Availability of E-Counselling Services for Students in Secondary Schools Amidst Covid-19: A Case Study of Niger State

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Abstract

This study looked into the availability of e-counselling services for students in secondary schools in Niger State during COVID-19. The specific goal was to assess whether ICT facilities were available in guidance and counselling services for students in secondary schools in Niger state, as well as whether trained e-counsellors were available in such schools. A total of 480 people were used as part of the sample. Simple random and purposive selection procedures were used to select the sample. The study relied on an instrument called the E-counseling Facilities' Availability for Guidance and Counselling Services in Schools Questionnaire (EFAGCSSQ). To answer the study questions, the acquired data was analyzed using frequencies and percentages, while t-test statistics were employed to test the null hypothesis at the 0.05 level of significance. The findings found that senior secondary schools lacked suitable e-counselling facilities and that trained e-counselors were scarcely accessible. According to the report, the government should provide e-counselling facilities and either hire professional e-counselors or teach existing counselors in e-counselling.

Keywords: E-counselling, Guidance and Counselling Services, Senior Secondary Schools, Availability.

Introduction

E-learning is the use of many kinds or types of ICT to teach or assist people learn over the internet with data (particularly students). Learning experiences employing various electronic devices (e.g., computers, laptops, smartphones, etc.) with internet access in synchronous or asynchronous environmental conditions are referred to as e-learning. Artemisa R. D, Andreia G, Irene P. C, and Fernando B, Online e-learning could be a platform that makes the educational process more student-centered, innovative, and adaptable (2020). When delivering curriculum to students in rural and remote places, online delivery of courses is cost-effective and convenient. E-learning was underutilized in most underdeveloped nations until to the introduction of covid-19. However, the present pandemic of COVID-19 has driven the world to adopt e-learning for education, particularly in educational institutions. Several organizations, schools, and colleges were forced to close temporarily due to the covid-19 outbreak.

Due to the covid-19 epidemic, many traditional or orthodox schools of learning no longer offer face-to-face education. Health professionals' covid-19 rule of social separation has had detrimental consequences for instructional activities in schools. As a result, educational stakeholders and agencies are attempting to devise new approaches to dealing with this educational difficulty. The temporary closure of schools boosted the expansion of online educational activities, ensuring that instruction was not disrupted. Many schools have been involved in many technological ways on how to best reach out to students and offer online course materials, engage students in active academic

activities, and students' evaluations Artemisa R. Dores, et al (2020) (especially professional or trained counsellors).

Statement of the Problem

The covid-19 problem has made it difficult for educational sectors, notably guidance and counselling education, to deal with, and it is even more difficult for guidance and counselling services to cope with. Guidance and counselling labs and clinics have implemented a variety of technologically innovative strategies to combat the Covid-19 crisis, including the use of ICT software/apps such as Google Classroom, Zoom, WhatsApp, Zimbra, and Microsoft Teams, among others, to not only take online courses, but also to reach out to clients who may require counselling at any time to improve their lives. This virtual e-learning class was started to increase the students' certainty and confidence in their schools during the COVID-19 pandemic Artemisa R. Dores, et al (2020). School counselors play a critical role in the educational system, especially in senior secondary schools, due to the specific services they provide. Future officers and counsellors shall be appointed in post-primary schools, in view of the apparent ignorance of many young people regarding career options, and in view of personality maladjustment among school pupils, according to Nigeria's national education policy FGN (2004). Because skilled individuals in this category are in short supply, the government should continue to fund training for interested instructors in guidance and counseling. Teacher education programs must also include guidance and counseling. In each primary and post-primary school, school owners must provide sufficient guidance counsellors (pg. 53). Government will build and equip counselling clinics, career resource centers, and information centers for guidance counselling services, according to the National Policy on Education FGN (2014). As a result, the government recognizes the need of having counsellors in post-secondary universities as well as equipping information centers to provide counseling services. These officers will be so well-trained that they will be able to provide guidance programs and services aimed at boosting students' education and, as a result, their quality of life. However, it is unfortunate to see that Nigeria's federal government has failed to meet the expectations of the above education strategy. This research was prompted by the inadequate or lack of availability of ICT facilities for guidance and counselling services for students amidst covid-19 in most senior secondary schools in Nigeria, particularly in Niger state, and the need to improve the use of current guidance and counselling services through the use of ICT in secondary schools in Nigeria, particularly in Niger state.

Literature Review

The Importance and Necessity of E-counselling in the Context of the Covid-19 Pandemic for Nigerian Students

According to Modo and Inaja (2010), a counsellor is a person who has received professional training in the field of counselling and is able to assist clients or students who may want assistance. According to Denga (2001), the counsellor is a project manager who manages the client's educational, vocational, and personal-social potentials in such a way that the individual becomes helpful to himself and society at large. These services are frequently beneficial to the school administration, the school community, as well as parents and guardians. According to Akpan (2010), guidance is an educational service that aims to give a complete educational development for the school child in order to prepare him for a functional life. The basic goal of a school's guidance department is to provide pupils with a wide range of personnel services. Appraisal, consulting, planning, evaluation, information, placement, follow-up, and counseling are among the services provided to students.

These should be set up to aid in the growth and development of all pupils from kindergarten to post-secondary education.

Guidance counsellors require a variety of facilities, talents, competencies, and materials in order to effectively support their clients, which range from background knowledge on their clients to resource materials and facilities.

Given the importance of Information and Communication Technology (ICT)-based facilities for quality teaching and learning in today's world, the modern guidance counsellor requires ICT-based facilities to stay up with modern development. To achieve the policy objectives, the government shall provide facilities and necessary infrastructure for the promotion of Information and Communication Technology (ICT) at all levels of education, as well as facilities to ensure that the benefits of the virtual library pervade all levels of education in Nigeria, according to the Nigerian National Policy on Education FGN (2004). Unfortunately, the Nigerian government has failed to accomplish the policy's objectives at all levels, from federal to state. Olosunde and Akinpelu (2010) claimed that the world as we know it now has changed and will continue to change in significant ways when it comes to the value and necessity of ICT and its importance to learning. These shifts may be reflected in the impact of emerging technologies, particularly Information and Communication Technology (ICT), on individuals and society as a whole.

The current method of gathering and sharing information is known as ICT (Information and Communication Technology). It is the technology employed in the collection, storage, editing, and transmission of information in diverse forms, according to Salau (2003). 1CT, according to Fasokun (2010), is also a great tool for learning and expression. According to Nwachukwu (2004), ICT is a phrase that incorporates the concept of using technology to communication handling in terms of information generation, storage, processing, retrieval, and distribution. It's also a catch-all phrase for any communication equipment or appliance, including radios, televisions, cell phones, computers, hardware, software, and satellite space operations (network).

In addition, according to Robertson (1994), new information and communication technology (ICT) provides modern and fast ways of constructing and delivering communications. According to Salau (2003), the ICT revolution in education has changed the accessible technologies, as well as the means, methods, and activities involved in teaching, learning, and counseling. As a result, materials related to guidance services can be sought and used where needed, in the way required, and at the most convenient time, using this medium of communication. According to Akinrotohun (2002), information and communication technology has enabled students to communicate with any resource person anywhere in the world at any time. A resource person can now provide advice services via the web, satellite, or even a robot, thanks to advances in technology. It is possible to take part in a counselling session without needing to be physically present in front of the counsellor (Yahaya, 2010). Integrating ICT into guidance services, on the other hand, complements rather than replaces the job of the guidance counsellor. 2010 (Oyinlo).

Overall, as stated by Iwu (2004), ICT's contribution to education (of which guidance services are a component) has a significant impact. These contributions, if properly harnessed, have the potential to have a far-reaching impact on secondary school counseling services in Nigeria, particularly in our study target area of Niger state. ICT has improved pupils' ability to study and academic achievement, according to Afolobi, Adedapo, and Adejanju (2005). When students use ICT, they spend more time on their learning tasks. They learn new problem-solving tactics and improve their higher-order

cognitive abilities. They claimed that schools with enough ICT resources outperformed schools with inadequate ICT resources in terms of academic achievement.

Many people in industrialized societies have access to ICT resources, which they use to obtain information that impacts or influences their decisions. As may be seen in industrialized countries, this has improved the link between ICT and counseling services. As a result, it's no surprise that ICT has been implemented into a variety of learning and counseling situations (Olusunde and Akinpetu, 2010).

Over one-third of high school students in Canada were losing interest in education, according to Brawshaw (1995), and the usage of multimedia computer technology was introduced, which considerably increased their interest in their education and job choice. Knowledge for Youth About Career (KYAC) was one of the strategies that attempted to aid the Canadian government in addressing school dropouts by utilizing multimedia computer technology.

ICT plays a critical role in aiding different professionals in their varied job activities since they can utilize technology to source, store, retrieve, and discriminate information on a one-to-one, one-to-many, and many-to-one basis. As a result, if ICT is incorporated, the above guidance services can be greatly strengthened. As a result, Nigerian secondary school guidance counsellors will gain greatly since they will be able to source, save, retrieve, and disseminate comprehensive information that will help students' academic, professional, and persona-social lives.

Both the counsellor and the student in Nigerian secondary schools would be able to counsel pupils online at any time and place of their choosing. Individual and group counseling, as well as anonymous counseling, are all options for online counseling. Appraisal, information, follow-up, and referral are all services that can be easily conducted via the internet. Parents/guardians, school administrators, school teachers, Prara-Counsellors, and referral centers will all benefit from guidance Counsellors' use of ICT. ICT gadgets such as video cameras, televisions, radio sets, telephone sets, projectors, computers, record players, cassette tape recorders, CD players, and video cassette recorders are employed in the delivery of education, according to Inyang-Abia (2004). Lectures and jingles on environmentally sensitive problems that are assisting in raising awareness and educating youths on the significance of protecting themselves from harmful behaviors such as drug addiction, smoking, and illegal sexual relationships that can damage their life, particularly IUV and AIDS.

The counsellor's efforts in providing guiding services can be supplemented with video recorded activities and data. Furthermore, quick and urgent access to information can be quite beneficial to the advancement of the guidance counsellor's employment. As a result, incorporating ICT into advisory services is quite beneficial. In light of the role that ICT plays in all spheres of life in general and in various areas of the educational system in particular, the Nigerian secondary school guidance counsellor must harness the potentials and benefits of ICT to ensure efficiency in providing guidance and counselling services to secondary school students.

Furthermore, Doyle (1994) emphasized that individuals in the twenty-first century must be able to obtain, assess, and use information from a variety of sources. The computer and the internet are examples of these sources. As a result, every Nigerian secondary school guidance counsellor must equip himself or herself with the ability and competence to use ICT materials in locating, selecting, and disseminating appropriate educational/counselling materials, ideas, and activities that will help him or her succeed in their counseling careers.

The researcher found the present study, which sought to investigate the availability and accessibility of ICT facilities in guidance services in senior secondary schools, to be a necessity and quite an appropriate one in light of the lack of e-counselling facilities for students in most Nigerian schools.

As a result, the researcher found the present study, which sought to investigate the availability and accessibility and of ICT facilities in guidance services in senior secondary schools, to be quite appropriate.

The Study's Objectives
This research was guided by three goals.
   i. To determine whether e-counseling services for guidance and counseling are available in secondary schools in Niger State.
   ii. To determine the availability of trained school counsellors for the use of e-counseling facilities in secondary schools in Niger State for guidance and counselling services.
   iii. To determine the factors that contribute to the lack of available e-counselling services and trained school counsellors in secondary schools in Niger State.

Questions to Ponder
This study was guided by three research questions.
   i. What is the extent to which e-counselling facilities for guidance and counselling services are available in Niger State secondary schools?
   ii. What is the availability of trained e-counsellors in Niger State secondary schools for the use of E-counseling facilities in guiding and counselling services?
   iii. What are the reasons behind Niger State's secondary schools' lack of e-counselling services and professional school counsellors?

Hypothesis for Research
The investigation was directed by one null hypothesis:
Ho1: In secondary schools in Niger State, there is no significant difference between the availability and non-availability of e-counselling capabilities for guidance and counselling services.

Methodology
This study used a descriptive survey research design as its research method. A survey was given to a sample of students to determine their thoughts and views about the availability of e-counselling services for guidance and counselling, as well as the availability of certified school counselors at their respective schools. A total of 480 persons were chosen from ten schools in Niger State (both urban and rural). In order to choose the schools for the study, a simple random method was used. The respondents in these schools were chosen using a purposive sample to ensure that both genders were represented (male and female). After obtaining consent from the principals of each of the ten schools, a 21-item researcher-created questionnaire titled "E-counselling Facilities' Availability for Guidance and Counselling Services in Schools Questionnaire (EFAGCSSQ)" was administered to the respondents. There were two sections to the questionnaire. Section A elicited response on the availability of e-counselling facilities for counselling services, as well as the availability of trained e-counselors in secondary schools in Niger State, while section B elicited responses on the extent of availability of e-counselling facilities for counselling services, as well as the availability of trained e-counselors in secondary schools in Niger State. Two specialists from Veritas University Abuja's guidance and counseling department assessed the questionnaire's face and content validity. After a pilot test, the reliability was confirmed with a PPMCC coefficient of 0.82. To address the study

questions, the acquired data was analyzed using frequency counts and percentages, while the null hypothesis was tested using a t-test at the 0.05 level of significance. If the computed t-calculated value was equal to or greater than the t-tabulated value, the null hypothesis was rejected, however if the t-calculated value was less than the t-tabulated value, the null hypothesis was retained. Also, if the calculated p-value was equal to or less than the set p-value, the null hypothesis was rejected, and if the calculated p-value was greater than the specified p-value, the null hypothesis was preserved.

Results

The study's three research questions were answered in a descriptive manner.

Research Question 1: To what extent are e-counselling facilities for guidance and counselling services available in senior secondary schools in Niger State's Niger East Senatorial District?

Table 1 shows the extent to which e-counselling facilities for guidance and counseling services are available in senior secondary schools in Niger State's Niger East Senatorial District.

S/N	Availability of E-counselling Facilities	Responses			
		Yes		No	
		F	%	F	%
1	Our school has a big counseling clinic with computers for counseling services	41	8.5	439	91.5
2	Our school has an email address and website portal for counseling services	38	7.9	442	92.1
3	Our school counseling clinic has free quality internet services for counseling services	19	3.9	461	96.1
4	Our counseling clinic has a digital photo camera for counseling services	56	11.7	424	88.3
5	Our counseling clinic has a video camera for counseling services	45	9.4	435	90.6
6	Our school counseling clinic has a CCTV camera for counseling services	32	6.7	448	93.3
7	Our school counseling clinic has an electronic scanner for counseling services	79	16.5	401	83.5
8	Our school counseling clinic has a projector for counseling services	61	12.7	419	87.3
9	Our school counseling clinic has made available free video conferencing for counseling services	40	8.3	440	91.7
10	Our school counseling clinic has made available free telephones for counseling services	98	20.4	382	79.6
11	Every student in our school has available email address for counseling	53	11.1	427	88.9
12	Every student in our school has available computer for counseling	32	6.7	448	93.3
13	Every student in our school has available video equipment for counseling	55	11.5	425	88.5

| 14 | Our school counseling clinic has available interacting internet platforms like Zoom, Google Classroom, etc. for counseling services | 54 | 11.3 | 426 | 88.7 |
| 15 | Every student in our school has available android phone for counseling services | 48 | 10.0 | 432 | 90.0 |

According to table 1, item 1, 8.5 percent of respondents agreed that their schools have large counseling clinics with computers for counseling services, whereas 91.5 percent responded no. Item 2 found that 7.9% of respondents agreed that their schools have email addresses and online portals for counseling services, whilst 92.1 percent disagreed. Item 3 revealed that only 3.9 percent of respondents agreed that their school counseling clinics offer free, high-quality internet counseling services, while 96.1 percent said no. Item 4 revealed that 11.7 percent of respondents agreed that their counseling clinics have a digital photo camera for counseling services, while 88.3% stated no. Item 5 revealed that 9.4% of respondents agreed that video cameras are used in their counseling clinics for counseling services, while 90.6 percent stated no. Item 6 revealed that only 6.7 percent of respondents agreed that their school counseling clinics contain CCTV cameras for counseling services, while 93.3 percent disagreed. Item 7 revealed that 16.5 percent of respondents agreed that their school counseling clinics have electronic scanners for counseling services, while the remaining 83.5 percent stated no. In response to question 8, 12.7 percent of respondents agreed that their school counseling clinics have projectors for counseling services, while 87.3 percent disagreed. Item 9 revealed that 8.3% of respondents agreed that their school counseling clinics had made free video conferencing available for counseling services, while 91.7 percent disagreed. Item 10 revealed that 20.4 percent of respondents agreed that their school counseling clinics have made free telephones available for counseling services, while 79.6% disagreed. Item 11 revealed that 11.1 percent of respondents agreed that every student in their school has an email address available for counseling, while 88.9% disagreed. Item 12 revealed that while 6.7 percent of respondents agreed that every student in their school gets access to a computer for counseling, 93.3 percent disagreed. Item 13 revealed that 11.5 percent of respondents agreed that all students in their school have access to video counseling equipment, while 88.5 percent disagreed. Item 14 revealed that 11.3 percent of respondents agreed that their school counseling clinics have interactive online platforms for counseling services such as Zoom, Google Classroom, and others, while 88.7% disagreed. Item 15 revealed that 10.0 percent of respondents agreed that every student in their school had an Android phone available for counseling services, whilst 90.0 percent disagreed. As a result, the provision of e-counselling facilities in Suleja Senatorial District senior secondary schools was extremely limited.

Research Question 2: What is the availability of trained e-counsellors in the Niger East Senatorial District of Niger State for the use of e-counseling facilities in guidance and counselling services in senior secondary schools?

Table 2: Percentage study of the availability of e-counselors in Niger East Senatorial District, Niger State, for the usage of e-counselling facilities in guidance and counseling services in senior secondary schools

		Responses							
		Highly Available		Moderately Available		Rarely Available		Not Available	
		F	%	F	%	F	%	F	%
16	Trained e-counsellors are available in my school	12	2.5	38	7.9	91	18.9	339	70.7

Table 2 item 16 found that 2.5 percent of respondents agreed that skilled e-counsellors are very accessible, 7.9 percent said they are moderately accessible, 18.9 percent said they are rarely accessible, and 70.7 percent said they are not accessible. As a result, the availability of trained e-counsellors at senior secondary schools in Niger State's Suleja Senatorial District was extremely limited.

What are the reasons that contribute to the lack of e-counselling facilities and skilled e-counsellors in senior secondary schools in Niger State's Suleja Senatorial District?

Table 3: A percentage analysis of the factors contributing to the lack of e-counselling facilities and trained e-counsellors in senior secondary schools in Niger State's Niger East Senatorial District.

S/N	Factors Responsible for Inadequate E-counselling Facilities and Trained E-counsellors	Responses			
		Yes		No	
		F	%	F	%
17	Lack of e-counselling awareness	381	79.4	99	20.6
18	Financial constraint	362	75.4	118	24.6
19	Poor power supply	412	85.8	68	14.2
20	Limited service	325	67.7	155	32.3
21	Inadequate computer literacy	301	62.7	179	37.3

Table 3 item 17 shows that 79.4 percent of respondents agree that they are unaware of e-counselling, while 20.6 percent disagree. Item 18 found that 75.4 percent of respondents agreed that they do not have enough money, while 24.6 percent disagreed. Item 19 revealed that 85.8% of respondents agreed that there is a lack of power supply, while 14.2% disagreed. Item 20 revealed that 67.7% of the respondents agreed that there is limited service, while 32.3 percent disagreed. Item 21 revealed that 62.7 percent of respondents agreed that computer literacy is lacking, while 37.3 percent disagreed. Inadequate e-counselling facilities and qualified e-counselling counsellors in senior secondary schools in Suleja Senatorial District, Niger State, are due to reasons such as e-counselling awareness, finance, power supply, limited service, and computer literacy.

Hypothesis for Research
The null hypothesis was tested at a significance level of 0.05.
Ho1: In the Suleja Senatorial District of Niger State, there is no significant difference between the availability and non-availability of e-counselling facilities for guidance and counselling services in senior secondary schools.

Table 4 shows the difference between the availability and non-availability of e-counselling facilities for guidance and counseling services in senior secondary schools in Niger State's Niger East Senatorial District.

Variables	N	Mean	Std. deviation	Df	t_{cal}	t_{tab}	Sig (P_{cal})	Remarks
Availability	480	10.36	1.551					
				958	9.546	1.646	0.000	Reject Ho_1
Non-availability	480	9.48	1.322					

Significant at df=958; P≤0.05, $t_{cal} > t_{tab}$
Ho1 should be rejected.
P0.05, t-cal > t-tab, significant at df=958;

Table 4 depicted a t-test study of the difference between the presence and non-availability of e-counselling services for guidance and counselling in senior secondary schools in Niger State's Suleja Senatorial District. Given 958 degrees of freedom, the t-cal value of 9.546 was found to be bigger than the t-tab value of 1.646 at the 0.05 level of significance. The null hypothesis was rejected since the t-cal value was bigger than the t-tab value. P-cal was also lower than P-set. It meant that there was a considerable disparity between the availability and non-availability of e-counselling capabilities for guidance and counselling in senior secondary schools in Niger State's Suleja Senatorial District. As a result, when e-counselling became available, counseling became more intriguing.

Discussion

In response to study question one, it was discovered that the provision of e-counselling facilities in Suleja Senatorial District senior secondary schools was quite limited.
The amount of availability of trained e-counsellors in senior secondary schools in Niger State, was similarly very low in study question two.
In research question three, it was discovered that inadequate e-counselling facilities and trained e-counselling counsellors in senior secondary schools in Niger State, are caused by factors such as e-counselling awareness, finance, power supply, limited service, and computer literacy.
There was a significant difference between the availability and non-availability of e-counselling facilities for guidance and counselling in secondary schools in Niger State, according to the null hypothesis. As a result, when e-counselling became available, counseling became more intriguing.

Conclusion

Senior secondary schools lacked enough e-counselling resources, and competent e-counselors were scarce.

Recommendations

- E-counselling facilities should be made available by the government, and professional e-counselors should be employed or available counselors should be taught in e-counselling.
- For effective e-counselling interaction, the government should provide alternative power sources, adequate computers, and free internet access to students and counsellors.
- In light of the hazards and threats posed by COVID-19, the study advised that the government train counsellors on how to use E-counselling services, in accordance to health experts' COVID-19 safety guidelines for the health safety of all pupils.

References

Afolabi, A. O. Adedapo, Adeyanju, O. L. (2005). Why college teachers do not use ICT facilities in teaching, Journal of E-learning (JOEL): 25-38.

Akinrotohum, O.F. (2002). Technology education for sustainable development in Nigeria: The way forward, STAN proceedings of the 43th Annual Conference and Inaugural Conference of CASTME Africa, 523-525.

Akpan, N.U. (2010). The challenges of guidance and counselling services in primary schools in Akwa Ibom, Nigeria. Ibom Journal of Counselling, 1 (1), 97-106.

Artemisa R. Dores, Andreia Geraldo, Irene P. Carvalho, and Fernando Barbosa (2020) The Use of New Digital Information and Communication Technologies in Psychological Counseling during the COVID-19 Pandemic, https://www.mdpi.com/1660-4601/17/20/7663.

Bradshaw. R.A. (1995). Delivery of career counselling services, Videolise and multimedia career interventions. *ER*IC, Digest USA: ERIC Publications.

Doyle. C. S. (1994). Information literacy in on information society: a concept for the information ages. *ERIC clearing house on information and technology.*

Denga, D. 1. (2001). Guidance and counselling in school and non-school settings (2rd Ed.) Port Harcourt: Double Diamond Publications.

Fasokun, T. O. (2010). Education as a potent factor achieving sustainable development in Nigeria. In Talla N. S.т Mohammed M. IL A para S. A. L. & Ogungbe E. O. (eds.). *Education for sustainable (kvelopmem in Nigeria* (pp. 18-44). Jos, Nigeria: Smartprint Productions.

FRN (2004) Notional Policy Education, NERDC Press, Lagos, Nigerian Educational Research Development Council 4th Edition. 53.

FRN (2014) Notional Policy Education, NERDC Press, Lagos, Nigerian Educational Research Development Council 6th Edition. 59.

Inyang-Abia, M. E. (2004), Essentials of Educational Technology: A handbook for educators and media practitioners, Calabar: Mifam Services, Nigeria Limited.

Iwu, A. O. (2004). New information technologies and their uses in education, Nigeria Journal for Curriculum Studies, 11. 1.

Marilyn. (2003). The internet health care revolution. In psyc, April, 5-6.

Modo. F.N. and Inaja. A.E. (2010). Rebranding skills for counsellors toward curbing personal- social problems in the school system. *I how Journal **of** Counselling*. 1 (1)40-46.

Nwachukwu, V.N. (2004). Information and Communication Technologies (ICTs) education for effective human resources development in Nigerian schools. Nigerian Journal of Curriculum Studies. 11, 110-111.

Olosunde, G. R. & Akinpelu, S. O. (2010). ICT education and sustainable development: Issues and Challenges. In Talla N. S., Mohammed M. IL Apara S. A. E. & Ogungbe E. O. (cds.). Education for sustainable development in Nigeria (pp. 402-411). Jos. Nigeria: Smartprint Productions.

Onyilo, B. O. (2010). The role of ICT in education for sustainable development. In Talla N. S., Mohammed M. H., Apara S. A. E. & Ogungbe E. O. (eds.). *Education for sustainable development m Nigeria.* Jos, Nigeria.Smartprint Productions.

Salau, M. O. (2003) Promotion of ICT usage in mathematics instruction in the secondary school level in Nigeria: some inhibiting factors in   M.A.G. (ed.). Information and Communication Technology (ICT) and Science

Technology and Mathematics (STM) Education. A proceeding of the 44th Annual conference of STAN, 2003, H.E.B. (Nig) Plc.

Robertson, B. (1994). New technology for teaching and learning 2011, Course 3, Block B in University of London, MA/Diploma for External Studies.

Yahaya A. S. (2010). The electronics techniques of instructions in Nigerian schools as remedy to shortage of qualified teachers in Talla N. S. Mohammed M. H., Apara S. A. E. & Ogungbe E. O. (eds) Education for Sustainable Development in Nigeria. Jos, Nigeria: Smartprint Production.