

**Barriers to the Use of ICT in the Teaching Health Education  
among Teachers in Ilorin-South Local Government, Kwara  
State, Nigeria**

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**Abstract**

*The study examined the barriers to using ICT in the teaching of Health Education in Secondary Schools in Ilorin South Local Government Area, Kwara State. The objective of the study was to examine (i) accessibility to internet network services (ii) ICT training, and (iii) allotted time as barriers to the use of ICT in teaching Health Education. A descriptive research design of survey type was used. A total of two hundred and forty-four (244) teachers were used for the study. A researcher structured, validated and pilot tested questionnaire was used for data collection. Findings revealed that; majority, (87.7%) of the respondents do not have stable internet service at their work place. Eighty-four (84.01%) of the respondents had the knowledge and needed ICT skills in the teaching of Health Education, while 79.51% of the respondents disagreed that there is no adequate time allotted to Health Education on the school timetable. It was concluded that ICT facilities are not adequate in most of the schools in the study area and teachers have to use their meagre salary to purchase data needed for internet activities.*

*It was recommended that the Ministry of Education should carry out continuous training in the form of workshops and seminar to assist teachers in gaining more knowledge and competencies on the use of ICT.*

**Keywords:** Barriers to the use of ICT, ICT, Internet, Teaching of Health Education, Secondary school.

**Word Count: 215**

### **Introduction**

Teaching has become one of the most difficult professions in our society today, as information is continually expanding and modern technology requires teachers to learn how to use them. Globally, the dynamic influx of information and cutting-edge technology has resulted in significant investments in technological innovation and infrastructure development. Information and communication technology, or ICT, has evolved into strong means for disseminating knowledge and information during the last few decades. Young and Hsin-Ho (2008) expressed that the integration of ICT in education has profound implications on the entire education process, spanning from investments to the use of technologies in dealing with critical issues of access, equity, management, efficiency, pedagogy, quality, research, and innovation. Many of the tactics used by both educators and students in the teaching and learning process are evolving, they will likely continue to evolve as the usage of ICTs as an educational medium grows (Hennesy, Onguiko, Harrisson & Wamakote, 2010). Computer technology and other parts of digital culture have revolutionized the way people live, work, play, and study, and have had an impact on the development and distribution of knowledge and power around the world (Deuze, 2017). Alsied (2016) noted that students who are unfamiliar with digital culture will find themselves at a competitive disadvantage in the national and global market. As a result, digital literacy, the abilities to find, evaluate, and produce information, as well as the critical use of new

media for full involvement in the society has become a key issue for curriculum frameworks.

Specifically, the health education teacher is expected to use or adopt ICT to familiarise and enable secondary school students to understand ICT integration, thereby facilitating changes in health behaviours in the classroom and consciously construct opportunities for learning and communication designed to improve health literacy, knowledge and life skills among students. According to Tariq, (2019), health educators' educational efficiency of ICT is determined by how it is utilised and for what purpose. Like any other educational tool or mode of delivery, ICT should work for every student, everywhere in the same way. Goodwin (2019) advanced that when teachers are digitally literate and trained to use ICT, it will improve the higher order of the thinking skills, provide creative and individualized options for students to express their understandings, and leave students better prepared to deal with ongoing technological change in the society and workplace.

According to Venkatesh, Morris, Davis & Davis (2003), when instructors are faced with new technology, such as ICT, two major aspects will impact their judgement about how and when they will use it based on the external circumstances surrounding them. External variables represent the challenges that teachers face when integrating a new technology into their teaching and learning process that are outside their sphere of control, such as the school authority's inability to provide some of the basic technologies, a well-functioning computer laboratory and ICT facilities, and usefulness of the facilities, which represents the benefits that a new technology can provide.

Furthermore, an intrinsic factor may include a health education teacher's attitude regarding the use of ICT. This will undoubtedly influence a teacher's feelings (positive or negative) about its usage. The extent to which teachers make conscious preparations to engage in or refrain from engaging in certain future behaviours, such as the use of ICT is critical. The job of a secondary school health education teacher in the integration of ICT is to deliver health

education to students as a set of techniques that involve various concepts and preparation of health information with the use of brochures, pamphlets, videos, delivering lectures, facilitating role play or simulation, analysing case studies, anticipating, and delivering health education as a set of techniques.

Health educators' use and integrate ICT based on the price, availability, and access to technology in different parts of the world (Oluwatayo & Ojo, 2017). Even if ICT usage in secondary schools in Kwara State, Nigeria has resulted in many ICT problems, the fact remains that ICT use brings clarity and efficacy and cannot be overlooked. Therefore, teachers require specific professional development opportunities to improve their abilities to use ICT for formative learning evaluations, tailored instruction, online resource access, and student interaction and collaboration (Dunleavy, 2017). Smeets (2015) also noted that, not only should ICT training improve teachers' overall attitudes toward ICT in the classroom, but it should also provide particular guidance on ICT teaching and learning within each discipline. Teachers who do not have this support are more likely to employ ICT for skill-based applications, which limits student academic thinking. It is also critical for educational managers, supervisors, teacher educators, and decision-makers to be taught in ICT use in order to support teachers as they adapt their teaching methods.

According to Clarke, French, Bilodeau, Capasso, Edwards and Empoliti, (2016), technological advancements and the emergence of digital environments have permeated and modified learning patterns at all levels, including secondary education. Teaching the digital generation of learners without a strong understanding of how they learn is just like beginning on an endless journey. As a result, ICT integration by health education teachers should provide unique chances to drive growth and innovation in every local environment, allowing secondary school students to interact more constructively with the global economy and the rest of the globe. However, in order to reach their full potential, technologies must be integrated into a broader set of productive changes and supporting capabilities.

To achieve individual and institutional goals, ICT resources must be matched by a lot of passion, as well as additional activities by health educators, entrepreneurs, or school owners, especially in secondary schools (Henessy, Onguiko, Harrison, & Wamakote, 2010).

Kefala (2016), advanced that, while health instructors appear to recognise the significance of ICT in schools, they occasionally face challenges in using these tools into their teaching and learning. Dawes (2016), also opined that, new technologies and ICT have the potential to improve health education teachers' knowledge of secondary school curriculum and provide opportunities for efficient student-teacher communication in ways never before possible. ICT in education has the potential to transform teaching, so the lack of use of ICT by school teachers remains a negative factor.

The obstacles to the use of ICT technologies in health education teaching and learning in the classroom are tremendous. Many secondary school instructors in Ilorin, Kwara State, has been denied the observable effectiveness of using ICT tools to improve classroom teaching and learning. The rate is frightening and unacceptable. The availability of ICT tools, expertise, and access to ICT remains a critical challenge in the study area. Many health educators seem to lack the necessary computer knowledge, training, abilities, and are uninterested in incorporating ICT. Hence, the focus of this study was on barriers to the use of ICT among Health Education Teachers in Ilorin South Local Government Area of Kwara State, Nigeria.

### **Objectives of the Study**

Specifically, the study examined if:

1. accessibility to internet network services influence the ICT use in teaching health education in secondary schools in Ilorin South Local Government area of Kwara State.
2. ICT training influence the use of ICT in teaching health education in secondary schools in Ilorin South Local Government Area of Kwara State, and

3. The allotted time to health education influence the use of ICT in teaching health education in secondary schools in Ilorin South Local Government Area of Kwara State.

### **Methodology**

The research design used for this study is a descriptive research design of survey type. Two hundred and forty-four (244) teachers who were employed to teach Health Education were sampled from 32 public schools in Ilorin South Local Government Area of Ilorin, Kwara State, Nigeria using purposive sampling and simple random sampling of balloting. Purposive sampling was used to select teachers who had either certificate or a degree in Health education and those who are actively involved in the teaching of Health education. A researcher structured closed-ended questionnaire which contains two sections (A and B) was used for the study. Section A contained the demographic characteristics of the respondents which include; Age range, religion and the use of ICT in teaching. Section B contained question items on the variables for the study which included Accessibility to internet, ICT knowledge and allotted time for Health Education. The instrument was pilot tested and the reliability coefficient was 0.70r. Participation in the study was entirely voluntary, and each subject gave their informed consent. All information provided by research participants was kept confidential by the researcher, who also ensured the participants' privacy. A descriptive statistics of frequency counts and percentages was used to analyse the demographic data and the research questions raised for the study.

## Results

**Table I:** Demographic Distribution of Respondents.

S/N	Items	Frequency	Percentage
1	<b>Age Range</b>		
	Below 30 years old	38	15.6%
	31-40years old	149	61.1%
	41 and above	57	23.4%
	<b>Total</b>	<b>244</b>	<b>100</b>
2	<b>Religion</b>		
	Christianity	105	43.0%
	Islam	130	53.3%
	Others	9	3.7%
	<b>Total</b>	<b>244</b>	<b>100</b>
3	Do you engage in the use ICT to teach your students		
	Yes	22	9.02%
	No	222	90.98%
	<b>Total</b>	<b>244</b>	<b>100%</b>

Table I shows the demographic information of respondents for the study as shown in the table, 38(15.6%) of the respondents were below 30 years old, 149(61.1%) of the respondents were between 31-40years, this means that majority of the respondents were within their youthful age. On religion, 105(43%) of the respondents were Christians, while majority of the respondents (130/53.3%) were Muslims. Table I also revealed that 22(9.02%) of the respondents used ICT, while 224(90.98%) did not use ICT to teach

their students. This shows that the majority of the respondent do not use ICT in the teaching of Health Education even though they are still within their youthful years.

**Table 2:** Frequency and Percentages of Responses on the impact of Accessibility to Internet Network on the Use of ICT in the Teaching of Health Education.

S/N	Items	SA	A	D	SD	Row Total
1	There is stable internet service at my place of work that I can use to teach Health Education	15 (6.15%)	15 (6.15%)	89 (36.47%)	125 (51.23%)	244
2	Oftentimes, I have to buy data to connect to the internet whenever I have to browse for materials related to the teaching of Health Education	108 (44.30%)	101 (41.40%)	25 (10.2%)	10 (4.10%)	244
3	Its been constantly challenging getting data to browse the internet and get information on Health Education and this affects my use of ICT	113 (46.31%)	92 (37.7%)	28 (11.48%)	11 (4.51%)	244

Table 2 shows that the majority (87.7%) of the respondents do not have stable internet service at their work place. 85.7% of the respondents often times have to buy data to connect to the internet for browsing, while, 84.11% of the respondents feels it has constantly been challenging getting data to browse the internet and get information on Health Education and this affects their use of ICT. This shows that the majority of the respondents do not have



easy access to ICT facilities and this has negatively influenced its use in the teaching of Health Education.

**Table 3:** Frequency Counts and Percentages showing the impact of ICT training on the use of ICT in Secondary Schools in Ilorin South Local Government Area of Kwara State.

S/N	Items	SA	A	D	SD	Row Total
1	I have the needed knowledge and skills when it comes to ICT	87 (35.65%)	118 (48.36%)	24 (9.84)	15 (6.15%)	244
2	The school authority in my school constantly get the teachers trained on ICT on regular basis	56 (22.95%)	125 (51.23%)	53 (21.72%)	10 (4.09%)	244
3	ICT training is too tasking and time consuming, so i don't believe in it	14 (5.73%)	41 (16.83%)	129 (52.86%)	60 (24.58%)	244

Table 3 shows that 84.01% of the respondents had the knowledge and needed skills of ICT in the teaching of Health Education 74.18% agreed that their school authorities constantly get the teachers trained on the use of ICT. In comparison, 22.56% of the respondents do not believe in ICT training as they find it tasking and time consuming.

**Table 4:** Frequency Counts and Percentages Showing responses on the influence of allotted time on the use of ICT in Secondary Schools in Ilorin South Local Government, Ilorin, Kwara State.

S/ N	Items	SA	A	D	SD	Row Total
1	There is absolutely no time allotted to health education in my school	34 (13.93%)	16 (6.55%)	68 (27.87%)	126 (51.64%)	244
2	Often times as the class teacher I have to squeeze time in order to teach the students health education	72 (29.51%)	117 (47.95%)	42 (17.21%)	13 (5.33%)	244
3	We have just few periods on the time table allotted for health education	68 (27.86%)	115 (47.13%)	42 (17.22%)	19 (7.79%)	<b>244</b>
4	Health education is not seen as a subject on its own so not usually on the time table	77 (31.55%)	116 (47.54%)	41 (16.80%)	10 (4.09%)	244

Table 4 shows that 79.51% of the respondents disagreed that there is no adequate time allotted to Health Education on the school timetable, 77.4% of the respondents agreed that they had to squeeze in time to teach Health Education, 74.99% said they have only few periods to teach Health Education. In comparison, 79.09% of the respondents said Health Education is not seen as a subject on its own, so it is not usually on the timetable.

### **Discussion of Findings**

Findings revealed that the majority of the respondents did not have easy access to ICT facilities and this has negatively influenced its use in the teaching of Health Education. This finding is not surprising given the situation in Nigeria, a developing country that is lagging technology-wise. Many schools are not provided with ICT gadgets

to improve the teaching of Health Education using ICT. This finding agrees with the assertion of Neeru (2015) that, ICTs and the internet have the potential to significantly improve access and equity in education, particularly in health education. In the case of health education, the use of ICTs helps both teaching and learning activities while causing changes in the teaching and learning process. Oluwatayo et. al. (2017) also noted that the internet has evolved into an information superhighway traditional libraries must supplement. As a result, health education teachers in both private and public schools are expected to use the internet, but regrettably, the internet is only available in high standard schools. Most public schools do not have internet connectivity, let alone health education teachers will use the internet to retrieve materials.

Findings also revealed that the majority of the respondents have knowledge of the use of ICT in the teaching of Health Education. Only a few believed that the training on ICT is too tasking. This finding negates the findings of Akinloye (2017), who stated that the use of ICT by health education teachers is hampered by a lack of necessary knowledge and abilities. One of the greatest impediments to the adoption of ICT in education is that, most teachers lack the necessary knowledge and abilities. Akinloye (2017) affirmed that, according to a survey of 42 schools, 66 percent of ICT teachers in Nigeria had never been instructed on how to teach the subject. The teachers were engaged to teach subjects in their fields of competence, and they would also be expected to teach ICT. Lack of sufficient staff training and quality teacher training has always resulted in very poor student performance in secondary schools. The study's finding is not so surprising because, the researchers observed that, most of the study participants were in their youthful ages and given the increasing technological versatility and inclination in the country, people within their youthful age are expected to be technologically inclined.

Findings also revealed that there was no adequate time allocation for the inclusion of ICT into health education teaching. This finding agrees with Mukail, (2016) who opined that teachers'

lack of time for health education had been demonstrated to be one of the strongest barriers to their usage of new technology in the classroom. The researchers observe that, time is required for the teachers to collaborate with other teachers and innovators and learn how to use new hardware and software. In the words of Mndzebele, (2013), teachers have been discovered to be the most important predictors of the usage of new technologies in classrooms. The researchers find the time allocation issue in the study area to be unpalatable because, health education is the basis for disease prevention, health promotion and healthful living.

### **Conclusion**

Based on the findings of this study, the researchers concluded that, ICT facilities are not adequate in most of the schools in the study area and teachers have to use their meagre salary to purchase data needed for internet activities. Also, the majority of the teachers in the study area have adequate knowledge of ICT but lack of easy and free access to internet facilities is the major hindrance to the use of ICT in teaching Health Education. Again, the time allotted for the teaching of Health education is inadequate given the tremendous task involved in the use of ICT in teaching and learning.

### **Recommendations**

The Ministry of Education in Nigeria should carry out continuous training in the form of workshops and seminar to assist teachers in gaining more knowledge and competencies on the use of ICT. The Ministry should also review the time allocated for the teaching of Health Education so as to give sufficient time for Health Education teachers to integrate the use of ICT. The Ministry should also provide free Internet access to make ICT easier and cheaper for teachers to use.

## References

- Akinloye, A. (2020). Information communication technology and advancement of knowledge in health education. *International Journal of Innovative Technology Integration in Education*, 4(2); pp. 41-46.
- Alsied, S.M.& Pathan, M.M. (2015). The use of computer technology in EFL classroom: Advantages and implications. *International Journal of English Language and Translation Studies*. 1(1)
- Balanskat, A., Blamire, R., & Kefala, S. (2006). The ICT impact report: A review of studies of ICT impact on schools in Europe, European Schoolnet, Brussels, Belgium, 2006. Available at: <http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan037334.pdf>. Accessed on 02/08/21.
- Clarke, E., French, B., Bilodeau, M., Capasso, V., Edwards, A, & Empoliti, J. (2016). Pain management knowledge, attitudes and clinical practice: The impact of nurses' characteristics and education. *Journal of Pain and Symptom Management*, 2; pp11-18.
- Deuze, M. (2017). Participation Remediation Bricolage - Considering Principal Components of a Digital Culture. *The Information Society*. 22
- Dunleavy, M., Dextert, S. and Heinecke, W.F. (2017). 'What added value does a 1:1 student to laptop ratio bring to technology-supported teaching and learning?' *Journal of Computer Assisted Learning*. 23.
- Hennessy, S., Onguko, B., Harrison, D, Ang'ondi, E. K., Namalefe, S, Naseem, A. & Wamakote, L (2010). Developing the Use of Information and Communication Technology to Enhance Teaching and Learning in East African Schools: Review of the Literature. Available at [https://www.educ.cam.ac.uk/centres/archive/cce/publications/CCE\\_Report1\\_LitRevJune0210.pdf](https://www.educ.cam.ac.uk/centres/archive/cce/publications/CCE_Report1_LitRevJune0210.pdf). Accessed on 02/08/21
- Goodwin, K. (2019). *Use of Tablet Technology in the Classroom*. Strathfield, New South Wales: NSW Curriculum and Learning Innovation Centre.

- Mndzebele, N. (2013). Challenges faced by schools when Introducing ICT in developing countries. *International Journal of Humanities and Social Science Invention*, 2(9); 1-4. ISSN (Online): pp. 2319 – 7722.
- Neer, S. (2009). "ICT in Indian Universities and Colleges: Opportunities and Challenges". *Management & Change*, 13 (2); 231-244.
- Oluwatayo, I. B., & Ojo, A. O. (2017). Determinants of Access to Education and ICT in Nigeria. *Journal of Economics and Behavioral Studies*, 9(4(J)); 153-163. Doi: [https://doi.org/10.22610/jebss.v9i4\(J\).1830](https://doi.org/10.22610/jebss.v9i4(J).1830).
- Tariq, Z. F.M, (2019). Role of Information Communication Technology (ICT) in Education and its Relative Impact. Available at <https://www.ijert.org/role-of-information-communication-technology-ict-in-education-and-its-relative-impact>. Accessed on 24/06/2021.
- Young, S.C & Hsin-Ho, K (2008). A study of the uses of ICT in P.E through Fur Winning School Classes in the Taiwan Cyberfair. Available at: [https://www.researchgate.net/publication/234678334\\_A\\_Study\\_of\\_Uses\\_of\\_ICT\\_in\\_Primary\\_Education\\_through\\_Four\\_Winning\\_School\\_Cases\\_in\\_the\\_Taiwan\\_Schools\\_Cyberfair](https://www.researchgate.net/publication/234678334_A_Study_of_Uses_of_ICT_in_Primary_Education_through_Four_Winning_School_Cases_in_the_Taiwan_Schools_Cyberfair). Accessed on 11/09/2021
- Venkatesh, V., Morris, M. G., Davis G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27 (3); pp. 425-478.