

Survey Of Teachers' Perception Of The Integration Of E-Learning In Secondary Schools In Niger State, Nigeria

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Abstract:

This study examined Teacher's Perception of the Integration of E-learning in Secondary Schools in Niger State. Descriptive survey design was adopted for the study and multi-stage sampling which involves purposive, proportionate and simple random sampling techniques were used to select a total of 306 respondents for the study. Researcher's self-designed questionnaire titled "Teacher's Perception of the Integration of E-learning Questionnaire (TPIEQ)" was used to collect relevant data for the study. The instrument yielded a test re-test reliability coefficient of 0.82. The following research questions were raised: What is the level of availability of E-learning technological facilities in secondary schools in Niger State? What is the level of teachers' perception on the integration of E-learning for instruction in Secondary Schools in Niger State? The research questions were analyzed using SPSS to find the Mean. The findings of the study revealed that availability of resources like internet services, devices and funding is particularly low, while teachers in secondary schools in Niger State have a positive perception of E-learning's impact on teaching and learning. Based on the findings of this study it was recommended that government should provide E-learning resources like internet services and devices for teaching and learning.

Keyword: Perception, Integration, E-learning, Secondary School Teachers.

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I. Introduction

Education is the bedrock of development of any Nation; it's the yardstick for measuring development of a country in all sectors; economic, political, social and the rest. Education is one of the mandatory social services for government to provide for its citizen at any given situation. Insecurity and banditry, in Nigeria is no longer an issue of contention or argument since the issue is known to all. Niger state is unfortunate to be one of the insecurities affected State. At a time, the situation warranted the closure of many schools particularly in villages. Meanwhile, for government to ensure that everybody is provided with opportunity for the access to education, other means or methods of instructions need to be adopted. Alternatively, E-learning methods can be applied considering the fact that there is paradigm shift in method of instruction whereby, technology is overriding the old methods of instructions'-learning is described as online learning or electronic learning, which is the acquisition of knowledge that takes place through electronic technologies and media. It is typically the learning that is conducted on the internet, where students can access their learning materials online at any place and time (Seder, 2020). A learning system based on formalized teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. E-learning can also be termed as a network-enabled transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times. Earlier, it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning.

E-learning instructional design: In simple terms, it's the practice of making learning experiences effective, interesting, and engaging for a learner. Anyone can create an e-learning project, but a skilled instructional designer will build e-learning that meets the learning objectives and needs of the learners. Therefore, it has become necessary for government to see the possibility of introducing e-learning in secondary schools of Niger state thereby providing opportunities for every child to have access to education so as to fulfill their mandatory duties enshrined in the Constitution and National Policy on Education of Nigeria. Education is

one of the basic necessities that must be provided for every citizen of the country based on the constitutional and National policy on education provisions that stated clearly that; "...is based on the integration of the individual into a sound and effective citizen and equal educational opportunities for all citizen of the nation at the primary, secondary and tertiary levels (FGN, 2004). Therefore, Government of Niger state should be able to achieve the desired objective and ensure the fulfillment of its duty bound, under critical situation that necessitated the closure of many schools due to the insecurity and banditry issues. Hence, there is need for other means of instruction in our schools. The e-learning is one of the methods that gives educational assess to children under critical situations like insecurity, disaster and rest.

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A learning system based on formalized teaching but with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, the use of computers and the Internet forms the major component of E-learning. E-learning can also be termed as a network enabled transfer of skills and knowledge, and the delivery of education is made to a large number of recipients at the same or different times. Earlier, it was not accepted wholeheartedly as it was assumed that this system lacked the human element required in learning. E-learning instructional design in simple term is the practice of making learning experiences effective, interesting, and engaging for a learner. Anyone can create an e-learning project, but a skilled instructional designer will build e-learning that meets the learning objectives and needs of the audience, (FGN, 2004). Historically, E-Learning to be better understand how eLearning benefits organizations today, it's helpful to look at its past. Elliott Maisie coined the term "eLearning" in 1999, marking the first time the phrase was used professionally. In the years since, e-Learning's reputation has gone from strength to strength. But what factors have facilitated eLearning in becoming the most popular way to deliver training today? Meanwhile, Teachers' perception is the thoughts or mental images teachers have about the issues related to teaching and learning process that are shaped by their background knowledge and life experiences. These experiences might involve their family history or tradition, education, work, culture, or community. All of these and more contribute to an individual's personal lens and how he or she views others.

The perceptions matter because, even when individuals have little information about another, they naturally form perceptions about them, some of which might be based on stereotypes. This tendency can lead to misperceptions. For instance, Jill Smith, a practicum student, is working in a diverse classroom. Her university supervisor is observing Jill as she conducts whole-group instruction. Later, the supervisor offers observations and feedback about Jill's instruction. One of the things she pointed out is the way Jill responded differently to different groups of students. This study is therefore to make a survey of teachers' perception on the integration of E-learning in secondary schools in Niger state, Nigeria.

Statement of Problem

Education is one of the basic necessities to be provided by government just as being stated in the constitution and National policy on education (FGN, 2004). The issue of insecurity and banditry in Nigeria is no longer news particularly in the north and in Niger state in particular, because is well known to everybody day in day out, due to that many schools have been closed down. Many children who ought to be in schools are not there, government could not find solution to the problem. Therefore, if nothing is done to this effect, those children out of schools can be a problem to the state and country at large. There is likelihood for them to be Area boys, hoodlums, gangsters and so on if they have nothing to do and cannot contribute to the development of the state and the nation in general. In view of the above, this study investigated on the perception of teachers towards the integration of e-learning in secondary schools in Niger state thereby PROFERING possible solutions to those students whose schools have been closed to have chance of getting access to education through e-learning where ever they find themselves.

Objectives of the Study

1. To examine the level of availability of E-learning technological facilities in secondary schools in Niger State.
2. To determine the level of teachers' perception of the integration of E-learning for instruction in Secondary Schools in Niger State.
3. To assess teachers' perception of the challenges of using E-learning for instruction in Secondary Schools in Niger State.
4. To determine possible measures that mitigate against teachers' perception of the challenges of using E-learning in Secondary Schools in Niger State.

Research Questions

1. What is the level of availability of E-learning technological facilities in secondary schools in Niger State?
2. What is the level of teachers' perception on the integration of E-learning for instruction in Secondary Schools in Niger State?
3. What are teachers' perceptions on the challenges of using E-learning for instruction in Secondary Schools in Niger State?
4. What are the possible measures that mitigate teachers' perception on the challenges of using E-learning in Secondary Schools in Niger State?

II. Material And Methods

Research Design

Descriptive survey research design was adopted in carrying out this study. This research design is appropriate for this study because firstly, it is less costly and less time consuming. Secondly, it allows analyzing several factors at one time by giving a snapshot at a particular time (Coetzee, 2005). Thirdly, it is easier to collect answers needed since participation does not require long time commitment from participants (Kipkebut, 2010). Lastly, data obtained from the survey is easier and faster to analyze with the help of statistical software.

Study Population

The population for this study comprised all teachers of Niger state secondary schools. To make a survey of teachers' perception on E-learning in Secondary schools of Niger state, Nigeria. Multi stage sampling technique was used to determine sample population for the study which is 306. The first sampling technique was purposeful which involved the selection of secondary schools from Niger state. One school with dense population was selected from each zone of the state. The second sampling technique is the proportionate stratified sampling; it is suitable for this study because it involves many secondary schools with different population. To ensure proper spread of the sample size this sample techniques are essential, because it gives a researcher option of choosing the proportion based on the size of the stratum in the population (Hibberts, Johnson, & Hudson, in Bagobiri, 2022).

Research instrumentation

A researcher's designed structured questionnaire tagged "Teacher's Perception on the Integration of E-learning Questionnaire (TPIEQ)" was used to elicit information on perception among respondents. The instrument has two sections: A and B. A elicits personal data of the respondents and section B consists of 20 items on perception of the participants. The 4-point Likert-type rating scale response format was adopted for use in responding to each item on the instrument tagged (TPIEQ).

Validity of the instrument

In order to validate the content of questionnaire draft, it was given to two major experts or specialists in the field of research statistics and curriculum for face and content validity to make critical and thorough observation on its suitability as an instrument for the collection of data. The reliability of the instrument was ascertained by the means of test re-test method. The instrument was administered on 20 secondary school teachers who did not form part of this study but have similar characteristics of the study population. After a period of four (4) weeks, the same instrument was re-administered on the same set of teachers. The two set of scores obtained on the two occasions were correlated using Pearson Product Moment Correlation (PPMC) statistical method. The Correlation Co-efficient (r) value of 0.82 at 0.05 was obtained. Thus the instrument is reliable for the study.

Data Analysis

Data collected was analyzed using SPSS package. Descriptive analysis was carried out to determine the levels of the variables, specifically frequency, percentages and charts will be used.

III. Result

Analysis of RQ1: What is the level of availability of E-learning technological facilities in secondary schools in Niger State?

Table 1: Mean Availability Level of E-Learning Technological Facilities in Secondary Schools in Niger State

Variable	N	Mean	Std. Dev
Availability of E-learning technological facilities	299	2.264	.886

The table 1 shows that Secondary Schools in Niger State lack adequate resources for E-learning, with mean scores below 3. The availability of resources like Internet services, devices, and funding is particularly low. While there is some variation in responses, the distributions are generally symmetrical and normal. The statistics indicate a need to improve resource availability to support effective E-learning, with some room for error in the mean scores.

Analysis of RQ2: What is the level of teachers' perception of the integration of E-learning for instruction in Secondary Schools in Niger State?

Table 2: Mean level of teachers' perception of the integration of E-learning for instruction in Secondary Schools in Niger State

Variable	N	Mean	Std. Dev
Teachers' perception of the integration of E-learning for instruction	299	3.219	.663

From the table 2 above, result shows that teachers in Secondary Schools in Niger State have a positive perception of E-learning's impact on teaching and learning. Mean scores range from 3.12 to 3.33, indicating a generally positive view. Standard deviation and variance values are relatively low, indicating consistency in responses. Skewness and kurtosis values suggest symmetrical and normal distributions. Standard error values indicate high accuracy in mean scores. Overall, the descriptive statistics suggest that teachers in Secondary Schools in Niger State have a positive perception of the impact of E-learning on teaching and learning. They believe that E-learning will enhance their instruction, professional knowledge, and efficiency, as well as improve the learning climate and student interactions.

Analysis of RQ3: What are teachers' perceptions of the challenges of using E-learning for instruction in Secondary Schools in Niger State?

Table 3: Mean on teachers' perceptions of the challenges of using E-learning for instruction in Secondary Schools in Niger State

Variable	N	Mean	Std. Dev
Teachers' perceptions of the challenges of using E-learning for instruction	299	2.56	.803

Source: SPSS

The statistics of table 3 show that Secondary Schools in Niger State face challenges in integrating E-learning. The mean scores indicate inadequate personnel, devices, and facilities, as well as unreliable electricity and inadequate funding. Additionally, students lack knowledge of computer applications. The standard deviation and variance values indicate moderate variation in responses, while skewness and kurtosis values suggest some asymmetry in distributions. Overall, the statistics highlight the need to address these challenges to facilitate effective E-learning integration.

Analysis of RQ4: What are possible measures to facilitate teachers' perception of the challenges of using E-learning in Secondary Schools in Niger State?

Table 4: Mean on possible measures to facilitate teachers' perception of the challenges of using E-learning in Secondary Schools in Niger State

Variable	N	Mean	Std. Dev
Possible measures to facilitate teachers' perception of the challenges of using E-learning	299	3.41	.646

Source: SPSS

The above statistical table 4 shows that there is a strong consensus among respondents on the need for various provisions to facilitate the integration of E-learning in Secondary Schools in Niger State. The mean scores range from 3.32 to 3.55, indicating a high level of agreement on the need for Internet facilities, E-learning materials, training and retraining of teachers, employment of computer-compliant staff, and adequate public electricity supply. The standard deviation and variance values indicate moderate variation in responses, while skewness and kurtosis values suggest some asymmetry in distributions. Overall, the statistics highlight the importance of these provisions for effective E-learning integration.

IV. Discussion

Firstly, table one shows that Secondary Schools in Niger State lack adequate resources for E-learning, with mean scores below 3. The availability of resources like Internet services, devices, and funding is particularly low. The findings agree with Amiaya (2016) who stated that ICT facilities are not adequately available for teaching and learning in secondary school. The findings however contradict, Nwabufo and Mamman (2018) who reported that e-learning technologies were relatively available to teachers and students in secondary schools

in Niger State. The result also supports the findings of Salome (2012), who reported that a large number of ICT resources required for teaching and learning in secondary schools.

Secondly, table two shows that teachers in Secondary Schools in Niger State have a positive perception of E-learning's impact on teaching and learning. Mean scores range from 3.12 to 3.33, indicating a generally positive view. Standard deviation and variance values are relatively low, indicating consistency in responses. Skewness and kurtosis values suggest symmetrical and normal distributions. Standard error values indicate high accuracy in mean scores. Overall, the descriptive statistics suggest that teachers in Secondary Schools in Niger State have a positive perception of the impact of E-learning on teaching and learning. They believe that E-learning will enhance their instruction, professional knowledge, and efficiency, as well as improve the learning climate and student interactions. This finding is in line with Ming-hung lin et al (2017) who found out digital learning presents better positive effects on learning than traditional teaching does. Similarly, this finding agrees with Fayomi et al. (2015) who studied the impacts of e-learning in facilitating academic performance among private secondary schools and tertiary institutions, resulting to improve learning process and high academic performance. The researchers found out that teachers in secondary schools in Niger State has positive perception towards the integration of E-learning in teaching and learning.

Thirdly, table three shows that Secondary Schools in Niger State face challenges in integrating E-learning. The mean scores indicate inadequate personnel, devices, and facilities, as well as unreliable electricity and inadequate funding. Additionally, students lack knowledge of computer applications. This result corroborate the findings of the Federal Ministry of Education (2014) which listed four obstacles to the effective use of ICT: a lack of confidence among some teachers regarding the advantages of ICT; a severe shortage of plasma televisions in educational institutions nationwide; and a shortage of computers, maintenance, and services in secondary schools. The result also supports the finding of Olisaemeka (2012), who claimed that the main obstacle s schools face that have led to the limited availability and use of ICT facilities are a lack of computers and internet access, funding, teacher training programs, computer lab space, school-based ICT policies, and the shortage of qualified IT teachers and technical assistants.

Fourthly, table 4 indicates a high level of agreement on the need for Internet facilities, E-learning materials, training and retraining of teachers, employment of computer-compliant staff, and adequate public electricity supply. The current result is in line with Nwokolo and Anyachebelu (2012) who found out that the level of e-learning facilities would be improved if quality internet facilities are provided and accessible. Therefore, the government and school management should brace up to make sure they provide all the necessary modern e-learning facilities for active utilization in schools.

V. Conclusion

The current study was carried out to show the perception of teachers on the integration of e-learning in secondary school in Niger State. The result shows that there is a need to improve resource availability to support e-learning. This will enhance instruction, professional knowledge and efficiency as well as improve the climate and the students' interaction. Also, there is the need to address challenges to facilitate effective e-learning integration and importance of these provisions for effective e-learning integration in schools.

Recommendations:

1. The availability of E-learning provides educators and educational managers the opportunity to undertake educational reforms and innovations that could result in increased efficiency.
2. Effectiveness of teaching and learning. E-learning has also been shown to have positive impact in teaching and learning. Thus government, educators and managers should seriously consider ways of integrating the use of ICT in education.
3. Training and re-training of teachers with theoretical and practical knowledge of ICT enabling them to teach effectively.

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