

FACTORS MILITATING AGAINST THE INTEGRATION OF ICT IN SECONDARY SCHOOLS IN KUMBOTSO LOCAL GOVERNMENT AREA OF KANO STATE

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Abstract

Information Communication Technology (ICT) refers to devices that facilitate transmission of information such as radio, cell phones, computer, internet technologies and others. The present study therefore sought to determine factors militating against the integration of ICT in Kumbotso secondary schools in Kano State. Three objectives and three research questions were generated to guide the study. Descriptive survey design was employed. Instrument for data collection was a facts finding questionnaire designed by the author. Population for the study comprised all secondary schools in Kumbotso Local Government Area of Kano state. The respondents were male and female teachers in these schools. A total of 60 secondary school teachers were randomly selected from 4 schools (15 teachers from each) to form the sample size. The findings were that ICT equipment were not available and those available are inadequate. Teachers lack ICT skills. Recommendations proffered were that ICT materials should be sufficiently provided. Teachers should be trained to acquire ICT skills and ICT equipment should be regularly serviced.

Information and Communication Technology (ICT) is a term often used in broad area of human activities. It is the acquisition, processing storage and dissemination of vocal, practical textual and numeric information by a micro-electronic based combination of computing and telecommunication (Ike, Iwu and Chimezie, 2006). Furthermore, it is an umbrella term that includes any communication

device or application, including radio, television, cellular phone, computer net work, hardware, soft ware, electronic mail, satellite systems as well as the various services and applications associated with them. It also includes internet technologies and multimedia utilization. The use of ICT in the classroom has been observed to support the intrinsic and extrinsic motivation of students. Hennessy, Fung and Scanlon (2001) assert that ICT speeds up the graphing processes in Mathematics, freeing students from analyses and reflect on relationships between graphs and their patterns.

The information and communication technology (ICT) is revolutionizing the way in which we live and work. It is changing all aspects of our life and life style. The digital revolution according to Leon and Leon (1999), has given mankind the ability to treat information with mathematical precision, to transmit it at very high accuracy and to manipulate it at will. These capabilities are bringing into being a whole world within and around the physical world.

The integration of information communication technology in teaching is a central matter in ensuring quality in the educational system. There are two equally-important reasons for integrating ICT in teaching. Students will become familiar with the use of information technology since all jobs in the society of the future will depend on it (Leon and Leon, 1999) and ICT must be used in

teaching in order to improve its quality and make it more effective (Davis, 1997). ICT offers new and innovative modes of learning for teachers and students in schools, it brings about classroom without walls when teachers utilize the enormous potentials of this tool (Okoro, Momodu and Nnebe, 2005) But on the contrary, in many public primary and secondary schools in Nigeria today, chalkboard, textbooks, charts are still being used as instructional materials while the use of the much publicized ICT mode in teaching still looks to be mere fantasy. Aladejana (2007) found out in her study that none of the secondary schools use ICT... rather few students are asked to browse information on the internet. Teachers virtually do not involve the use of ICT in their science teaching. Schools have very few computers and few students have access to them. None of the public schools had computers or access to internet. Some of the major challenges identified by Aladejana (2007) in utilizing ICT in primary and secondary school levels include; Educational personnel in ICT, provision of ICT materials, power supply, class size and funding.

Objectives of the Study

The objectives of the present study are as follows:

1. To assess the availability of ICT equipment in secondary schools in Kumbotso L.G.A. of Kano state.
2. To determine the level of teachers competences in the utilization of ICT equipment.
3. To find out if the available ICT equipment are functional.

Research Questions

1. Are ICT equipment available in secondary schools in Kumbotso L.G.A of Kano state?

2. Do the teachers have the basic competence of utilizing the ICT equipment available in the schools?
3. Are the available ICT equipment functional?

Methodology

The researcher adopted the descriptive survey design since the study sought to explain existing circumstance and on going practices in ICT. The study does not also seek to neither manipulate variables nor identify new phenomena. The design enabled the researcher to make use of a sample out of a large population.

Population for the Study

The population for the present study comprised all the public secondary schools in Kumbotso L.G.A of Kano State. The respondents included all teachers in Kumbotso secondary schools both male and female.

Sample and Sampling Technique

A total of 4 secondary schools were randomly selected as sample for this study and 60 teachers (15 from each of the sampled schools) formed the sample size of respondents. Stratified random sampling techniques was employed with a view to have a representation of the sub-groups in the population such as male and female teachers

Instrument for Data Collection

The instrument for data collection was a facts finding questionnaire titled ICT Utilization Inventory (ICTUI) designed by the researcher. The instrument was a structured questionnaire with 10 items. Four items on availability of ICT equipment with three response option (Available and Adequate and Not available). Three items on teacher competences in utilizing available ICT equipment with three response option (thus: very good, fair and poor) three items on functionality of the equipment available.

Factors Militating Against the Integration of ICT in Secondary Schools in Kumbotso Local Government Area of Kano State

Procedure for Data Analysis

Data collected was analyzed using descriptive statistics such as simple percentages, since the study did neither seek to determine significance of difference nor relationship between variables.

Data Presentation and Analysis

Data obtained from the ICT Utilization Inventory was analyzed using descriptive statistics- simple percentages, since neither significant difference nor relationship between variables was sought.

Results

Research Question 1

Are ICT equipment available in secondary schools in Kumbotso L.G.A.?

Data obtained from the data collection instrument were summarized in form of frequencies and percentages as shown in table 1 below

Table 1: Availability of ICT Equipment in Kumbotso Secondary Schools
N-60

ICT Items	Available not Adequate f	Available and Adequate f	Not Available f
Computers	40	10	10
Internet facilities	00	00	60
Multimedia facilities	10	00	50
Videos	15	06	39
Total frequency	65	16	159
Percentage	27.08%	6.6%	66,25%

Result in table 1 above indicates that ICT facilities are not adequately available in

secondary schools in Kumbotso L.G.A. 66.25 percent of respondents indicate that most ICT items were not available in their schools. However, 40 respondents comprising 66.67 percent of the subjects show that computers were available, though not adequate.

Research Question 2

Do the teachers have basic competence of utilizing the ICT equipment available in the school?

Response obtained from (IUI) ICT utilization Inventory) were summarized in table 2 below

Table 2: Teachers Competence on Use of ICT Materials

ICT Materials	Very good f	Fair f	Poor f
Use of computer	18	38	04
Competence in internet browsing	43	10	07
Use of multimedia software/hardware	04	02	56
Total frequency	65	50	67
Percentage competence	36.11%	27.78%	37.22%

Result in table 2 above indicates that teachers are more skillful in computer use and internet browsing than in other ICT equipment. Since 43 subjects comprising 71% of the respondents are computer literate. However, 56 subjects comprising 93.3 percent of the respondents have very poor knowledge in utilizing the multimedia technology. Though 71 percent of the respondents show that they are computer literate, this study did not assess their extent of computer literacy, since there are many programmes and soft ware packages.

Research Question 3

Are the available ICT equipment functional?

Responses were summarized in form of frequencies and percentages as shown in table 3 below.

Table 3: Percentages of Functional ICT Equipment

ICT Materials	Functional F	Not functional f
Computers	10	50
Internet facilities	01	59
Multimedia facilities	00	60
Videos	24	36
Total frequencies	35	160
Functional percentage	14.58%	66.67%

Result in the table 3 above show that 66.67 percent of respondents indicate that ICT facilities are not functional. This response can also be interpreted as not being available and not used. Only 14.58% of respondents indicate that the available ICT facilities were functional. The researcher observes that since teachers are rarely accessing the ICT facilities they may not be very sure whether the equipments are functional or not.

Summary of Findings

1. Only computers were found in most schools
2. Teachers have poor knowledge in utilization of ICT equipment
3. Only computers were the functional ICT facilities

Discussion

The finding that ICT facilities were not available in most schools except for few non-functional computers corroborates the finding of (Okoro, Momodu and Nnebe, 2005) that in Nigeria today, chalkboard, textbooks, charts are still being in use. In a related study, Aladejana (2007) found that none of the secondary schools use ICT... rather few students were asked to browse information on internet.

The finding that teachers do not use ICT equipment in teaching is in consonance with Aladejana's (2007) finding that Teachers virtually do not involve the use of ICT in their science, and furthered that they lacked manipulative skills. Researcher has shown that among the major problems militating against the implementation of ICT in Nigerian schools, lack of training of teachers in use of these facilities was identified.

The finding that most of the available ICT facilities in secondary schools were not functional or were not being used or accessed, except few computers in some schools. This result corroborates with the finding of Okoro, Momodu and Nnebe, (2005), Aladejana (2007) ...schools have very few computers and few students had access to them. No internet facilities. In most secondary schools in Kumbotso, the available facilities were either not accessible to students as most of them were not functional. Respondents indicated that in some schools where computers were available, they were inadequate considering the population size of students. Some teachers explained that class sizes were too large and control was a major problem.

Conclusion

Integrating ICT in teaching in Nigerian schools will create ample opportunities for students to become familiar with the use of information technology and will improve teaching quality and make it more effective. Nigeria cannot be left behind this global trend. Therefore more commitment is urgently required from teachers and stake holders to realize the dream of ICT in Nigeria.

Recommendations

1. Modern ICT facilities should be provided in primary, secondary and tertiary institutions.
2. Teachers should not only be trained but should be provided with necessary ICT equipment.
3. Classes should be split into more arms to reduce large and intimidating class-size. A situation where a class has a population of 120 students is outrageous.
4. Available ICT materials should be maintained or serviced from time to time.

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