Approaches for Bridging the Skill Gap of Technical Vocational Education and Training (TVET) Graduates towards Economic Recovery in a Recessed Economy in Nigeria

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Abstract: This study investigated the strategies for bridging the skill gap of technical vocational education and training (TVET) graduates towards economic recovery in a Recessed economy. The study adopted a descriptive survey research design. Three research questions guided the study and the population of the study comprised of sixty (60) vocational and technical education lecturers in TVET departments in Adeniran Ogunsanya College of Education, Ijanikin and Michael Otedola Primary College of Education, Epe. Fourty (40) questionnaires were administered to the respondents and three (3) experts were engaged for face validation of the instrument. Cronbach Alpha method was used to determine the reliability of the instrument at 0.86. The paper identified problem solving skills and personnel management skills as some of the skill gaps in TVET, the paper also identified making of Students' excursion compulsory in the curriculum of TVET as one of the strategies in bridging the skill gaps among others, the paper went further to state that inadequate funding of technical and vocational education is one of the setback of vocational and technical education. The study recommended among others that TVET institutions should work out modalities for training and re-training of TVET teachers in a way that will benefit both the Institutions and Industries in Nigeria and there should be adequate monitoring and supervision of student on the job training as well as adequate funding of technical vocational education and training by government.

Key Words: Strategies, Skill Gap, TVET, Economy Recovery, and Recessed Economy.

I. INTRODUCTION

The role of technical vocational education and training in national development and economic recovery in Nigeria cannot be overemphasized. A nation that fails to pay attention to vocational and technical education is obviously doomed in this globalized and competitive economy. It is a well-known fact that education is an important ingredient of national development and integration and it is a process that aims at imparting knowledge, attitude and skills required in all spheres of life. Odukoya (2009), is of the view that the importance of education to the general well-being of mankind in which vocational and technical education falls cannot be overemphasized and that education is a fundamental human right. He further explains that the relationship between education and development had been established, such that

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education is now internationally accepted as a key development index. It is in recognition of this importance that the international community and governments all over the world have made commitments for their citizens to have access to education. In the view of Ovbiagele (2015), education is a variable tool for national development which requires deliberate plan to suit the development needs of a nation. More so, it is geared towards the system producing the right type of manpower in the right quality and quantity for nation building. It is an exercise that engages every one. It is a process that enables the individuals to live as useful and acceptable members of a society. An individual may go through liberal, general education or acquire knowledge and be useful to himself and to the society at large. Education means more than just going to school (formal education). An adult, who did not have an opportunity of formal education, maybe directly or indirectly involve in education in the informal way.

Okoye (2002) opined that an educated man is the gentleman, who is socially, morally, intellectually and physically useful to the society. It is no gain saying that societal norms and values are prerequisites for a person to fit into any society, hence the need for the acquisition of vocational skills and competence for self-relevance. Ogwo and Oranu (2006) is of the view that vocational and technical education are in most cases used interchangeably, however though similar, they are not the same. Ogwo and Oranu went further to say that Vocational education is an aspect of technical education that lay emphasis on skills acquisition and functional education for the development of the society. That is, it leads to employment in a job, a trade or occupation while technical education is an aspect of education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. It gives both quality and quantity of the manpower required for transformation of a country in a technical world of work. Adele and Olukayode (2007) described TVET as a programme with various branches that can transform Nigeria into a producer/manufactures nation from its present status of a consumer/importer nation. Its various courses are career oriented and thus arms graduates with skills to work in the chosen trade or profession. Lawal (2010) describe vocational and technical education as that types of education that prepare people who could apply relevant practical skill to make positive changes within their society and afford a self-dependent life . This form of education has been attest severally as an education that provides self-employment, enhance productivity and selfreliance. It reduces the over dependence of school graduates on government own jobs and develop in them entrepreneurial skills needed to provide jobs and also work and fit properly in the global society. According to National Policy an Education (2014), Technical and Vocational Education is used as a comprehensive term referring to those aspects of the educational process involving in addition to general education the study of technology and related sciences and the acquisition of practical skills, attitude, understanding and knowledge relating to occupations in various sectors of the economic and social life of Nigerians. It further expatiated the concept of vocational and technical education to include: an integral part of general education, a means of preparing for participation in world of work, an aspect of lifelong learning, a preparation for responsible citizenships, and an instrument promoting environmentally healthy sustainable for development. In order to achieve the objectives of the TVET as stated by the National Policy on Education (2014), there is need to device strategies for bridging the skill gaps of TVET graduates towards economic recovery in a depressed economy.

Approaches can be seen as a careful plan or program for achieving a set objectives. Obarisiagbon and Akintoye (2019) defined strategy as a method, road map and blue print worked out in advance for achieving some objectives. Approach is all about integrating organizational activities and utilizing and allocating the scarce resources within the organizational environment so as to meet the present objectives. Approach in TVET also defines the overall mission, vision and direction which helps in bridging the skill gap between "where we are" and "where we want to be".

Skill gap can be seen as a deficiency between what employers want or need their employees to be able to do, and what those employees can actually do when they walk into work. A skill denotes expertise or ability developed in the course of training and experience. A skill can also be seen as an activity involving knowledge, judgment, accuracy and usually manual dexterity, all of which are acquired as a result of long time training and practice. Oladejo (2019) defined skill as a well-established habit of doing something involving the acquisition of performance, capabilities in the most economical way. Obarisiagbon and Omagie (2018) while writing on skill stated that skill is the natural endowment of an individual or an endowment thrust on man through adequate training followed by frequent practice. Njoku (2014) in Alao and Adelabu (2006), stated that the survival in a globalize world calls for schools products in which technical college graduate are one to develop new skills and competencies, these new skills and competences according to Njoku(2014) can be defined as the ability to do something well, especially

because you have learnt and practice it. According to Oviawe, Uwameiye and Uddin (2017) in Idris and Rajuddin, (2012), who are of the opinion that in spite of several efforts by government through her different policies to make Nigerian educational system more functional, there are still growing concerns among education stakeholders and industrialist that graduates from our educational institutions lack adequate practical background and relevant job related skills for employment in industries. 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 industries. This growing concerns calls for the bridging of the skills the graduates of TVET have acquired towards economic recovery in a recessed economy.

Recession can be seen as a period when the economy of a country declines significantly for at least six months, showing drops in the following five economic indicators: real GDP, Income, Employment, Manufacturing, and retail sales. Tinuke (2012) defined recession as a period of economic slowdown featuring low output, illiquidity and unemployment. It is characterized by its length, abnormal increases in unemployment, falls in the availability of credit, shrinking output and investment, numerous bankruptcies, reduced amounts of trade and commerce, as well as highly volatile relative currency value fluctuations, mostly devaluations, financial crises and bank failure. Businesses have responded to the problem of economic recession, in a number of ways, some sought subsidy and tariff protection from the government and others became more efficient and de-diversified by selling off many of their subsidiaries in unrelated industries. They also reduced their labor forces by shedding layers of management and laying off thousands of production workers. Rather than produce the entire product within the firm, more and more work was outsourced that is, purchased from others abroad. Financial Times (2017) opined that economic recession is a downturn in the economy. It is often characterized by symptoms such as rising prices of goods and services, inability of government to meet its financial obligations, exchange rate fluctuations, and poor performance of other macroeconomic variables which defines the state of the economy per time hence the need for economic recovery.

Economic recovery connotes a period of resuscitation in business activities, after a period of economic downturn has been experienced. It can be seen as that phase of convalescence/recovery after a period of real negative gross domestic product has been suffered. During economic recovery process, wealth creation is continually on the increase i.e. business activities resumes and maintains a constant acceleration towards the peak. Economic recovery is gradual, and hence it is not easy to tell at the onset. Economic recovery becomes pertinent since economic recession had drastically affected the economy development of this great country negatively. As our young men and women who supposed to be job creators and number one in industries are no longer turned out or trained from the relevant TVET training institution to fill the existing vacancies in the industries rather the vacancies are been filled by foreign expatriates who came in and milk away the hard earned reserves to their own country no wonder why Nigeria is today described as having a recessed economy. Hence the need to device strategies for bridging the skills gaps of TVET graduates towards economic recovery is inevitable.

Purpose of the Study

The major purpose of the study was to device strategies for bridging the skill gap of technical vocational education and training (TVET) graduates towards economic recovery in a recessed economy in Nigeria. Specifically, the study determined;

- 1. The skill gap in TVET institution.
- 2. The Strategies for bridging the skill gap in TVET institution towards economic recovery.
- 3. The Setbacks in bridging the skill gap in TVET institution towards economic recovery.

Research Questions

The following research questions were raised to guide the study:

- 1. What are the skill gap in TVET institution
- 2. What are the Strategies for bridging the skill gap in TVET institution towards economic recovery?
- 3. What are the Setbacks in bridging the skill gap in TVET institution towards economic recovery?

II. METHODOLOGY

The study adopted the survey research design. Survey research design is a plan structure, strategy that the enumerator wants to adopt in order to obtain situation to research problems using questionnaire in collecting, analysing and interpreting the data, (Obidile, 2018).

Area of the Study

The study was carried out in the two Lagos state owned colleges of education. Lagos was chosen because is one of the commercial nerve centres in Nigeria and has a lot of industries where the graduates of TVET can work or gain experience during the course of their training.

Population for the Study

The population for this study comprised of all the 60 vocational and technical education teachers in the two colleges of education in Lagos State.

Sample and Sampling Technique

There was no sampling for the study because of the small size of the populace.

Instrument for Data Collection

A structured questionnaire was the instrument for data collection. The items used a 4-point response scale of highly agreed, averagely agreed, slightly agreed and not agreed which were assigned numerical values of 4, 3, 2, and 1 respectively. The instrument was subjected to face and content validation by two lecturers from the Department of Vocational Technical Education, Yaba College of Education Technical Akoka to attest the appropriateness of the instrument in measuring what it intended to measure. The instrument was trial tested on 30 vocational and technical education teachers in four technical colleges in Ogun State. This yielded a reliability co-efficiency of 0.86 using the Cronbach Alpha formula.

Method of Data Collection:

Sixty (60) copies of the questionnaires were distributed to the technical vocational education and training teachers in Adeniran Ogunsanya College of Education and Micheal Otedola College of Primary Education all in Lagos State. The 60 copies of the questionnaires were returned yielding a 100% return rate. The data was collected by administering the questionnaire directly on the respondents by the researchers and two research assistants.

III. METHOD OF DATA ANALYSIS

The data collected from this study were analyzed using mean and standard deviation for answering the research questions. Any item with a mean value of 2.50 and above was regarded as agreed while any item with a mean below 2.50 was regarded as not agreed.

Research Question 1

What are the skill gaps in TVET institution?

S/N	Item Statement	Х	SD	Remarks
1	Applied academic skills	3.22	0.72	Agreed
2	Career planning skills	3.65	0.61	Agreed
3	Information development and presentation skills	3.64	0.66	Agreed
4	Problem solving skills	3.77	0.64	Agreed
5	Personal management skills	2.82	0.80	Agreed
6	Organizational skills.	3.87	0.56	Agreed
7	Teamwork skills	3.60	0.58	Agreed
8	Cooperation/Negotiation skills	3.57	0.57	Agreed
9	Understanding systems skills	3.74	0.60	Agreed
10	Employability application skills	3.79	0.60	Agreed

Table 1: Indicates that all the 10 items on skill gap in technical vocational education and training towards economic recovery in a recessed economy had their mean score ranging from 2.82 to 3.79, which is above the cut off of 2.50. This indicates that all the respondents agreed on the item statements. The standard deviation also indicates that the responses do not vary widely from their mean.

Research Question 2

What are for the Strategies for bridging the skill gap in TVET institution towards economic recovery?

S/N	Item Statement	Х	SD	Remarks
1	Making of Students' excursion compulsory in the curriculum.	3.23	0.71	Agreed
2	Regular conducting of students' practical projects exhibition.	3.65	0.61	Agreed
3	Prompt supplying of current text materials on practical skills in TVET institutions library.	3.75	0.60	Agreed
4	The management and administrators of TVET should motivate lecturers by attaching rewards to practical projects.	3.76	0.59	Agreed
5	Incentives should be given to the best practical student.	3.69	0.60	Agreed
6	Alternative source of power supply should be made available in workshops and laboratories.	3.65	0.61	Agreed
7	There should be proper training and re-training of TVET teachers.	3.64	0.62	Agreed
8	The assessment strategies to evaluate the competencies of the learners should be reviewed.	3.88	0.54	Agreed
9	The teaching and learning strategies should aligned with the outcomes of the revised curricula by focusing on competency-based education systems.	3.77	0.58	Agreed
10	There should be development of the critical skills such as: reading, thinking and writing into the teaching and learning process.	3.86	0.55	Agreed
11	There should be focus on making academic qualification relevant in the labour market so that the graduates of TVET will be employable.	3.88	0.54	Agreed
12	There should be innovation in the academic programmes by aligning them with the workplace skill requirements.	3.78	0.57	Agreed
13	There should be proper maintenance of tools and equipment in the workshops	3.73	0.59	Agreed
14	Enough tools/materials should be provided in the workshops/laboratories always.	3.70	0.60	Agreed
15	The development of competencies such as (technical knowledge, practical skills and pervasive skills) should be incorporated into the curricula of TVET.	3.16	0.75	Agreed

Table 2: Indicates that all the 15 items on the Strategies for bridging the skill gap in TVET institution towards economic recovery in technical vocational education and training towards economic recovery in a recessed economy had their mean score ranging from 3.16 to 3.88, which is above the cut off of 2.50. This indicates that all the respondents agreed on

the item statements. The standard deviation also indicates that the responses do not vary widely from their mean.

Research Question 3

What are the Setbacks in bridging the skill gap in TVET institution towards economic recovery?

S/N	Item Statement	Х	SD	Remarks
1	Allocation of insufficient funds to practical exams.	3.43	0.41	Agreed
2	Inadequate emphasis on practical skill development in the curriculum.	3.21	0.74	Agreed
3	Nonchalant attitude toward practical skill acquisition by students.	3.12	0.76	Agreed
4	Lack of possession of adequate practical skills by the lecturers.	3.12	0.76	Agreed
5	Use of traditional method of teaching which does not motivate students to learn practical skills.	3.09	0.78	Agreed
6	Inadequate funding of technical and vocational Education	3.21	0.74	Agreed
7	The mismatch of the academic qualification with the workplace requirement.	3.23	0.73	Agreed
8	The silo approach to knowledge development and assessment in TVET.	2.89	0.82	Agreed
9	Lack of proper training, re-training and retention of TVET teachers.	3.15	0.75	Agreed
10	The curricula in TVET institution are adjudged to be too academic and overloaded with theoretical content at the expense of basic practical and entrepreneurial skills.	3.30	0.72	Agreed
11	Lack in the development of critical skills required for the application of knowledge in a changing business and economic environments.	3.68	0.61	Agreed
12	Lack of proper supply of water/electricity for students' practical session.	3.61	0.59	Agreed
13	Lack of proper maintenance of tools and equipment in the workshops	3.53	0.64	Agreed
14	Inadequate tools/materials in the workshops/laboratories	3.35	0.71	Agreed
15	Lack of proper collaboration with industries in assessment of students practical skills.	3.24	0.70	Agreed

Table 3: Indicates that all the 15 items on the Setbacks in bridging the skill gap in TVET institution towards economic recovery in technical vocational education and training towards economic recovery in a recessed economy had their mean score ranging from 2.89-3.68, which is above the cut off of 2.50. This indicates that all the respondents agreed on the item statements. The standard deviation also indicates that the responses do not vary widely from their mean.

IV. DISCUSSION OF THE RESULT

The findings in table 1 showed that all the items in table 1 were agreed upon by vocational education lecturers as the skill gap in technical vocational education and training towards economic recovery in a recessed economy. This is in agreement with Aina, (2008) who stated that most of the students graduating from technical colleges are without the necessary skills and entrepreneurial competencies that will enable them establish and manage a small business enterprise so as to become self-employed and self-reliant after graduation. This is also in agreement with Cleary, Flynn, Thomasson, Alexander and McDonald, (2007) who signaled the following eight employability skills as being significant for graduates entering industry after leaving technical institutions:

- The capacity to effectively converse with others
- Ability to work with others in a group;
- Problem-solving;
- Life-long learning;
- Planning and organising
- Resourcefulness and enterprise skill;
- Self-management; and
- Technology skills

The findings in table 2 showed that all the items in table 2 were agreed upon by vocational education lecturers as the Strategies for bridging the skill gap in TVET institution towards economic recovery in technical vocational education and training towards economic recovery in a recessed economy. This is also in agreement with Egboh (2009) who stated that the strategies for moving the teaching of vocational technical education and training forward are:

- Re-designing of school curriculum using the thematic approach to content selection and retaining a spiral approach to content organization
- Greater community involvement in the management of schools especially Parents, Teachers Association.
- Teachers should devise means to further make the subjects more relevant to societal needs and promote the entrepreneurial opportunities of skilled persons.
- Improving the standard of facilities through the provision of modern laboratories, workshops, equipment among others.

The findings in table 3 showed that all the items in table 3 were agreed upon by vocational education lecturers as the Setbacks in bridging the skill gaps in TVET institution

towards economic recovery. This is also in agreement with Egboh (2009) who stated that the challenges confronting technical vocational education and training are:

- Limited industrial experiences and opportunities for practical on course experience.
- Inadequate guidance and counsellors to science, vocational and technology education subjects.
- Shortage of books and materials including outdated literature.
- ✤ Inadequate administration.
- Inadequate evaluation of education outcome through continuous assessment.
- Inability of teachers to make the subjects more attractive to students and more relevant to societal needs.
- Poorly planned expansion and enrolment.
- Inadequate policy and instability of education systems.
- ♦ Absence of acceptable value and ethical systems.
- Inadequate political commitment to quality education.

V. CONCLUSION

For Nigeria to come out of economic recession which it found herself, there is the need for her to recover her economy by setting strategies to bridge the skills gap of technical vocational education and training (TVET) graduates towards economic recovery in a recessed economy in Nigeria to enhance productivity and self-reliance and also reduces the over dependence of school graduates on government own jobs thereby developing in them entrepreneurial skills needed to provide jobs in this globalize and competitive society.

VI. RECOMMENDATIONS

The following were suggestions for setting strategies to bridge the skills gap of technical vocational education and training (TVET) graduates towards economic recovery in a recessed economy:

- TVET institutions curriculum should emphasize more on the work environment habit inculcation into students in order to make them abreast with the emerging trends in the world of work.
- An effective and efficient communication system should be established between the TVET institutions and industries which would facilitate meaningful coordination of the SIWES program.
- There should be adequate adequate funding of vocational technical education and training by the government.

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