

# ELEMENTS OF ENTREPRENEURSHIP TRAINING IN SCHOOL-INDUSTRY TRAINING: STRATEGY FOR STRENGTHENING TECHNOLOGY EDUCATION PROGRAMMES

BY

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## Abstract

*Technology education programme is employment-oriented education designed to equip students with relevant job-skills, technical knowledge, positive work attitudes and habits to be employable or hold employment after graduation. School-industry collaboration with her mandate, objectives and laudable programmes have not done much in the area of job creation, unemployment reduction and self-reliance motive of the government. The high level of graduate and youth unemployment in the country is a potential source of mass revolt. This unhealthy development and the imminent danger to the society are the concern of the authors. The paper examined the concept and objectives of school- industry partnership and the need to strengthen this relationship in technology education programmes. Finally, it is the recommendation of the authors that there should be an inclusion of entrepreneurial skills training for programme effectiveness.*

## Introduction

In the national policy on education, the Federal Government of Nigeria expressed her desire to offer training in technology education to meet the manpower need of the industry (F.G.N,2004). This led to the mounting of vocational and technology education programmes in various institutions in the country. These programmes involve the acquisition of knowledge and skills on the part of students which will help them to be gainfully employed in the world of work, (Agwumezie, 1994). Contrarily, most of the institutions offering courses in technology areas do not possess adequate facilities and modern equipment to enable them give the students proper practicals they need. Obi (2009) observed that industrial devices, machineries and processes are continually being updated and completely replaced by more complex equipment and sophisticated techniques which demand greater degrees of technical competence and often new technical education skills. Further, he stated that training institutions are inadequately prepared and insufficiently linked to the world of work. As a result graduates of technology education and other professional areas find it difficult to secure and sustain employment in their area of study.

In its deliberate effort to bridge the gap between what is taught in classroom and that obtained in the world of work, the federal government in 1976 introduced industrial training programme for students in tertiary institutions, especially in technical and other professional based courses. The objectives of this programme are to promote and encourage acquisition of skills in industry and commerce with a view to produce indigenous trained manpower sufficient to meet the technological need of the economy. The training offered at various levels of manpower training should always be tuned to the need of commerce and industry. This implies a joint participation of the school and the industry in the whole process of training. Presently, the level of participation in skill acquisition and training programme by industry

through IT/SIWES programme is low and of insignificant value for effective and functional technology education (Obi,2005).

Considering the low level of competence in skill acquisition and training the students attain before graduation compounded by the alarming level of graduate and youth unemployment in the country, the paper is canvassing for the inclusion of some elements of entrepreneurship training in the SIWES programme to strengthen Technology Education programme for effectiveness. This will adequately prepare young Nigerians from tertiary institutions for self-reliance after graduation; help check unemployment, generate new jobs, and for wealth creation.

### **Present Level of Industry Participation in Technology Education**

Decree 47 of 1971 was promulgated to ensure industry participation in the training of technology students; though the implementation took effect in 1976. To ensure its effective monitoring and supervision, the industrial training fund (ITF) was constituted which later took charge of the programme. Now under the umbrella called Students Industrial Work Experience Scheme (SIWES) co-ordinated, monitored and funded through I.T.F has made impact in skill acquisition and training in the country with several problems and limitation.

Recognizing the place of this programme in training of vocational and technical teachers; the National Policy on Education (2004) directed that technology based professionals especially, need exposure to the environment in which they will eventually work, by:

- (i) placing students in relevant work experience during the vacations.
- (ii) industrial training fund (ITF) to continue to contribute significantly to the financing of practical training courses particularly for Nigeria Engineers and technicians; and
- (iii) government ensuring that teachers in professional fields have relevant industrial practical experience.

In the same decree that established the ITF, the role and objectives are stated clearly as follows:

- (i) ITF will bear a proportion of the direct cost of in-service training carried out by employers;
- (ii) assist and/or strengthen training facilities and capabilities throughout the country;
- (iii) directly build up training facilities of its own,
- (iv) organize researches and studies into training and support to other activities of the fund.

In spite of its short duration especially in colleges of education, and universities, SIWES programme works out as cooperative effort between the school and industry to help students of technology education for a period of practical experience in industry in such areas that are related to their field of study. During this Industrial training, students are exposed to acquire practical work experience in industry to complement the classroom lecture and workshop practice. This enables them to develop specific skills, knowledge and attitudes to be employable and sustain employment. The programme has constituted part of the requirement for graduation in higher institutions in Nigeria.

The idea of the programme itself is good and laudable, but there is a saying that 'action depends on situation'. The situation of massive youth unemployment suggests that SIWES programme content is inadequate and cannot face the obvious challenge of reducing unemployment in the country (Nwokolo,1997). Even if the youths are skilled, competent and employable, the facts remain that there are not enough industries to employ them. It therefore becomes pertinent that elements of entrepreneurial training that are critical to self-reliance, job

and wealth creation be included in the SIWES training programme. This seems to be the missing link between technology education programme and self-reliance.

### **Entrepreneurship in Technology Education**

Entrepreneurship involves the ability to set up a business enterprise as different from being employed. This ability involves the acquisition of skills, ideas, managerial competencies necessary for self-employment and the entrepreneurial spirit to propel and sustain wealth creation. Without these components properly built and developed in an individual, the entrepreneurship education as presently mounted in tertiary institutions of the country cannot be effective.

On the other hand, self-reliance simply means standing on ones' feet, making it by oneself, relying or showing confidence on ones' abilities. It could also be understood as the degree to which one's entrepreneurial skills can sustain him for a living and profit maximization (Nwosu, 2000). Far from expectations, the entrepreneurship education programmes as presently mounted in the tertiary institutions is just "theory as usual" making no meaningful impact on the lives of young Nigerians after graduation. This suggests a missing link somewhere in technology education programme. In the light of this obvious gap, the paper is of the opinion that school-industry relationship should be strengthened through effective entrepreneurship education. There should be an arrangement where the school continues to handle the theory part of entrepreneurship education and the industry handles the practical components which is training on entrepreneurial skills and spirit (the missing link) in addition to training on technology skills acquisition and training.

### **Elements of Entrepreneurial Training**

Nwokolo (2004) opined that topics such as: sourcing of raw materials for small-scale business, profit maximization and utilization in small scale business, sources of financing small-scale business, small business accounting, prospecting for business, feasibility surveys and break-even analysis, human and public relations, elements of marketing, personnel administration and the modalities for registering business organizations be included in the programme. While this list appears to be exhaustive, it covers only the topics to be handled by the institutions (schools) while the list is silent on critical elements of the training where the industry will play a major role. The paper is of the opinion that until the curriculum addresses the peculiar problem which is still missing in the list submitted above – the practical contents of the whole programme will lack focus, impotent and still remains theory as usual and makes no meaningful impact on the lives of the youths. The students should be exposed adequately to develop and build entrepreneurial skills and spirit. Without these participatory aspects, the unemployment reduction and the self-reliance motive of entrepreneurship education in our society becomes a mirage.

### **Strategies for Developing Entrepreneurial Skills in Individuals**

Every human being has innate entrepreneurial spirit or potential. When the potential is not called up or used, it becomes redundant. The redundancy is temporal and can be made active or developed any time. Development of entrepreneurial skills and spirit demands active participation of students in creating and spending wealth, the actual world of work experience and sound human and public relations conducive for wealth creation. This agrees with the common adage, that 'practice makes perfect', but different from technology skill acquisition and training, which training on entrepreneurial skills and spirit are not part of the content. The students on industrial training programme presently may be learning and acquiring relevant technology skills but may not know how the incomes of the establishments are made and spent.

Developing entrepreneurial skills therefore suggest the provision of a conducive working environment that places every graduating student on SIWES programme as an entrepreneur for a specified period of time. Within this period, the students will be involved in sourcing raw materials for production; involved in selling and distributing finished products; allowed to relate well with the public to attract patronage. In service based establishments, the students should be allowed to render the agreed services with the help of company's workers; charges for the services rendered; keeps records and accounts for the services and finances at the expiration of the programme. The student while serving his or her turn will be assisted by some paid staff of the establishment, preferably junior staff to help the student carry out these functions well. At the end of the student's turn, he or she will be assessed, scored and rewarded accordingly based on the student's performance. This implies that for students that undergo four months industrial attachment, three months could be used for skill training in the students' area of study while the last one month will be used for entrepreneurial training. For six months attachment period, four months and two weeks could be used for skill training in the students area while one month and two weeks be used for entrepreneurial training. Similarly, for one year attachment period, nine months could be used for skill training in the student's area of study while the last three months be for entrepreneurial skills training.

This exposure is very necessary to help the graduating students unveil the secrets of businesses, inculcate the right attitudes, traits spirit and develop good public relations critical for successes in business. Again, this exposure will certainly equip the graduating students adequately for job, wealth creation and self-reliance after school without fear of failing in business. The strategy may not need to review the programme curriculum but be included in the job performance specifications which each student presents to his or her industrial based supervisor on arrival for I.T. programme. If this is included in the job performance specifications as one of the major components of the I.T. programme; adequately observed and supervised by both the industrial and institution based supervisors, there will be good results. This is a sure way to develop and build the skills and the desirable spirit necessary for running and sustaining enterprises.

### Conclusion

The graduate and youth unemployment has reached alarming level. The situation is gradually degenerating to insecurity, threat to human life, violent robbery and kidnapping which is now the order of the day in Nigeria. There is a danger signal pointing towards violent mass revolt. This is the time to gradually and systematically engage our young graduates in meaningful self-employment ventures through entrepreneurial skills training. Government and her agencies such as Industrial Training Fund (ITF), the National Directorate for Employment (NDE), Education Tax Fund (ETF), Petroleum Trust Fund (PTF) or from other budget heads should systematically sponsor and support this training programme and the graduate entrepreneurs. Alternatively, the three levels of government in the country: local, state and the federal governments need to float a loan scheme for funding graduate entrepreneurs.

School and industry must work closely together in order to understand, train, monitor, redesign or adjust programme where necessary and evaluate technology education with focus on job and wealth creation and self-reliance after graduation. Functional and productive manpower training in this country for the 21<sup>st</sup> century demands greater industry participation in the entire process of training young Nigerians.

## Recommendations

In the light of the above, the following recommendations were made:

1. Entrepreneurial skills training should be included in the job performance specification as a major component which every IT student must present to industry before starting the programme.
2. The period for the entrepreneurial skills training should be observed by every graduating student, monitored, supervised and evaluated by ITF officials, industrial and institution based supervisors.
3. The period of SIWES programme for NCE (Technical) students should be extended to six months non-stop. This makes the training more meaningful.
4. Every graduating student should be encouraged to own basic hand tools appropriate to his or her area of specialization for entrepreneurial activities after graduation.
5. The three levels of government in Nigeria should budget for loan scheme for intending graduate entrepreneurs yearly.

## References

- Agwumezie, F.U. (1994), School – industry relationship: A necessity in vocational: business education programme. A paper presented at the National Conference on Vocational . Technical Education held at F.C.E. (T), Umunze Anambra State. Monday 5<sup>th</sup> August
- Federal Ministry of Education (2004), *The National Policy on Education*. (Reversed), Lagos: Federal Government Press.
- Nwokolo, P.O (2004), Entrepreneurship initiative in colleges of education programme: A paper presented at Education Tax Fund (ETF) Workshop on Capacity Building for Lecturers of Colleges of Education in Nigeria for Enhanced performance held at F.C.E. (T) Umunze, Anambra State. Wednesday 15<sup>th</sup> July.
- Nwosu, S. (2000) *Self-reliance through vocational and technical education: The imperatives of vocational and technical education for a developing nation*: Onitsha; Cape Publishers Int.
- Obi, W.J.D. (2009) Entrepreneurial skills development in technical/ vocational education and training (TVET): A Panacea for Global Economic Crises. *Eastern COEASU Journal of Teacher Education*: 1(2), 51 – 54.