Assessment of the Factors Responsible for Lack of Employable Skills among TVET Graduates from Nigerian Universities

Mrs. Akpomudjere Ovwiroro
College of Education,
Warri, Delta State,

ABSTRACT
The purpose of the study is to examine the factors responsible for lack of employable skills among TVET graduates from Nigerian Universities. 3 research questions guided the study and 3 hypotheses were tested at .05 level of significance. Survey research design was used for the study. The population of the study was 61 Heads of Department of TVET programmes of Federal and State universities in South-South Nigeria. No sampling was done rather all the population were used for the study. The instrument for data collection was a 20 item questionnaire titled “Assessment of Factors Responsible for Lack of Employable Skills Questionnaire (AFRLESQ)”. The AFRLESQ is on a 4-point scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) with a corresponding weight of 4, 3, 2, and 1 respectively. AFRLESQ was validated by 3 TVET lecturers from Delta State University, Abraka. To ascertain the reliability of AFRLESQ, 15 copies were administered to Head of Departments of TVET programmes of universities in South-East and South-West Nigeria. Using Cronbach’s alpha technique, a reliability coefficient of .69 was obtained. Data was collected by the researcher through the aid of 3 research assistants. Mean was used to analyse the research questions and t-test was used to test the hypotheses at .05 level of significance. The study revealed that various factors such as government, school, and industries are responsible for TVET graduates not possessing employable skills for employment and to be self-reliant. Hence, it was concluded amongst others that government, universities, and industries should collaborate to address the lack of employable skills of TVET graduates from Nigerian Universities.

INTRODUCTION
The rapid technological developments we are witnessing in the early years of the twenty-first century, together with the forces of globalization, are likely to lead to radical changes in the world of work. In fact, the changing nature of work is already perceptible in both urban centres and in rural communities. It follows therefore that human development, of which Technical Vocational Education and Training (TVET) have vital roles to play. According to Oviawe, Uwameyi, and Uddin (2017), the essential role of TVET in facilitating skills development for the socioeconomic and technological development of countries globally account for the increasing importance of TVET. Buttressing the importance of TVET in national development, Usman and Tasmin (2015), posited that TVET plays an important role in shaping a nation’s intellectual human capital.

Technical and Vocational Education and Training (TVET) is broadly defined as; education which is mainly aimed at leading participants to acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations (Atchoereria, & Delluc, 2001). As well, Oviawe, Uwameyi, and Uddin (2017) see TVET is the type of education which provides individuals with skills, knowledge and attitudes for effective employment in specific occupation. Also, Ayonmike and Okeke (2016), posited that TVET prepares students for the world of work, because it is a skill oriented discipline which is aimed at inculcating vocational skills to its recipients. In same vein, Akerele, (2007), opined that TVET is an aspect of education that exposes the learner to acquisition of demonstrable skills that could be transformed into economic benefits.

According to Federal Republic of Nigeria (FRN, 2013), the objectives of TVET are to: i. Provide trained manpower in applied science, technology and commerce particularly at sub professional level; ii. Provide the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development; iii. Provide people who can apply scientific knowledge to the improvement and solution of environmental problems for the use and convenience of man; iv. Give an introduction to professional studies in engineering and other
technologies; v. Give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant; and vi. Enable our young men and women to have an intelligent understanding of the increasing complexity of technology.

The implementation of the TVET curriculum in TVET institutions in Nigeria has not been yielding the expected outcomes. This is due to the fact that the aims and objectives of TVET as enshrined in the National Policy on Education (NPE) have not been met. However, this could be explained by the persistent petition by the labour market, that Nigerian graduates (TVET graduate inclusive) do not possess employable skills which could be traced to the implementation of the curriculum (TVET curriculum inclusive).

Employability is about being capable of getting and keeping fulfilling work. Employment and employability is not the same thing. Being employed means having a job whereas being employable means having the attributes needed to maintain employment and progress in the workplace (Onyeike & Onyeagbaklo, 2014). According to Harvey (1997) as cited by Onyeike and Onyeagbaklo (2014), employability is the capability of a graduate to display attributes that employers predict will be necessary for the effective functioning of their organization in the future. Robinson (2000) opined that employability skills are those basic skills necessary for getting, keeping and doing well on a job.

In spite of several efforts by government through her different policies to make Nigerian educational system (TVET inclusive) more functional, there are still growing concerns among education stakeholders and industrialist that graduates (TVET graduates inclusive) from our educational institutions lack adequate practical background and relevant job related skills for employment in industries (Idleh, 2013; Idris & Rajuddin, 2012). Employers of labour have continued to express their worry over the quality of the current graduates of TVET institutions in Nigeria who are experiencing set-backs due to lack of relevant job skills for employment in the 21st century (Oviawe, Uwameiye, & Uddin, 2017).

Furthermore, Netherland Organization for International Cooperation in Higher Education (NICHE, 2010) posited that there are various challenges that TVET graduates are facing in terms of practical skills acquisition, in most developing countries, especially in Nigeria, TVE is narrow in scale, scope, quality and relevance. The programs are not relevant to the requirements of the local labor market, the curricula and syllabi are out-of-date and the institutions lack the tools and equipment essential for practical skills acquisition. Where present, the equipment in workshops and laboratories is often out-of-date, bearing little resemblance to the technologies presently used by industry (NICHE, 2010).

The implementation of the TVET curriculum in TVET institutions in Nigeria has not been yielding the expected outcomes. This is due to the fact that the aims and objectives of TVET as enshrined in the National Policy on Education (NPE) have not been met. However, this could be explained by the persistent petition by the labour market, that Nigerian graduates (TVET graduate inclusive) do not possess employable skills which could be traced to the implementation of the curriculum (TVET curriculum inclusive). Consequently, TVET today face huge demands globally due to the high level of youth unemployment. Nigeria as one of the developing nations of the world is saddled with the fundamental issues of graduate unemployment and this has become a serious cause of concern (Oviawe, Uwameiye, & Uddin, 2017). Oviawe, Uwameiye, and Uddin (2017), reported that TVET institutions and industries work place collaboration training programmes has failed Nigerians over time to address the skill gaps which exist and diminish the usefulness of TVET graduates from the Nigerian educational institutions.

Various factors are responsible for the quality of TVET graduates produced by our TVET institutions in Nigeria which has resulted to the production of TVET graduates deficient of employable skills. According to Usman and Tasmin (2015), TVET programs have fallen short of expectations, the factors responsible for poor quality TVET graduates without employable skills includes:

a) Inadequate training of technicians, technologists due to inadequate training facilities in TVET institutions;

b) Insufficient exposure to practical work, series of strikes and closure of schools, lack of functional libraries, laboratory and workshops;

c) Weak, dissipated and obsolete infrastructure, equipment and facilities due to poor funding and corruption;

d) Inadequate information between schools and industries. Industry based supervisors are often not involved in designing the training programs;

e) Lack of proper support for research and development;
f) High cost of and apathy towards home-made goods;
g) unnecessary policy reviews and discontinuities between successive administrations, and general bureaucratic bottlenecks;
h) Insufficient personnel motivation, commitment to duty, and patriotism. Supervisors are not seriously committed and as a result student trainees are not assigned to challenging jobs.
i) Lack of proper matching of individual set skills with the relevant fields needed by industry.

Also, Ekpenyong (2011) in Ayonmike (2013) posited that, there are a number of factors, which have in various proportions impeded the smooth implementation of the goals and objectives of Technical and Vocational Education and Training (TVET). According to the National Board for Technical Education (NBTE,2011), the underlying challenges of TVET sector include; low societal recognition, which translate to low enrolment and inadequate skilled workforce, obsolete instructional facility, inadequate funding, poor staffing, poor linkages with industry and general deficiency in quality. In addition, evaluation in all sectors of education tends to be by conventional examinations, which generally does not factor in practical techniques in the industry.

In Africa, most of the TVET institutions are faced by the challenge of producing employable graduates due to various institutional factors. In Ghana, Dasmani (2011) indicated that inadequate supply of instructional materials, large class sizes, inadequate training facilities, weak linkages with local industries for hands-on-experience for both instructors and trainees lead to ineffective and inefficient training of students while emphasizing on passing final examination in the TVET institutions. Similarly, Oppong (2013) in Longe (2017) reported that over supply of university graduates, mis-alignment of the educational system output, inadequate practical training and inelastic labour absorptive capacity in both the private and public sectors are causal factors of graduate unemployment due to non-possession of employable skills.

As well, Udofia, Ekpo, Akpan, and Nsa (2012) reported that there is significant relationship between teacher quality, teaching methods and instructional facilities and acquisition of employable skills by students. Furthermore, Government of Kenya (GoK, 2012) reported that the curriculum being offered in TVET institutions is majorly theory-based and not relevant to labour market (industries) needs due to limited link between the TVET institutions and the industries hence there is mismatch of skills taught in the TVET institutions and those required by employers. In same vein, Madoui (2015) reported the disconnection between the university education system and the world of work (industries) as the striking cause of graduate unemployment in Algeria. The skills acquired from the tertiary institutions appeared dysfunctional and irrelevant. In consequence, some of the university graduates saw themselves in predicament because of the gap in skills acquired in the university and skills requirement set by employers in the Algerian working environment. In addition, Njoki (2014) reveals that in Nairobi County, TVET institutions are understaffed especially in technical disciplines which lead to ill preparation of students for work. Njoki further indicated that there is limited industrial attachment with little or no supervision which implies that graduates are not exposed to work environment early enough hence they are deemed incompetent when employed.

According to Usman and Tasmin (2015) the factors responsible for skills mismatch between TVET institutions and industries include:(i) inadequate training facilities; (ii) insufficient exposure to practical work; (iii) weak, dissipated and obsolete infrastructure, equipment and facilities; (iv) inadequate information between schools and industries. Also, Oviawe and Uwameiye (2010) reported that most TVET institutions lack the tools and equipment necessary for practical education, even when the equipment were available in the workshops and laboratories, you find out that the equipment are often obsolete, bearing little or no resemblance to the equipment in the world of work. Similarly, Mbugua, Muthaa, and Sang (2012) expressed that there is inadequate training materials and the use of inferior equipment in TVET which have compromised the relevance of skills taught to skills needed by industries.

To address the issues of TVET graduates not possessing employable skills there is need for government, TVET institutions, and industries to collaborate to produce graduates with employable skills and that which will be relevant in the labour market and the world of work. In support, Oviawe, Uwameiye, and Uddin (2017), opined that to meet the manpower needs of the 21st century workplace, the manpower work force has to possess the right skills, up-to-date knowledge, the right attitude and abilities to do the work in line with the demands of the occupation. All these can be achieved through a functional and effective TVET-industry collaboration. According to Usman and Tasmin (2015), TVET is a program that is
designed to equip the industries with the technological manpower needed to foster its socio-economic, and technical functionality, as such TVET institutions and industries should coexist as necessary partners. Specifically, TVET institutions and industries should work together to ensure that students are given the right guidance at the right time and that curricula scopes, content and standards are relevant to the requirements of the employers. This type of collaboration will help to bridge the gap between the ideas and knowledge inculcated in the TVET institutions and the reality in the world of work (industries). Similarly, Clerk (1971) as cited by Usman and Tasmin (2015), opined that TVET Institutions-Industries partnership will produce the right calibre of TVET graduates that will facilitate socioeconomic development of Nigeria.

To improve the quality of TVET graduates as well as to address the production of Unemployable TVET graduates, Usman and Tasmin (2015), recommended that:

a) TVET institutions should work out modalities for training and re-training in a way that will benefit both the TVET Institutions and Industries in Nigeria;

b) Industrial Training Funds (ITF) and National Board for Technical Education (NBTE) staff should pay regular visits to industries in order to supervise the trainees on Students’ Industrial Work Experience Scheme (SIWES) to industries;

c) An effective and efficient communication system should be established between the TVET institutions and industries which would facilitate meaningful coordination of the SIWES program;

d) ITF should perform need assessment on the part of the industries so as to balance the school-industry needs.

e) Effective involvement of the industry to achieve integrated work and learning.

Unemployment of TVET graduates from Nigerian universities is alarming. Sometimes one wonders if the objective of equipping TVET graduates with vocational skills that will make them employable or self-reliant has been achieved with the bulk of TVET graduates roaming the street in search of jobs when they are supposed to be self-employed and employers of labour. It is an established fact that personnel managers from industries complained of TVET graduates not possessing employable skills that is needed to function effectively in the work place. Hence, the need to conduct this study to identify the factors responsible for TVET graduates not having the skills needed for employment and to be self-reliant.

**Significance of the Study**

This study will be significant to school administrators, TVET lecturers, government, and industries, since the study will reveal the factors responsible for TVET graduates from universities not possessing employable skills for employment and to be self-reliant. Also, the study will reveal factors as it relates to the universities, government, and industries. More so the findings from the study will be used by future researchers when conducting similar research and also when drawing conclusion.

**Purpose of the Study**

The major purpose of the study is to find out the factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant. Specifically, the study examined the:

1. Government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.
2. School factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.
3. Industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

**Research Questions**

The following research questions guided the study:

1. What are the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant as perceived by Heads of TVET Department from Federal and State Universities in South-South Nigeria?
2. What are the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant as perceived by Heads of TVET Department from Federal and State Universities in South-South Nigeria?
3. What are the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant as perceived by Heads of TVET Department from Federal and State Universities in South-South Nigeria?
Hypotheses

The following hypotheses were tested at .05 level of significance:

1. There is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

2. There is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

3. There is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

METHODOLOGY

Survey research design was used in this study. The population of the study was 61 Heads of Department of TVET programmes of Federal and State universities in South-South Nigeria (Nigeria Universities Commission, 2018). No sampling was done because of the small population, rather all the 61 Heads of Department of TVET programmes were used for the study. The instrument for data collection was a 20 item questionnaire titled “Assessment of Factors Responsible for Lack of Employable Skills Questionnaire (AFRLESQ)”. The AFRLESQ is on a 4-point scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD) with a corresponding weight of 4, 3, 2, and 1 respectively. AFRLESQ has 2 parts (A and B). Part A is on respondents bio data, while part B has 3 sections 1, 2, and 3 based on the research questions. Section 1 is on government with 6 items; Section 2 is on school factors with 8 items; and Section 3 is on industries factor with 6 items. AFRLESQ was validated by 3 TVE lecturers from Delta State University, Abraka. To ascertain the reliability of the AFRLESQ, 15 copies were administered to Heads of Departments of TVET programmes of universities in South-East and South-West Nigeria. Using Cronbach's alpha technique, a reliability coefficient of .69 was obtained. Data was collected by the researcher through the aid of 3 research assistants. Mean was used to analyse the research questions and t-test was used to test the hypotheses at .05 level of significance. The decision point was 2.50, this implies that any mean value of 2.50 and above was regarded as agree and 2.49 and below was regarded as disagree. As well, when t-calculated is less than t-critical, the hypothesis was accepted and if t-calculated is greater than t-critical, the hypothesis was rejected.

RESULTS AND DISCUSSION

The result was presented based on research questions and hypotheses.

Research Question 1: What are the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant as perceived by Heads of TVET Department from Federal and State Universities in South-South Nigeria?

Table 1: Mean Response of Heads of Department of TVET Department on the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item Statement: What are the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant?</th>
<th>H.O.Ds of TVET Programmes State Universities</th>
<th>H.O.Ds of TVET Programmes Federal Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Poor funding of TVET programmes at the university level</td>
<td>Mean: 3.25, Remark: Agree</td>
<td>Mean: 3.19, Remark: Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Poor provision of TVET training equipment</td>
<td>Mean: 3.41, Remark: Agree</td>
<td>Mean: 3.05, Remark: Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Poor provision of infrastructural facilities</td>
<td>Mean: 3.10, Remark: Agree</td>
<td>Mean: 3.35, Remark: Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Poor provision of qualified TVET lecturers and technicians</td>
<td>Mean: 3.38, Remark: Agree</td>
<td>Mean: 3.44, Remark: Agree</td>
</tr>
<tr>
<td>5.</td>
<td>Poor supervision of the implementation of TVET curriculum at the university level</td>
<td>Mean: 3.51, Remark: Agree</td>
<td>Mean: 3.26, Remark: Agree</td>
</tr>
<tr>
<td>6.</td>
<td>Poor training and retraining programmes for TVET lecturers and technicians</td>
<td>Mean: 3.56, Remark: Agree</td>
<td>Mean: 3.29, Remark: Agree</td>
</tr>
<tr>
<td></td>
<td><strong>Grand Mean</strong></td>
<td>Mean: 3.37</td>
<td>Mean: 3.26</td>
</tr>
</tbody>
</table>

Corresponding author: Akpomudjere O. akpomudjereowwiworo@yahoo.com College of Education, Warri, Delta, State. © 2019 Faculty of Technology Education, ATBU Bauchi. All rights reserved
Table 1 revealed the following as government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant: Poor funding of TVET programmes at the university level; Poor provision of TVET training equipment; Poor provision of infrastructural facilities; Poor provision of qualified TVET lecturers and technicians; Poor supervision of the implementation of TVET curriculum at the university level; and Poor training and retraining programmes for TVET lecturers and technicians. These findings are in agreement with previous findings of other researches. In Ghana, Dasmani (2011) indicated that inadequate supply of instructional materials, large class sizes, inadequate training facilities, weak linkages with local industries for hands-on-experience for both instructors and trainees lead to ineffective and inefficient training of students while emphasizing on passing final examination in the TVET institutions. According to the National Board for Technical Education (NBTE,2011), the underlining challenges of TVET sector include; low societal recognition, which translate to low enrolment and inadequate skilled workforce, obsolete instructional facility, inadequate funding, poor staffing, poor linkages with industry and general deficiency in quality. In addition, evaluation in all sectors of education tends to be by conventional examinations, which generally does not factor in practical techniques in the industry.

**Research Question 2:** What are the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant as perceived by Heads of TVET Department from Federal and State Universities in South-South Nigeria?

Table 2: Mean Response of Heads of Department of TVET Department on the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item Statement: What are the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant?</th>
<th>H.O.Ds of TVET Programmes State Universities (N=40)</th>
<th>H.O.Ds of TVET Programmes Federal Universities (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean</td>
<td>Remark</td>
</tr>
<tr>
<td>1.</td>
<td>Inadequate infrastructural facilities such as lecture halls, workshops, and library.</td>
<td>3.30</td>
<td>Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Inadequate TVET training equipment such as machines, hand tools, and consumable materials</td>
<td>3.25</td>
<td>Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Inadequate lecturers and technicians in TVET department</td>
<td>3.46</td>
<td>Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Poor relationship between the universities and industries</td>
<td>3.33</td>
<td>Agree</td>
</tr>
<tr>
<td>5.</td>
<td>Poor supervision and evaluation of TVET programmes by school administrators</td>
<td>3.38</td>
<td>Agree</td>
</tr>
<tr>
<td>6.</td>
<td>Poor review of TVET curriculum at the university level</td>
<td>3.62</td>
<td>Agree</td>
</tr>
<tr>
<td>7.</td>
<td>Poor teaching methods used by TVET lecturers and technicians</td>
<td>3.00</td>
<td>Agree</td>
</tr>
<tr>
<td>8.</td>
<td>Poor industrial attachment programme for TVET students</td>
<td>3.54</td>
<td>Agree</td>
</tr>
</tbody>
</table>

| Grand Mean | 3.36 | 3.33 |

Table 2 revealed the following as school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant: Inadequate infrastructural facilities such as lecture halls, workshops, and library; Inadequate TVET training equipment such as machines, hand tools, and consumable materials; Inadequate lecturers and technicians in TVET department; Poor relationship between the universities and industries; Poor supervision and evaluation of TVET programmes by school administrators; Poor review of TVET curriculum at the university level; Poor teaching methods used by TVET lecturers and technicians; and Poor industrial attachment programme for TVET students. These findings are in line with the position of other researchers. Mbogu, Mutha, and Sang (2012) expressed that there is inadequate training materials and the use of inferior equipment in TVET which have compromised the relevance of skills taught to skills needed by industries. In support, Oviawe and 

Corresponding author: Akpomudjere O. akpomujereowwiworo@yahoo.com College of Education, Warri, Delta, State. © 2019 Faculty of Technology Education, ATBU Bauchi. All rights reserved
Uwameiye (2010) reported that most TVET institutions lack the tools and equipment necessary for practical education, even when the equipment were available in the workshops and laboratories, you find out that the equipment are often obsolete, bearing little or no resemblance to the equipment in the world of work. Similarly, Usman and Tasmin (2015) the factors responsible for skills mismatch between TVET institutions and industries include: (i) inadequate training facilities; (ii) insufficient exposure to practical work; (iii) weak, dissipated and obsolete infrastructure, equipment and facilities; (iv) inadequate information between schools and industries. In addition, Njoki (2014) reveals that in Nairobi County, TVET institutions are understaffed especially in technical disciplines which lead to ill preparation of students for work. Njoki further indicated that there is limited industrial attachment with little or no supervision which implies that graduates are not exposed to work environment early enough hence they are deemed incompetent when employed. As well, Udofia, Ekpo, Akpan, and Nsa (2012) reported that there is significant relationship between teacher quality, teaching methods and instructional facilities and acquisition of employable skills by students.

**Research Question 3:** What are the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant as perceived by Heads of TVET Department from Federal and State Universities in South-South Nigeria?

**Table 3:** Mean Response of Heads of Department of TVET Department on the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant

<table>
<thead>
<tr>
<th>S/N</th>
<th>Item Statement: What are the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant?</th>
<th>H.O.Ds of TVET Programmes Federal Universities</th>
<th>H.O.Ds of TVET Programmes State Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Poor relationship with TVET department in the universities</td>
<td>Mean 3.00</td>
<td>Remark Agree</td>
</tr>
<tr>
<td>2.</td>
<td>Poor job performance feedback on TVET graduates to the universities</td>
<td>Mean 3.24</td>
<td>Remark Agree</td>
</tr>
<tr>
<td>3.</td>
<td>Inability to inform universities of their current skills need</td>
<td>Mean 2.96</td>
<td>Remark Agree</td>
</tr>
<tr>
<td>4.</td>
<td>Poor support to TVET department in the universities</td>
<td>Mean 3.13</td>
<td>Remark Agree</td>
</tr>
<tr>
<td>5.</td>
<td>Poor attitude towards accepting TVET students for industrial attachment</td>
<td>Mean 3.32</td>
<td>Remark Agree</td>
</tr>
<tr>
<td>6.</td>
<td>Poor participation of industries during TVET curriculum review at the university level</td>
<td>Mean 3.00</td>
<td>Remark Agree</td>
</tr>
</tbody>
</table>

**Grand Mean**

<table>
<thead>
<tr>
<th></th>
<th>Federal Universities</th>
<th>State Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>3.11</td>
<td>3.08</td>
</tr>
</tbody>
</table>

Table 3 revealed the following as industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant: Poor relationship with TVET department in the universities; Poor job performance feedback on TVET graduates to the universities; Inability to inform universities of their current skills need; Poor support to TVET department in the universities; Poor attitude towards accepting TVET students for industrial attachment; and Poor participation of industries during TVET curriculum review at the university level. These findings are in line with the views of other researchers, Government of Kenya (GoK, 2012) reported that the curriculum being offered in TVET institutions is majorly theory-based and not relevant to labour market (industries) needs due to limited link between the TVET institutions and the industries hence there is mismatch of skills taught in the TVET institutions and those required by employers. In same vein, Madoui (2015) reported the disconnection between the university education system and the world of work (industries) as the striking cause of graduate unemployment in Algeria. The skills acquired from the tertiary institutions appeared dysfunctional and irrelevant. In consequence, some of the university graduates saw themselves in predicament because of the gap in skills acquired in the university and skills requirement set by employers in the Algerian working environment. As well, Usman and Tasmin (2015), TVET programs have fallen short of expectations, the factors responsible for poor quality TVET graduates without employable skills is as a result of inadequate information between schools and
industries and lack of proper support for research and development in TVET institutions.

**Hypothesis 1:** There is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

**Table 4:** t-test analysis of significant difference in the mean response of Heads of Department of TVET on the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-cal</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Universities</td>
<td>40</td>
<td>3.37</td>
<td>0.14</td>
<td>1.186</td>
<td>Accepted</td>
</tr>
<tr>
<td>Federal Universities</td>
<td>21</td>
<td>3.26</td>
<td>0.09</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Df=59, t-crit=1.671

Since t-cal (1.186) is less than t-crit (1.671), the hypothesis which stated that there is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the government factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant was accepted which implies that there was no significant difference in the response from Heads of Department of TVET on government factors.

**Hypothesis 2:** There is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

**Table 5:** t-test analysis of significant difference in the mean response of Heads of Department of TVET Department on the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-cal</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Universities</td>
<td>40</td>
<td>3.36</td>
<td>0.26</td>
<td>0.344</td>
<td>Accepted</td>
</tr>
<tr>
<td>Federal Universities</td>
<td>21</td>
<td>3.33</td>
<td>0.07</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Df=59, t-crit=1.671

Since t-cal (0.344) is less than t-crit (1.671), the hypothesis which stated that there is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the school factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant was accepted which implies that there was no significant difference in the response from Heads of Department of TVET on school factors.

**Hypothesis 3:** There is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant.

**Table 6:** t-test analysis of significant difference in the mean response of Heads of Department of TVET Department on the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>S.D</th>
<th>t-cal</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Universities</td>
<td>40</td>
<td>3.11</td>
<td>0.11</td>
<td>0.317</td>
<td>Accepted</td>
</tr>
<tr>
<td>Federal Universities</td>
<td>21</td>
<td>3.08</td>
<td>0.16</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Df=59, t-crit=1.671

Since t-cal (0.317) is less than t-crit (1.671), the hypothesis which stated that there is no significant difference between mean response of Heads of TVET Department from Federal and State Universities on the industries factors responsible for TVET graduates not possessing employable skills for employment and to be self-reliant was accepted which implies that there was no significant difference in the response from Heads of Department of TVET on industries factors.

**CONCLUSION**

Based on the findings from the study, it revealed that various factors such as government, school, and industries are responsible for TVET graduates not possessing employable skills for...
employment and to be self-reliant. Hence, it was concluded amongst others that government, universities, and industries should collaborate to address the lack of employable skills of TVET graduates from Nigerian Universities.

RECOMMENDATIONS

Based on the findings from the study, the following recommendations were made to help address the production of TVET graduates without employable skills:

1. Government should adequately fund TVET programs in TVET institutions in Nigeria.
2. Government should adequately provide qualified TVET technicians and teachers in TVET institutions in Nigeria.
3. Government should always involve TVET institutions and industry when reviewing TVET curriculum.
4. School administrators should foster partnerships between TVET institutions and industries in the implementation of TVET programmes.
5. School administrators should adequately supervised, monitor, and evaluate TVET programmes.
6. School administrators should introduce competency based education and training should be introduced in TVET programmes.
7. Industries should give information regarding their skills need in the industry to enable TVET institutions to review their programmes in that direction.
8. Industries should make available their resources for teaching and learning TVET skills needed for employment.
9. Industries should assist TVET institutions in the improving human and material resources for the teaching and learning in TVET institutions.

REFERENCES


http://dx.doiorg110.4236/jss.2015.31006.


National Board for Technical Education (NBTE, 2011), report of the national steering committee on the development of national


