

## ASSESSMENT OF TEACHERS' LEVEL OF LITERACY AND ATTITUDE TOWARDS ICT APPLICATION IN VOCATIONAL AND BUSINESS EDUCATION

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### **Abstract**

*The study assessed teachers' level of literacy and attitude towards ICT Application in Vocational and Business Education. In carrying out this survey study a sample of four hundred (400) vocational and business education related subject teachers were selected from all the four divisions in Ogun State of Nigeria. Three research questions were raised and answered. Frequency count and simple percentages were the analytical tools used for the analysis of data collected. The results showed that computer as an ICT facility is not adequately available in schools, majority of the teachers have low literacy level in the use of computer and that teachers are favourably disposed to the use of ICT facilities in teaching. The study among others, therefore, recommended that Government should make computer and other ICT facilities readily and adequately available in schools.*

**Key words:** Assessment, Vocational and Business Education, ICT Application, Attitude

### **Introduction**

Literacy simply means the ability to read and write. Gray in Abimbade (1996) sees a literate person as one who has acquired the knowledge and skills in reading and writing which enable him to engage effectively in all those activities in which literacy is normally assumed in his cultural group. More so, the world is fast becoming a global village, as a result of developments in information and communication technology (ICT) (Kalu and Ekwueme, 2003). According to them, the key

instrument to this globalization is the computer. Computer mediated communication is increasingly becoming the fact of everyday life, particularly in the developed and some developing countries. "In these countries, information and communication technologies have changed how people live, work and play" (Berenfeld, 1999). As it could be seen as well ICT is changing every aspect of human life-trade, manufacturing, communications, services, culture, entertainment, education, research, defence, and global security (Akudolu, 2002;

Ekoko, 2002; Amoo, 2010). Gillian (2001) and Ehikhamenor (2003) said that Information and Communication Technologies (ICTs) has revolutionized the outlook and actual practice and process of economic activities expanding the scope and terrain of commercial transactions. It has brought about changes in the economic, administrative and political culture as well as social practices. In the submission of World Bank (2002), ICT holds out the opportunity to revolutionize pedagogical methods, expand access to quality education, and improve the management of education. Glaringly, the present pedagogical pattern used in Nigerian classroom does not prepare students for the information age and globalization, that is, it's not equipping students to live effectively in the modern age of science and technology (Federal Ministry of Education, 1998).

Kiadese and Adetayo (2007) citing Onu (1987), submitted that vocational education is one of the important forces that dictate man's economic life and social order while the national policy on education (Federal Republic of Nigeria, 2004) described vocational education as that form of education, which is obtainable at the technical college level of education in Nigeria.

Vocational and business education being a course that prepare students for the world of work need an improvement in the academic training given to their students in order to brace up to the new challenges and systems of education through the deployment and use of ICT in schools. In the opinion of Jajua (2006), ICT is that process of utilizing information and data dissemination through electronic facilities such as computers, videos, radios, phones etc. which modern society uses to share knowledge, ideas, information and data in limited dimensions that enable learner to learn at their individual pace. Sharma (2005) observed that "the role of ICT in education and the role of the teacher in using that technology are pertinent in shaping the future of education".

Attitude has been variously defined by many scholars (Chukwu, 1990; Emeke, 1996; Okwilagwe, 2002). Okwilagwe (2002) describes attitude as a moderately intense emotion that predisposes an individual to respond consistently in a favourable or an unfavourable manner when confronted with a particular object. Emeke (1996) asserted that a positive attitude is likely to engender achievement of a goal or objective than a negative attitude. The possession of positive attitude according to Okwilagwe (2002) is so

crucial in an individual life that various educationists have over the years addressed the importance of its development. Attitude, whether conceived as a process or a product of learning has been found by some researchers to significantly influence achievement or performance in various subjects and even workers productivity on the job. The general contention from these various studies seems to suggest that favourable attitudes are important determinants of achievement in various disciplines (Astin, 1993). Therefore, it is very important to determine the attitude of teachers who are the major stakeholders in educational setting or policy implementation towards the use of ICT tools in imparting knowledge into the students under their tutelage.

The question that readily comes to mind is how ready are vocational and business education teachers to use ICT tool? According to the World bank (2002) low education and literacy levels, lack of awareness about the capabilities of the technology and absence of skills to develop and use ICT applications represent significant obstacles to adoption, even when the physical and institutional infrastructure is available. In the light of this submission, the present study assessed Business Education

teachers' literacy levels and attitudes toward the use of ICT in teaching.

### **Research Questions**

The following research questions were raised to guide the study:

1. Are computers available for use in teaching vocation and business education subjects?
2. What is the literacy level of vocational and business education teachers in ICT application?
3. What is the attitude of vocational and business education teachers towards ICT application in teaching?

### **Methodology**

The study employed the descriptive survey research design; this design was chosen because the researcher intends not to manipulate any variable. Multistage sampling technique was used in selecting the sampled used for the study. The first stage was the stratification of Ogun State to its original four divisions. The second stage was the selection of twenty secondary schools randomly from each division and the last stage was the selection of five vocational and business education related subject teachers from each selected schools. In all four (400) hundred teachers participated in the

study. A researcher designed and validated computer availability, literacy assessment and attitude to ICT application scale (CALAS) was the instrument used for data collection.

CALAS was designed to collect data on the availability of computers, teachers' literacy level and attitude to application of ICT in schools. The instrument has two sections. Section A sought information on availability of computer in schools and their level of competence in operating it. Section B consists of twenty items on a four point likert response mode measuring teachers' disposition to the application of ICT in schools.

The instrument was given to two experts in the area of educational evaluation for perusal to ascertain content validity. It was also trial tested on a sample of thirty teachers and the result yielded reliability coefficient of 0.78 using cronbach alpha statistic.

### **Results**

The results of the analysis of data are as presented below:

Research Question 1: Are computers available for use when teaching their subjects?

**Table 1: Computer availability according to schools**

<b>Condition</b>	<b>Frequency</b>	<b>Percentage</b>
Available	120	30
Not Available	280	70
Total	400	100

The result in table 1 revealed that computer was not adequately available in school because only one hundred and twenty (120) teachers out of the 400 sampled indicated that computer is available in their schools.

Research Question 2: What is the literacy level of vocational and business education teachers in ICT?

**Table 2: Teachers' literacy level in the use of computer**

<b>Literacy Level</b>	<b>Frequency</b>	<b>Percentage</b>
High	112	28
Low	288	72
Total	400	100

The result in table 2 revealed the level of ICT literacy of vocational and business teachers in the use of computer. The table revealed that, two hundred and eighty eight teachers possess low literacy level while one hundred and twelve teachers had high literacy levels.

Hence, majority of the teachers have low literacy level in the use of computer.

Research Question 3: What is the attitude of vocational and business education teachers towards application of ICT in teaching?

**Table 3: General Attitudinal Disposition Table**

Category of teachers attitude	Frequency	Percentage
Unfavourable	120	30
Favourable	280	70
Total	400	100

The result in table 3 revealed that one hundred and twenty teachers, which constitute 30%, were not favourably disposed to the application of ICT facilities in teaching while the remaining two hundred and eighty teachers representing 80% are favourably disposed to its application in teaching.

corroborate that of Yusuf (2005) and Kiadese (2007) that non-availability of ICT facilities like computer is one of the challenges facing ICT application in school.

### Discussion and Conclusion

This study aimed at finding out the status of computer as ICT facilities in school as well as the attitude and literacy level of vocational and business education teachers in the use of computer in teaching. The study reveals that computer as an ICT facility is not adequately available in school. This finding

Furthermore, the study also found that majority of vocational and business education teachers possessed low literacy level in the use of computer. This finding contradicts that of New house (2005) and Kiadese (2007) that most teachers have minimal ICT literacy irrespective of their level. The last research questions showed that seventy (70%) percent of the vocational and business education teachers in Ogun state secondary school are favourably disposed to the application of ICT facilities in schools. This favourable attitude

confirmed the earlier submission of many researchers that the attitude formed towards an objective, goals, would eventually reflected on the performance or reaction towards those objectives and in the subjects afterwards (Bolaji, 2001, Sotonwa, 2004). The findings however negate the report of Kalu & Ekwueme (2003) that most teachers are not favourably disposed to the applications of ICT in schools.

In Conclusion, the study has implications for Government and other stakeholders that there is urgent need to make computer and other ICT facilities readily and adequately available in the secondary schools. The favourable dispositions of teachers to the use of ICT facilities in teaching and their low literacy level also have implication for the society at large. There is likelihood that very soon technological advancement in the country will be improved and our student's right from the secondary schools will be able to face the challenges of globalization, and there is need also, to increase the awareness for the use of ICT tools in the teaching and learning process.

### **Recommendations**

Based on these findings, it was therefore recommended that:

1. Government should made provision for adequate supply of computer and other ICT facilities to schools in order to boost the literacy level of the teachers.
2. Serving teachers should be encouraged to get some formal education in computer and internet.
3. Also, in-service training, workshop and seminars should be organised for the teachers at regular interval specifically for the purpose of facilitating their literacy, awareness and skills in using ICT in teaching so as to make them ICT compliant and improve their condition for effective classroom teaching and learning process.
4. All tertiary institutions that specialize in the training of would-be teachers should incorporate ICT related courses into the curriculum of the student-teachers so as to ensure that they are ICT compliances even before the completion of their programme, as this will enhances their performances in the classroom situation.

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