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TECHNICAL VOCATIONAL EDUCATION AND TRAINING (TVET) TEACHERS TO BUILD SKILLED NIGERIA

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Abstract: - This study was carried out in order to identify means by which TVET teachers and training instructors could build a skilled Nigeria through giving options in career exploration, basic academic supports and life skills. Simple random sampling technique was used in selecting participants for this research, 500 respondents were sampled, and data were analyzed using statistical software. The study showed that active youth were heavily involved in one or more trade for skills development to mention but a few are carpentry, electrician, mechanic, motorcyclist, welding, brick-layer etc. 50.0 % of the respondents were between 26 -30 years, and explained that they chooses those trades because of low or lack of employment.100% male by gender and 39.0 % were in those trades for over 20 years and 40.0% were full time operators.One-fifths (20.0%) were engaged in commercial motorcycling which has no/less technical value addition to the nation's economy, this was as a result of high income obtained in the trade(com motorcycling). Most of the respondents (25.0%) in this research hadNABTEB(National business and technical examination board certificate), level of education, followed by 18.0% of them who had a senior secondary school education, 16.0% had National Diploma (ND), 10.0% obtain National certificate of education (NCE). The research concludes that the didactic liability for what happens to students at work remains with vocational teachers, their success depends on the readiness of teachers to offer learning opportunities to students, and the students to utilize their talents and explore their competences accordingly.

Introduction

The development of any nation depends on the social and economic contributions of her citizens. Educational, vocational and training plays a major role at promoting community and national development.TVET is a means of preparing occupational fields for effective participation in hands-on work for alleviating poverty. It also facilitates the acquisition of practical and applied skills and basic scientific knowledge(Oluwale et al. 2013). Numerous studies have pointed out that the role of vocational teachers is changing as a result of current educational reforms, which can be understood in terms of bringing education and work closer together. While vocational self-identity and trainers are essential to supporting skills development in the workforce, they are not granted high status in this role. With the global increase in secondary education enrolment, it is clear that young adults with some secondary education are entering the formal and informal labour market(Akhuemonkhan et al. 2014). This was the highest level of attainment for 48 % of the global labour force in 2010, up from 39 % in 1980 – with sub-Saharan Africa likely to rise from 32 to 48 % from 2012 to 2020 alone (McKinsey Global Institute, 2012a, 2012b). It is, therefore imperative that relevant skills are taught within the classroom that effectively prepare youth for work. For instance, the 2012 Manpower Talent Shortage Survey (ManpowerGroup, 2012) indicated that about a third of employers quote the lack of skilled available applicants as the most common reason for not filling a job, and the World Bank, the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the International Labour Organization (ILO) have all devoted special issues to examining the skills development agenda for youth (Shernoff et al., 2017). In most industrialized countries, most of the workforce that constitutes the backbone of their economy is intermediate-level workers and employees, who have learned a substantial part of their occupational skills and knowledge through the support of teachers, trainers and instructors(Grollmann, 2008). The example of Japan suggests that the excellence of their work-

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based TVET depends on the pedagogical skills of the supervisors and more experienced workers, on the strong employer encouragement to workers to engage in self-development, and in mechanisms such as job rotation and quality control circles that are a source of informal skill development (Sako, 1994). Similarly in Germany, and in the other countries that maintain a dynamic, modern apprenticeship, it is the combination of work-based TVET with the exposure to further skills in the linked institutional training of these systems that gives this form of apprenticeship an advantage over training that is merely on-the-job(King, 1993). An important lens that is often employed when looking at the quality of teachers and teacher education is that of the professionalism of teachers. There are obstacles to the professionalization of teachers in vocational education which includes the low status of vocational education and the problem of increasing the status of teaching profession (Grollmann, 2008). Thus, if a person acquires skills and the right attitude, and realistically applies the skills and right attitude for the benefit of his/her society, it means that education has helped transform the person for better.Education technical or non-technical is a driving force for human development, social mobility and nationaltransformation. It is a universal concept that differs from society to society (Okoye & Okwelle, 2013). Thus, the system of education needed for the national transformation agenda the education system that should place stress on knowledge, skills and values that are based on Nigerian setting in which the learners will live and work(Guthrie et al. 2009). The education type which emphasis is given to knowledge, skill, value and product (Okoye & Okwelle, 2017). Since no educational System could riseabove the quality of its teachers, teacher education shall continue to be given major importance in all educational planning and developmentamong other things to:

- Provide high motivated conscious and efficient teachers for all level of educational system in Nigeria.
- Human Development through Capacity Building.

Skilled	+	Institution/organizations	+	Purpose	\vdash	Technological
individual	-		-		L/	capability

Figure 1: Adopted Model expressing the creation of technological capability (Modified Enos (1991)

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Cognitive skills	Non- cognitive skills	Specific and technical skills		
Basic cognitive	Openness to learning	Language(mainly English)		
skills				
Analytical &	Communication(oral&	Basic business skills		
Critical thinking	written)			
	Work habit (punctuality,	ICT skills, Often specific to context but		
	application.etc),Team	with both a practical and theoretical		
	work, Personal integrity	prospective		
	Leadership,			
	entrepreneurship			

Table 1: Formal& informal skills required

Source: (Jayaram and Engmann, 2013)

These indicate that the skill required by employers, both formal and informal, shown in Table 1 ISESE project findings (R4D, 2013) confirm what is known from other studies on the skills, especially those to do with the informal economy, with teacher attitudes, and in connection between general and vocational secondary education. Major conclusions of this study are as follows: Employers hunt for Cognitive, Non-cognitive, and Technical Skills (Oluwale et al., 2013). All these skills are important both formal and informal, but non-cognitive skills are more essential in economy as most workers are self-employed and have to hold lots of tasks.

- Technical skills (electrician, mechanics, computer, welding and carpentry,) are functional at secondary level if related to demand of labor market. Generally technical skills cost more to provide than academic secondary education.
- Even where technical skills are important, vocational education is still considered a second-class option.

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 Transferable skills are applicable to existing skills, chiefly in today's dynamic and fastchanging job market

TVET Teachers in Different Educational Context in Nigeria

In order to understand the needs and requirements of vocational teachers, it is necessary to intricate on some of the various ways in which they perform. Based on the limited information available from the studies, it is feasible to make a distinction the following fundamental profiles of teachers, trainers and instructors in technical vocational education and training (Ekpenyong& Edokpolor, 2016).

- Teachers or lecturers working in formal school or collages providing instruction in vocational courses;
- Instructors and laboratory assistants working in school or college in vocational laboratories who teach with a high degree of autonomy who act as assistants to other vocational teachers;
- Trainers, tutors and others in enterprises who integrate training and education functions into their jobs to varying degrees (for example, from incidental to full-time teaching of trainees and apprentices) – in dual systems of vocational education, for instance, thisfunction is often separated from human resource development functions within some companies, while in others this distinction is not strongly maintained(Adamu, 2016)
- Instructors and trainers working in labour market training institutions supported by governments and public authorities, with a strong focus on social inclusion and basic occupational competences;
- Instructors and trainers working in employers' organizations, such as chambers of commerce, sectoral training institutions or privately owned training companies and providers that focus on upgrading technical competences, training in communication skills, etc. (Grollmann & Rauner, 2007).

Methodology

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The methodical concept adopted for this study was based on what has been reputable in literature on technological capacity building skills that assess the competencies of training instructors in vocational education and training programmes in Nigeria in relation to skilled development. In this study three states were chosen (Katsina, Kano, and Kaduna) in the Northwestern part of Nigeria. The three states were randomly selected.Research tool were set of structured questionnaires designed to collect information (Ertmer et al. 2012).The questionnaire was designed to obtain information about available capacity building skills such as commercial motorcyclist, carpenters, mechanics and electricians, welder, painter and etc in the above mentioned states of Nigeria. A total of 600 questionnaires were distributed randomly among them, 500 questionnaires were completed and used in this study. Educational/vocational backgrounds, duration and type of operation, reasons for engaging in such job/skill/profession were identified also. Data were analyzed using IBM SPSS version 20.

Results

It is of great benefit to know demography and level of education of various TVET trainees and students in this study. Table 2&3below gives qualification and ages of different trainees/students who participate in the study.

Qualification	Number	Percentage
BSc	30	6.0
HND	70	14.0
NCE	50	10.0
ND	80	16.0
SSCE	90	18.0
NABTEB	120	24.0
PSLC	60	12.0
Total	500	100.0

 Table 2: Distribution of the Respondents based on Educational Level

Table3: Distribution of the Respondents According to Age

Age(years)	Number	Percentage	
25& below	33	7.1	

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26 - 30	250	50.0
31 - 35	89	17.3
36 - 40	68	13.6
Above 40	60	12.0

Source:(Okwelle and Deebom, 2018)

Table 2&3 above gives the respondents classification based on their level of education and age. Table 2shows the respondents distribution according to their level of education. 25.0% obtained NABTEB(National Business and Technical Examination Board) Certificates, those who have Senior Secondary School Certificate (SSCE) constitutes 18.0% of the respondent.16.0% hadNationalDiploma (ND) level of education. Whereas degree holders (BSc) had the lowest number (6.0%). Table 3 shows the distribution of respondents according to their age groups. Itshows that majority of the respondents (50.0%)were between 26 - 30 years of age. Furthermore, 14.0% were between 36 - 40 years.12.0% of the participants in this research wereAbove 40 years of age respectively.

Variables	Katsina	Kano	Kaduna	Total	Total in(%)		
Trade/Craft							
Carpenter	15	20	15	50	10.0		
Co motorcyclist	40	30	30	100	20.0		
Electrician	10	20	10	40	8.0		
Mechanic	15	15	20	50	10.0		
Battery charger	15	15	10	40	8.0		
Blacksmith	10	20	10	40	8.0		
Brick layer	10	20	20	50	10.0		
Welder	20	20	10	50	10.0		
Painter	10	30	10	50	10.0		
Vulcanizer	5	20	5	30	6.0		
Gender							
Male	150	210	140	500	100		
		Experience	(years)				
5& below	11	8	13	32	6.4		
6-10	5	15	25	45	9.0		
11-15	20	40	70	130	26.0		
16-20	22	18	30	100	20.0		
Above 20	30	53	90	193	38.6		

Table 4: Background of Capacity Building skills

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Operation type						
Full-time	70	130	100	300	60.0	
Part-time	40	100	60	200	40.0	
Reasons for skill engagement						
Nothing to do	80	120	50	250	50.0	
Low income	30	50	70	150	30.0	
New technology	20	30	50	100	20.0	

Source : (Oluwale et al. 2013)

Socio–economic background of the respondents were Identified in table 4 above, where by all the respondents were male, and majority of them (60.0%) were full time workers and comm. Motorcyclist had the largest number among the respondents,(38.0%) of the respondents are experienced above 20 years. It can also see that 50.0% of the respondents were engaged in to this skills/job due to lack of employment which could either be government or private.

Discussion

From the result, it shows various qualifications of different trainees in the TVET, where by those that have SSCE and NABTEB as their major qualifications carries the highest number of the participants in this research, followed by graduates of national diploma, higher national diploma and national certificate of education(NCE). Degree holders were found to have the least number among the participants, it also highlighted that (70.0%) of the participants are between 25-35 years of age particularly youth. This indicates that most of the people, primarily youths, who have some capacity to be trained formally for jobs. In addition, not less than 95.0% of the respondents can read and write. These finding is line with Sambu&Simiyu (2013) who found that access to knowledge and skills to all people regardless of gender, age, race or location is enormously important. Education and training must be all-inclusive and reflect the vastly diversified present economy and various fields of human-power needs. In a similar study by(Pavlova & Maclean. 2013) also indicated thatthrough а revisedpolicy, Australiangovernment with its industry led TVET has diversified qualifications with occupations(Bhurtel, 2015).Socio-economic background of the respondents were identified in

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table 4 above, where all the respondents (100%) were male by gender, and majority of them (60.0%) were full time workers. Largest number of respondents being from Kano (42.0%) followed by Katsina (30.0%) and Kaduna (28.0%). Largest number of respondents obtained was due to Kano being the most densely populated state in the north – western part of Nigeria. Also it shows that as many as (99.0%) had learnt a trade or craft for a living. The respondents experienced of the trade mostly ranging between 15 -20 years and above. These respondents are formally engaged in trades and crafts such as mechanic, carpentry, bricklaying, and paintinghas (10.0%) each of the total respondents, whereaselectrician, battery charging, and black smiting were (8.0%) each, vulcanizing having the least (6.0%) and Comm. motorcycling had the largest number (20.0%) of the total respondents in this study. This is in line with similar study by Okwelle (2016) who stated that "Currently, the technology driven economy requires participatory job ethics in which individuals are rated on what they can do practically" The main reasons for chosen trades were low income and lack of equipment (30.0 and 50.0%, respectively). These were closely followed by lack of business or clientele. Other respondents indicated that they dropped out of school as a result of financial problems. This shows that a large proportion of the educated youths that are without office jobs are involved in commercial jobs that are of no value addition to the nation. Also, described by Sambu and Simiyu (2013) who reported that "there is a link between poverty reduction and skills training and increased growth, productivity and innovation, in particular for the informal sector (Fluitman 2002)"

Conclusions

As a member of TVET family, I believe in capacity building through skills development, Nigeria having lots of resources, it remains very imperative for the people particularly youth and TVET teacher/instructors to take it seriously with vocational education programmes and sensitization through awareness campaign and enlightment. Skill workers are needed and are taking a big portion of whole workforce in a nation, it is necessary for a country to think seriously about TVET and its major roles in national development.

Recommendations

There should be a greater collaboration between education and employment particularly selfemployment in order to help the youths acquire the necessary skills. Entrepreneurship development should become an essential part of tertiary institutions' curriculum. Teaching

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prevocational subjects in the primary and junior secondary schools should be taken seriously to raise the interest of students for vocational programmes there should be a stronger linkagebetween the knowledge institutions and the craftsmen. Acquisition of practical skills should be stressed on the final outcome.

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