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Extent of ICT software availability and teacher trainers' ICT literacy level in vocational education department: A case study of two federal colleges of education in Nigeria

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A B S T R A C T

The paper sought to investigate the extent of ICT Software availability and the teacher trainers' ICT literacy level in Vocational Education departments. Researcher-made structured questionnaire was administered on 92 teacher trainers in Vocational Education departments in two Federal Colleges of Education in Nigeria. The findings showed that ICT Software was lacking and majority of the teacher trainers was ICT non-literate. Priority in the provision of ICT softwares by government, seminars/workshops and in-service training for teacher trainers were among the recommendations made towards improving the situation in Colleges.

Introduction

Information and communication technology (ICT) has contributed immensely in every sphere of life. Its impact on the growth and quality of education is much particularly, if well harnessed in Nigeria. ICT will prove its course in Vocational Education growth and development.

Information, according to Diamond (2002) in Ezugwu (2004) is the facts told, heard or discovered about knowledge while technology a social process that generates and combines know-how and people in order to extend the physical range of man. Communication on the other hand is the conveying of information of any kind from one person or place to another either by direct assisted conversion or correspondent through postal services (Jwakdak *et al.*, 2003). Information and communication technology (ICT) is then the application of computer and telecommunication technology to improve learning by the students (Macmillan *et al.*, 2003).

Science and technology have contributed a lot to the quality and growth of any education through its different inventions like radio, television, and computer, Internet etc. Today, ICT is a major way science and technology is contributing to educational growth and quality.

According to Ajagun (2003) information and communication technology includes the radio, television, videos, computers, sensors, interface boxes, e-mail, satellite connections, Internet and all the software and material which are employed by teachers for teaching and learning.

Isoun (2003) remarked that there has been tremendous increase in the number of Internet providers with the attendant penetration of ICT into many parts of the country. He further highlighted the benefits of ICT as follows:

- Increased employment and education opportunities for young people.
- Opportunity of long learning.
- Learning while working.
- Skill for employment among others.

In another development, Gusen (2001) identified the following areas of need in information technology:

- Teacher and students need for broad education in order to determine the application and innovation in technology.
- Teachers need competency in design of instructional system such as programming, web page etc. to enable them assist their students become critical thinkers.
- Students and teachers need to review critically the relevance of software packages for their teaching practice.
- Teachers and students need to evaluate ways in which the use of information technology changes the nature of teaching and learning and to overcome logical problems in school setting etc.

The importance of ICT in teaching and learning notwithstanding, some teething problems have to be overcome. As Temi (2003) puts it, the success of ICT in Nigerian classroom would depend not only on the extent to which the need of teacher trainers are met during preparation but on the availability of the ICT software to teachers and students. This obviously calls to mind that the challenges of integrating information and communication technology into teacher education are to realize that the need of the trainees is the needs of the schools. In addressing the issue of ICT in Vocational Education teacher training Colleges in Nigeria, the following basic questions readily come to mind.

1. Is the ICT software available in the Vocational Education classroom?
2. What is the vocational Education teacher trainers' ICT literacy level?

It is an effort to tackle these questions that this paper emerged.

Purpose of the study

The purpose of the study was to investigate the degree of availability of ICT software in Vocational Education departments in Colleges of Education in Nigeria

Secondly the paper sought to determine the Vocational Education teacher trainers' ICT literacy level.

Research questions

1. What is the degree of availability of ICT software in Vocational Education departments in Federal Colleges of Education in Nigeria?
2. What are Vocational Education Teacher trainers' ICT literacy levels?

Method

Research Design: The design of the study was survey design.

Population of the study: The population of the study comprised of all the teacher trainers in Vocational Education departments in two Federal Colleges of Education in Nigeria.

Sample

Ninety-two (92) teacher trainers were sampled from two sampled Federal Colleges of Education in Nigeria.

Instrument

Structured questionnaire categorized into two parts was used in collecting the relevant data. Part A of the questionnaire sought information on the degree of availability of the ICT software's while part B was meant to collect data on the ICT literacy level of the Vocational Education teacher trainers.

Validity of the instrument

Three experts in computer technology validated the instrument.

Instrument administration

The researcher administered the questionnaire to the sampled Federal Colleges of Education. Only 87 copies of the questionnaire were found valid and were scored and used in data analysis.

Method of data analysis

Mean and percentages were employed in data analysis.

Results

The results of the findings were presented according to the research question and hypothesis.

Table 1 shows the data collected in respect to the ICT software availability in vocational Education Department in College of Education.

Majority of the ICT software are either not available or the availability is negligible considering the population of teacher trainers and students.

Table 2 shows ICT literacy level of the Vocational Education: (Teacher Trainers). The scores of the respondents to the questionnaire were converted to percentage and thereafter classified into four normative categories, namely:,

- Very low literacy level, VLLL (0-49%)
- Low literacy level, LLL (50 - 59%)
- High literacy level, HLL (60 -69%)
- Very high literacy level, VHLL (70% and above)

The result of Table 2 shows that majority of the Vocational Education teacher trainers were at either low literacy level or very low literacy level in ICT while only 3% and 13% of the respondents were at the very high and high ICT literacy levels respectively. In other worlds, about 82% of the respondent were still ICT non-literate.

Discussion

The major findings of this study were that:

1. ICT software except radios and computers were either not available or the availability are very low.
2. Most of the Vocational Education teacher trainers were ICT non-literate.

These findings agreed with that of Akelonu (2000) that not many Nigerians are aware of the versatility of computers and its position as the instrument of the future for teaching, informing, recording, and storage of data, entertaining, planning, calculating, and predicting among others. He also observed that few Nigerians who have access to computer or trained to use it could afford to acquire it.

A nin, and to make the situation gloomy is the near absence of ICT software in the Colleges studied. The situation negates. In fact,

teacher trainees are expected to teach computer studies at the primary and may be junior secondary level, they should be able to programme and process a given data with maximum speed and with high level of competence to handle the different models by which the computer for instance, can be used in teaching-learning situation (Olagunji, 2003). Indeed, a lot is required of the teachers to make the trainees proficient in facing the challenges of information and communication technology demand of this age. The question that may come to mind is, how can this be possible when the teacher trainers themselves are ignorant of the ICT devices and applications? The issue is indeed a serious one that should be, without delay, considered and improved upon if ICT is to have meaning in our educational systems and programmes.

Recommendations

1. Provision of ICT software's like computers and the likes to schools and in particular teacher training Colleges should be made a priority by the government.
2. Seminars and workshop should be organized for teacher trainers and trainees on the application of ICT software in teaching and learning.
3. In-service training for teacher trainers should be regularized for it to be effective meaningful.

Table.1 Extent of ICT software availability

ICT Software	Agric Edu	FAA Edu	Bus. Edu	HOMEC Edu	Mean (x)	Extent of availability
Radios	28	8	53	40	32.25	Moderate
Television	0	2	4	1	1.25	Very low
Video Recorder	3	2	1	1	1.25	Very low
Computer	0	3	24	0	9.50	Low
Sensors	0	0	0	0	0	Not available
Interface Boxes	0	0	0	0	0	Not available
Satelite Connection	0	0	1	2	0.75	Extremely low
Internet	0	0	0	0	0	Not available
AudioVideo tapes	1	40	2	3	0.25	Low
Cassette Recorder	0	0	5	0	1.25	Very low
Projectors	0	0	0	0	0	Not available
Slides	0	0	0	0	0	Not available
Films Strips	0	0	0	0	0	Not available
Transparencies	0	0	0	0	0	Not available
Tape Recorded Materials	0	0	2	0	0.50	Extremely low

Table.2 ICT Literacy level of the vocational education teacher trainers

Categories	No of Teachers Trainers	Percentage (%)
Very High literacy Level		3.0
High Literacy Level	12	13.0
Low Literacy Level	35	40.0
Very Low Literacy Level	37	42.0

References

Ajagun, G.A. 2003. The development of ICT skills through the national computer education curriculum for primary schools. STAN, 44. Conference Proceedings.

Akelonu, H.O., Saleh, B., Samuel, S.D. 2000. Science, Technology and Society. A veritable trinity of national development. *Afr. J. Sci. Technol.*, (1)1.

Diamond, A. 2002. Access to technology in Africa. P.C. World (2), 2. www.pc.gov., West Africa.

Gusen, J. 2001. The information technology education in Nigeria: A challenge for the classroom teacher. A paper presented at Maiden Conference (Chapt. 2-3), College of Education, FCE Pankshin.

Isoun, T. 2003. Keynote address in M.A.G. Akale (Ed). Proceedings of the 44th Annual Conference of Science of Science Association of Nigeria. Pp. 3–8.

Jwakdak, F.S., Bott, A.B., Gyang D.T., Yero, H.J. 2003. Information and communication technology as a tool for catch them young in science. Information for Primary School Teachers. STAN Proceeding, 44th Annual Conference.

Macmillan, M.J., Bulus, D.P., Matthias, A.O. 2003. The status of computer education and science learning in Plateau State central district. STAN Proceeding of 44th Annual Conference.

Olagunji, A.M. 2003. Science Education Students Level of Awareness and Utilization of ICT. Implications for Tertiary Institutions" STAN 44th Conference.

Temi, B. 2003. An investigation into the training status and ICT support of teacher trainers in institutions of higher learning in Lagos State, STAN 44th Annual Conference.