

**ASSESSMENT OF DIGITIZATION OF SECONDARY SCHOOLS IN KOGI STATE:
SUCCESS AND CHALLENGES**

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Abstract

The study was on assessment of digitization of Secondary Schools in Kogi state. Descriptive survey research design was used for the study. The population for the study comprises of 60 principals and three thousand teachers drawn from sixty government secondary schools in Kogi East. The sample size was thirty principals and 1500 teachers which is 50% of the total population. Proportionate stratified random sampling was adopted and each secondary school in the area were classified into strata and selected. Questionnaire titled Digitization of Secondary School Questionnaire (DOSSQ) was used as instrument for data collection. Two experts in Information and Communication Technology (ICT) education and one from measurement and evaluation from Prince Abubakar Audu University, Anyigba validated the instrument. A Reliability co-efficient of 0.83 was obtained.. Mean and standard deviation was used for data analysis. The findings of the study showed that every area of secondary school can be digitized, digitization of secondary schools in Kogi East is to a very little extent. The challenges to digitization of secondary schools include inadequate power supply, inadequate trained manpower and poor funding by authorities concerned. The study recommended adequate funding of secondary schools and training and retraining of teachers to handle digitization facilities among others as a way forward.

Keywords: assessment, digitization, secondary education, successes, challenges

Introduction:

Digitalization of the education sector is one of the numerous progress made in the educational industry to improve the provision and management of the education sector. According to Oguche (2013), digitalization evolved for so many reasons, among this is that education can no longer be confined, knowledge is vast, and students need to put their curiosity, exploration and innovative idea into practice. This cannot be catered for by the educational system which was earlier developed. Similarly, The Task Technology Theorist believed that task should be carried out if the technology to be used to carry out the task fits the task and is readily available to carry it out. (Godhue & Thompson, 1995) Digitization of secondary schools is a task that must be carried out in secondary school in this information age, however the digitization facilities must be available to enable the task to be carried out. The Task Technology Fits Theory has provided the theoretical foundation for this research.

Oiga (2017), says digitalization is the transformation of all types of information texts, sounds, visual, video and other data from various sources into the digital language. It involves

the use of advanced technique to introduce online courses, online examination, digital textbooks, animation, accumulation of students on the same platform and connecting students with their educators. Adopting the above method in teaching and administrative works in secondary education will quicken the education process. Over the years, there have been a very strong concern and agitations by stakeholder in education in Nigeria on the analogue outlook of Nigeria educational system, (Oiga,2017 & Oguche, 2013) this includes primary education, secondary education and tertiary education and stressed the need to join hand to improve its practice and management. This has given task to researchers in the field of education to develop instrument and carryout studies to find out how far Nigeria educational system has been digitized, the successes recorded and the challenges facing this innovation. In a study carried out by Bello (2013) on automation and digitalization of primary and secondary education libraries, print and non-print media were not digitized.

The challenges to digitization identified by the author include inadequate facilities, inadequate funding, and lack of qualified manpower to take the lead in the digitization process. In another comment, education in Nigeria including secondary school education has been remodeled to embrace digitization (News Direct 2021) this includes the use of the internet and virtual classroom. The authors noted that unhealthy experiences from secondary schools such as absence of infrastructures, and the low level of exposure of students to digitized facilities are challenges facing secondary schools. In a related study, Abdullahi and Tijani (2019) in their study reported that collaborative and inquiry based learning should be encouraged and digitized to enhance better management of the education system. Furthermore, Oguche (2013) indicates that the use of analogue technology centers in colleges of education in North central states has affected the pace of growth of education in the area. The challenges noted by the author include poor internet connectivity, lack of funds and inadequate technology teachers.

As part of effort to reduce the problem of digitization of education in Nigeria, the Federal Government of Nigeria also launched e-learning platforms to herald the digitization of all teaching and learning (Academia 2022). School adoption scheme of 500 was also launched (Vanguard 2021).Similarly; the tribune equally reported the launch of smart programme in schools across the country. (Nigerian Tribune 2021) all aimed at digitalizing secondary schools. The present study specifically identified areas of digitalization in secondary schools, the extent of digitization and the challenges to digitization of secondary schools in Kogi East. Put in question form. What are the various areas of digitalization in secondary school? To what extent has secondary school in Kogi East digitized? What are the challenges to digitization of Secondary School in Kogi East..?

Research Questions

The following research questions guided the study.

1. What are the areas of digitalization of secondary schools in Kogi East?
2. To What extent are secondary schools in Kogi East digitized?
3. What are the challenges to digitization of secondary schools in Kogi East

Methodology

The survey research design was adopted for the study. This design is considered appropriate for this research because it enabled the collection of data from principals and students in secondary schools at their convenience. The study was carried out in the Eastern part of Kogi State. The population for the study comprises of 60 principals and 3000 teachers drawn from all government grant aided secondary schools in Kogi East. The sample size was

thirty (30) principals and one thousand five hundred teachers (1500) which is 50% of the total population. Proportionate stratified random sampling was adopted and each secondary school in the area was classified into strata and selected. Questionnaire was used as instrument for data collection. The questionnaire titled Digitization of Secondary School Questionnaire (DOSSQ) was developed by the researcher. The questionnaire was tested for reliability using Crombach Alfa technique. A reliability coefficient of 0.83 was obtained showing the items are reliable. Three experts, two from ICT in Education and one from Educational measurement and evaluation of Kogi State University Anyigba validated the instrument. One thousand, five hundred (1500), and thirty (30) copies of the questionnaire was administered to 30 principals and teachers of secondary schools in Kogi East. Respectively. A total of one thousand four hundred and fifty (1450) copies of questionnaire were retrieved from students, while all the thirty questionnaire were retrieved from principals and analyzed. The weighted mean and standard deviation was used to answer the research questions. Real limit numbers of 0-50- 149, 150-2.49, 2.50-3.49, 3.50-4.00 was used to interpret the scores as very little extent, little extent, great extent and very great extent, strongly agree, agree, disagree, strongly disagree respectively.

Table 1

Mean and standard deviation of principals and teachers of secondary schools in Kogi East on area of digitization of secondary schools.

S/N	Areas of Digitization of Secondary Education	X	S.D	DEC
1	Students Records	3.51	0.92	A
2	Students Subject	3.62	0.68	A
3	Examination can be written online	2.61	0.81	A
4	Topics to be taught can be animated	2.52	0.21	A
5	Staff and students can be reached through online resources	3.30	0.99	A
6	Administrative activities can be digitalized	3.62	0.68	A
7	Past question paper can be accessed online	3.47	0.59	A
8	Students results can be viewed online	3.74	0.59	A

9	CBT test can be used for better performance	2.60	1.13	A
10	Messages to students can be sent through bulk SMS.	3.43	0.77	A

Table 1 showed the area of secondary school that can be digitized to advantage. All the principals and teachers that responded agreed that all the items on table one can be digitized. Their agreements indicate that principals and students of secondary schools know ICT facilities that can be digitized for better academic performance in secondary schools.

Table 2

Mean and Standard Deviation of Principals and teachers of secondary Schools in Kogi East on Extent of Digitization of Secondary Schools.

S/N	Successes recorded in the area of digitization	X	S.D	DEC
1	Students courses are recorded online	2.44	0.80	LE
2	Students record are digitalized	2.47	1.12	LE
3	Students use online facilities to write their examinations	2.38	1.14	LE
4	Students textbooks are digitalized	1.99	1.11	LE
5	Topics to be taught are animated	1.19	1.01	VLE
6	Staff and students are reached through online resources	2.44	1.07	LE
7	Administrative processes are digitalized	2.40	1.40	LE
8	Past examinations questionnaire accessed by students online	2.30	1.22	LE
9	Students view their results online	2.10	1.13	LE
10	CBT test given to students on regular basis	1.84	0.84	LE
11	Messages to students and parents are sent through SMS	3.01	1.95	GE

Table 2 showed the extent of digitization secondary schools in Kogi East. The table shows that both principals and teachers responded that digitization of secondary schools in

Kogi east was to a very little extent in all the areas listed except in the area of Short Messages (SMS) to students and parent. Their responses indicates that in secondary schools in Kogi east, most items are not digitized.

Table 3

Mean and standard deviation of principals and teachers of secondary schools in Kogi East on challenges to digitization of secondary schools?

S/N	Item Statement	X	S.D	Dec
1	Inadequate funding prevent our school from digitizing their operation	3.12	0.38	A
2	Qualified manpower to handle digitized facilities are inadequate	3.17	0.39	A
3	Digitized facilities are not enough for staff and students	3.06	0.41	A
4	High rate of inflation and the local currency devaluation affect budgetary provision	3.42	0.27	A
5	Technical support and maintenance is not adequate	3.19	0.38	A
6	Poor electricity supply affect ditzitization	3.12	0.37	A
7	Facilities if available may not be secure due to activities of robbers and vandals	3.10	0.39	A
8	Most secondary schools cannot initiate viable income generating strategies to compliment government effort	3.46	8.26	A
9	Staff training and retraining on digitization of secondary education have not been given attention.	3.10	0.39	A
10	There are no standard building with modern facilities for digitization in our school	3.46	0.26	A

Table 3 showed the challenges to digitization of secondary schools in Kogi East. The respondents agreed that all the items on table 3 are challenges to the digitization of secondary schools in Kogi East. The table indicates .that there are many challenges, and not until the challenges are removed, secondary education may not achieve their digitization goals.

Discussion

The results of the responses revealed that so many areas of secondary schools can be digitized. It has been established that for secondary schools to make progress digitization is necessary. The opinion of most respondents revealed that student's records, subjects to be taught, examinations, textbooks, topics to be taught by teachers, communication by staff and students, administrative activities amongst others are areas that can be digitized in secondary schools. This finding is in agreement with Oguche (2013) who states that for educational quality improvement in secondary schools, its activities have to be digitized. Digitization guarantees success and quality education to users.

The results of the responses on research question two revealed that not many areas have been digitized in secondary schools in Kogi State. The responses showed that student's records, examination results, administrative activities, topics to be taught among others are digitized to a little extent. This implies that digitization is yet witnessed appreciable success in secondary schools in Kogi East. The finding collaborates with the findings of Bello (2013) who states that primary and secondary schools in Nigeria have not fully embraced digitization. This has adversely affected their operations

The findings equally revealed that there are challenges facing digitization of secondary schools. These findings include inadequate funding, lack of qualified manpower, lack of digitized facilities, inflation, and lack of technical support among other challenges. The findings agree with the findings of Bello(2013) who identify inadequate funds lack of qualified manpower and inadequate facilities as some of the challenges to digitization in primary and post-secondary schools, thus the digitization of secondary schools is to a little extent in secondary schools in Kogi east. The challenges can however be summated to achieve the stated educational goals.

Conclusion

The discourse on digitization of secondary schools is very important to staff and students of secondary schools. Digitization helps to quicken the education process as it improve the analogue ways of teaching, and management of secondary schools. Stakeholders in education should ensure that the challenges to digitization of secondary schools are removed for the attainment of stated objectives.

Recommendations

The following recommendations were made based on the findings of the study;

1. Adequate funding of secondary schools should be intensified by stake holders in the education industry.
2. Training and retraining of teachers for digitization purposes be intensified by the state government and education provider to help digitization.
3. Provision of necessary facilities for digitization should be encouraged by stakeholders in education
4. There is the need for constant power supply to ensure users make use of Digitized facilities

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