REENGINEERING TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING

TOWARD ECONOMIC AND INDUSTRIAL DEVELOPMENT IN NIGERIA

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Abstract

Technology education is of immense importance to present day Nigeria,because of its potentials to produce the needed skills, knowledge and competences required to steer the engine of development. Therefore, the paper examined: challenges confronting TVET institutions in developing employees; responsibilities expected of industries in helping TVET institutions and mechanism for reengineer TVET programme. Descriptive survey research design was employed in carried out the studs. data were obtained using structured questionnaire from 197 TVET lecturers/instructors and TVET graduates in Lagos State. The collected data were analyzed using mean and standard deviation to answer research questions while independen1 samples 1-test was employed to test null hypotheses at 0.05 level of significance. The reliability coefficient for the study was .88 using Cronbach alpha reliability tests. The findings revealed: inability of TVET institutions to track employment destination of their graduates, consequently, valuable feedback inputs to be factored into the review of curricula and training packages are lost: There is no significant difference between the mean responses of respondents regarding responsibilities expected of industries by gender and working experience: the mechanism for reengineering TVET programme include that industrial policy should shifts to align education systems with economic development towards effective manpower development. Based on the findings,it was recommended that government should increase funding to support TVET,while TVET institutions must deliver flexible and demand-driven training.

Keywords:Reengineering,Technical and Vocational Education and Training, Employees,

Economic,Industrial Development

Introduction

Education and training are central to the achievement of economic and industrial development. Development is the ability of man to conquer his environment and utilize it to his advantage. It involves the development of tools. skills and the mobilization of required resources (Oluwagbohunmi, 2015).Technical Vocational Education and Training (TVET) is used as a comprehensive term referring to those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of awareness, knowledge, skills and attitudes relating to occupations in various sectors of economic

Over the years, successive government has formulated policy and

and social lifc (UNESCO. 2015).The development of technical and vocational skills is vital to economic development for two important reasons. First, technical and vocational skills are needed for enterprise productivity and profitability,as well as for national productivity and wcalth creation. Without the necessary skills and enterprise, national growth can be seriously hobbled. Technological innovation and economic growth fuel the demand for skilled workers. The need for technical and vocational skills are increasing because of a convergence of factors technical change.changes in work organization.growing cconomic openness and competitivencss,and capital decpening (increasing capital per worker). The second reason is because it is essential for individual prosperity. Acquisition of relevant skills enables the individual to increase productivity and income. This is especially important for those who are secking out a living in the informal sector of the economy (Yusuf & Soyemi,2012).

Technical Vocational Education and Training (TVET) is one of a recognized and effective process by which quality,up-to-date, information, literate and knowledgeable workers are prepared,trained for sustainable society. TVET, as part of lifelong learning. can take place at secondary, post-secondary and includes work-based learning and continuing training and professional development which may lead to qualification. TVET is the heart of the economy of any nation.Just as the wheel revolves round the hub,the economic sector of Nigeria rotates round TVET. Solomon & John(2013)observed that the wealth and prosperity of a nation depends on the effective utilization of its human and material resources through industrialization industries open up possibilities of greater fulfillment for the individuals.

budgeted for TVET but there was nothing to show for it. The government appears to be mcrely paying lip service to it. If TVET is given attention by the government and is practiced the way it is done in other countrics such as Malaysia, China, India, Canada,U. S. A. and Germany, it would pave way for a radical change in Nigeria's entire economy and industrial development and this would enhance sustainable scientific and technological development.The present state of technical vocational education and training in Nigeria is not very encouraging. The problem of lack of or inadequacy of expericnced qualified TVET personals, workshops/laboratorics or poorly equipped, training facilitics such as machines, equipment, power tools, hand tools and consumable materials is still very pressing.

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TVET is besieged with a myriads of problems which includes among others the problem of experience technology teachers. Even though the educational system is confronted with the problem of inadequate trained personnel at all levels, technical institutions are more affected because they do not have enough avenues to produce technical teachers. Even where these colleges are available,Nigerians will not be willing to accept admissions because of the misconception by the public that vocational education is for those who cannot cope with academic programmes. One mandate of TVET institutions is manpower production for the industries.According to Imandojemu (2001). development in TVET suggest training purposely planned for employees or persons for efficiency and effectiveness,and maximization of profit or full benefit for the enterprise (industry, commerce, or agriculture). Okafor(2011)explained that TVET is concerned with qualitative technological human resource development directed towards a national pool of skilled and self-reliant workplace.Due to lack of shortage of trained teachers many untrained

and unqualified individuals are employed as teachers and workers al the various levels of education in Nigeria. This is against the recommendation of the National Policy on Education(FRN,2013)that recommend that teachers must be professionally qualified with minimum qualification with NCE certificate before is employed into the teaching profession Nigeria.

The industries are the consumer of TVET products,however,TVET does not seem to be getting support from industries in the arca of funding and provision of opportunities for internship and offering their expertise in the arca of training.One of the objectives of any country is industrial development,since economic and industrial development of a nation is inseparable and indispensable with TVET (Musa & Okorieocha,2012).Yusuf & Soyemi(2012) affirmed that TVET skills are vital to economic and industrial development because they are needed for industry productivity and profitability as well as individual's prosperity.In the opinion of Budu-Smith (2005). without skilled manpower produced by TVET institutions for industry,commerce and agriculture, national development would virtually grind to a standstill. Many studies have also suggested that TVET is an instrument for industrial development and economic growth (Nsiah-Gyabaah,2009;Okorieocha & Duru, 2013;Ansah & Kissi,2013;Ezeani, 2014;Scott,2014).It is no doubt that TVET has been faced with issues and challenges in Nigeria that are affecting the latent contributions of TVET for industrial development.Amongst the challenges and Issues are policy issues,curriculum reforms. TVET industrial link, and government attitude to funding TVET. Ansah & Kissi (2013) affirmed that the major challenge facing TVET implementation is the lack of unsatisfactory policy framework, and thercfor stated thal there is need to put in place some mechanism such as good policy framework that will help promote TVET and its curriculum design and delivery to meet the labour market.

Mechanism can be referred to as fundamental processes involved in or responsible for improving TVET,in another view mechanism is a way of acting. thinking,or behaving in such a way that will promote TVET in a specified way. Chukwuedo& Omofonmwan, (2015)affirm that there is need for TVET-industry partnership.in order to produce the needed industrial manpower that will sustain the growth and functionality of the industry. This consequently explains that TVET-industry partnership is necessary as a mechanism for developing industrial and technological manpower via TVET for national development. Yusuff & Soyemi (2012) and Scott (2014) stated that TVET can be re-engineered for effectiveness for the industry through functional partnership. Reengineering therefore can be explained as a systematie starting over and reinventing the way a program institution,or a business process, gets its work done. It is a fundamental rethinking and radical redesign of occupational process to achieve dramatic improvements in critical measures of performance.Reengineering TVET involves the examination and redesign of occupational processes and workflows in TVET institutions.Reengineering TVET is the process of changing the way TVET institutions carry out their responsibility so that it can be done in better way to accomplish the goals and philosophy of TVET programs.

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Statement of the Problem

The quality of graduates from Nigeria educational institutions has been a source of concem to employers of labour. The educational system seems to be malfunctioning thereby ereating problem of scientitie and technological manpower

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production which is getting to a crisis level. This hasresulted to graduates not getting jobs,raising unemployment as the industries cannot find necessary talents. This is because of the many problems which include limitation of knowledge about the importance of the contributions of vocational and technical subjects to technological development of the country, government attitude to funding, and policy reform and industry partnership in developing manpower requirement for industries. This aspect of education is increasingly seen as a master key to industrial development,poverty alleviation and social cohesion. TVET is meant to prepare the learners with the right skills and values required to be self-reliant and /or be employed. However, this may not be feasible in the nearest future because of the slow pace of socio-economic,scientific and industrial development in the country.

Employers of labour are more interested in those who have acquired appropriate skills for job fulfillment. It is a paradox that large numbers of university graduates go jobless for years while service and industrial organization complain of lack of skilled workers. Many graduates from Nigeria universities seem to lack technical competence and are not well equipped with complimentary life skills such as a problem solving ability, reflective and critical thinking, interpersonal and team skills. Other desirable skills include effective communication,character,integrity and high level of personal ethics, self-discipline, organizing skills and abilitics to translate ideas into action.Following the inability of Nigerian government to effectively and continually fund TVET,issues concerning inadequate facilities increase periodically. This situation worsened because the industries that are the consumers of the products of the institutions seem not to be willing to collaborate in the areas of funding and participation in TVET curriculum and workplace training opportunitics. This has led to the production of ill-equipped graduate who do not possess the practical skill needed in the industries for job placement. This situation may have led to frustration, lawlessness, kidnapping, robbery, prostitution, drug abuse and trafficking and many other anti-social behaviour in the country,hence the need to reengineer TVET towards economic and industrial development in Nigeria.

Purpose of the Study

The purpose of the study is to reengineer Technical and Vocational Education and Training towards cconomic and industrial development. Specifically, it sought to ascertain:

i. The challenges confronting TVET institutions in developing employees for cconomic and industrial development;

ii. if the responsibilities expected of industrics in helping TVET institutions towards developing employees for economic and industrial development differ by gender and years of experience and

iii. The mechanism for reengineering TVET programme towards economic and industrial development.

Research Questions

The following are the research questions that guided the study

i. what are the challenges confronting TVET institutions in develoing employees for economic and industrial development?

ii. does the responsibilities expected of industries in helping TVET institutions towards developing employees for economic and industrial development differ by gender and years of experience?

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iii. what are the mechanism for reengineer TVET programme towards cconomic and industrial development?

Methods

The research employed descriptive survey research design.The population for the study was defined as TVET graduates working in industrics and lecturers/instructors in TVET institutions in Lagos state. To ensure that a representative sample was selected from the population,the researchers defined specific selection criteria used in slecting participants for the study. TVET lecturers/instructors with a minimum of ten years teaching and research experience and graduate with minimum of five years were considered the base selection criteria for participants for the study. Hence, a total of two hundred and thirty three comprised of 123 lecturers and 110 TVET graduates were first listed as potential participants for the study having met the base selection criteria. After several considerations and review the list was reduced to a total of two hundred and ninc participants' selected 113 lecturer/instructors and 96 TVET graduates. Participants were purposefully selected to ensure that only those with adequate knowledge related issues were chosen, and also to ensure that quality data was generated.The instrument for data collection was a structured questionnaire. The instrument had four sections A to D. Section A sought information on personal data of the respondents such as status,gender and place of work. Section B, C & D sought information on three rescarch hypotheses. The instrument used is a closed ended questionnaire, validated by two lecturers from Department of Science and Technology Education,University of Lagos and a training officerform industrial training funds.Ojota-Lagos to ensure that instrument mcasure what it tends to mcasure .The internal consistency of the instruments was determined using Cronbach Alpha,with an alpha valuc of a =.88.The instrument was administered to the respondents through research assistants, and personal contact. Out of 209 questionnaires administered,197 were duly filled and returned. These represented 94% rate of return. Data gencrated from the return questionnaire were analyzed using mean and standard deviation, while independent sample t-test statistics was used to test null hypotheses at .05% level of significance,using SPSS version 16.0

Results and Discussion

Responses of TVET teachers and TVET graduates who are working in industries regarding challenges confronting TVET institutions in developing workforce for economic and industrial development

Table 1: Mean and SD of respondents with respect to the challenges confronting TVET institutions in developing workforce for economic and industrial development N=197

CHALLENGES

NO	CHALLENGES	Mean	SD
1	Inability of TVET institutions to track employment destination of their graduates,consequently, valuable feedback inputs to be factored into the review of currieula and training packages are lost.	3.91	81
2	Mismatch between training and market skill demand which is as a result of lack of collaboration between the training institutions and industries	3.69	46
3	Low quality training,with undue emphasis on theory and certification rather than skill acquisition and proficiency testing.	3.80	61
4	Lack of training materials and poor attitude of trainees are some of the factors that reduce the effectiveness of training in meeting the required knowledge and skill objectives.	3.84	85

5	Funding to training institutions are grossly inadequate because unit cosis are higher in TVET institutions due to expensive training equipment,toolsand materials	3.79	40
6	Negative perception of TVET as career path for less academically endowed and discrimination against graduates of technical institutions	3.71	45

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Absence of partnership between training institutions and industry and poor linkage between formal 3.69 46 and non-formal TVET.

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9 TVET programmes seriously suffer ill-equipped or inadequate workshops in specific and facilities 3.58 in gencral. 67

9 TVET programmes seriously suffer ill-equipped or inadequate workshops in specific and facilities 3.58 in gencral.

10 Societal respect for the academics and disregard for mechanics lead to mismatch between training 3.69 46 and labour.

Table 1 presents the mean and standard deviation of TVET teachers and TVET graduates who are working in industries regarding the challenges confronting TVET institutionsin developing workforce for cconomic and industrial development.The close look at the mean score of each item shows that respondents agreed with all the challenges identified confronting TVET institutions in developing workforce for economic and industrial development. Among which include: inability of TVET institutions to track employment destination of their graduates, consequently,valuable feedback inputs to be

Table 1 presents the mean and standard deviation of TVET teachers and TVET graduates who are working in industries regarding the

factored into the review of curricula and training packages are lost; mismatch between training and market skill demand which is as a result of lack of collaboration between the training institutions and industries;absence of partnership between training institutions and industry and poor linkage between formal and non-formal TVET: poor implementation of staff development training policy, insufficient laboratory and workshop equipment. The following items on the scale had mean values ranging from 3.58 to 3.91 which is above the cut-off point of 3.50.

Table 2:1-test result of gender difference in respondents regarding responsibilities expected of industries in helping TVET institutions towards developing workforce for economic and industrial development

Gender	N	X	SD	t-cal.	P
Male	126	3.85	.56	.333	.741
Female	71	3.67	53		

In order to determine gender difference regarding responsibilitics expected of industries in helping TVET institutions towards developing workforce for economic and industrial development,an independent sample t-test was conducted to compare the mean score of male and female TVET teachers and TVET graduates in industries.The independent sample t-test scores were presented in Table 2.As seen in Table 2, male TVET teachers and TVET graduates working in industries had relatively higher mean scores than the

female TVET teachers and TVET graduates working in industrics. However, this difference in their mean score was not statistically significant between the males' and females' means score on responsibilities expected of industries in helping TVET institutions towards developing workforce for cconomic and industrial development. (t=.333,p>05).The result show that gender does not influence male and female TVET teachers and TVET graduates working in industries.

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Table 3: ANOVAresults of working experience of respondents regarding responsibilities expected of industries in helping TVET institutions towards developing workforce for cconomic and industrial development

Years of experience	N	X	SD	F	P
0-5(1)	38	3.73	.64		
5-10(2)	54	3.84	.85	.694	.501
10 years and above (3)	105	3.67	.46		

One way analysis of variance (ANOVA) was employed to compare the mean scores of working year of experience. The working experience was divided into three: 0-5, 5-10. and 10 and above. The mean scores, standard deviation and ANOVA results of the working experience were shown in Table 3 above.

As shown in Table 3, respondents within 5-10 years of working experience have mean score of 3.84 higher than 0-5 and 10 years above with mean scores of 3.73 and 3.67 respectively.However,there were no statistically significant differences between the working experiences mean scores on responsibilitics expected of industries in helping TVET institutions towards developing workforce for economic and industrial development.(F=.694, p>.05). In order words, TVET graduates in industries and teachers from TVET institutions were not influence by working experience.

.694,p>.05).

Table 4: t-test statistic of mean responses of the respondents with respect to the mechanism for reengineering TVET programme towards economic and industrial development=197

S/N	Mechanism for Re-engineering TVET Program Towards Economic and Industrial Development	x	SD
1	It is necessary to have industrial policy that will guide TVET institutions towards manpower development for industrial growth	3.78	.88
2	Dual system of TVET training should be adopted to allow learning to take place in a vocational school and in a private owned but properly registered businesses or entrepreneurship agency concurrently	3.89	.77
3	Industries and TVET institutions should establish the criteria for evaluating the extent of practical skills to be acquired by students	3.85	72
4	TVET programs requires collective efforts and strong commitments on the part of parents.		

	educational institutions/training providers.employers and government	3.72	.88
5	Industries,TVET institutions and other stakeholders should jointly involve in formulating the curriculum of TVET program for manpower development	3.89	.76
6	Government need to determine appropriate level(s) of TVET stakeholders involvement in developing manpower in meeting industrial development	3.98	.95
7	Establish a criteria to which non-formal and formal TVET programs should partner in developing workforce meeting industrial development	4.00	.58
8	Establish benchmarks through which personnel in industry and TVET lecturers should collaborate in developing workforce for industrial development	3.82	.81

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9	Government should encourage private participation in skill training of human resource and manpower development for rapid socio-economic development of the nation	3.69	.68
10	Basic workshop subjects such as metalwork,woodwork,technical drawing,auto mechanics and basic electricity should be made compulsory at secondary level.	3.71	61
11	Industrial policy should shifts to align education systems with cconomic development towards effective manpower development	3.81	48
12	Government should increase funding to support TVET.while educational institutions must deliver flexible and demand driven training	4.00	63

Table 4 shows the mean responses of the respondents regarding mechanism for reengineering TVET programme towards economic and industrial development.The mechanism for reengineering TVET identified through the study among others includes that: It is necessary to have industrial policy that will guide TVET institutions towards manpower development for industrial growth; dual system of TVET training should be adopted to allow lcaring to take place in a vocational school and in a private owned but properly registered businesses or entreprencurship agency concurrently: Industrics,TVET institutions and other stakeholders should jointly be involved in formulating the curriculum of TVET program for manpower development: Industrial policy should shifts to align education systems with economic development towards effective manpower development and Government should increase funding to support TVET, while educational institutions must deliver flexible and demand-driven training. With means values ranging from 3.69 to 4.00 above the cut-off point of 3.50, it was evident that TVET graduates in industries and teachers from TVET institutions considered mechanism for reengineering TVET programme towards economic and industrial development.

Discussion of Findings

Reengineering TVET towards economic and industrial development was the main goal of the study. Findings from the results presented in Table 1, revealed that TVET lecturers in educational institution and their graduates working in industries agreed that there were several challenges confronting TVET institutions in developing workforce for economic and industrial development. The findings in respect of the challenges identified were in congruent with the findings of Reko & Maxwell (2016)who emphasized that most of our TVET institutions lack the necessary training facilities to train people in vocational and technical skills. Authors explained further that this mostly affects TVET institutions that they lack the skilled manpower and equipment to impart knowledge into their students. The study is also in agreement with study carried out by Chinedu & Olabiyi (2015) and Ikponmwosa (2016)who found out that there is issue of misappropriation of funds specifically disbursed for the sole purpose of implementing TVET programs. Authors emphasized that this has led to ill-structured programmes with unsuitable content focusing on skill areas already vastly populated. Hence, resulting in the production of unskilled workers with little or no knowledge of the vocation they were trained for.Therefore,it becomes necessary to reengineer TVET programs to focus on skills and vocational areas that have not been fully explored in order to provide skills to youth across all sectors of the nation's economy.

Authors added that administrators of these programmes across federal,state and local government areas would need to develop working plans that draws from the results of research to appropriate funds give out for TVET.Furthermore,the findings of the study was in agreement with Chinedu & Olabiyi (2015) and Ikponmwosa (2016)who perceived that the regulatory agencies such as NABTEB, NCCE and NUC are not carrying out their statutory responsibilities as they ought to in ensuring TVET institutions comply with the policy of effective implementation of curriculum. To elucidatc this Reko & Maxwell (2016)in a survey carried out to determine the technical and vocational education in Nigeria:issues. challenges and a way forward found out there is mismatch between training and market skill demand which is as a result of lack of collaboration between the training institutions and industrics and absence of partnership between training institutions and industry and poor linkage between formal and non-formal TVET are among the challenges TVET institutions are facing towards developing workforce for industrial development. Reko & Maxwell stressed further that Nigerians have since imbibed the culture of showing respect only to those with white collar jobs in the society.

Authors explained that most craftsmen and artisans who practice vocations are usually seen as school drop outs or never do wells. This attitude has discouraged a lot of young people from venturing into technical education (Ikponmwosa, 2016). Other challenges confronting TVET institutions in developing workforce for economic and industrial development according to George,Udeme & Stella (2017) include Nigerian value system, apathy of political holders/law makers,staff training and retention, low information and communication technology compliance curriculum,and involvement of TVET non-professionals in TVET policy decisions.

Regarding the responsibilitics expected of industries in helping TVET institutions towards developing workforce for economic and industrial development as shown in Table 2. The findings from this study revealed no significant difference between male and female TVET teachers and TVET graduates in industries. This suggests that respondents have the same perception about the responsibilities expected of industries in helping TVET institutions towards developing workforce for economic and industrial development. This finding is in consistent with other studies which found no significant difference in responsibilities expected by industries in helping TVET institutions towards workforce development. Furthermore,the study found no statistically significant difference between the working experience mean scores on responsibilities expected of industries in helping TVET institutions towards workforce development. This means that TVET teachers in institutions and TVET graduates in industries were not influenced by working experience regard responsibilities expected of industries towards workforce development. These results suggest that respondents in respect of their working experience were similar in their expectation fromm industries in helping TVET institutions towards workforce development.

The findings in respect of this research question is inagreement with the findings of Applied Education Systems and Technologies Associates (AESTA,2017)in their study carried out on three key reasons why TVET needs to strengthen links with industry found out that industry participation in TVET curriculum and workplace training opportunities is the primary way of developing workforce for economic and industrial development. AESTA explains

that if employers were not involved in the process of the specific skills attitude and behaviors required by graduates,they are less likely to see any relevance between TVET and their skills needs and constant feedback from industry is the primary input to updating curriculum along with graduate input on the relevance of their institution learned skills to performance requirement. The finding is also in agreement with Reko &Maxwell(2016) who observe that links between industry and TVET institutions, authors opined twenty to forty per cent of TVET institutional revenue is generated by the entrepreneurial activities of the individual institutions. This is often seen as a part of beneficiary based financing of TVET.It assumes that all parties benefit to some degree and,hence,can support TVET to the corresponding. If Industry sees no benefitin the linkage,they will not support such a program and legislation will be largely incffective.

The result of the study with respect to mechanism for reengineer TVET programme towards economic and industrial development was prescnted in table 4. Findings from the results as shown revealed that TVET lecturers and TVET graduates in industries agreed with the identified mechanism to reengineer TVET programme. The result is congruent with the reports presented by Chinedu & Olabiyi (2015) which stressed that administrators with vast experience and knowledge of vocational education should be selected to administer TVET institutions this is necessary to curb issues of losses and waste that leads to the non-implementation of established training programmes the way they were originally planned and conceptualized. Chinedu & Olabiyi added that qualified instructors and trainers (sector-specific with adequate experience and teaching qualifications) should be recruited to ensure that up-to-date content is taught to students in TVET institutions. The finding is also in agreement with

Chukwucdo,& Omofonmwan (2015) who emphasized that TVET policy reform issues and TVET-industry partnership are viable mechanisms for cconomic,industrial and technological manpower development for national development via TVET programmes in Nigeria. Authors added that stringent policy document should be prepared by government and TVET stakcholders to properly harmonize TVET programmes in Nigeria and industrial/technological advancement. Furthermore,the finding of the study is also in line with the opinion of Ibeneme (2009) who affirm that no nation can develop beyond the level of human resources available in that nation. For Nigeria to develop technologically via the industry, appropriate training needs to be put in place promptly and training systems need to respond quickly to industrial demand. Chincdu & Olabiyi (2015) suggests that government need to encourage private participation in skill training of human resources and manpower development and basic workshop subjects such as metalwork, woodwork,technical drawing, auto mcchanics and basic electricity should be made compulsory at secondary level. This requires amongst others, but most fundamentally,TVET policy reform and industry partnership as the fundamental mechanisms for developing manpower requirement for industrial security/development, vis-à-vis national development. Skills standards must be set by those who employ TVET graduates.Without strong links with employers at the institutional level. TVET will be much less effective

To reengineer TVET programs, Olabiyi& Chinedu (2018) suggests that training in TVET institutions should be

linked to economic development strategies by analyzing the skill implications of economic investments. Olabiyi & Chinedu emphasized that one of the most effective strategies to reengineer TVET programs is to involve employers closely in directing and evaluating the training system.Authors stressed further that deeper employer involvement requires recognizing employer time constraints, building employer participation in governance, and using enterprise associations to build public-private partnerships,more flexible training supply is also important. Also. TVET courses can be made more flexible through short-term programs; modular content; local accountability; and continuous, lifelong training.

Conclusion

The present problem with TVET will persist unless appropriate measures are put in place to improve on the challenges confronting the programme. TVET appears not to function very well because of inadequate necessary training facilities and insufficient funds which is primarily responsible for agences-such as NABTEB. NCCE not carrying out their statutory responsibilities. Moreover, TVET appears not to function well as a result of Nigerian value system,apathy of political holders/law makers, staff training and retention,low information and communication technology compliance curriculum,and involvement of TVET non-professionals in TVET policy decisions are some of the challenges confronting TVET institutions in developing workforce for economic and industrial development. It was also established that industries participation in TVET curriculum and workplace training opportunities is the primary way of developing workforce for economic and industrial development and constant feedback from industry will serve as input to updating curriculum along with graduate input on the relevance of their institution learned skills to performance requirement. Policy reform and industry partnership is fundamental mechanisms for developing manpower requirement for industrial security/development, vis-à-vis national development and skills standards must be set by those who employ TVET graduates.

Recommendations

It was recommended that: stringent policy document should be prepared by government and TVET stakeholders to properly harmonize TVET programmes in Nigeria, TVET-industry partnership are viable mechanisms for economic,industrial and technological manpower development, governments and all levels, corporate bodies and individuals must begin to take it more seriously in order to create a more prosperous and economically viable Nigeria, and skills standards must be set by industries and business organization who employ TVET graduates.

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