

Assessment of the Achievement of Information and Communication Technology Policy in Technical Colleges in Adamawa State

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Abstract- The main purpose of the study was to assess the achievement of ICT policy in technical colleges in Adamawa State. Two research questions were used to guide the study. The study adopted descriptive survey design. The population of the study comprised 2465 teachers and students. The sample of the study comprised 32 teachers and 113 students. The instrument used for data collection was a structured questionnaire of Likert-type scale. The instrument was validated by two experts in department of Technology Education, Modibbo Adama University of Technology (MAUTECH) Yola. The reliability of the instrument was determined by using the test-retest techniques, whereby reliability coefficient of 0.73 was obtained using the Pearson Product Moment Correlation Formula. Statistical Package for Social Science (SPSS) was used to analyze mean for each research question. The findings of the study revealed that ICT facilities are not available and human resources for implementing ICT policy are inadequate in technical colleges in Adamawa State. However, base on the findings of the study, the researcher recommended that Adamawa state government should provide more ICT facilities to technical colleges and regularly organize seminars for teachers in ICT application in teaching and learning process.

I. INTRODUCTION

Technical college is an institution that prepares students for careers at various levels ranged from trades to lifelong craft and for educational furtherance in the fields of engineering, technology and business (Oluwatumbi, 2015). Graduates of technical colleges are expected to acquire practical skills in their respective trades, as well as basic Information and Communication Technology (ICT) literacy to enable them to design, maintain and use modern equipment (Robert,2011). Similarly, Shambirna'ah and Abana (2017) observed that the roles of craftsmen and technicians can only be realistic if information and communication technology is implemented in technical colleges, because ICT has ability to enhance skill acquisition and it offers unlimited means of achieving academic goals (Gabriel, Olaniyi and Saliu, 2010).

Information and Communication Technology (ICT) can be describe as electronic technology used for storage, sending, and retrieval of information (Adomi and Kpangban, 2010). ICT encompasses modern technological devices used for storing, sending, retrieving, and researching of information (Andoh,

2012). This study specifically describes ICT as modern technology that is used for communication, recording, storage, retrieval and dissemination of information in forms of text, symbol, graphic, and oral. Having recognized the ICT potential in education system, the revised national policy on education (FRN, 2013), re- emphasized that there is need for ICT integration at all levels of education. In line with the above policy, the Nigerian Educational Research and Development Council (NERDC) initiated curriculum reform for effective implementation of ICT policy in schools and colleges. Consequently, national policy on Information Technology (FRN 2012) identified frameworks for the achievement of ICT in schools and colleges. These includes provision of ICT infrastructures, ICT facilities, ICT skilled human resources and making ICT compulsory subject under general studies in schools and colleges. Although ICT integration in education is faced with challenges, which includes lack of power supply and unstable education polices. These challenges are longing for an immediate attention more especially in technical colleges, because most of the graduates of technical colleges in Nigeria are incompetent, half-baked and lack employable competencies (Gali, 2016). Therefore this study is focused on the assessment of the achievement of Information and Communication Technology (ICT) policy in government technical colleges in Adamawa State.

II. STATEMENT OF PROBLEM

The recent increase of unemployment among the graduates of technical colleges is attributed to lack of employable skill acquired in their respective trades, despite the enormous gain obtained from information and communication technology. Dawha and Medugu(2017) observed that the rate of unemployment existing among technical college graduates has attributed to inability of the students to identify and nurture their entrepreneurial potential required in the labour market. This is contrary to the aims of establishing technical and vocational education in Nigeria. Therefore, this study intends to assess the available resources that can implement Information and Communication Technology (ICT) policy in technical colleges in Adamawa State.

III. PURPOSE OF THE STUDY

The main purpose of the study is to assess the available resources that can implement Information and Communication Technology (ICT) policy in technical colleges in Adamawa State. Specifically, the study sought to assess:

1. The available facilities for implementing ICT polices in technical colleges in Adamawa state.
2. The adequacy of human resources for implementation ICT polices in technical colleges in Adamawa State.

IV. RESEARCH QUESTIONS

This study answered the following research questions which guided the study:

1. What are the available facilities for implementing ICT polices in technical colleges in Adamawa State?
2. How adequate are human resources for implementation ICT polices technical colleges in Adamawa State?

V. SIGNIFICANCE OF THE STUDY

The findings of this study will be significant to students, teachers, parents, school administrators, and Adamawa State government. Students will benefit from the findings of this study by the time Adamawa State government complied with the recommendations of the study, , students will be exposed to the uses of ICT facilities and developed ICT skills that will give them gainful employment. It will also help the students to develop self-study ability and it will make lesson more interesting and easy to comprehend. Teachers will benefits from the findings of this study, by the time Adamawa State government complied with the recommendations of the study. This will help teachers to prepare their lesson easily real, interesting and provides good time management during lesson delivery. Parents will benefit from the findings of this study by

the time Adamawa State government complied with the recommendations of the study. ICT in education will be fully implemented in technical colleges; this will help their children to acquire knowledge and marketable skills that will lead them to employment. School administrators' will benefit from the findings of this study, by knowing the strength, weaknesses and factual information on ICT implementation in technical colleges. This will guide the Adamawa State government to plan for the subsequent ICT programmes in schools and colleges.

VI. METHODOLOGY

Descriptive survey design was adopted for this study. The population of the study comprised 2465 teachers and students. Random sampling technique was employed to select 32 teachers and 113 students for the study. The instrument used for data collection was structured questionnaire of 23 items based on a five points rating scales. Two experts in department of Technology education, Modibbo Adama University of Technology (MAUTECH) Yola, were served with copies of the questionnaires for face validation. Pilot tested was conducted on 15 samples from Federal Science Technical College, Jalingo Taraba State. The reliability coefficient of 0.68 was obtained. The instrument was administered and collected after completion by three research assistants. Statistical Package for Social Science (SPSS) version 17 was used to analyze mean for each research question. Item with 3.50 and above was agreed, while item with less than 3.50 was disagreed.

VII. RESULTS AND DISCUSSION

The results were presented and discussed in harmony with the research questions.

Research Question 1: What are the available facilities for implementing ICT policy in Technical Colleges in Adamawa State?

Table 2: Mean Responses of Teachers and Students on the Available Facilities For Implementing ICT policy in Technical Colleges in Adamawa State

S/N	Item	\bar{X}_1	\bar{X}_2	G \bar{X}	Remark
1	closed circuit television system	2.03	4.17	3.10	disagree
2	video camera in your college	2.57	3.83	3.20	disagree
3	video camera accessories	1.92	3.90	2.91	Disagree
4	dubbing machines	2.25	4.13	3.19	Disagree
5	projectors with accessories	2.25	3.47	2.86	disagree
6	amplifiers in your college	4.00	3.67	3.84	agreed
7	microphones in your College	4.19	3.67	3.93	agreed
8	tripod stands for video camera	4.09	3.53	2.81	disagree
9	android phones in your College	3.64	4.00	3.81	agreed
10	internet connectivity	3.76	3.77	3.27	disagreed
11	educative video cassettes	2.13	4.00	3.07	Disagree
12	computer systems	4.15	3.90	4.03	agreed
	Grand mean	2.83	3.34	3.34	Disagreed

Table 1 revealed that 8 items were rated disagreed, while 4 items were rated agreed out of 12 item listed on the available facilities for the implementing ICT policy in government technical colleges in Adamawa State. The grand mean 3.34 indicates that ICT facilities are not available for implementing ICT policy in Government Technical Colleges in Adamawa State. Specifically, the table revealed that most of the technical

colleges in Adamawa State have computers, android phone, microphones and amplifier.

Research Question 2: How adequate are ICT human resources for the implementation of ICT policy in Technical Colleges in Adamawa State?

Table 2: Mean Responses of Teachers and Students on the Adequacy of human resources for the implementation of ICT policy in Technical Colleges in Adamawa State

S/N	Item	\bar{X}_1	\bar{X}_2	G \bar{X}	Remark
13	Adequate computer human resources.	3.08	4.08	3.34	Disagreed
14	Adequate experts in software maintenance	3.04	4.04	3.42	Disagreed
15	Adequate experts in hardware maintenance	3.21	4.20	3.32	Disagreed
16	Adequate educational technologists	2.10	2.10	3.04	Agreed
17	Adequate ICT store officers	1.93	1.93	2.87	Disagreed
18	Adequate equipments technicians	4.25	4.25	4.16	Agreed
19	Adequate camera men	2.24	3.06	2.65	Disagreed
20	Adequate projectionists	1.98	1.98	2.94	Disagreed
21	Adequate computer technicians	3.31	2.44	3.38	Disagreed
22	Adequate video camera men	2.83	2.83	3.43	Disagreed
23	Adequate graphic artists	3.95	3.95	3.94	Agreed
	Grand mean	3.14	3.56	3.35	Disagreed

Table 2 revealed that 8 items were rated disagreed, while 3 items were rated agreed out of 11 items listed on the adequacy of human resources for the implementation of ICT policy in technical colleges in Adamawa State. The grand mean 3.14 is an evidence to show that there are inadequate human resources for the implementation of ICT policy in technical colleges in Adamawa State.

the implementing ICT programs in Government Technical Colleges.

The finding with the respect to research question 2 revealed that there are inadequate human resources for the implementation for ICT policy in Government Technical Colleges in Adamawa State. This finding agreed with Adegmille (2016) who revealed that there are inadequate ICT human resources in Government Technical Colleges that can implement ICT in the educational sector. This finding is in agreement with Adeusum (2010) who revealed that Government Technical Colleges has inadequate human resources that can implement ICT in technical colleges in Lagos State. On the other hand, the findings of Ajayi and Ekudayo (2009) also confirmed that there are inadequate human resources that can apply ICT facilities in teaching and learning process in schools and colleges.

VIII. SUMMARY OF MAJOR FINDINGS

The following findings were made from the study:

1. Facilities for implementing ICT policy are not available in technical colleges in Adamawa State.
2. Human resources for implementing ICT policy are inadequate in technical colleges in Adamawa State.

IX. DISCUSSION

The findings of this study were discussed based on the research questions of the study.

The finding with regard to research question 1 indicated that there are unavailable ICT facilities in Government Technical Colleges in Adamawa State. This finding concurred with Robert (2011) who conducted a similar study on information and communication technology awareness in technical colleges and found that most Government Technical Colleges in Nigeria are having unavailable ICT facilities. This finding is in consonance with Dankaro and Jude (2012) who revealed that only few government schools are having basic ICT facilities like computers. This implies that ICT facilities are not available for

X. CONCLUSION

Based on the findings of this study, it was revealed that ICT facilities are not available and human resources are inadequate for the implementation of ICT policy in government technical colleges in Adamawa State. Finally, the researchers recommended that Adamawa State Government should provide more ICT facilities, employ adequate human resources that can support ICT implementation and regularly organize seminars for teachers in ICT application in learning and teaching process in Adamawa State.

REFERENCES

- [1] Adeosun, O (2010). Quality Basic Education Development in Nigeria: Imperative for Use of ICT Journal of international cooperation in Education. 13(2) 193_ 211
- [2] Adegmilo, O. (2016) Information and Communication Technology (ICT) Availability and Utilization in Management of Secondary Schools in Kaduna State, Nigeria. Journal of Education and Social Research 2(7).
- [3] Adomi E.E & Kpangban.E. (2010). Application of ICTs in Nigerian Secondary School. Library philosophy and practice 1522-2222. Available at <http://www.google-analytics.com/ga.js> type='text/javascript' percent3E percent3C/script percent3E
- [4] Ajayi, J.A & Ekandayo, H.T. (2009). The Application of information and Communication Technology in Nigerian Secondary Schools: international NGO Journal 4(5)281-286. Available online at <http://www.ademicjournals.org/INGOJ>.
- [5] Andoh, C.B. (2012) Factors influencing teachers adoption and integration of ICT into teaching. International Journal of Education and Development using ICT (IJEDICT) 8(1)136 – 155.
- [6] Darko J.T & Juche, W.T (2012) ICT Resource utilization, Availability and Accessibility by Teacher Education for instructional Development in College of Education Katsina- Ala: online journal3(1) 2224- 3268. Available at Neul and Mass Communication, www.iiste.org.
- [7] Dawlha, J. M. & Medugu, J.D (3007) Potentials for improving entrepreneurial competencies Acquired by Electronic Technological College Graduate for Establishing Enterprise in Nigeria. International Journal of Education and social sciences 4(4) 6 – 17. Availble at www.westnet.com.
- [8] Federal Republic of Nigeria, (2012). National information Communication Technology (ICT) policy Draft by the Ministerial; Committee on ICT policy Harmonization.
- [9] Federal Republic of Nigeria (2013) National Policy on Education NERDC Press.
- [10] Federal of Nigeria (2002) National Information Technology (ICT) Policy Draft by the Ministerial Committee on ICT Policy harmonization.
- [11] Gabriel, A.O, Olaniyi, B.S, & Saliu, J.A (2010). Perceived Roles of Information and Communication Technology in The Implementation of continuous Assessment in Nigeria Secondary School, Journal Of Education And Social Research 1(1) 78-90
- [12] Gali, O.(2016) Availability and utilization of Information and Communication Technology in Teaching Electrical Trade in Kaduna State Technical Colleges. M.Tech Theses submitted to the department of Technology Education, Modibbo Adama University of Technology, Yola.
- [13] Robert, O. (2011). Information and Communication technology Awareness among Technical Colleges Teachers in Benue State Nigeria: International Journal of vocational and technical education 3(6)75-80. Available <http://www.academicjournals.org/IJVTE>.
- [14] Oluwatumbi, O. S. (2-15) ICT Literacy among Vocational and Technocal Education Teachers in Kogi State Technical and Vocational Colleges. Skill GAPS British Journal of Education Available at www.journals.org
- [15] Shambirna'ah & Jafaru (2017) Application of ICT Facilities For Teaching Mechanical Trades in Technology College in Adamawa state. CARD international Journal of Educational Research and Management Technology (IJERMT). 2(2) 65-78. Available on <http://www.casirmediapublishing.com>.

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