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ASSESSMENT OF STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME (SIWES) IN TERTIARY INSTITUTIONS IN NIGERIA

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Abstract
This paper examined the students industrial work experience scheme (SIWES) in tertiary institutions in the country. The scheme was introduced to familiarize students with work method and expose them to needed experience in handling equipment and machinery that are not usually available in their institutions. A study of vocational and technical education programmes in universities, polytechnics and colleges of education revealed that much emphasis is being laid on theoretical concepts to the detriment of vocational and technical skills needed in the industry. The challenges and competitiveness of the automated office tasks/work methods demand for collaboration between industries and higher institutions. The paper therefore argued that SIWES will make tertiary institutions, prepare students to assume such challenges and roles that may be posed by emerging technologies. The objectives of SIWES and notable constraints were highlighted and discussed. The paper conclude with some suggestions that will sanitize the scheme and make it more effective.

Introduction

The students industrial work experience scheme (SIWES) is a skill training programme designed to expose and prepare students of Universities, Polytechnics, Colleges of Education for the industrial work situation they are likely to meet after graduation (ITF Information and Guideline 2004). The scheme forms part of the requirement for the award of degrees, diplomas, Nigeria certificate in education, in Engineering, Technology, Agriculture, Creative Arts, Computer and Business Education.

Prior to the establishment of the scheme, there was a growing concern among our industrialists that graduates from institutions of higher learning in Nigeria lacked adequate practical skill base that will prepare them for employment in industries. The employers were of the opinion that theoretical education provided in higher institutions was not responsive to the need of employers of labour. It is against this background that students industrial work experience scheme was introduced to familiarize students with work method and expose them to needed experience in handling equipment and machinery that are not usually available in their institutions.

The Industrial Training Fund was established by the federal Government of Nigeria in 1971 by Decree 47. The fund within the first few years of it's operation in industry identified a serious defect in the area of practical skill of locally trained engineers and technologists. It observed a wide gap existing between theory and practice of

engineering and other practical oriented courses in almost all higher institutions in the country. In an effort to bridge this identified gap between theory and practice of engineering, technology and allied courses in higher institutions of learning, the Industrial Training Fund established the Students Industrial Work Experience scheme in 1973. The Scheme was designed to provide the much needed practical experience for students undergoing courses that demand exposure in industrial activities during their college programmes. In order to demonstrate the importance the Federal Government and its agencies such as the National University Commission (NUC), National Board for Technical Education (NBTE) and the National Commission for Colleges of Education (NCCE) attach to students industrial work experience scheme, the accreditation of those courses that relate to industry and commerce and are mounted by Nigerian Universities, Polytechnics, colleges of Technology, Colleges of Education and allied institutions are used as a pre-condition for establishing a SIWES unit.

Students Industrial Work Experience Scheme (SIWES)
Meaning and Justification

Olawuyi (1996) defined students industrial work experience scheme as a programme of upholding standards and efficiency of human resources provided by the country's list of tertiary institutions. It is a way of harmonizing school learning with practical industrial requirements of skilled labour. The harmonization is necessary because a greater proportion of problems confronting the nation can be traced to the failure of our educational institutions to impart appropriate skills, knowledge and attitudes to her graduates to make them ready for gainful or self-employment.

Ekpenyong (1995), opined that students industrial work experience scheme is an attempt to integrate classroom theory and workshop/laboratory practice in school setting with planned and supervised practical experiences in the world of work. Kolawole (1999) asserted that Students Industrial Work Experience Scheme is an attempt to bridge the perceived gap between theory and practice of science, technical and vocational education programmes in Nigeria's tertiary institutions. The programme also affords vocational/technical education students the opportunity of acquiring competence in manipulative skilled jobs to enable them work effectively in industrial /private establishment or go into private employment.

According to Dennison (1996) students industrial work experience scheme make it possible for students to have a successful and easy interaction with certain machines that are not available within the system. This does not only prepare students for what they are to meet in future, but make them familiar with the practical aspect of work incase they are called upon. He also stated that students industrial work experience scheme broadens the students knowledge theoretically and practically and thus enable them acquire skills and experiences which will be relevant to them after graduation. Eneh (1998) remarked that the exposure of students during industrial work experience scheme make them to understand what goes on in the industry, the condition of work, understand the relationship between employers and employees, the regulations of the industry and the congenial environment under which they work so that any student who had gone through the scheme will not find it difficult to cope when he is employed in the industry.

Kalu (1996) argued that employers are indirectly regarded as educational incubators as well as employers of students during industrial training. As students are being guided on what to do by their employers which is similar to classroom situation

between lecturers and students though it is practical oriented while classroom teaching is mainly theoretical. He further remarked that SIWES is a youth action programme which is very important in terms of providing relevant practical skills and experiences to students in their chosen field in commerce and industry even before graduation. Thus, students are being exposed to real practical experience, which is not available in the school system.

According to Hassan (1997), students who have gone through industrial training while in higher institutions could be easily absorbed in the industry immediately after graduation, since they are already accustomed to the method of work in the industry while in school. Isaac (1993) stated that the method of learning in the classroom situation does not correlate with method of work in the industry. If the industries fail to participate in the students industrial work experience scheme, their modus operandi, will not be made known to students and consequently will consume time and money for the employers to give students in-service training when they are employed after graduation. In order to minimize this waste of resources students in tertiary institutions have to undergo industrial training. The writer opined thatstudents industrial work experience scheme is a programme that help students to develop manipulative skill for full-time employment as a worker or an apprentice in the discipline.

Objectives of Students Industrial Work Experience Scheme (SIWES)

According to the (ITF) Information and Guideline (2004) the objectives of SIWES are specifically to;

a. Provide an avenue for students in institutions of higher learning to acquire industrial skills in their course of study.
b. Prepare students for the industrial work situation they are to meet after graduation.
c. Expose students to work methods and techniques in handling equipment and machinery that may not be available in their institution.
d. Make the transition from school to the world of work easier and enhance student contacts for later job placement.
e. Provide students with an opportunity to apply their knowledge in real work situation thereby bridging the gap between theory and practice.
f. Enlist and strengthen employers involvement in the entire educational process and prepare students for employment in industry and commerce.

Challenges of Students Industrial Work Experience Scheme (SIWES)

Students industrial work experience scheme which was meant to strengthen the practical content of learning for technical and vocational students in tertiary institutions has numerous challenges. Some of the challenges to more efficient implementation of SIWES programme include:

1. Inability of many students to get places where they can get relevant work experience as well as acquire cognate skills due to massive rejection of students by some industries. As a result students who cannot find suitable places end up in ill-equipped organization that are willing to accept them.
2. Delay in payment of students and supervisors allowances is a demotivating factor which needs to be guided against.
3. Unco-operative attitude of employers: Pessu (1992) stated that employers are skeptical about students ability and integrity. According to him, the fear of these employers is that students are in-experienced to handle certain delicate machines

and tools without damaging them. As a result many students on industrial training are only allowed to see these machines/equipment but are not allowed to manipulate them.

4. Poor supervision: There is inadequate supervision of student during industrial training. Many institutional supervisors visit students on attachment only once instead of the normal three visits. They blame this on poor transportation allowances which are usually paid in arrears rather than in advance. Some merely ask the students to bring their logbooks for signature on completion of the programme.
5. Students poor attitude: Generally, students' attitude towards industrial training are not encouraging. Many students cannot differentiate between college freedom and work ethics. In higher institutions of learning students are regarded as mature and given a reasonable degree of freedom to operate. But many of these students extend this freedom to industries through acts of indiscipline such as absenteeism, lateness to work, insubordination and other social vices during training.
6. Poorly staffed and ill-equipped SIWES Co-ordinating Units in institutions. Contrary to the expectation of the industrial training fund the scheme is poorly co-ordinated and supervised at all levels. Most SIWES co-ordinators who would have assisted in getting places for students are not provided with vehicles to make necessary contacts with well established organizations that would have been able and willing to take students on industrial training.
7. Absence of job specification: Job specification is the job that students are expected to do during industrial training. It serves as a guide between students on industrial attachment and the employers or the industry based supervisors during the training period. According to ITF Journal of Training and Development (1992), Job specification will have to be sent by the institution to the industry where students are to carryout the training. As this will ensure that the students acquire the minimum national standard of experience required for the industrial training prior taking up employment after graduation. But in most cases this is lacking.

Strategies for Effective Students Industrial Work Experience (SIWES) Programme

1. Curriculum Revision

Fagbemi (1988) assessed the technical business curriculum of Colleges, Polytechnics and Universities of Technology in Nigeria and came up with the suggestion that workshops should be frequently organized in collaboration with industries to review the training content area with the aim of designing an effective curricular that is related to industrial human resources need and national development from time to time.

2. Supervision

There should be proper supervision and assessment of students undergoing industrial training. Both the institution based supervisors and the industry based supervisors should co-ordinate the programme effectively to ensure that students are properly supervised according to the industrial training fund (ITF) guideline on SIWES.

3. Job Specification

Training would be a waste of time and resources if the areas of emphasis in training were not properly planned. The industrial training fund should emphasize that institutions should endeavour to post students to organized establishment with job specification which will serve as a guide to students' on industrial attachment and the employers or industry-based supervisors during the training period.

4. School Industry Linkage

The federal government should promulgate a decree compelling co-operation between institutions of higher learning and industries to work out programmes for the total education and development of young Nigerians. According to Clark (1991) the school-industry linkage will produce the right caliber of engineers, scientists, technologists and business managers. In addition industries should be made to sponsor programme(s) of institutions in their areas of operation.

5. Extension of Training Period

Ogwumezie (2000) suggested that the period of industrial training should be extended to a reasonable period to enable students acquire sufficient skills in the practical training while industries are given some time to benefit from the service of student undergoing training.

6. Co-ordinating Units

The co-ordinating units should be adequately staffed and funded to ensure effective operation of the scheme. In addition the co-ordinating units can be used for career survey on skills needed by industries located round their institutions, and advise appropriate arms of these institutions on the area where skill-up grading courses should be run.

Conclusion

Despite the numerous problems associated with students industrial work experience scheme many people however believe that SIWES provide student with opportunity to apply their classroom knowledge to real work situation thereby bridging the gap between theory and practicals. It also provide an avenue for students in tertiary institutions to acquire industrial skills in their course of study. However, problems of improper placement, poor funding, poor supervision, inappropriate curriculum design and description and ill-equipped SIWES co-ordinating units in tertiary institutions need to be promptly and properly addressed by the various organizations responsible for the management of students industrial work experience scheme to make it more effective and functional.

Recommendations

The increasing technological changes in the industry and the world of work demands that the educational sector should collaborate with the industrial sector inorder to remain up-to –date and be relevant in the 21st century. In order for graduates of tertiary institutions in Nigeria to remain employable in every sector of the economy, there is need for collaboration between the educational institutions and the private sector. This can be done by creating a forum made up of Industrial Training Fund/ government representatives, educationists/supervisory agencies and representatives of employers of labour in industries and commercial concerns for the purpose of harmonizing the needs of the industry with school curriculum so as to ensure an efficient and effective student industrial work experience scheme.

References

Clark E.K. (1991). University and Industry partnership in progress: Carton Press (West Africa) Limited.

Dennison E.E. (1996). *Measuring the contribution of Education in Economic growth*. The Residual Factor. (OECD table 2).

Ekpenyong L.E. (1995). *Foundations of Vocational Education*: New *Directions and Approaches*. Benin. Supreme Ideal Publishers Int. Limited.

Eneh G.C. (1998). Charting a new course for industry and education partnership: *Journal of vocational education research* (6) pp 23-29.

Fagbemi B.O.B (1988). *The Technical Education in Nigeria*. An overview of *Historical Development, Role and Function*. Nigeria Journal of Technical Education 5 (1-2).

Hassan A. (1997). *The role of Institutions towards achieving the goals of SIWES programme*: Benin City word and Book publishers.

Industrial Training Fund (1992). *Training Methods and Development Kaduna ITF Training Guide Series*

Industrial Training Fund (2004). *Information and Guideline for students* Work Experience Scheme (Reviewed) Kaduna. ITF Training Guide Series.

Isaac A. (1993) NECA Satisfied with I.T.D progress: *Industrial Training Fund Journal*. Lagos News.

Kalu I.N. (1996) Technological Advancement in Business *Education*. *Business Education Journal* 2(1) PP.24-31.

Kolawole J.O. (1999). *The problems and prospects in Running the SIWES Scheme and the Way Forward*. A university experience. A paper delivered at the 7th Biennial National Conference on Students Industrial Work Experience Scheme held at the centre for excellence, Jos, from 11th -12th November.

Ogwumezie F.U (2000). *School-Industry Relationships. A necessity in Vocational Business Education.* A paper presented at the National Conference on Vocational Technical Education.

Olawuyi (1996). *The SIWES in Nigeria Polytechnics*. *An Explanatory* Analysis. Nigerian Journal of Technical Education 1&2 (13). Pp. 115-153

Pessu E.J (1992). *The goals of Industrial Attachment in a Developing Economy* :Warri COEWA Publishers.