

AVAILABILITY AND UTILIZATION OF TEACHING RESOURCES FOR EFFECTIVE TECHNICAL VOCATIONAL EDUCATION AND TRAINING FOR YOUTH EMPOWERMENT IN EDO STATE.

¹Ehimen, Theophilus Ehijele and ²Prof. Onyia U. Alexander

¹ehimendu@yahoo.com

¹Vocational and Technology Education Department

²Department of Technology and Vocational Education

¹Niger Delta University

²Enugu State University of Science and Technology

Abstract

This study was an assessment of the extent of availability and Utilization of Teaching resources for effective Technical Vocational Education and Training in the Technical Colleges of Edo State. To carry out the study, two research questions and a Null Hypothesis was formulated. The data were analyzed using Mean, standard deviation and z-test respectively. A questionnaire with 45 items were developed and used for collecting data from the respondents. The population of the study was 534. A sample size of 300 respondents was obtained using stratified random sampling techniques comprising of 215 vocational students and 85 technical teachers in four technical colleges of the state. A reliability test was conducted using Pearson (r) product moment correlation co-efficient and the instrument yielded an internal consistency of 0.69. Results showed among other things that teaching resources like Audio, Printed and non-projected teachings and worksheets were not available. Extent of utilization of teaching resources indicates that Audio, Computer Mediated teachings and non-projected display teachings were not utilized in the teaching and learning in the technical colleges. Based on the findings, recommendations were made as; Teaching resources should be provided in all the departments in the technical colleges for effective teaching and government should monitor utilization of teaching resources in all the technical colleges to enable the youths pass out with skills for self-employment.

Introduction

Informed society can be progressively achieved by equipping the young generation in schools with knowledge and skills so as to prepare them for the challenges in the future. The National Policy on Education (NPE 2013) makes this clear by stating that education is an instrument for formation of ideas, the integration for national development and the interaction of persons and ideas are all aspects of education. Therefore, in order to realize fully the potentials of the contribution of education to the achievement of these goals, Technical

Colleges must be equipped with teaching resources to be utilized for effective Technical Vocational Education and Training (TVET) for youth empowerment.

However, teaching resources in this aspect comprises of all the things necessary for teachings such as teaching aids of various types, the infrastructural facilities, like the classroom, library, relevant textbooks as well as other resource such as personnel. Resources according to Offorma (2005) are of great importance in carrying out planned

activities like that of teaching and learning.

According to Dodo, Ajiki and Abimiku (2010) teaching resource include; students, laboratories, workers, teaching aids and devices such as modern educational hardware and software in form of magnetic tapes, films and transparencies. However, Technical Vocational Education and Training (TVET) according to Sunday and Joshua (2010) are regarded as those aspects of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. TVET is referred to as a range of learning experiences which are relevant to the world of work and learning contexts, including educational institutions and the workplace (UNESCO, 2006). Ehiametalor (2010) clarified the essence of TVET by stating that, it encompasses programmes providing participants with skills, knowledge and aptitudes that enable them to engage in productive work, to adapt a rapidly changing labour markets and economy, and to participate as responsible citizens in their society. According to Tope (2011), youth empowerment is a process whereby young people gain the ability and authority to make decision and implement changes in their own lives.

Thus, youth empowerment in Nigeria can be viewed as a means of encouraging young peoples to gain the skills and knowledge that will allow them to overcome obstacles in life. In this sense, Tope (2011) highlighted that Youth empowerment does the following for the Nigeria Youth.

- The ability to make decision about personal and collective circumstance;
- The ability to access information and resources for decision making
- Ability to consider a range of options from which to choose;

- Ability to exercise assertiveness in collective decision making;
- Having positive thinking about skills for improving personal/collective circumstances;
- Ability to inform others perceptions through exchange, education and engagement.

Sadly enough, previous government policies negate youth empowerment and this has brought about unemployment and political thuggery among other social vices (Tope 2011). In support of this assertion, Tenibiaje and Smith (2009), reported that, these youths are either roaming, idling or are being used for various criminal activities that had made the nation to be rated as being among the three most venal people in the world. Upon this background, the researcher want to ascertain the extent of utilization of teaching resources for effective technical Vocational Education and training in the technical Colleges of Edo State, Nigeria.

Many youths in Edo state live in poverty and have far fewer opportunities than their more advantaged peers in other states e.g Bayelsa State, Rivers State, Delta State among others. This is because the Technical Colleges in Edo States lacked teaching resources for the proper training of youths as well as their empowerment. Since these resources as earlier mentioned such as classroom, library, textbooks, were not available for the effective teaching of the youths in technical colleges, the objectives of TVET as enumerated in the national policy on education and UNESCO's, affirmative areas of action such as creating opportunities, non-discrimination, gender equality and equity among others with regard to TVET shall not be achieved. Hence this study tries to ascertain the extent of utilization of

teaching resources for effective technical Vocational Education and training for youth empowerment in the technical Colleges of Edo State, Nigeria.

The main purpose of this study is to assess extent of availability *and* utilization of teaching resources for effective TVET for youth empowerment. The study specifically determined:

1. The availability of the teaching resources for effective teaching of TVET in technical college in Edo state.
2. The extent of utilization of teaching resources for youth empowerment in technical colleges in Edo state.

Research Questions

Based on the purpose of the study, the following questions were drawn to guide the study;

1. How available are the teaching resources for effective teaching of TVET in technical college, Edo State.
2. What are the extents of utilization of teaching resources in technical colleges of Edo state for youth empowerment?

Hypothesis

The following null hypothesis was formulated and tested at 0.05 level of significance. There is no significant difference between the mean ratings scores of student and teachers on the extent of utilization of teaching resources in technical colleges of Edo state.

Method

The study adopted a descriptive survey research design. Mmaduakonam (2004), explained that descriptive survey research permits the description of a situation as it exists at the time of investigation. The population for the study was 534 respondents which consisted of all the

vocational III students and teachers in the four technical colleges of Edo state as shown in table 1. A stratified random sampling technique was use to obtain a sample size of 300 comprising 215 vocational III students and 85 teachers. The instrument used for data collection was a researcher made structured questionnaire with forty five (45) items. The instrument was divided into three sections, section A consisted of information on the respondent's personal data. While sections B and C focused on the variables for the study. Section B was structured on a 5 points likert rating scale of Very highly available, (5), Highly available (4) Moderately available (3), Hardly available (2), Not available (1), Section C was structured on Very Highly Utilized (5), Highly Utilized (4), Moderately Utilized (3) Hardly Utilized (2), Not Utilized (1).

The questionnaire was face validated by three experts in the department of Educational Foundations, Niger Delta University Amassoma.

Their inputs helped in the final construction of the questionnaire.

It was first pilot tested on 50 respondents in Federal Science Technical College, Owerri Imo State, who were not part of the population.

The reliability co-efficient of 0.69 was obtained using pearson (r) product moment correlation co-efficient. The researcher employed direct delivery method in distribution of the questionnaire with the aid of two research assistants in each of the colleges visited. Hence all the 300 copies of the questionnaire distributed to the respondents were collected and used for the study. Research questions were answered using mean and standard derivation.

Decision rule was based on the real limits of numbers as show below and hypothesis

was tested using z-test statistics at 0.05 level of significance

Options	Real Limits
Very highly available/utilized	4.50 – 5.00
Highly available/utilized	3.50 – 4.49
Moderately available/utilized	2.50 – 3.49
Hardly available/utilized	1.50 – 2.49
Not available/utilized	0.5 – 1.49

Further, if the calculated Z-test value in the null hypothesis is equal to or greater than the critical table value (1.96) reject the null hypothesis otherwise, accept the null hypothesis.

Results

Research Question 1: How available are teaching resources for effective teaching of TVET in Technical Colleges of Edo State?

Table 2: Mean and Standard Deviation of Respondents on Extent Availability of Teaching Resources

S/N	Items	Students N=215		Teachers N=85		Grand		Decision
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	
	Teaching resources are as follows							
1.	Textbooks for TVET program	3.70	0.30	4.85	0.20	4.208	0.25	Highly available
2.	Stationeries	4.55	0.25	3.85	0.19	4.20	0.35	Highly available
3.	Audio Teachings	2.75	0.23	1.97	0.14	2.36	0.19	Hardly available
4.	Printed Teachings	2.40	0.25	2.34	1.36	2.37	0.81	Hardly available
5.	Non-Projected teachings	2.95	0.28	2.09	1.86	2.52	1.07	Moderately available
6.	Still Project Display Teaching	2.45	0.22	2.03	0.19	2.24	0.21	Hardly available
7.	Link-audio and still Video Teachings	1.85	0.24	2.00	0.20	1.93	0.22	Hardly available
8.	Cine and Video Teachings	2.75	0.26	2.76	0.24	2.76	0.25	Moderately available
9.	Computer Mediated Teachings	4.55	0.34	3.91	0.24	4.23	0.29	Highly available
10.	Tools for Practical	4.90	0.23	3.85	0.21	4.38	0.22	Highly available
11.	Equipments in all workshops	3.35	0.27	3.09	0.19	3.63	0.23	Highly available
12.	Machine for practical	3.55	0.26	4.31	0.18	3.93	0.22	Highly available
13.	Policy Documents	4.65	0.27	3.81	0.19	4.23	0.23	Highly available
14.	Duplicating Machines	3.55	0.27	3.67	0.16	3.61	0.35	Highly available
15.	Curriculum	4.35	0.34	3.97	0.18	4.16	0.26	Highly available
16.	Journals	3.25	0.22	3.78	0.15	3.52	0.19	Highly available
17.	Worksheet	2.50	0.28	2.67	0.14	2.59	0.21	Moderately available
	Grand Mean/Standard deviation					3.35	0.32	Moderately Available

The table 2 above shows that both the students and teachers had mean scores of 3.00 and above in 10 items and means scores below 3.00 in 7 items. This results shows that both students and teachers agreed on availability of teaching resources in Edo states technical colleges. However, the grand mean (Gm) of 3.35 indicates that respondents are of the view that teaching resources for effective TVET are moderately available in the technical Colleges of Edo State.

Research Question 2: What is the Level of utilization of teaching resources in technical colleges in Edo state for youth empowerment?

Table 3. Mean and Standard Deviation of Respondents on Utilization of teaching Resource. For youth empowerment

S/N	Items	Students N=215		Teachers N=85		Grand		Decision
		\bar{X}	SD	\bar{X}	SD	\bar{X}	SD	
1.	Textbook for TVET program	4.86	0.22	4.75	0.19	4.81	0.21	Very highly utilized
2.	Stationeries	3.39	0.17	4.45	0.18	3.92	0.18	Highly utilized
3.	Audio Teachings	2.97	0.16	2.40	0.18	2.69	0.17	Moderately utilized
4.	Computer Mediated Teachings	2.72	0.66	2.55	0.20	2.64	0.43	Moderately utilized
5.	Alternator	3.19	1.07	3.73	0.21	3.46	0.64	Moderately utilized
6.	Ammeter	3.14	0.89	3.20	0.80	3.17	0.85	Moderately utilized
7.	Digital Clock	3.64	0.32	3.80	0.24	3.72	0.28	Moderately utilized
8.	Electromagnet	3.33	1.22	3.50	1.59	3.42	1.41	Moderately utilized
9.	Induction coil, Indicators	4.78	0.92	3.75	0.21	4.27	0.57	Highly utilized
10.	Voltmeters 100V	3.14	0.29	3.10	0.27	3.12	0.28	Moderately utilized
11.	Digital Meter	3.83	0.34	3.47	0.24	3.65	0.29	Highly utilized
12.	Head Pans	4.81	1.01	3.85	1.08	4.33	1.05	Highly utilized
13.	Sprit levels	4.25	0.45	3.18	0.25	3.72	0.35	Highly utilized
14.	Lion squard	3.22	0.99	3.40	0.22	3.31	0.61	Moderately utilized
15.	Jack planes	4.33	0.22	3.40	0.18	3.87	0.20	Highly utilized
16.	Shovels	3.11	0.23	3.95	0.21	3.53	0.22	Highly utilized
17.	Galvanometer	3.78	0.20	4.25	0.22	4.02	0.21	Highly utilized
18.	Vanier Callier	4.08	0.19	3.30	0.17	3.69	0.18	Highly utilized
19.	Micrometer assorted	3.81	0.22	3.36	0.24	3.59	0.23	Highly utilized
20.	Metal scraper	4.61	0.98	3.53	0.18	4.07	0.58	Highly utilized
21.	Try squared	3.44	0.20	3.10	0.94	3.27	0.57	Moderately utilized
22.	Sanding machine	3.28	0.21	3.37	0.21	3.33	0.21	Moderately utilized
23.	Generator 1.5KVA	3.47	0.25	3.48	0.27	3.48	0.26	Moderately utilized
24.	Grinding Machine	3.39	0.28	3.40	0.26	3.40	0.27	Moderately utilized
25.	Hacksaw frame	4.07	0.21	3.05	0.24	3.56	0.23	Highly utilized
26.	Soldering Iron Soldering Lead	4.11	0.96	3.75	0.23	3.93	0.60	Highly utilized
27.	Policy Document	3.67	0.23	4.18	0.22	3.93	0.23	Highly utilized
28.	Non-projected Display teachings	2.19	0.28	2.72	1.09	2.46	0.69	Hardly utilized
Grand Mean/Standard Deviation		3.67	0.48	3.50	0.37	3.60	0.43	Highly utilized

Table 3 above shows, the result of the analysis of responses on level of utilization of teaching resources, Twenty five items on utilization of teaching resources have a mean scores, of above 3.00 a mean scores below 3.00 in 3 items. While the grand mean of 3.60 shows that teaching resources were highly utilized. The result shows that, textbooks are very highly utilized in the teaching and learning at a mean of 4.86 and 4.75 respectively. This indicates that, majority of respondents view does not differ on level of utilization of textbooks as a factor toward effective TVET and Youth empowerment in Edo State.

Hypothesis: There is no significant difference between the mean responses scores of students and teachers on the utilization of teaching resources in technical colleges in Edo state.

Table 4: Z-test analysis of the mean rating of response of students and Teachers on utilization of teaching resources

Respondents	N	X	SD	df	z-cal.	z-crit	Decision
Students	215	3.67	0.48				
Teachers	85	3.50	0.37	298	3.56	1.96	Rejected

Table 4 above, revealed Z-calculated value of 3.56 which was greater than the Z- critical value of 1.96 at 0.05 probability level and degree of freedom (df) 298. The null hypothesis was rejected. This implies that there was significant difference on the opinions of students and teachers on utilization of teaching resources in technical colleges in Edo State.

Findings

On the availability of teaching resources the findings showed that;

1. Edo state technical colleges have available tools and equipment while audio, and video teaching aids, Printed, Non-projected, still projected display teachings and worksheet are not available.
2. Link audio and still video teachings cine and video teaching are not available in the technical colleges of Edo state.
3. Textbooks are available for effective TVET for youth empowerment.

On level of utilization of teaching resources, the findings showed that;

1. Textbook were highly utilized in the teaching and learning of various topics.

2. Voltmeter, soldering iron, vanier caliper, try square and sanding machine were utilized for effective TVET for youth empowerment in Edo state technical colleges.

The result of hypothesis tested shows that there was significant difference in the opinions of students and teachers on the level of utilization of teaching resources for effective teaching and learning in the technical colleges in Edo state.

Discussion of Findings

The data regarding research question one showed that respondents are of the opinion that teaching resources are moderately available in the technical colleges in Edo state. This is a justification from the findings of Sunday and Joshua (2010), which stated that most of the technical colleges have required

teaching resources needed for teaching and learning. This is in line with the study of Adeogun and Osifila (2010), who professed that magnitude of teaching resources can make teaching more productive; give instruction a more scientific base; make teaching and learning more individualistic; make instruction more powerful and immediate; and finally make attainment of objectives easier.

Adeogun and Osifila (2010), also asserts that availability in quality and quantity of suitable teaching resources, in good supply, are crucial for the achievement of curriculum objectives. Therefore, this finding clearly indicate the view of Adeogun and Osifila (2010) which affirmed that there is a direct bearing between a range of teaching resources and learning outcomes. Adequate and qualitative teaching resources are required for an effective learning and teaching to take place. Based on these facts it is pertinent to state that teaching resources are available for effective teaching and learning in technical colleges in Edo state.

The findings from data on research question two on the level of utilization of teaching resources showed that teaching resources were utilized for teaching and learning. Therefore this finding is relevant to the theories of vocational education as stated by Okorie (2000) that school environment should expose students to the use of teaching resources in a way that will lead students to acquire relevant knowledge and skills. Okorie (2000), added that skills being developed by students in training are necessarily limited by available equipment. In another study, Idris (2007) encourages teachers to teach through practice as experience shows that students learn best by practice, especially with

regard to psychomotor activities, which in turn become more advanced.

The result of the null hypothesis showed that students and teachers in the technical colleges in Edo State agreed that teaching resources was highly utilize for teaching and learning. The finding confirmed with work of Idris (2007), which showed that teaching resources were utilized for effective TVET and youth empowerment in the technical colleges.

Conclusion

The realization of the objectives of TVET and the ability to improve students achievement depends on a number of factors that rest on availability and utilization of Teaching resources which will in turn help in producing an effective teaching and learning in the technical colleges. From the findings of this study, it is clear and evident that in Edo state, technical vocational education and training (TVET) is totally a potent tools which provides teaching resources for effective technical vocational education and training for youth empowerment.

Recommendations

In line with the findings of the study, the following recommendation were made:

1. Teachings resources should be provided by Edo State Government in all the departments in the state Technical Colleges for effective teaching and learning for the youth empowerment.
2. Practical class should be encouraged for retention of what is learnt for youth empowerment in the technical colleges.
3. Government should monitor utilization of teaching resources in all the technical colleges to enable youth

pass out with skills that will lead to their self empowerment.

4. At all levels, of empowerment programmes the youth should be inspired, mentored and coached by the State Government.

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