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SIWES - A Necessary Tool for the Realization of Needs.

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Abstract - It has been observed that technology and engineering institutions has failed to impart the appropriate skills knowledge and attitude for gainful or self-employment to graduates. This paper stresses on Students Industrial Work Experience Scheme (SIWES) for training in technology and engineering programmes as a necessity for the realization of National Economic Empowerment and Development Strategy (NEEDs) initiatives. The paper also highlights on NEEDs objectives and the role of SIWES in the realization of NEEDs objectives. Conclusions were drawn and recommendations made to ensure that students acquire practical skills, knowledge and attitude that will enable them to be employed or become self-reliant and contribute to the development of the nation inline with the objectives of NEEDs.

1. INTRODUCTION

The students industrial work experience scheme was introduced in Nigeria by Industrial Training Fund (ITF) in 1973. The ITF itself was established under Decree Number 47 of 1971, (Kareem, 1994 and Oni, 1996). The ITF was established to promote and encourage the acquisition of skills in industries and commerce with a view to generating a pool of indigenous trained manpower sufficient to meet the needs of the economy (ITF, 1994). According to Fakorede (1998) the ITF use the following

approaches to the development of effective manpower training.

- Inplant training programmes for small and medium size companies
- Industry oriented vocational training programmes.
- Continuous direct training courses, seminars, conferences and workshop for employees form both private and public sectors of the economy
- Improves reimbursement and grants schemes

Before now, studies revealed serious gap existing between theory and practice of Technology and Engineering courses offered in Nigerian institutions of higher learning. In an efforts to bridge this gap ITF established SIWES as a cooperative programme between industries and schools. The scheme takes the form of on the job supervised work experience for students offering courses demanding exposure to the much needed industrial skills (Okonkwo, 1996).

The emphasis of the programme is on training the students to acquire specific skills ready for work by interweaving theory and practical and developing general and specific occupational attitudes and skills in students. The scheme is also meant to expose students to work methods and experience in handling equipment and machinery that may not be available in educational institutions. Thus the central focus of the scheme therefore, is to enlist and strengthen employers involvement in the educational process of preparing students for employment in industry. The scheme

that its inception involved students and teachers from institutions of higher learning, corporate industrial and commercial firms including small-scale industrial and service enterprises and the Industrial Training Fund (ITF). The co-operative machinery between industry and institutions of higher learning under the control and supervision of ITF is not yielding the desired result for which the scheme was set up. This is because students are wrongly placed and sometimes lack of adequate monitoring and supervision of students to ensure that the student acquires the specific skills and practical knowledge that will enable them to become practically oriented to prepare them for employment in the industries or become self-reliant by way of establishing their own workshops or becoming employers of labour in line with the goals and aspirations of NEEDS.

II. OBJECTIVES OF SIWES

Technology and engineering institutions failed to impart the appropriate skills, knowledge and attitude necessary for gainful or self-employment of the graduates, a problem traced to colonial heritage. It has been observed that employers of labour prefer workers with skill training in automobile technology through apprenticeship training to those with formal training in technical institutions, this is because in the apprenticeship training emphasis is more on the practical aspect, whereas, with the formal training in technical institutions students are not engaged much on the practical training, even after been employed they need to be retrained.

The above observation confirms statement made by Aina and Beecroft (1982) as they declared that "there is indeed cause to be apprehensive about relevance, scope and length of technology education programmes, since

increasing number of our engineers and technologists have failed to make anything work"

In realization of the relevance of these short coverings in the higher institutions programmes and the desire to attain competent men for the much needed technological take off, the Nigerian government formulates the National Policy on Education in (1977) (revised, 1981 and 1994) in which the aims of technology education were re-viewed and specified to include: To give training and impart the necessary skills leading to the production of craft men, technicians and other skilled personnel who will be enterprising and self-reliant. This is in line with the objectives of National Economic Empowerment Development Strategy (NEEDS).

The six objectives of SIWES as specified by ITF and quoted by Kareem (1994) include:

- To provide student with an opportunity to apply his knowledge in a real work situation thereby, bridging the gap between college work and actual practice.
- To assess the interest of the students in and suitability for the occupation he has chosen.
- To expose students to work method not taught in institution and provide access to production equipment not normally available in the college environment.
- To make the transition from school to the world of work easier and to enhance student contacts for later job placements.
- To enhance industry's satisfaction with diplomats of the institutions and
- To enlist and strengthen employers involvement in industrial activities and in the entire educational process of preparing the students for employment in industry.

It can be seen from these broad objectives that the emphasis is on training the students to acquire

specific skills and development of occupational competencies in which case the work environment is expected to form part of total educational plan. Through SIWES students and graduates develop confidence in practical preparation of work plans, performance of tasks with manipulative skills and coordination. Such tasks include product design, maintenance and repairs of simple equipment, conducting research projects, contracting production and control work study, career development, industrial human relations, problem solving techniques, self-reliance and self-employment which is in-line with the objectives of NEEDS.

III. NATIONAL ECONOMIC EMPOWERMENT AND DEVELOPMENT STRATEGY (NEEDS)

In May, 2004 president Obasanjo launched the National Economic Empowerment and Development Strategy (NEEDS) as Nigeria's home grown poverty reduction strategy in order to address the short-comings of the past military regime, which had been the constraints to the achievement of the Millennium Development Goal (MDG). According to National Planning Commission (2004) NEEDS is Nigeria's plan for prosperity. It defines a process of development anchored on clear vision, sound values and enduring principles. The development of this vision began in 2001, when people from all walks of life and all parts of Nigeria were given the chance to tell the government about their needs and ambitions. Information collected from farmers, labourers, factory owners, teachers and university professors, community based organisations and other stakeholders was used to draft an Interim Poverty Reduction Strategy (IPRS). After intensive and extensive nation wide

consultations and debate on the earlier draft, NEEDS has been substantially revised to reflect the constructive contributions from stakeholders and other government officials. NEEDS is about Nigerian people, their health, employment, education, political power, peace, security, empowerment etc. In order to realize its vision, it rests squarely on four key strategies viz:

- Reforming government institutions
- Encouraging or promoting private sector
- Implementing a social character and value orientation

In pursuing its objectives NEEDS hope to:

- Reduce poverty
- Generate employment
- Create wealth. (Udofia, 2004)

Education according to NEEDS blue

prints, is considered the key bridge to the future. Education is a key instrument to empower individuals in charge of their lives in the future. However, many nations and communities of the world more than ever have recognized the necessity of providing functional education to their youths in a committed effort to achieve and sustain individual and national development and productivity. Among the developing nations of the world, Nigeria is one of those that are weak technologically. It is not surprising however, because technology and engineering institutions lack necessary infrastructures such as machines, laboratories, buildings, electricity and water supply, workshops, computer rooms, libraries and even skilled teachers to teach students. This has resulted to mass failure, congestion, production of half-baked engineers, technologists, technicians, and the output of machine, wrong readings from experiments, dependence on theory instead of practical, poor safety records and so on.

Technology and engineering education requires the manipulations of tools and machines to acquire the necessary skills. Technology and engineering institutions therefore, are institutions where skills acquisition are highly emphasized such institutions teach technology education in three domains namely; cognitive (Brain), affective (Heart) and psychomotor (Hands). This can be achieved through SIWES by sending the students to industries or small and medium scale enterprises to acquire the necessary skills that will enable them to be employed or become self-employed which is inline with the objectives of NEEDs.

IV. THE ROLE OF SIWES IN THE REALIZATION OF NEEDS OBJECTIVES

The role of SIWES in the realization of NEEDs objectives cannot be overemphasized. Therefore, SIWES serves as a source for gainful employment. There is no doubt that unemployment is one of the major problems facing the Nigeria as a nation, this could be observed as stated in the objectives of NEEDs.

Unemployment is at alarming rate and this is common among Nigerian Youths. SIWES will cater for the individuals interest in terms of gainful employment. It provides the pre-requisite skills to gain entrance into employment and will make such individuals suitable for the selected career.

SIWES promotes the establishment of small and medium scale enterprises:- The broad aim of SIWES is on the training of students to acquire specific skills for self employment. Individuals is developed through the entrepreneurial skills acquired to set up their own business and become

self-employed and be able to employ others in order to contribute economically to the development of the nation.

Students that undergo SIWES in the course of their studies, most likely increases their productivity and earning capacity as well as employability and higher job mobility.

V. CONCLUSION

It is quite clear that the main objective of SIWES is to train students to acquire skills in order to be self-reliant and also to influence technological development of the nation. This cannot be said to be achieved due to the problems facing the scheme such as inadequate funding, inadequate supervision, wrong placement of students, uncooperative attitude of some employers etc. Therefore if these problems are properly address SIWES will enable students to acquire the necessary skills that will make them to be self-reliance and contribute towards the development of the nation which is inline with the objective of NEEDs.

VI. RECOMMENDATIONS

In order to realize the objectives of SIWES as specified by ITF (1973) in a privatized economy towards the realization of NEEDs objectives, the following recommendations are made:-

- Adequate funding of the scheme should be accorded priority attention, in line with those of other educational programmes both by government and non-governmental organizations.
- Regular and multiple supervision of students should be embarked upon through the use of institution supervisors close to employers and not necessarily institutions from which students belong, this could

- be done through computerization of student's name against the industries available for SIWES.
- Students should be placed in industries relevant to their fields of study. Greater cooperation between industries and educational institutions be encouraged.
- A policy should be formulated to compel employers to accept students placement during industrial attachment.
- Government should create an enabling environment for private sectors and non-governmental organisations in order to encourage the establishment of manufacturing industries to cater for the increasing numbers of participating students in SIWES so that the goals of NEEDS can be achieved leading to the development of the nation.

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