

IMPROVING ELECTRICAL/ELECTRONICS SKILLS ACQUISITION THROUGH PARTNERSHIP BETWEEN INDUSTRY AND TECHNICAL VOCATIONAL TRAINING INSTITUTIONS FOR INCREASED EMPLOYMENT OPPORTUNITIES IN NIGERIA

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Abstract

Technical and vocational education as a skill-oriented enterprise has been recognized world over as a potent tool for empowering people; youths in particular through job creation for sustainable economic development and livelihood of participants. Technical and vocational education is capital intensive because of the machines, tools and materials required for execution of this type of education. In Nigeria, technical and vocational education has experienced a transparent set-back due to lack of enough finance. The government alone cannot effectively finance technology and vocational education, hence the need for private participants in running and financing of vocational education. The paper identified the significant roles played by private partners in financing technology and vocational education especially helping to train youths in skills acquisition in electrical electronics and other skill areas in technical and vocational education. The closer ties between the government and private institutions would give credence to provision of enough funds to execute effective skills acquisition in technical and vocational education enterprise.

Introduction

The importance of saleable skills acquisition especially among the youth in the contemporary society cannot be over-emphasized. Government at various levels and private industries are deeply concerned in youths acquiring skills that would make them employable in order to boost their economic relevance and reduce insurgencies. Thus the skill needs of youths today is enormous and cannot be tackled by the skill based institutions without help from patriotic private establishments. It is extremely difficult for the government to bear the burden of funding technical and vocational education.

From the foregoing, some educators had advocated for private participation in vocational education. Aina (2005) suggested that other sources of funding vocational and technical education should be sought and thus develop appropriate partnership with organized private sector and mobilize local communities in funding education. This idea was supported

by Okoro (2007) who posited that non-governmental organizations should be accorded full support by governments and industry to assume increasing responsibility in adult and continuing professional education of youths. This government needs to institute a liaison between training institutions and public private partners to finance technical and vocational education to enable the teeming youths gain marketable skills to increase their employment opportunities in self employment in employment in recognized institutions.

This paper discussed the concepts of technical vocational education, skills acquisition and industries, skills acquisition and employment opportunities, challenges facing TVET, and the benefits of private public partnership in TVET, summary and conclusion.

TVET and Employment Opportunities

Technical and vocational education is basically a utilitarian educational system tailored towards the training of youths for skills acquisition that would subsequently enable

them secure employment or become self employed in the society. With the ever increasing scientific and technological improvement and development, technical and vocational education has become paramount and basic in training youths for skills acquisition. Technical skilled workforce is the bedrock of genuine productivity in all sectors of economy. Technical marketable skills are therefore the engine that propels productive occupations in the contemporary society.

Many nations had devised some means of utilizing vocational education to foster youth employment. Umar (2012) reported that China, Japan and Australia introduced compulsory policy permitting vocational education subjects to be integrated into the normal school system and skilled labour courses per week in technical and vocational education are specially meant to train youths on basic productive skills that will enable them secure employment on graduation. Eze (1999) stated that technical and vocational education training which prepares individuals for job skills and competencies is the major tool that can empower the youths and free them from the shackles of poverty, and as well a potent instrument for reducing incidences of social vices being engaged by the young ones in the society. Poverty reduction could emanate directly from the effects of skills acquisition in technical and vocational education as youths with acquired saleable skills would apply such in productive ventures that would undoubtedly increase their earning capacity. This will involve the participation of private industries as the government alone cannot bear the entire cost of providing vocational education for the entire citizenry.

Skills Acquisition in Electrical/Electronics for Employment Opportunities

Electrical and electronics technology education is offered in tertiary institutions and polytechnics in the department of technical education and electrical/electronics engineering respectively. The skills provided to students are meant to enable them work

effectively in electrical/electronics related organizations or become self-reliant on graduation by establishing their own electrical or electronics based workshops or institutions.

Skills acquisition is the responsibility of the teacher to the learners. Akudolu (2013) pointed out that the teachers' preoccupation should not only be to teach skills but to also help them acquire skills involving three factors: imitation, repetition and occupational participation. Okorie (2006) posits that technical and vocational education develops skills in six specialized areas such as: agricultural education which has skills in poultry, fish farming and food production. Business and office education have skills in accounting, secretarial, computer analysis, clerical and management. Home economics education has skills in catering services, home making, clothing and textiles. Trade and industrial education have skills in electrical and electronics, mechanical, automobile and building and wood work.

Skills in electrical and electronics technology as required for acquisition by learners for effective employment opportunities include the following: conducting of surface and conduit electrical installation, measurement of electrical parameters such as resistors, current, and resistance. Conducting continuity tests in electrical and electronics circuits, wire stripping, construction of various lighting circuits such as ring circuits and final sub-circuits of different loads. Fault tracing in electrical and electronics circuits, repairing and maintenance of electrical and electronics equipment. Soldering and de-soldering in electronics circuits are also skills that could foster employment opportunities.

To enable youths be employable in electrical and electronics technology education after graduation, they must possess relevant skills in some of the above stated areas. These skills and competencies would enhance the youth's employability either in a recognized electrical or electronics institutions or self-reliant

employment in the world of work. When electrical or electronics industries partner with the training institutions, students' skills development would be more meaningful.

Private Industries Partnership in Technology and Vocational Education

The overall funding of education by the government has not been efficient. The Federal Republic of Nigeria (2013) pointed out that education is an expensive social service and requires adequate provision of fund from all tiers of government for successful implementation. Since adequate funding of TVET is particularly expensive the combination of efforts from the federal, state and local governments are akin to produce a more efficient financing. Also private sectors need to offer a helping hand for the successful implementation of technology and vocational education. This is because the efforts of government alone have not been enough. This was supported by Olusegu (2005) when he posited that the government has been making tireless efforts to finance technical and vocational education but funding despite all the efforts is grossly inadequate and that attention should be directed towards alternative ways of funding the expensive technical and vocational education.

Technical and vocational education institutions therefore need proper liaison with private industries for effective implementation of its skills acquisition programmes. Raymond (2010) remarked that the federal government master plan of 2001 to 2010 suggested that for technical and vocational education policy design and delivery to be actualized, a new partnership between government, employers, vocational industries, trade unions and the society must be established which will create a coherent frame work to enable the launching of national strategy for change. The robust demand of citizens for skills acquisition in technology and vocational education for employment opportunities is presently beyond the federal government to cope. The government and cooperate organizations

should support vocational education to enable youths effectively acquire marketable skills especially in electrical and electronics education.

Private Partnership in TVE

Private sectors have the efficient means of copying with funding of their businesses than the public sectors. Raymond (2010) pointed out that training in the private sector by private employers and private training institutions can be the most efficient way to developing skills of workforce in the contemporary society. The private sector is thus the organization that takes the risks as an enterprise for the purpose of profit maximization. To effectively key into the progress of economy of nations in the contemporary times, the contributions of the private sector in funding technology and vocational education is imperative, Eze (2003). Nigerian economy can thus be sustained if private business executives sincerely contribute to the building up of the skills acquisition institutions to help them train worthwhile youths that will in consequence contribute to the development of the economy of Nigeria through their contribution of productive skills.

It is thus evident that government alone cannot effectively bear the burdens of sponsoring technical and vocational education. The private institutions should contribute in advancing skills acquisition of youth in the following dimensions.

- **Establishment of private technical and vocational schools:** Private and rich individuals could be encouraged by the government to establish and fund technical and vocational institutions. This will ease the burden of the government in funding all forms of education alone.
- **Establishment of liaison between training institutions and private industries:** Skill industrial based companies should be encouraged to liaise with industries that could help to train the students in acquiring the requisite skills in their industries. Skills based industries can

prove invaluable to student trainees when they are apprenticed to such industries where they can learn at first hand the processes and operations of production thus learning the skills involved directly in the world of work.

- **Offer of scholarship:** Highly interested and intelligent high achieving students in technical and vocational educational institutions should be encouraged by granting them scholarships to source and train in advance skills training schools. This will serve as an incentive to other youths and would spur them to aim higher in their skills acquisition especially in electrical electronics.
- **Incentive to teachers:** It has often been said that no educational institution can be better than the teachers who implement the teaching activities. When the teachers are offered incentives like sponsoring them in retraining programmes conferences and excursions, they would be motivated to put in their efforts in training the students.
- **Students industrial work experience scheme (SIWES):** The impetus of industrial work experience scheme is to bring closer, the world of work and the world of school. The SIWES affords the student the chance to get exposed to innovations in the profession in the training institution. Every school now is expected to send their technical and vocational education students at tertiary institutions to the industry for the purpose of acquiring modern knowledge and skills in their trades.

Conclusions

The present global economic trends give credence to more emphasis on effective skills acquisition by the myriads of youths in the country. Nigeria cannot make much progress towards satisfying all the skills needs of the youths without harnessing the contribution of the private sector. The government can play a catalytic role in attracting private investors to support technical and vocational education and thus build a more robust foundation for more

youths to receive skills training through the aids of these private investors. When stronger and continual ties among schools, research institutions, private sectors and governmental agencies are established, industries could be helped to produce more employable youths, thus reducing the present predicament of unemployment. When students properly trained in electrical and electronics based industries, marketable skills can be effectively acquired. The students after graduation can prove invaluable in rendering such services in such related industries thus living a worthy life of contributing to the economic advancement of the nation while achieving self-reliance. Technical and vocational subjects are basically imbued with marketable skills that the youths can get advantage of when enough fund is provided to execute the required training. The government cannot do all these alone and the contributions of the private sectors are inevitable for successful implementation of technology and vocational education programmes of youths for subsequent reduction of unemployment rate in the contemporary Nigeria.

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