.

These objectives are indeed laudable and in the face of the challenges posed by the COVID-19 pandemic cannot be achieved effectively without the integration of e-learning.

According to Rosenberg (2001) and Wentling et al. (2000), e-learning provides a wide range of solutions to enhance knowledge and performance. It facilitates and enhances learning through and based on the computer and communication technology and it can be considered as a flexible learning. Papanis (2005) stated that e-learning components include the content delivery in different formats, to manage the learning experience, learners' network community, and content developers and experts. E-learning is a personalized approach that focuses on the individual learner and it includes self-paced training, many of the virtual events, mentoring, simulation, collaboration, assessment, competency road map, authoring tools, e-store, and the

learning management system. E-learning also includes many of the different components that are very familiar with traditional learning, namely, learner's presentation ideas, group discussions, arguments and other different forms that convey the information which culminates into knowledge and interest (Bencheva, 2010).

Despite the laudable benefits of e-learning, more than 1.5 billion students and pupils in 188 countries including Nigeria were out of school due to COVID-19 pandemic in the second quarter of 2020, according to UNESCO (2020). The pandemic exposed the vast disparities in countries' emergency preparedness, internet access for children, and availability of learning materials especially in public schools. For many children in the public setting, the COVID-19 pandemic meant limited or no education, or falling further behind their peers (Ajala & Olaniyonu, 2020). Most states embarked on make-shift e-learning classes via the radio, television and even Zoom platforms for the public schools knowing fully that most of the pupils from these public schools live in areas with no access to light, good internet network and whose families have lost income as a result of job cuts or precarious employment or are otherwise in a difficult situation and struggling to survive at the time of the pandemic (UNDP, 2020; WHO, 2020 & NCDC, 2020).

The teachers are also not left out of this fire-brigade solution as Aiyebilehin cited by Makinde, Makinde and Shorunke (2013) found that, when it comes to the use of e-learning in classrooms even before the COVID-19 pandemic, computer, multimedia boards, projectors, telephones, internet, scanners, and photocopiers were used more frequently by teachers. However, the largest percentage of computer users (57.26%) were reported to be monthly users, the largest percentage of multimedia users (52.56%) were reported to be occasional users, and the largest percentage of projector users 125 (53.42%) reported to be occasional users. In other

words, most teachers sparingly engaged in the use of e-learning features, platforms and strategies. In the face of the above discourse, it is obvious that most school teachers and pupils were not familiar with the use of e-learning in classroom teaching before the COVID-19 pandemic forced its adoption. It is therefore not out of place to examine the perception of public primary school teachers on the influence of e-learning on pupils' learning interest.

Research Questions

The following questions were answered in this study:

1. What are the various e-learning approaches used by private primary school teachers during the Covid-19 pandemic in Asaba as perceived by teachers and pupils?
2. To what extent did the e-learning approaches utilized by private primary school teachers during the Covid-19 pandemic in Asaba influenced pupils' interest in learning as perceived by teachers and pupils?

Methodology

The study employed the descriptive survey research design. This research design is preferred in this case because in using the descriptive survey, statistical information can easily be obtained and cannot be manipulated. Also, the design allows for the use of questionnaire by the researcher as a data collection instrument and it is cost-effective. This study was carried out in Asaba metropolis of Delta State. This comprises Koka-Ibusa road, Summit, Inter-bau, Bonsac, Nnebisi road and DLA road axes.

The population of the study comprised Primary 5 and 6 pupils as well as their teachers in private primary schools in Asaba metropolis. The reason for selecting only primary 5 and 6 is because those are the classes where e-learning approaches were consistently implemented during the COVID-19 pandemic. In addition, these classes had the age range of pupils (7-11 years) that

could suitably respond to the research items. An estimated number of 80 teachers and 300 pupils at primary 5-6 levels made up the population (Delta State Ministry of Education records on population and number of private schools, 2021).

Private schools were the focus of the study because the implementation process of e-learning during the COVID-19 pandemic was more open and assessable unlike the one carried out in public schools. Purposive sampling technique was used to select four private schools that made up the study's sample out of about fifteen in Asaba metropolis. These schools were purposively selected based on their consent to allow their teachers and pupils participate in the study, adherence to educational standards in terms of evidence of use of the official curriculum and availability of building structures and internet facilities to operate e-learning. Simple random sampling technique was then used to select five teachers and fifteen pupils from each of the four schools selected for the study. This makes a total of twenty teachers and sixty pupils (80 respondents) that made up the sample size.

The instrument used to gather data was a questionnaire titled Teachers' and Pupils' Perception on E-learning and Pupils' Learning Interest Questionnaire (TPPEPLIQ). The questionnaire consisted of sections A and B. Section A elicited responses on the respondent's demographic variables while Section B consisted of sixteen items constructed to elicit responses on the research questions raised. The items were rated on a four-point Likert scale of Strongly Agree (SA), Agree (A) Disagree (D), Strongly Disagree (SD) and Very High Extent (VHE), High Extent (HE), Low Extent (LE) and Very Low Extent (VLE). The instrument was validated by two research experts and observations made were effected in the final draft administered. The instrument was tested for reliability on ten teachers outside of the sample location using

Cronbach Alpha analysis and a reliability co-efficient of 0.89 was obtained. On the spot approach was used in administering the instrument by the researcher and descriptive statistics of frequency counts, mean and standard deviation were used for analysis of data.

Results

Research Question 1: What are the various e-learning approaches used by private primary school teachers during the Covid-19 pandemic in Asaba as perceived by teachers and pupils?

Table 1: Mean Responses of Teachers on E-learning Approaches used by Private Primary School Teachers

S/N	STATEMENTS	SA	A	D	SD	X	SD	DECISION
1	Teacher used online discussion as a teaching strategy for the subjects taught during the covid-19 pandemic online learning	15	5	0	0	3.75	2.88	Agree
2	Teacher provided timely, constructive feedback to the pupils about assignments and questions during the Covid-19 pandemic online learning.	12	8	0	0	3.60	2.45	Agree
3	Teacher immediately consult with pupils to correct problems and keep them on the task during the Covid-19 pandemic online learning.	15	3	2	0	3.65	2.83	Agree
4	Teacher used appropriate approaches designed to accommodate the varied talents and skills of pupils during the Covid-19 pandemic online learning.	12	6		2	3.40	2.32	Agree
5	Teacher provided student centered lessons and activities that are based on concepts of active learning and that are connected to the application of online learning tools.	17	3	0	0	3.85	3.22	Agree
Grand Mean /SD						3.65	0.85	Agree

Table 1 shows teachers' mean scores and standard deviation ratings on the extent to which various e-Learning approaches were used by Primary School Teachers during the Covid-19 pandemic. Analysis of data indicates that respondents agree with all items raised as they recorded mean scores ratings of 3.75, 2.9, 3.65, 3.40 and 3.83 which are above the average mean

score rating of 2.50. This Implies that, teachers used online discussion as a teaching approach for the subjects taught during the covid-19 pandemic online learning, teacher provided timely, constructive feedback to the pupils about assignments and questions during the Covid-19 pandemic online learning and teacher immediately consult with pupils to correct problems and keep them on the task during the Covid-19 pandemic online learning among others e-Learning approaches. The standard deviation for all the items are within range and indicates that the respondents had a similar view on each item. The grand mean score of 3.65 and grand standard deviation score of 0.85 indicates that these e-Learning approaches were indeed used by the teachers and their views are not far apart.

Table 2: Mean Responses of Pupils on E-learning Approaches used by Private Primary School Teachers

S/N	STATEMENTS	SA	A	D	SD	X	SD	DECISION
1	Teacher used online discussion as a teaching approach for the subjects taught during the covid-19 pandemic online learning	39	16	4	1	3.50	2.64	Agree
2	Teacher provided timely, constructive feedback to the pupils about assignments and questions during the Covid-19 pandemic online learning.	17	28	6	9	2.93	1.75	Agree
3	Teacher immediately consult with pupils to correct problems and keep them on the task during the Covid-19 pandemic online learning.	29	19	7	5	3.16	2.08	Agree
4	Teacher used appropriate approaches designed to accommodate the varied talents and skills of pupils during the Covid-19 pandemic online learning.	24	23	2	11	3.15	1.92	Agree
5	Teacher provided student centered lessons and activities that are based on concepts of active learning and that are connected to the application of online learning tools.	20	26	7	7	2.98	1.80	Agree
Grand Mean/SD						3.14	1.32	Agree

Table 2 shows pupils' mean scores and standard deviation ratings on the extent to which various e-Learning approaches were used by Primary School Teachers during the Covid-19 pandemic.

Analysis of data indicates that respondents agree with all items raised as they recorded mean scores ratings of 3.50, 2.93, 3.16, 3.15 and 2.98 which are above the average mean score rating of 2.50. This indicated that respondents agree that e-learning approaches were used by teachers in teaching pupils during the Covid-19 pandemic lockdown. The grand mean score of 3.14 and grand standard deviation of 1.62 also indicates that pupils agree that e-Learning approaches were used by their teachers and their view on the items are not far apart.

Research Question 2: To what extent did the e-learning approaches utilized by private primary school teachers during the Covid-19 pandemic in Asaba influenced pupils’ interest in learning as perceived by teachers and pupils?

Table 3: Mean Responses of Teachers on the Influence of E-learning Approaches utilized by Private Primary School Teachers on Pupils Interest

S/N	STATEMENTS	VHE	HE	LE	VLE	X	SD	DECISION
6	Feedback from parents helped reveal that e-learning approaches utilized enhanced pupils’ interest.	19	0	0	1	3.85	3.62	High Extent
7	Pupils’ display of new concepts learned via online learning reveals that their learning interest was enhanced.	13	7	0	0	3.65	2.58	High Extent
8	Teachers’ adaptation to online teaching approaches affected positively the delivery of lessons which in turn was a boost for pupils learning interest.	12	3	5	0	3.35	2.28	High Extent
9	Teachers’ use of interactivity during online teaching helped sustain pupils’ interest as they progressed through the online teaching.	11	9	0	0	3.50	2.35	High Extent
10	Teachers’ use of appropriate online tools helped capture pupils’ attentiveness to online teaching and thus enhanced learning interest.	10	3	0	7	2.80	1.90	High Extent
Grand Mean/SD						3.43	0.85	High Extent

Table 3 shows teachers’ mean and standard deviation rating scores on the extent to which e-Learning approaches utilized by teachers during the Covid-19 pandemic lockdown influenced

pupils' interest in learning. Analysis of data indicates that respondents agree with all items raised as they recorded mean scores ratings of 3.85, 3.65, 3.35, 3.50 and 2.80 which are above the average mean score rating of 2.50. This implies that e-Learning approaches utilized by teachers during the Covid-19 pandemic influenced pupils' learning interest to a high extent. The grand mean score of 3.43 and standard deviation of 0.85 further indicates that these e-Learning approaches utilized by teachers indeed influenced pupils' learning interest to a high extent and the respondents were not wide apart in their views.

Table 4: Mean Responses of Pupils on the Influence of E-learning Approaches utilized by Private Primary School Teachers on Pupils' Interest

S/N	STATEMENTS	VHE	HE	LE	VLE	X	SD	DECISION
6	Feedback from parents helped reveal that e-learning approaches utilized enhanced pupils' interest.	23	28	4	5	3.15	2.00	High Extent
7	Pupils' display of new concepts learned via online learning reveals that their learning interest was enhanced.	34	19	2	5	3.36	2.38	High Extent
8	Teachers' adaptation to online teaching approaches affected positively the delivery of lessons which in turn was a boost for pupils learning interest.	18	15	10	17	2.56	1.40	High Extent
9	Teachers' use of interactivity during online teaching helped sustain pupils' interest as they progressed through the online teaching.	29	12	11	8	3.03	1.98	High Extent
10	Teachers' use of appropriate online tools helped capture pupils' attentiveness to online teaching and thus enhanced learning interest.	28	20	7	5	3.18	2.08	High Extent
Grand Mean/SD						3.06	1.29	High Extent

Table 4 shows pupils' mean scores and standard deviation ratings on the extent to which various e-Learning approaches used by Primary School Teachers during the Covid-19 pandemic had influence on pupils' learning interest. Analysis of data indicates that respondents agree with all

items raised as they recorded mean scores ratings of 3.15, 3.36, 2.56, 3.03 and 3.18 which are above the average mean score rating of 2.50. This implies that e-Learning approaches utilized by teachers during the Covid-19 pandemic influences pupils learning interest to a high extent. The grand mean score of 3.06 and grand standard deviation of 1.29 indicates that e-Learning approaches utilized by teachers during the Covid-19 pandemic to a high extent influenced pupils' learning interest and respondents had a similar view on the items.

Discussion of Findings

This study found that both teachers and pupils agree that teachers used online discussion as a teaching approach for the subjects taught during the covid-19 pandemic online learning, teacher provided timely, constructive feedback to the pupils about assignments and questions during the Covid-19 pandemic online learning and teacher immediately consult with pupils to correct problems and keep them on the task during the Covid-19 pandemic online learning among others e-Learning approaches. This finding is in line with DeRouin et al., as cited in Nore'n Creutz & Wiklund (2014) which states that e-learning is a wide set of applications and processes, such as Web-based learning, computer-based learning, virtual classrooms, and digital collaboration. It also includes the delivery of content via internet, intranet/extranet (LAN/WAN), audio and video tapes, satellite broadcast, interactive TV, and CD-ROM". It also aligns with Fischer (2013) definition that e-learning can be defined as the technological or the methodological approaches that are perceived as creative by the potential users.

This study also found that both teachers and pupils agree that e-Learning approaches utilized by teachers during the Covid-19 pandemic influenced pupils' learning interest to a high extent. This finding is in line with Bencheva (2010) that e-learning also includes many of the different components that are very familiar with traditional learning, namely, learner's

presentation ideas, group discussions, arguments and other different forms that convey the information which culminates into enhanced knowledge and interest.

Conclusion

This study has examined utilization of e-learning approaches during the COVID-19 pandemic and its influence on learners' interest. Despite reports that most schools and teachers paid less attention to the use of e-learning in their respective schools, this study has been able to reveal that most schools especially in the private sector had to beef up their earlier resources and explored the features of e-learning to a large extent during the pandemic. This is evident in the findings of the study. Though the study did not focus on public school, this does not mean that attempts were not made in public schools to explore the benefits of e-learning. This only gives room for further areas of research on this educational problem.

Recommendations

Based on the findings, the study therefore recommends that e-learning approaches to learning should be utilized by private primary school teachers as a regular classroom practice and not just for the fact that a pandemic necessitated it. In addition, private primary school teachers should explore the use of blended learning strategies. This would ensure consistency in the use of e-learning approaches in classroom teaching is sustained.

This study also recommends that school authorities should not leave private primary school teachers alone to face the challenge of providing facilities needed for engaging in e-learning. They should consciously provide the necessary facilities needed by these teachers. In the same vein, seeing that the utilization of e-learning approaches enhances pupils' learning interest, it would not be out of place for the school authority to set in motion strategies that will regularly update teachers on the latest in terms of e-learning usage.

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