Preparing Competent Teachers for Creative and Functional Technical Vocational Education in a Period of Socio-Economic Vicissitudes

George W. Kennedy, Udeme Stephen U., Ph.D, & Inwang A. Udo
Department of Technical education
Akwa Ibom State College of Education,
Afaha Nsit.
udemeudoetuk@yahoo.com, georgekennedyconference@gmail.com

Abstract
This study was undertaken to determine the appropriate strategies for preparing competent teachers for creative and functional TVET in a period of socio-economic vicissitudes. A survey research design was adopted for the study. A total of 148 TVET teacher educators drawn from six Colleges of Education in South-South Nigeria constituted the sample for the study. A 20-item questionnaire (PCTCFTVETQ) of 4 point scale was used to gather data. Face validity of the instrument was assessed by three research experts, while the reliability of the instrument was ascertained using Cronbach Alpha Reliability Statistics which yielded a reliability coefficient of 0.83. Two research questions and two null hypotheses were formulated to guide the study. Mean and independent t-test was used for data analyses at .05 level of significance. The findings of the study revealed that the respondents agreed that giving priority to professional technical competence in technical teacher recruitment and provision of TVET teacher’s evaluation guide are techniques that can be used to implement TVET curriculum. Also, the respondents agreed that exposure of students to Information and Communication Technology (ICT) facilities, practical based teaching methods, exposure to TVET practical and supervision will enhance effective preparation of competence TVET teachers. Consequent upon this, the paper posited that, TVET programmes should be re-strategized in the area of curriculum restructuring, engagement of professionally qualified and competent teachers, provision of TVET teacher’s evaluation guide among others, towards overcoming the inherent teacher’s preparation and curriculum implementation problems. This strategy would not only ensure creative and functional TVET in Nigeria, but also would facilitate rapid national economic development in a period of socio-economic vicissitudes. Anything short of this shall make “Education for All” become “Education for None”.

Keywords: Teachers, Creativity, Functional Technical Vocational Education and Training (TVET), Socio-economic vicissitudes.

Introduction
Improving educational outcomes in Nigeria is a challenging issue, one that preoccupies contemporary reformers and critics alike. With a system of schooling that has never delivered high quality education to all students, policy makers and educational leaders are calling for more complex and ambitious goals to prepare youth for the demands of the 21st century (Uyanga, 2008). He further stated that the visions of better schooling include innovative uses of technology, a much greater emphasis on collaborative work, integrated and problem-based curricula, and higher expectations for students. Too often minimized is what such changes imply for the interactive work of teaching and learning. Education is the process by which one passes from ignorance to knowledge, from incapacities to power and from
impulse to ideas (Dilshad, 2010). Education generally plays a critical role in the life of human beings. As an agent of change, education present a solid vehicle for the transformation and empowerment of individuals and making them effective and functional members of the society, and for achieving national goals. Creative, functional and qualitative education is viewed as a condition through which national development is attained (Aina, 2009). The level at which the door of education is opened to the entire citizenry, does not matter but the kind of education offered to the recipients matters a lot (Panda and Mohanty, 2003). The importance of education can never be over-emphasized because it yields both direct and indirect benefits to the individual and the society.

Education is one of the most important factors that has a direct relation to the development of society from starting and continues to assume the same role as long as society exists. Education is also a process by which man transmits his experience, new findings and values accumulated for several centuries in his struggle for survival. It is a base for socio-economic, cultural and political development of a country. It enables individuals and society to make full participation in the development process by acquiring knowledge, skills ability and attitudes.

According to Panda and Mohanty (2003), good teachers are essential for the effective functioning of education system and for improving the quality of learning process. He added that Job satisfaction enables teachers to put their maximum effort up on their work. The maintenance of high satisfaction and morale has long been an important objective for educators. Teachers develop performance style characteristics to their ways of relating to the world, perceptually as well as cognitively. A teacher is, therefore, likely to act in a way that maximizes the use of his/her aptitudes. Similarly, teachers' positive attitude towards teaching and higher objectives level determines their positive perception of the environments. An effective teacher’s development design should have an exhaustive measure of these factors so as to encourage necessary skills and attitudes amongst prospective teachers. The exclusive weight age to knowledge alone should be dispensed with in support of more activity oriented programs which have direct behaviour on actual classroom situation (UNESCO, 2002).

The strength of any nation lies in the quality and quantity of its workforce, while education remains the fulcrum of manpower training and development, the Nigerian education system has for several years been plagued by high level of unemployment rate, youth restiveness, crime and dwindling economy because of lopsided education which emphasized theoretical work without practical skills relevant to national needs. The National Policy on Education (FRN, 2013) bridge the gap by making the curriculum of technical vocational education and training comprehensive, more technological and science oriented. The policy defined technical vocational education and training as those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

The failure of teachers to arouse the delight interest of students in an educational system has been attributed to low quality in teacher’s education. This is because teacher education for decades has been criticized for low quality. Dilshad (2010), identified the commonly related problems to teacher education to include: “lack of funding and resources, poorly equipped training institutions, short training period, undue emphasis on quantitative expansion, narrow scope of curriculum, imbalance between general and professional courses, over-emphasis on theory as opposed to practice, little/no coordination between education departments and training institutions, deficient quality of instruction, lack of in-service training of teacher educators, failure in implementing useful reforms, vague objectives, poor quality of textbooks, defective examination system, lack of supervision and accountability, and lack of research and evaluation of teacher training programmes”. Thus, the teacher
education has been continuously the object of dissatisfaction as the program has received marginal attention resulting in mass production of teachers with shallow understanding of both the content and methodology of teaching (education). Based on this background, this research work sets out to identify measures that can enhance effective preparation of competent teachers for creative and functional technical vocational education and training in a period of socio-economic vicissitude.

Objectives of Vocational and Technical Education

The focus of Technical Vocational Education and Training orientation of recipients which enhances wealth creation, employment generation and poverty reduction are very important in people life. All of which reduce and indeed, capable of eliminating, youth restiveness, promote societal peaceful co-existence and cohesion and moulding responsible citizenry. All these are indices of development of a nation's economy and the absence of which portend under-development of the economy. This is necessary because with responsible citizenry, less restive youths and peaceful societal co-existence, nationalism and the desire for higher productivity are embraced by all and sundry.

According to FRN (2013), the aims/objectives of Technical Vocational Education and Training, are to provide trained manpower in applied science, technology and business, particularly at sub craft, advance craft and technical levels; to provide technical knowledge and vocational skills necessary for agriculture, commercial and economic development and to give training and impart the necessary skills in individual for self-reliance economically. It is in realization of TVET as the engine room of the nation's economy and its laudable objectives that it has become expedient to reposition and re-engineer TVET for the effective preparation of competent teachers for creative and functional TVET in a period of socio-economic vicissitudes.

Statement of the Problem

Effective preparation of competent teachers for creative and functional TVET in a period of socio-economic vicissitudes simply means those things that ought to be done to ensure TVET teachers productivity in TVET educational system. For teachers to be productive, quality has to be assured in their preparation. Unfortunately, quality of some teachers is very poor, low and substandard. This is as a result of poor preparation of teachers which invariably affects the performance of students in both internal and external examination emanating to low productivity of quality graduates. Teaching today holds a very low status in the society and as a result, teacher education is highly neglected and undoubtedly faced with numerous challenges which hinder its effective functioning. TVET Teacher education has recently taken a slow course of development and improvement in Nigeria due to poor quality and standard of education today. There is a high record of poor facilities, overcrowding at institutions, inadequate personnel, poor personnel management, outdated curriculum, inadequate teaching and learning aids, unconducive learning environment, inadequate payment of teachers, inadequate availability and poor application of ICT in teaching and learning as well as poor student’s outcome are contributing factors to the decline in the quality of higher education in Nigeria. The system has far outgrown the resources available to it to continue offering high-level quality education. Inadequate funding has resulted in problems such as the breakdown and deterioration of facilities, shortages of new books and current journals in the libraries, supplies for the laboratories, and limited funding for research. Institutional and system planning is critical for the restoration of quality in the system. The plans developed must be linked to realistic budget plans.

However, government have tried to equip VTE educators with skills required for creative and functional TVET, but there is dearth of competent teachers for the
implementation of TEVT curriculum (Mkpughe and Igberadja, 2016). Hence, lack of competent teachers and the incidence of high rate of TVET graduate dependent on white collar jobs have lead to the question: What strategies in the opinion of TVET educators are to be adopted for the preparation of competent teachers for creative and functional vocational technical education? What techniques in the opinion of TVET lecturers can be used for implementing TVET curriculum for creative and functional technical vocational education and training? The answers to these questions are not readily available, because there is the lack of or limited research evidence on the issue. The near-available answers to the questions have been based on mere opinion and not empirical work. It is the lack of or limited research evidence to indicate the preparedness and competencies of the TVET educators for implementing TVET curriculum for creative and functional TVET in a period of socio-economic vicissitude that provided the focus of the problem for this study.

**Purpose of the study**

The main purpose of this study was to determine the appropriate strategies for preparing competent teachers for creative and functional TVET in a period of socio-economic vicissitudes. The study specifically sought to:

1. To determine the strategies to be adopted for the preparation of competent teachers for creative and functional vocational technical education.
2. To determine the techniques that can be used for implementing TVET curriculum for creative and functional technical vocational education and training.

**Research Questions**

1. What strategies in the opinion of TVET lecturers are to be adopted for the preparation of competent teachers for creative and functional vocational technical education?
2. What techniques in the opinion of TVET lecturers can be used for implementing TVET curriculum for creative and functional technical vocational education and training?

**Hypotheses**

$H_01$: There is no significant difference between the mean responses of male and female TVET lecturers on the strategies to be adopted for the preparation of competent teachers for creative and functional vocational technical education.

$H_02$: There is no significant difference between the mean responses of male and female TVET lecturers on the techniques to be used for implementing TVET curriculum for creative and functional technical vocational education and training.

**Significance of the study**

The study will be of benefit to students in that they will be able to apply creativity in their studies.

1. Again, this study will encourage teachers to use the various techniques to not only enhance, but promote teaching and learning in Colleges of Education.
2. Furthermore, the significance of this research work also lies in the fact that it will contribute extensively to the already existing body of knowledge and will hereafter open up new frontiers for future research for students, lecturers and researchers in issues of revamping creativity in vocational/technical education. Finally, policy makers, educational stakeholders and the Government, at large will benefit as students and teachers will belong to a knowledgeable workforce capable of functioning creatively.
Methodology

Area of the Study

The study was carried out in Colleges of Education in South-South, Nigeria. The choice of this area was to contribute to the improvement of TVET teacher education and the production of quality graduates.

Design of the Study

The study employed descriptive survey research design. Nworgu (2006) noted that it is a design approach which aims at collecting data and describing them in a systematic manner, the characteristics features or facts about a given population. This design is used as a means of effecting clearly and properly understanding of the research findings, since it sought to ascertain the improvement of creativity in TVET.

Population of the Study

The target population of this study was 148 vocational education lecturers consisting 87 males and 61 females of the department of Vocational Education drawn from six Colleges of Education in South-South, Nigeria. The choice of the respondents was based on the fact that they are concerned with the training of teachers for Secondary Schools. Thus, they are knowledgeable about the variables under study and could supply useful information on the research instrument.

Sample and Sampling Techniques

Purposive sampling technique was used for the study. The researcher adopted purposive sampling technique since the sample seize was manageable. This implies that the total number of 148 VTE lecturers in the six Colleges of Education in South-South, Nigeria was used for the study.

Instrument for Data Collection

The instrument for data collection was a researcher’s structured questionnaire titled “Preparing Competent Teachers for Creative and Functional Technical Vocational Education and Training Questionnaire (PCTCFTVETQ). The questionnaire has two parts;

Part A: contains ten items on mean rating of lecturers on the techniques to be used for implementing TVET curriculum for creative and functional technical vocational education and training.

Part B: handles mean rating of respondents on the strategies to be adopted in the preparation of competent teachers for creative and functional technical vocational education and training. A four-point rating scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) was provided for the respondents to make their responses in all the clusters. The respondents indicated their level of agreement by ticking (√) on the rating scale based on 4- point rating scale. The scale is weighted 4,3,2,1 respectively. The cut-off points for the interpretation of the mean of the respondents’ opinion were: Strongly Agree (3.50 - 4.00); Agree (2.50 - 3.49); Disagree (1.50 - 2.49) and Strongly Disagree (1.00 - 1.49).

Validation of the Instrument

The face validity of the instrument was ascertained by giving the draft copies of the instrument to three experts in Measurement and Evaluation in the Faculty of Education, University of Nigeria, Nsukka. Corrections and possible suggestions were offered by the experts after adequate scrutiny of each item. This was to ensure that the instrument measured...
the intended attributes.

**Reliability of the Instrument**

In order to ensure the reliability of the instrument, the researchers administered questionnaire to 30 respondents who were not part of the study but possess the same qualities of those used for the study. Cronbach Alpha technique was used to analyse the data collected which yielded a reliability coefficient of 0.83. This shows the instrument was reliable for the study.

**Data Collection**

The researcher administered the instrument directly to the respondents in the colleges of Education with the help of two assistants who were instructed on what is required. The instrument was collected immediately after completion.

**Method of Data Analysis**

The research data collected were answered using mean while independent t-test was used to test the hypotheses at .05 level of significance.

**Decision Rule**

When the calculated t-value is greater than the tabulated value, null hypothesis is rejected, when the calculated t-value is less than the tabulated value null hypotheses is upheld.

**Presentation of Data Analysis and Result**

- **Research Questions 1**

  What strategies in the opinion of TVET lecturers are to be adopted for the preparation of competent teachers for creative and functional vocational technical education?

**Table 1: Mean rating of respondents on the techniques to be used for implementing TVET curriculum for Creative and Functional TVET**

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>N</th>
<th>X</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Employment of competent administrators to manage the affairs of VTE training institutions.</td>
<td>83</td>
<td>39</td>
<td>18</td>
<td>8</td>
<td>148</td>
<td>3.33</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Emphasis on renewal and capacity building in VTE.</td>
<td>60</td>
<td>52</td>
<td>28</td>
<td>8</td>
<td>148</td>
<td>3.09</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Improving existing facilities.</td>
<td>75</td>
<td>48</td>
<td>22</td>
<td>3</td>
<td>148</td>
<td>3.32</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Giving priority to professional and technical competence in technical teacher recruitment.</td>
<td>77</td>
<td>46</td>
<td>25</td>
<td>-</td>
<td>148</td>
<td>3.35</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>Motivation of technical educators through incentives and remuneration.</td>
<td>53</td>
<td>44</td>
<td>31</td>
<td>20</td>
<td>148</td>
<td>2.88</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>Emphasis on integration of ICT in teaching/learning of VTE.</td>
<td>68</td>
<td>60</td>
<td>18</td>
<td>2</td>
<td>148</td>
<td>3.31</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>Teacher’s evaluation guide should consist of sample evaluation items to guide the teachers.</td>
<td>71</td>
<td>68</td>
<td>8</td>
<td>1</td>
<td>148</td>
<td>3.42</td>
<td>Agree</td>
</tr>
<tr>
<td>9.</td>
<td>Every topic in the curriculum should be associated with quantitative reasoning tasks to facilitate the development of problem solving and psychomotor skills.</td>
<td>69</td>
<td>45</td>
<td>26</td>
<td>8</td>
<td>148</td>
<td>3.18</td>
<td>Agree</td>
</tr>
<tr>
<td>10.</td>
<td>Contents should be organised based on how students learn.</td>
<td>50</td>
<td>68</td>
<td>23</td>
<td>12</td>
<td>148</td>
<td>3.12</td>
<td>Agree</td>
</tr>
</tbody>
</table>
Table 1 reveal that the 10 items listed as techniques to be used for implementing TVET curriculum for Creative and Functional TVET were rated agreed by the respondents. The mean responses of all the items lie between 2.88 and 3.42. This signifies that all the items are techniques to be used for implementing TVET curriculum for Creative and Functional TVET. It was found out from the studies that teacher’s evaluation guide should consist of sample evaluation items to guide the teachers had the highest mean response while motivation of technical educators through incentives and remuneration had the lowest mean response. These findings are in line with NBTE (2011), Moja (2000), Olumese (2002), and Nwokomah (2005). These researchers opined that the challenges to the implementation of TVET curriculum are as a result of poor teaching methods employed by TVET lecturers, and poor provision of teaching materials.

Research Questions 2

What techniques in the opinion of TVET lecturers can be used for implementing TVET curriculum for creative and functional technical vocational education and training?

Table 2: Mean rating of respondents on the strategies to be adopted in the preparation of competent teachers for Creative and Functional TVET

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>F</th>
<th>X</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Exposure of students to theory of TVET by competent teachers.</td>
<td>148</td>
<td>3.11</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Exposure of students to practical in the laboratory workshops.</td>
<td>148</td>
<td>3.23</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Exposure of students in Information and Communication Technology through integration in teaching/learning of TVET.</td>
<td>148</td>
<td>3.36</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Exposure of students to TVET independent workshop practice.</td>
<td>148</td>
<td>3.14</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>Exposure of students to TVET project design and supervision.</td>
<td>148</td>
<td>3.01</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>Exposure of students to organised TVET field experience and supervision.</td>
<td>148</td>
<td>3.39</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>Exposure of students to teaching practice experience and supervision.</td>
<td>148</td>
<td>3.08</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>Exposure of students to cooperative education between industries and institutions.</td>
<td>148</td>
<td>3.10</td>
<td>Agree</td>
</tr>
<tr>
<td>9.</td>
<td>Exposure of students to examination in theory and practice.</td>
<td>148</td>
<td>3.27</td>
<td>Agree</td>
</tr>
<tr>
<td>10.</td>
<td>Exposure of students to the uses of TVET instructional materials.</td>
<td>148</td>
<td>3.22</td>
<td>Agree</td>
</tr>
</tbody>
</table>

Table 2 reveal that the 10 items listed as strategies to be adopted in the preparation of competent teachers for Creative and Functional TVET were rated agreed by the respondents. The mean responses of all the items lie between 3.01 and 3.39. This signifies that all the items are strategies to be adopted in the preparation of competent teachers for Creative and Functional TVET. It was found out from the studies that exposure of students to organised TVET field experience and supervision had the highest mean response while exposure of students to TVET project design and supervision had the lowest mean response.

Adding to this, Igbuzor (2006), maintained that provision of social and developmental services for teachers as well as infrastructural facilities in schools will boast the standard and quality of education which will help in acquisition of potential skills and knowledge for teachers development. The findings also agreed with Mok, (2005) that there is need for teacher education institution to seek ways to continually improve its academic staff, program design and delivery, administrative procedures and support services.

In order to test the hypotheses formulated for this study, t-test statistical tool is used with the view to finding out if the hypotheses formulated would be rejected or accepted at .05 level of significance.
H₀₁: There is no significant difference between the mean responses of male and female TVET lecturers on the strategies to be adopted for the preparation of competent teachers for creative and functional vocational technical education.

Table 3: Independent t-test comparison between males and females based on the respondents opinion on the techniques to be used for implementing TVET curriculum

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>t_cal</th>
<th>t_crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>87</td>
<td>3.42</td>
<td>1.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>3.31</td>
<td>1.06</td>
<td>146</td>
<td>-2.52</td>
<td>1.65</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note: NS = Not Significant

The result in table 3 indicates that the male respondents (87) had a mean rating of 3.42, SD was 1.10, while the females (61) had the mean rating of 3.31 with SD of 1.06 yielding a calculated t-value of -2.52 at 146 degree of freedom, it was considered to be non significant. The null hypothesis therefore, was not rejected. The implication of this is that male and female Vocational Technical teacher educators see that item are techniques to be used for implementing TVET curriculum for creative and functional technical vocational education and training.

H₀₂: There is no significant difference between the mean responses of male and female TVET lecturers on the techniques to be used for implementing TVET curriculum for creative and functional technical vocational education and training.

Table 4: Independent t-test comparison between males and females based on the respondents opinion on the strategies to be adopted in the preparation of competent teachers

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>df</th>
<th>t_cal</th>
<th>t_crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>87</td>
<td>3.15</td>
<td>0.99</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>61</td>
<td>3.54</td>
<td>0.87</td>
<td>146</td>
<td>-2.54</td>
<td>1.63</td>
<td>NS</td>
</tr>
</tbody>
</table>

Note: NS = Not Significant

The result in table 4 indicates that the male respondents (87) had a mean rating of 3.15, SD was 0.99, while the females (61) had the mean rating of 3.54 with SD of 3.54 yielding a calculated t-value of -2.54 at 146 degree of freedom, it was considered to be non-significant. The null hypothesis therefore, was not rejected. The implication of this is that male and female Vocational Technical teacher educators see that item are strategies to be adopted in the preparation of competent teachers for creative and functional technical vocational education and training.

Findings of the Study

The following were deduced from the study:

1. There is no significant difference between the mean responses of male and female TVET lecturers on the strategies to be adopted for the preparation of competent teachers for creative and functional vocational technical education.

2. There is no significant difference between the mean responses of male and female TVET lecturers on the techniques to be used for implementing TVET curriculum for creative and functional technical vocational education and training.

Discussion of the findings

This study was undertaken to determine the appropriate strategies for preparing competent
teachers for creative and functional TVET in a period of socio-economic vicissitudes. Based on the data analysis, the findings revealed thus: From the analysis, Table 1 reveal that the 10 items listed as techniques to be used for implementing TVET curriculum for Creative and Functional TVET were rated agreed by the respondents. The mean responses of all the items lie between 2.88 and 3.42. This signifies that all the items are techniques to be used for implementing TVET curriculum for Creative and Functional TVET. Table 2 reveal that the 10 items listed as strategies to be adopted in the preparation of competent teachers for Creative and Functional TVET were rated agreed by the respondents. The mean responses of all the items lie between 3.01 and 3.39. This signifies that all the items are strategies to be adopted in the preparation of competent teachers for Creative and Functional TVET. It was found out from the studies that exposure of students to organised TVET field experience and supervision had the highest mean response while exposure of students to TVET project design and supervision had the lowest mean response. It was found out from the studies that teacher’s evaluation guide should consist of sample evaluation items to guide the teachers had the highest mean response while motivation of technical educators through incentives and remuneration had the lowest mean response.

The result in table 3 indicates that the male respondents (87) had a mean rating of 3.42, SD was 1.10, while the females (61) had the mean rating of 3.31 with SD of 1.06 yielding a calculated t-value of -2.52 at 146 degree of freedom, it was considered to be non-significant. The null hypothesis therefore, was not rejected. The implication of this is that male and female Vocational Technical teacher educators see that item are techniques to be used for implementing TVET curriculum for creative and functional technical vocational education and training. The result in table 4 indicates that the male respondents (87) had a mean rating of 3.15, SD was 0.99, while the females (61) had the mean rating of 3.54 with SD of 3.54 yielding a calculated t-value of -2.54 at 146 degree of freedom, it was considered to be non-significant. The null hypothesis therefore, was not rejected. The implication of this is that male and female Vocational Technical teacher educators see that item are strategies to be adopted in the preparation of competent teachers for creative and functional technical vocational education and training.

Conclusions

Major educational transformations are required in the Nigerian education system. The tasks ahead are numerous and daunting. It is quite clear that it will be impossible for these tasks to be tackled by the Government of Nigeria alone or with the help of a few international partners. The involvement of major Nigerian stakeholders will be essential if the goals and potential of Nigeria education are to be realized. One of the great tragedies of the last decades is the collapse of an education system which was founded on sound developmental goals. The higher education system in Nigeria once boasted world class universities. These have now deteriorated to such an extent that local employers are not keen to employ Nigerian graduates and overseas institutions often have to place Nigerian graduates on remedial classes for them to cope with graduate studies. The reform of the entire education system is what we need and the time is now.

The way forward:

Based on this study, the following recommendations were made:

1. The government should be courageous enough in insisting that only professionally qualified, competent and qualified lecturers are involved in the teaching of technical education courses. Premium should also be placed on a lecturer’s area of specialization which is very basic to the success of the programme. The best of theories in education
has opined that no educational system could rise above the level of quality of its lecturers. Vocational and technical lecturers must be highly trained and acquire enough skills to be able to communicate their skills to students effectively.

2. The level of computer literacy must be improved by creating a computer-integrated TVET curriculum in all TVET institutions beginning from secondary school level. All TVET institutions should incorporate rigorous training in Information and Communication Technology (ICT) with emphasis on power point presentation software which would aid in effective lesson delivery; excel software which would help in the enrolment, assessment and computation and storage of results and other aspects of e-learning including social networking. The teacher already in service should be given mandatory training in computer use and other aspects of ICT. In the present world, computer illiteracy has proved to be the greatest illiteracy of all time. The TVET curriculum in our schools needs to be appropriately enriched to accommodate subjects like technical communication, consumer education, entrepreneurship and computer appreciation. This could rather be described as "complete career exploration" which promotes intelligent career choices and high technology development.

3. Government should conduct needs assessment of the people and the country at large with respect to TVET and match it with proper planning before implementation. Policies on education made in haste will never give desired results. It would be better if policies are made in such a way that changes can be accommodated without disturbing the overall system. Proper planning will also help to avoid inconsistencies in policy decisions which could hinder performance and success of TVET programmes.

4. The issue of training and retraining is critical in the production and retention of qualified teachers. Since teaching is a profession and a vocation, what is needed in the production of TVET teachers is more of training than teaching. The training of academic staff should be a continuous exercise to ensure consistent improvement in the quality of TVET teachers. The training should be in two folds: training to acquire qualifications required for teaching and continuing professional training. Both types of training can be acquired either locally or overseas. Government should adequately fund and support TVET programme through scholarships awards, funding/research grants, provide current books and journals in order to meet the needs required for staff good job performance.

5. Membership of the professional association should be encouraged and, if possible, the employers of teachers should make membership of professional at conferences, seminars and workshops mandatory to serving teachers. This would help in updating their knowledge of high technology, relevant teaching methods and skills of improvisation of materials and equipment.

6. The recommended 1:40 by Banjo Commission in the secondary education should be maintained by the school authority. This means employing teachers and providing more school buildings and more classroom facilities.

References


