



## Digitization of School System and Administrative Effectiveness in Secondary Schools

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### ABSTRACT

The study examined digitization of school system and administrative effectiveness in secondary schools. Descriptive survey research design type was adopted. Multi-stage sampling procedure was used to select 350 respondents. Self-developed structured questionnaire titled "Digitization of school system and administrative effectiveness in private secondary school scale (DSSAEPSSS). The instrument was validated by experts in Education Administration and Planning as well as Measurements and Evaluation. The instrument was subjected to reliability which yielded co-efficient of 0.82. The data collected were analyzed using descriptive statistics such as mean score, standard deviation, frequency count, percentages while inferential statistics of t-test was used to test the hypotheses at 0.05 level of significance. The results of the study revealed among others that Digitization of school system enhances administrative effectiveness to a high extent. The study recommended that more areas of the school system should be digitized, Administrators should be well trained to improve their competency level while school management make cogent efforts to alleviate the challenges faced by Administrators in the schools.

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### INTRODUCTION

Technology can become the 'wings' that allow the educational world to fly farther and faster than ever before if we allow it, Akinwumi (2021). Secondary schools play a very vital role in national educational development. They serve as the bridge between the primary school education and tertiary education. Secondary schools assist in laying a solid foundation for theoretical and practical framework which the tertiary institutions build upon to develop skills of each student. When students are properly educated at secondary school, it impacts their level of understanding of established laws and theorems they are to learn in higher institutions.

According to Ogunshola (2017) educational administration is a very important aspect in every schooling system. Administrators are expected to keep the school total process running smoothly; they are to make decisions that enhance successful student learning. Poor

administration makes the school environment to become static and uninspiring for learning purpose. To manage resources effectively, administrators should assess their schools to identify what resources students and teachers need and make necessary plans to make them available. Bamidele (2015) stated that administrators in Education are professionals who see to the daily functions of everything pertaining to the school. They provide leadership guide in times of crisis and outline positive visions for the future of the school. Target study (2018) posited that the traditional educational system is also known as customary education or conventional education. It involves passing on values, manners, skills and the social practice to the next generation, this is to ensure their survival. It involves much of oral recitation; it is very far from science and technology.

Akande, (2018) in his study Influence of Management Information System (MIS) on

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Students' Academic Performance in Lagos State Colleges of Education reports that Management Information systems (MIS) had become a generally accepted modern instrumental tool that enables administrators and educators to modify the teaching method they use in order to increase student interest. He further stated that the new technologies brought about by MIS have become central to contemporary societies and educational administration such that there have been considerable investments towards teaching and learning methods using various digital learning tools. This had revolutionized the administration of schooling system by bringing a large-scale change in the way education is planned and delivered. Dimitrios, (2013) observed that activities in the traditional educational system are majorly manual, use of pen and paper, chalk and chalkboard, textbooks, teacher's notes, and assignments. The students enrolled themselves in these physical schools and attended classes five days a week. Students having to line up in their hundreds for their biodata to be collected for enrolment/admission purpose. Administrative staff also must sit down for hours daily for some couple of weeks at the beginning of each session to register new intakes.

Staff and student data are documented on papers which were filed and kept in cabinets for future reference. Most of these papers and files are affected by 'wear and tear', they easily get lost, in case of fire incidents they got burnt and the precious information got lost forever without any hope of recovering them back at all. Students must be in class compulsorily five days of the week to learn, some must travel long distances to place of learning come rain come sunshine. Administrators compute examination records manually for hundreds of thousands of students manually termly, this is time consuming and emotionally tasking. Staff pay slips are also computed manually, errors do arise in the process, and underpayment or overpayment is a common thing. Staff training makes staff to travel a long distance, interstate by road/by air, risking their lives and wasting precious time that could have been devoted to developing the education system. The traditional educational system has

many limitations and challenges. The school administrator effectiveness and efficiency were negatively affected.

According to Akinwumi, (2021), in recent years, there have been several infusions of digital technology in the educational system. The education system is evolving for the better; smart phones, laptops and tablets are common tools among students and administrators in this 21st century. Online courses, online exams, digital textbooks, storage of information in the cloud and many more are used by administrators for more effectiveness in their discharge of duties. Oznacar, (2017) noted that from the administrator perspective, digitization of school system has become a tool for enhanced control over tasks, communication with staff, students, parent, and the community at large. It has become a relief in everyday tasks and to have everything organized.

Papers are exchanged with screens, pencils with keys; tasks previously handled on paper [manually] are now done digitally and made available online. This has greatly reduced administrative workload thus enhancing administrative effectiveness. Amy et al (2016) reported that School administrators in developed country like China, USA, and London, India among others depend heavily on the internet for their day-to-day activities. Secondary school administrator in Nigeria have also key into the use of internet as well as different software application for enrolment management, tuition and billing, curriculum management, progress tracking etc.

Bamidele, (2015) defined digital education as the adaptation of modern technology tools to assist in teaching and learning. It involves using digital mediums such as videos, audios, presentations, electronic documents, and many other technological inventions to corroborate educational facts. Traditional education had been making use of black boards and whiteboards to teach the students, however digital education improves the method of delivery by integration information technology into teaching students, Okon, Ekaette, & Ameh, (2018). The introduction of digital education in secondary schools had made student learning sessions more interactive, explanatory, and engaging. With the use of



technology, the school administrators can devote more time to administrative issues that could improve staff productivity. Isiaka, (2018) found that digitization of secondary school system has really helped secondary school administrator to improve teacher productivity and student engagement, regular administrative tasks are automated also known as Student Information System (SIS), each student academic progress can be easily and effortlessly monitored, management tasks are streamlined, and a positive school climate is built.

Digitization of education system though very costly in terms of tools to be purchased, software application installation expenses and cost of internet, however when it has been fully done, it saves a lot of resources vis a vis material, money, time among others, Muriithi, (2015). Digitization of school system is majorly obtainable in Private school in Nigeria presently. The school owners, parent, the community and other stakeholders want to see positive results.

The school owners want high returns on investment hence the high cost of school fees, parent want to see their children mastering the use of technological tools in learning, the community expected that the output of digitalized school system bring in new innovations into how things are done in the workplace and be a successful community member.

As the secondary schools in the country continually improve and embrace digital technologies as part of their learning delivery methods, there is a need to ascertain whether the implementation has enhanced administrative effectiveness, or it is a sheer waste of time and scarce resources.

#### **Statement of the Problem**

The digitization of secondary school education system entails the application of technology in all aspect of the school system, administrative tasks inclusive. Unfortunately, most school administrators in this 21st century are illiterate when it comes to application of digitization in the discharge of their day-to-day tasks. Most of them want to maintain the status quo, they want to stay in their comfort zone using the traditional

education system of carrying out tasks manually, most students still pay school fees by hand, and parents can also not access examination results online.

In Nigeria unlike other developed country, lack of access to fast and cheap internet that can support the digitized educational system is a great challenge. School owners too do not want to release fund when there is the necessity to constantly upgrade platforms as and when technologies change, this is a cause for concern to educational administrator in digitalized secondary school. The manual filling system is obsolete in the 21st century, but most school administrators still believe in using this manual store information, convening staff meetings and committee meetings are still carried out using verbal or written method. For this reason, there is need to provide information through data base research on digitization of school system and administrative effectiveness in secondary schools in Bwari Area Council, Abuja.

#### **Objectives of the Study**

The study examines the impact of digitization of school system and administrative effectiveness in secondary schools, specifically the study:

1. Find out the Sections of school administration that are digitized
2. Examine the extent to which digitization of school system enhances administrative effectiveness in secondary schools.
3. Investigate the Level of competence of administrators in using ICT tools in performing administrative tasks in Secondary Schools.
4. Find out Challenges faced by secondary school administrators in digitized school

#### **Research Questions**

The following research questions guided the study.

1. What are the main areas of school administration that are digitized?
2. To what extent does digitization of school system enhance administrative



- effectiveness in secondary schools in secondary school?
3. What is the level of competency of administrators in using ICT tools for administrative tasks in Secondary schools?
  4. What are the challenges faced by secondary schools Administrators in digitized school system?

### Hypotheses

To achieve the objectives of this study, the following null hypotheses were formulated at 0.05 alpha level:

- HO<sub>1</sub>:** There is no significant difference in the mean rating of the male and female administrators on the main areas of school administration the schools digitized in Bwari Area Council.
- HO<sub>2</sub>:** There is no significant difference in the mean rating of Senior and junior staff on the extent to which digitization of school system enhances administrative effectiveness in secondary schools in Bwari Area Council.
- HO<sub>3</sub>:** There is no significant difference in the mean rating of the male and female administrators on their level of competency in using ICT tools for administrative tasks in Secondary schools in Bwari Area Council.
- HO<sub>4</sub>:** There is no significant difference in the mean rating of Senior and junior staff on the challenges faced by secondary school administrators in digitized school system in Bwari Area Council.

### RESEARCH METHODOLOGY

The study adopted descriptive survey design. The population comprised of all administrative staff in private Secondary Schools in Bwari Area Council of FCT - Abuja. Multi-stage sampling procedure was deployed to select a

sample size of three hundred and fifty (350) respondents. In the first stage, purposive sampling technique was used to select fifty (50) approved private secondary schools from Bwari Area Council. In the selected schools, Principal, Vice Principal Administration, Vice Principal Academic, and secretaries totaling 150 were selected. The choice of the purposive sampling was to enable researcher to select schools that were digitized already. In the second stage, simple random sampling technique was used to select four (4) teachers basically (arms head, Examination officer, H. O. D) from the aforementioned schools. A self-developed structured questionnaire entitled "Digitization of School System and Administrative Effectiveness in Private Secondary Schools Scale, (DSSAEPSS)" was used to elicit relevant data from the respondents. The instrument had Likert four points rating scale and consisted of five sections labeled A, B, C, D and E. The instrument was subjected to face and content validity by two (2) experts in Educational Administration and Planning, an expert in Educational Technology and two (2) experts in Measurement and Evaluation.

The reliability of DSSAEPSS was established using Cronbach Alpha formula which yielded a coefficient of 0.82. This indicated that the instrument was highly reliable. The research questions were analyzed and answered using descriptive statistics such as: mean score, standard deviation, frequency count and percentages while the inferential statistics of t-test was adopted to analyze and test the hypotheses at 0.05 level of significant. Decision and interpretation was based on a pre-determined cut-off mean response of 2.50.

### RESULTS OF FINDINGS

**Research Question 1:** What are the main areas of school administration that private schools had digitized in Bwari Area Council of FCT?



**Table 1:** Main areas of school administration the schools had digitized

S/N	ITEMS	YES (%)	NO (%)
1	Student Admission	335(95.7)	15(4.3)
2	School Web Portal For Information Dissemination	320(91.4)	30(8.6)
3	Staff Recruitment	332(94.9)	18(5.1)
4	Staff Profile	327(93.4)	23(6.6)
5	Students Admission Details	326(93.1)	24(6.9)
6	E- Mail Notification	327(93.4)	23(6.6)
7	Staff Payroll	342(97.7)	8(2.3)
8	Submission Of Lesson Plan Through E-Mail	326(93.1)	24(6.9)
9	End Of Term Online Report	315(90.0)	35(10.0)
10	Students Continuous Assessment	280(80.0)	70(20.0)
11	E-Examination Using Computer Hardware	279(79.7)	71(20.3)
12	School Fees Payment	303(86.6)	47(13.4)
13	Google Classroom for Teacher Students Interaction	326(93.1)	24(6.9)

Table 1 shows responses of respondents on the main areas of school administration the school that had been digitized where 335(95.7%) states that admitting student into their school has been digitized and 320(91.4%) of the total respondents states that school web portal for information dissemination among administrator, staff and students had been digitized while 30(8.6%) states that they have not digitized school web portal for information dissemination, this will give majority of the participant of this study (school) that have imbibe the use of digital technology into their school system a cutting edge among other schools.

Similarly, 332(94.9%) and 327(93.4%) of the total respondents states that staff recruitment and staff record have been digitized, this is part of staff administration and will helps in operational flow of tasks in a meticulous, and impeccable manner thereby making staff data retrieval easier for management. These applications assist the school management in proper accounting record keeping.

**Hypothesis one:** There is no significant difference in the mean rating of the male and female administrators on the main areas of school administration the schools had digitized.

**Table 2:** t-test showing the main areas of school administration the schools had digitized based on Gender.

Gender	Frequency	Mean	SD	df	t	Sig (2-tailed)	Remarks
Male	234	1.93	0.094	348	-0.604	0.546	Accepted
Female	116	1.94	0.091				

Table 2 showed that 234 of the respondents are male which have 1.93 as mean and 116 of the total respondents are female which have 1.94 as mean score. The standard deviation is 0.094 and 0.091 respectively and their df is 348. The calculated t-value is -0.604 computed at critical alpha level of significance 0.05. Since the calculated significant value or probability value is greater than the 0.05 (0.546 > 0.05) critical alpha

value. Thus, the stated null hypothesis is accepted which means that the main areas of school administration the schools had digitized do not differ based on gender.

**Research Question 2:** To what extent does digitization of school system enhances Administrative effectiveness in secondary school?

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**Table 3:** Extent to which Digitization of School System enhances Administrative Effectiveness in Bwari Area Council of FCT

SN	ITEM	VHE (%)	HE (%)	LE (%)	VLE	MEAN
1	Simplified work process thus relieving stress.	164(46.9)	139(39.7)	47(13.4)	-	3.33
2	Added values to administrative duties	164(46.9)	116(33.1)	70(20.0)	-	3.27
3	Enabled efficient management of school resources	188(53.7)	92(26.3)	70(20.0)	-	3.34
4	Improved access to student and staff data	164(46.9)	163(46.6)	23(6.6)	-	3.39
5	Improved the school interaction with external bodies (parents and public)	140(40.0)	210(60.0)	-	-	3.35
6	Helped to fast track some administrative processes	141(40.3)	186(53.1)	23(6.6)	-	3.19
7	Improve student learning experience through developed curriculum.	164(46.9)	163(46.6)	23(6.6)	-	3.15
8	Prompt preparation and submission of lesson notes by the teachers using software application.	93(26.6)	257(73.4)	-	-	3.09
9	Achieving goals with greater outcome and acceptance	164(46.9)	160(45.7)	26(7.4)	-	3.29
10	Improved transparency and accountability of the school.	209(59.7)	114(32.6)	30(8.5)	-	3.43
<b>Grand Mean</b>						<b>3.28</b>

VHE =Very High Extent, HE = High Extent, LE = Low Extent, VLE =Very Large

Table 3 shows responses of respondents of this study on the impact of digitization of school system on administrative effectiveness where 303(86.6%) of the total respondents with mean score of 3.33 agree that digitization of school system simplified work process and relive work stress and 280(80.0%) of the respondents with mean score of 3.27 agree that digitization of school system added value to the administrative duties and that 280(80.0%) of the responses made by respondents with mean score of 3.34 agree that digitization of school system will enable efficient management of school resources. 327(93.5%) of the total respondents with mean score of 3.39 agree that improved

access to students and staff data are as a result of digitization of school system. Meanwhile all the respondents of this study agree that digitization of school system improved the school interaction with external bodies such as parents and public and 327(93.4%) of the total respondents with mean score of 3.19 indicate that digitization of school system helped to fast track some administrative processes of school system.

**Hypothesis two:** There is no significant difference in the mean rating of Senior and junior staff on the extent to which digitization of school system enhances administrative effectiveness in secondary school.

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**Table 4:** T-test showing the impact of digitization of administrative task on administrative effectiveness based on staff category

Category of Staff	Frequency	Mean	SD	df	t	Sig (2-tailed)	Remarks
Junior Staff	162	3.22	0.528	288.5	-5.093	0.000	Rejected
Senior Staff	188	3.47	0.382				

Table 4 showed that 162 of the respondents are Junior Staff which have 3.22 as mean score and 188 of the total respondents are Senior Staff which have 3.47 as mean score. The standard deviation is 0.528 and 0.382 respectively and their df is 288.5. The calculated t-value is -5.093 computed at critical alpha level of significance 0.05. Since the calculated significant value or probability value is less than the 0.05

(0.000<0.05) critical alpha value. Thus, the stated null hypothesis is rejected which means that the impact of Digitization of Administrative Task on Administrative effectiveness is different based on staff category.

**Research Question 3:** What is the Level of competency of administrators in using ICT tools for administrative tasks?

**Table 5:** Respondents' opinions on Level of competency of administrators in using ICT tools for administrative tasks

SN	ITEM	Highly Competent (%)	Competent (%)	Less Competent (%)	Not Competent (%)	Mean
1	The use of computer or tablet	211(60.3)	92(26.3)	46(13.1)	1(0.3)	3.47
2	The use of internet in school for administrative tasks	233(66.6)	70(20.0)	23(6.6)	24(6.9)	3.46
3	The use of email as a communication tool in the school	257(73.4)	70(20.0)	23(6.6)	-	3.69
4	The use of school portal for administrative purposes	208(59.4)	119(34.0)	23(6.6)	-	3.53
5	The use of Microsoft Word, Microsoft Excel etc	163(46.6)	164(46.9)	23(6.6)	-	3.40
6	The use of school software application to an advanced level	139(39.7)	183(52.3)	25(7.1)	3(0.86)	3.33
7	The use of digitization channels periodically after effective Training	92(26.3)	211(60.3)	46(13.1)	1(0.3)	3.13
<b>Grand Mean</b>						<b>3.43</b>

Table 5 shows responses of respondents on the level of competency of administrators in using ICT tools for administrative tasks where 303(86.6%) of the responses made by respondents with mean score of 3.47 agree that administrators of each school are highly

competent in the use of computer or tablet and the use of internet for administrative tasks. This shows that majority of respondents in the study area are highly committed to the use of ICT and accepts changes as it's unfold and this will positively affects the way they discharge their academic

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duties both with students and other academic work. Also, 327(93.4%) of the total respondents with mean of 3.64, 353 and 3.40 respectively agree that administrators are highly competent with the use of e-mail as a communication tool, they are also competent with the use of Microsoft products (word, excel etc) and the use of school portal for administrative purposes which will reduce the use of the normal conventional way of doing things (either writing paper telling student to inform their parent of the new development) which

will also save a lot of resources and will be more faster than the normal usage of paper. The implication is that the respondents are competent in ICT tools for administrative tasks since all the responses lie above the predetermined cut-off of 2.50

**Hypothesis three:** There is no significant difference in the mean rating of the male and female administrators on their level of competency in using ICT tools for administrative tasks.

**Table 6:** T-test showing the level of competency of administrators in using ICT tools based on Gender

Gender	Frequency	Mean	SD	df	t	Sig (2-tailed)	Remarks
Male	234	3.53	0.299	148.03	5.321	0.000	Rejected
Female	116	3.23	0.562				

Table 6 showed that 234 of the respondents are male which have 3.53 as mean score and 116 of the total respondents are female which have 3.23 as mean score. The standard deviation is 0.299 and 0.562 respectively and their df is 148.03. The calculated t-value is 5.321 computed at critical alpha level of significance 0.05. Since the calculated significant value or probability value is less than the 0.05

(0.000<0.05) critical alpha value. Thus, the stated null hypothesis is rejected which means that the level of competency of administrators in using ICT tools is different based on gender.

**Research Question 4:** What are the challenges faced by secondary school administrator in digitized school system?

**Table 7:** Respondents opinion the challenges faced by secondary school administrators in digitized school system

SN	ITEM	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)	Mean
1	Faulty Computers	139(39.7)	140(40.0)	70(20.0)	1(0.3)	3.19
2	Non- Availability of Internet	140(40.0)	115(32.9)	93(26.6)	2(0.6)	3.12
3	Slow Internet	185(52.9)	117(33.4)	47(13.4)	1(0.3)	3.39
4	Lack of Back-Up Equipment	117(33.4)	185(52.9)	47(13.4)	1(0.3)	3.19
5	Non- Availability of Anti-Virus Management Program	137(39.1)	188(53.7)	24(6.9)	1(0.3)	3.32
6	Dysfunctional Website/ Portal	163(46.6)	140(40.0)	46(13.1)	1(0.3)	3.33
7	Outdated Software Application	232(66.3)	93(26.6)	24(6.9)	1(0.3)	3.59
8	Lack Of Safety Measure Against Cyber attack	162(46.3)	163(46.6)	24(6.9)	1(0.3)	3.38
<b>Grand Mean</b>						<b>3.31</b>

Table 7 revealed responses of respondents on the challenges faced by secondary school administrator in digitized school

system where respondents strongly agree that faulty computers, non-availability of internet, slow internet, lack of backup equipment, non-





availability of anti-virus management program, dysfunctional website/portal, outdated software application and lack of safety measure for cyber-attack and many others are challenges faced by the school administrators in digitized school system, this is evident in the result of the study

with 3.19, 3.12, 3.39, 3.32, 3.33, 3.59 and 3.38 as their mean score respectively.

**Hypothesis four:** There is no significant difference in the mean rating of Senior and junior staff on the challenges faced by secondary school administrators in digitized school system.

**Table 8:** t-test showing the challenges faced by secondary school administrators in digitized school system based on Staff category

Category of Staff	Frequency	Mean	SD	df	t	Sig (2-tailed)	Remarks
Junior Staff	162	3.41	0.475	342	7.012	0.000	Rejected
Senior Staff	188	3.15	0.201				

Table 8 showed that 234 of the respondents are Junior Staff which have 3.41 as mean score and 116 of the total respondents are Senior Staff which have 3.15 as mean score. The standard deviation is 0.475 and 0.201 respectively and their df is 342. The calculated t-value is 7.012 computed at critical alpha level of significance 0.05. Since the calculated significant value or probability value is less than the 0.05 ( $0.000 < 0.05$ ) critical alpha value. Thus, the stated null hypothesis is rejected which means that the challenges faced by secondary school administrators in digitized school system differ based on Staff category.

### CONCLUSIONS

This study has investigated digitization of school system and administrative effectiveness in private secondary schools in Bwari Area Council of FCT and draws the following conclusions based on finding from the study:

1. The main areas of school administration that private schools in Bwari Area Council had digitized include: Student Admission, Staff Recruitment, and Staff Profile among others.
2. Digitization of school system to a high extent enhances administrative effectiveness.
3. The private secondary school administrators in Bwari Area Council are competent in using ICT tools for administrative tasks.
4. Faulty Computers, Slow Internet, Lack of Back-Up Equipment are some of the

challenges faced by private secondary school administrators in digitized school system in Bwari Area Council.

Furthermore, the opinion of the administrators used in this study did not differ significantly on the portent areas of school administration the schools had digitized and on the level of competency in using ICT tools for administrative tasks in Bwari Area Council.

### RECOMMENDATIONS

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

1. Private secondary school administrators should consider digitizing more areas of the school administrative tasks.
2. The proprietors and principals of private secondary schools in Bwari Area Council should organize capacity building in the area of utilization of ICT tools for administrative purposes in order to improve the competency level of the administrators in the schools.
3. School management should make cogent efforts to alleviate and mitigate the challenges faced by the administrations.
4. A qualified and experienced ICT engineer should be employed to manage and maintain the schools ICT tools.

### REFERENCES

Akande, M. R., (2018), *Influence of Management Information System (MIS) on Students'*

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- Academic Performance in Lagos State Colleges of Education, NOUN Journal of Education, Faculty of Education, National Open University, 5, 23 - 31
- Akinwumi, O. O., (2021). Information and Communication Technology Use on Amy, 45
- Angie, O., & Rita, N. (2016). The Place of ICT (Information and Communication Technology) in the Administration of Secondary Schools in South Eastern States of Nigeria.
- Bamidele, A. O. (2015). Access and use of Information and Communication Technology for administrative purpose by institutional administrators in colleges of education in Nigeria, 3 - 7
- Chuktu, O. (2020) Principals' utilization of ICT Resources and Secondary School Administrative effectiveness in Calabar South Local Government Area of Cross River State, Nigeria, 1 - 11
- Dimitrios w. N., (2013). Traditional Teaching Methods Vs Teaching Through the Application Of Information And Communication Technologies In The Accounting Field 2 - 8
- Isiaka A. A., (2022) Digitalization of Education in Nigerian Secondary Schools: Benefits and Challenges, 30 - 35
- Janetta Ainslee (2018) Digitization of Education in the 21st Century.  
<https://elearningindustry.com/digitization-of-education-21st-century/>  
Accessed on October 2020.
- Muriithi S. N., (2015): The Management Challenges of Using Information Communication Technology for Administration At Secondary Schools In Kirinyaga County, Kenya, 4, 21 – 27
- Naresh, N. (2021). The 10 Benefits of Digitalizing School Administration.  
<https://goschooler.com/benefits-of-digitalizing-school-administration/>, 2
- Ogunshola, R. & Adeniyi, A. (2017). Principals' personal variables and information and communication technology utilization in Federal Capital Territory Senior secondary schools, Abuja, Nigeria, Journal of Education and Practice 8 (15), 222-228.
- Okon, I., Ekaette, S. & Ameh, E. (2018). Information and communication technology (ICT) utilization in secondary schools.  
Target Study (2018) Traditional Education Vs Modern Education.  
<https://targetstudy.com/articles/traditional-education-vs-modern-education.html>  
Accessed on December 20, 2022, 1.
- Tunmibi (2015) Impact of E-learning and Digitalization in Primary and Secondary Schools, Journal of Education and Practice [www.iiste.org](http://www.iiste.org), ISSN 2222-1735 ISSN 2222-288X (Online). 6, No.17, 2015, 1-5

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