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**THE ROLE OF INDUSTRY BASED SUPERVISORS IN IMPLEMENTING SCHOOL – INDUSTRY PARTNERSHIP IN TECHNICAL EDUCATION PROGRAMME**

BY

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**Abstract**

*The paper, tries to explain the concept of school-industry partnership. It went further to show the roles of industry based on supervisors in implementing school-industry partnership in technical education. It also states some specific problems facing school-industry partnership in technical education in Nigeria like exponential rise/increase in number of courses, institutions and students involved, reduction in the number of placement opportunities, inadequate funding among other things. Based on these problems identified, the paper suggested some possible solutions such as increase in the number of stakeholders, implementation of SIWES rules and regulations, attracting partnership from private sectors to solve the problems of funding to mention but a few.*

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**Introduction**

Education is the potent instrument for national development and industrial growth. Therefore, the quality of technical education programme in any society affects the level of development and industrial growth in that society. According to Olaitan (1996) and United Nations, Educational, Scientific and Cultural Organization [UNESCO] (2002), the development of any nation depends strongly on its manpower, technological development and industrial capability. Thus, strengthening of technical education programme is essential foundation for preparing students to the world of work.

Technical education programme refers to planned activities that are observed in technical institutions. Some of these activities include the following among other things, electrical/electronics, woodwork automobile work, metal work, printing, catering and decoration. These courses are studied in Technical Colleges, Polytechnics, and Colleges of Education (Technical) to mention a few (Igwe, 2008). Technical Education Programme expect students to pass through its learning process with adequate knowledge and background of practical know-how needed in the industries for technological development. Unfortunately, some students that passed through technical education programme seem to be deficient in practical training (Atsumbe, 2006). This therefore, may lead to poorly trained technical education graduates that cannot fit into the world of work thereby affecting the ambition of Nigeria's national development through technological development. The theoretical knowledge alone would not usually prepare technical education students for the world of work. The student or productive individual should not only be knowledgeable but

should also be versatile in the application of skills to perform defined work or job (ITF, 2011).

**The Concept of School-Industry Partnership**

School-industry partnership comprises of three (3) words: school; industry and partnership. School refers to a place where teaching and learning activities take place. According to Collins (2005), school is any educational institution or building at which children and young people receive education or specializing in a particular subject or skills. In the context of this paper, school is seen as technical training institution where students are specialized in a particular trade. Industry refers to a place where economic activities take place. In another dimension, it is a place where goods and services are organized by technical experts who possess the technical and vocational competencies for work (Adebayo, 2005). In this paper, industry is regarded as a place where students of technical education programmes are accepted on industrial attachment.

Partnership on the other hand, is a situation in which people or organization work together to achieve a result that will benefit all of them. According to Wikipedia (2011) partnership is an arrangement where parties agree to cooperate to advance their mutual interest. School-Industry partnership is therefore an arrangement or cooperation between educational institutions and industries through the Student Industrial Work Experience Scheme (SIWES) toward improving the quality standard of training programme (Atsumbe, 2006). In projection, it is a contractual relationship between technical institutions and industries so that each contributes to quality training programme.

### The Role of Industry based Supervisors in Implementing School-Industry Partnership

Industrial based supervisor is a person who impart knowledge and skills to a novice and newly employed staff who after a period of industrial training or attachment becomes a competent workman. According to Bates (2005) a key aspect of the work based supervisor's role is to support students through the placement. Supervisors need to know the skills required and the different learning environments in which learning opportunities are provided so that effective learning in the work place occurs. Industry-based supervisors are expected to develop customized training programme as a guide for systematic training of students on industrial attachment (ITF, 2011).

The Industry Based Supervisor links between an organization's management and the organizations workforce. The role wields great power because it is the gate keeper between management and workforce. According to Cates (2005), the position passes information between groups and make decisions. It can filter information content and bias decision and opinions in both management and workforce by what is passed from one to the other. Because the role is a link connecting management and workforce it is critical to the successful operation of the organizational structures. If this is not done well and the link fails both the workforce and its management will suffer problems (McNamara, 2008).

Among the roles of industrial supervisor at workplace as reported by Poly (2011) includes:

1. Provide real work experience, which let the students apply and practice the theory learn in class, in a safe working environment.
2. Over see the placement, including orienting and coaching students
3. Discuss with the department for students progress and meet the department if a site visits is arranged.
4. Conduct a site visit with student placement officer to monitor the student's performance if it is deemed appropriate.
5. Provide industrial advice on the subject related aspects of placement for the student concerned; and
6. Provide students with terms and conditions of the placement, including possible compensation and/or allowance for overtime work, location of work and job duties.

In a similar manner, Bates (2005) classified the roles of industry based supervisor into administrative, educational and supportive. The educational function involves developing the students by teaching knowledge and skills and assisting the students to

transfer their theoretical knowledge to practice. The supportive function involves encouraging the students in their development of self confidence as a professional and more broadly work awareness. Some work integrated learning programmes require supervisors to provide only one or two functions of the supervisory roles; this is reflected in the varying requirement to provide either on-of/or on-going feedback (Smigiel & Macleod, 2007). In some cases, the supervisor is required to give formal feedback in a written report, while other requires, the feedback of the students be provided against a number of criteria. In other cases, the provision of feedback is less formal or even nonexistent. Whatever the situation, classification of the role of the supervisor is essential. Costley and Armsby (2007) stated that the industry based supervisor may have multiple roles: manager, educator mentor, coach or administrator. However, at a minimum, the industry based supervisor is a person who observes the students in an environment that is different from the academic environment. The role of the workplace supervisor also differs from the academic, in that he/she assist the students in applying academic knowledge to the workforce while in the workplace and assists in developing that students requisite professional behaviour (Harger, 2004). In addition, industry based supervisors provide feedback on qualities required for professional practice. It is important that students understand what the real world job is like and that they need to make use of this opportunity during their industrial attachment to build a good work habit. Howard, (2003) also described industry based supervisor as a person who give feedback report in which the supervisor indicates whether the students has been observed fulfilling a set of standard criteria. The criteria are set in relation to expected workplace skills. This type of report given by industry based supervisors on weekly basis forms part of summative assessment, rather than being formative.

A number of authors, including Bates (2005), Apple (2000), Mafe (2004) and ITF (2011) have identified various features of the work-based supervisor role in supporting learning in the workplace.

1. Provide the student with an overview of business, division functions and workplace rules, policies and procedures (including work-ethics issues, the organizational culture, un-written rules and the social aspects of work).
2. Explain the organizations goals to the students and discuss how each division contributes to the achievement of goals.
3. Help the Students understand his or her job responsibilities

4. Contribute to the design, development and objectives of the students' individual work-based learning plan.
5. Guide the students in work-related decision making goals setting, privatizing and scheduling.
6. Assist with planning how learning outcomes might be achieved.
7. Arrange for additional practical experience
8. Manage access to libraries or other learning resources available in the workplace
9. Coach in or demonstrate practical skills.
10. Assist the student in identifying and developing specific occupational, technical skills and the core academic and employability skills.
11. Help student see connections between classroom learning and the work place.
12. Point out the differences between school and work environments, including acceptable behaviour and performance expectations.

In another dimension, Mafe, (2004) stated the following as roles of industry based supervisors namely: Help build in student self-esteem and confidence by providing, opportunities for success in the work place and positively reinforcing accomplishments, provide feedback necessary for the student to perform effectively, highlighting strengths and opportunities for growth and correcting in appropriate behavior, Seek out the students' opinions and suggestions, formally or informally evaluate the students work performance, coach the students to continuously improve work performance and encourage ongoing self-assessment, help student to realistically review their performance, give the student a lift when morale is low, make his/her available to listen and advice students, help the students to resolve conflicts, classify issues and cope with stressful situation, act as a liaison between workplace and higher education institution staff, mediating when necessary. In another connection, Howard (2003) stated that maintaining communication with higher education institution staff concerning student's progress and model behaviour that leads to workplace success, including respectful communication and cooperation with colleagues are among the roles of work based supervisors.

#### **Specific Problems facing School-Industry Partnership in Nigeria**

The problems facing school-industry partnership in technical education programme cut across administrative/organizational structure and funding, stakeholders' participation in SIWES and the effectiveness of SIWES. Some of these problems according to ITF (2011) include:

Exponential rise/increase in the number of courses, institutions and students involved, reduction in the number of placement opportunities, due to inabilities of employer of labour to absorb all the students as results of industry closure, inadequate funding which lead to delays and non-payment of allowances to students and staff involved in SIWES in institutions, lack of career prospects for institution based coordinators. This situation has in turn, adversely affected the morale, interest and desire of the coordinators in carrying out their duties and responsibilities. Other factors as further stated by ITF during an evaluation on the impact of SIWES on technical skill development in 2011, are denial of the use of facilities and inadequate facilities for students on attachment e.g. laboratories, workshops studios and computers, inadequate and lack of effective orientation and supervision of students on attachment by staff of institutions, ITF and employer of labour, non-provision of safety wares/devices by most employer of labour, leading to the exposure of both students and staff to industrial hazards, non-provision of training manuals for students on attachment and forwarding manual to institutions, non-availability/obsolete nature of job specification handbook, inadequate or non-availability of industrial based training programmes; and non-uniformity of credit unit assigned to SIWES participating institutions.

#### **Possible Solutions to School-Industry Partnership**

Possible solutions/suggestions to School-Industry Partnership in Nigeria can be made based on the problem facing School-Industry Partnership. Some of these proffered solutions include:

1. **Increase in the number of Stakeholders:** With continuous increase in the number of courses, institutions and students participating in the SIWES, there is an urgent need for an increase in the number of stakeholders' who will bring their influence and resources to bear in the bid to surmount some challenges presently experienced. Four potential stakeholders' are the Federal Ministry of Labour and Productivity, Education Trust Fund (ETF) and Millennium Development Goals (MDGs). Increase the number of this stakeholder will greatly help solving most of these challenges associated with the exponential increase in the number of courses, programmes, institutions and students participating in SIWES.
2. **Career Prospects for Institutions based Coordinators:** Appropriate training opportunities should be provided for the institutions based coordinators whereby they end

up as professionals in their own right. If this is done, the coordinators will see themselves as career persons rather than adhoc personnel, and thus boost their morale.

3. **Implementation of S1WES Rules and Regulations:** The ITF will need to be empowered to enforce all the rules and regulations as are contained in the S1WES documents for efficient management of the scheme including sanctions to defaulting organizations and institutions. Areas mostly affected are supervision, monitoring of employers and feedback from institutions.
4. **Attracting Partners from the Private Sectors to solve the Problem of Funding:** The funding of S1WES by the Federal Government has continued to fall short of the expected expenditure. There is, therefore the need to consider the possibility of additional funding outside government coffers. School-industry partnership can be properly packaged for presentation to potential sponsors such as Banks, Multinationals and other Corporate Institutions for support in a variety of ways, including the creation of placement opportunities for industrial trainees, providing resources to support the scheme and even in the direct funding of the scheme.
5. **Database:** For the development, growth, effective monitoring and evaluation of school industry partnership, the ITF need to be immediately empowered to demand accountability from all stakeholders of the scheme. There is also need to put in place a comprehensive interactive database for the management of the scheme with vital information on institutions, eligible courses, and places of attachment among others.
6. **Allocation of uniform credit units to S1WES by participating department and institutions:** There is need for the management and administrators of S1WES, in collaboration with institutions of higher learning to arrive at a common/uniform credit unit, say six credit units (6 credit units), for each attachment year for similar courses/programmes. The agreed credit unit should necessary take cognizance of the minimum credit unit required for graduation for the various courses/programmes.

#### Conclusion

Working with industry based supervisors to establish capability criteria for students performance is an integral part of school-industry partnership in technical education. The roles play by industry based supervisors during SIWES has long been recognized as a great value to students' professional development. However, their roles have been perceived to be affected in one or the other as a result of low cooperation between schools and industries. If the level of cooperation is left like that, there is a tendency of graduating less qualitative technical education graduates who cannot fit into the world of work thereby, affecting the ambition of Nigeria's national development through technical education programme.

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