

## **IMPACT OF STUDENTS INDUSTRIAL WORK EXPERIENCE SCHEME ON ENTREPRENEURIAL COMPETENCE FOR PRE-SERVICE TEACHERS**

**BY**

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### ***Abstract***

*The current emphasis on entrepreneurial development is at increase every day. The necessity is as a result of unemployment and poverty that has ravaged the country. This paper therefore set's to determine the impact of students Industrial Work Experience Scheme (SIWES) on entrepreneurial competences for pre-service teachers. It further looked at definition of concepts with specific concern on SIWES, entrepreneurial competencies, and pre-service teachers. The paper also considered the objectives of SIWES. The techniques for developing entrepreneurial competencies were also considered, as well as the role of SIWES in developing entrepreneurial competence in pre-service teachers. The paper also, pointed out the challenges in conducting SIWES. In conclusion, the paper maintained that, there is need to complement the traditional teaching method with a well organized student's industrial work experience scheme and recommended that, industries, institutions of higher learning, contractors and governments should play their necessary roles for enhanced acquisition of entrepreneurship skills. And corruption at all levels must be discouraged so that we can have an enterprising society that we so much desire.*

***Keywords:*** *impact, SIWES, entrepreneurial competence and pre-service teachers*

## 1.0 Introduction

The students' industrial work experience scheme (SIWES) is a practical oriented programme organized and financed by the industrial Training Fund (ITF) In partnership with Colleges of Education, Polytechnic's and University in order to bridge the gap between the school and industry. The practical placement programme is designed for students of Engineering, Technology, Environmental Sciences, Medical Sciences, Veterinary Medicine, Business Education, Technical Education, Agricultural Education, Home Economics Education, Fine and Applied Arts, Music Education and Library Studies. The programme, according to ITF Publication, are collaborative, involving the institutions of higher learning, their accrediting agencies like National Universities Commission (NUC), National Board for Technical Education (NBTE), industries and commerce as well as the industrial Training Fund (ITF). The need for this type of linkage came as a result of the need to produce well trained and skilled workers to meet the technological and entrepreneurial demands of our developing country, (Sa'ad 2010).

However, for many countries of the world today, entrepreneurship is enjoying a great deal of attention, this is borne out of the desire to make graduate self-reliant rather than looking for a white collar job. Nigeria a developing country is confronted with economic, social, political, educational and insecurity challenges. Omorojie and Agbamu (2018) maintained that, for decades, unemployment has been a current and recurrent problem. Many young Nigerian graduates today are unemployed. So, those studying in some of the tertiary institutions, and are offering courses that under take the students industrial work experience scheme, they will be able to blend the theory with practical's, and acquire more entrepreneurial competences.

## 2.0 CONCEPTUAL CLARIFICATION

**2.1 The concept Students Industrial Work Experience scheme (SIWES):** This is a practically oriented programme aimed at bridging the gap between the theory and practical's. It is also, a programme to be performed, employing both human and material resources to achieve the objectives of training pre-service teachers to acquire practical skills. This activity is in consonance with one of the laws of vocational and Technical Education which states that; The Training environment must be a replica of the work place, (Okoro, 2006). Therefore, SIWES is Training where pre-service teachers are actually involved in the process of acquiring skills in their area of study.

**2.2 Entrepreneurial Competencies:** Is the ability to bring together, creates innovative ideas and combine them with management and organizational skills in order to combine people, money and resources to meet an identified need and therefore create wealth, (Osuala 2006). However entrepreneurship is a multi-dimensional discipline. Arua (2006) noted that the concept of entrepreneurship is not restricted to business or economic operations alone. Similarly, Ibezie (2009) noted that, entrepreneurship is a dynamic process of achieving change and creativity which requires the use of energy and passion for the purpose of creating and implementation of new ideals thereby bringing solution to needs.

**2.3 Entrepreneur:** Is a creative person who perceives needs, conceives idea towards goods and services to satisfy the needs of others, organizes the factors of production towards satisfaction of needs and profit maximization. Therefore, entrepreneurial competence as referred to in this study, is the possession of both Technical and professional competencies by pre-service teachers, to initiate, create and manage businesses they may establish or find themselves.

**2.4 Pre-Service Teachers:** These are the candidates undertaking a course of learning in the colleges of education, which shall lead to the award of Nigeria Certificate in Education (NCE). Pre-service teachers according to NCCE (2012), are the candidates whom have gain admissions in the colleges of education to study a programme or course of their choice for a period of three (3) years; to enable them teach effectively at the basic education level. The pre-service teachers are candidate undergoing training in the colleges of education for the purpose of teaching and they possess the pedagogy as required in the area they are trained, that is the knowledge and skills that teachers need for effective teaching, (NCCE, 2012).

**3.0 Objective of SIWES:** The objectives of SIWES have been summarized by Ndiagu (1998) and affirmed by Sa'ad (2010) as:-

1. To provide an avenue for students in institutions of higher learning to acquire industrial skills and experience in their courses of study.
2. To prepare students for the work situation they are likely to come across after graduation.
3. To expose students to work methods and techniques in handling equipment and machinery that may not be available in the educational institutions.
4. To make the transition from school to the world of work easier and to enhance students contacts for job placement later in life.
5. To provide the students with opportunities to apply their knowledge in real work situation thereby bridging the gap between what they learnt in school and practical work.

6. To enlist and strengthen employers involvement in the entire education process of preparing students for employment in the industry.
7. To provide the students with information's on diverse entrepreneur set up and managerial skills and techniques.

To achieve these objectives, the institutions, employers, industrial training funds, students and government have some roles to play. These are:

**4.0 Role of Institutions:** In other to achieve the objectives of SIWES the institution should among other things play the following roles:

1. Have a functional industrial attachment unit or SIWES directorate that should be adequately stated and funded to ensure effective operation of the scheme. The unit should see to the placement of students and ensure that they are placed in areas relevant to their courses to acquire the needed experiences.
2. Appoint a full time coordinator to oversee the scheme.
3. Have and operate a separate bank account for all the receipts and payment in respect of SIWES.
4. Prepare the students for industrial attachment by organizing SIWES Pre-orientation programme before the, commencement of the programme.
5. Prepare copies of master and placement list of eligible candidates for the year and submit those two months before the commencement of the attachment to the accrediting agencies and ITF headquarters.
6. Provide the participating students with letters of introduction to their prospective employers. Students should be provided with logbooks, ITF Form8, SP-1forms and Job specification for each course.
7. Make the qualified staff visit the students on attachment in order to examine their practical activities and mark their logbooks.
8. Complete the evaluation form in respect of all students who have participated in the scheme, (Akogun, 2005).

**5.0 Role of Employers:** The following roles of employers for SIWES were highlighted by Ayiamie (1990) as :-

1. The employers are to delegate experienced staff to effectively train and supervise the students and their activities throughout the programme.
2. Sign the logbooks for the students on weekly basis and comment on their activities.

3. Provide medical care to students within the limit of the employer's conditions of service during the period of attachment.
4. Allow the representative of accrediting bodies, ITF and institutions to visit students on attachment for follow-up activities.

### **6.0 Roles of Government**

1. Government should make funds available to the accrediting agencies for the scheme.
2. Make the ministries and parastatals provide more training places for students on attachment.
3. Make it a policy to involve a clause in every major contract being awarded to contractors to take students on industrial attachment.
4. Provide loans and facilities for vocational graduates that intend to embark on self-reliant enterprises, (Sa'ad, 2010).

### **7.0 Techniques for Developing Entrepreneur competencies during SIWES**

Different techniques may be used by staff members of the establishment where the student is carrying out the attachment, it may depend on the situation on ground or the mindset of the boss. However, some of the commonly used techniques as identified by Okere (2005) include:

**7.1 Accompanying:** Making a commitment which involves taking part in the learning process side by side with the learner.

**7.2 Catalyzing:** When change reaches a critical level of pressure, learning can be escalating. Here the staff chooses to plunge the attaché (learner) right into change, provoking a different way of thinking by re-ordering values.

**7.3 Showing:** This is making something understandable or using your own skills or example to demonstrate a particular activity.

In light of the above, to build the entrepreneur capabilities of pre-service teachers while on SIWES, the organization should involve the attaché in all activities, especially as it concern's entrepreneurship. For instance, Nwolo (2003) opined that, education and training for entrepreneur should equip the students with the required entrepreneurial skill in addition to the usual skills. Uzor (2007) noted that, studies in entrepreneurship should aim at producing students who are well groomed for success in their endeavours. The author therefore noted the need to intensify and emphasize the total development of the individuals' trainee in entrepreneurial skills such as creative skills, marketing skills, professional skills, and self motivation skills. Iwuoha (2016) also

emphasized the need to inculcate entrepreneurial skills in teachers' trainees to complement the business skills acquisition. This the author noted will make the students relevant, functional and self-employed in their areas of specialization after graduation if teaching opportunities are not readily available.

Researchers have shown that application of field studies in teaching is the key factor in improving learners' entrepreneurial capacity and review of some of the world's top education system maintained that, no nation can develop above the intellectual height of her citizenry, (Chen&Ierkwagh, 2010).

**8.0 The Impact of SIWES in Developing Entrepreneurial Competencies:** Every year, many graduate from higher institutions roam the city streets searching for employment. Some of these graduates are considered incompetent by their employers as they cannot be trusted to handle some equipment or machines. Sa'ad (2010) stated that, the quality of graduate skill is gradually eroded as a result of distressed economy where funding of education is reduced, and with high cost of tools and machines, the institution can neither procure new ones nor repair damaged ones. Nwosu (1996) further said that SIWES programme is very relevant to human resources development because it exposes them beyond their usual environment. He stressed that it exposes students to practical experiences and gets them to fit in well into their chosen careers. In support of this, Atep, Obono & Emem, (2011) stated that, skills acquisition is needed much in every sector of occupation, for competencies and productivity of a nation. Nsa (2006) also submitted that, the urgent need of resources transformation for technological development has brought about the emphasis on practical skill acquisition which means learning by doing.

Further more, the impact of SIWES on developing entrepreneur competencies are underlisted:

1. SIWES give's the recipients an insight into how micro or small business work, as they are expose to it.
2. It creates in the recipients the capacity to start a new venture of their own.
3. SIWES build in the recipient general understanding of business area and approaches.
4. It inculcate into the pre-service teachers personal enterprising capacity, (Gibb 2007).
5. It exposes the recipient to difficulties and challenges in operations of the enterprise
6. SIWES also build the professional abilities into the pre-service teachers, (Chen, 2014).

## **9.0 Challenges in conducting SIWES**

Despite the evidence supporting the importance of SIWES on entrepreneurial competencies of pre-service teachers, there are a number of challenges affecting the smooth operation. These are:

1. Collaboration between institutions and industries: There is a missing link between the institutions of higher learning and business operators; most at times business operators tend to reject students from carrying out attachment in their business organization. This is worrisome. They forgot that it is their social and cooperate responsibility to accept the students' attires' they demand for money before they will accept the students.
2. Luke warm attitude by institutions and supervising agents: Most at times, the institutions do not prepare ahead of time for students to get their Log books and other materials in good time, there by delaying when the students should start the excise. Also, the stipend the students are given after the SIWES excise is suppose to be given while on the attachment to enhance their mobility and feeding, but it's not given until they are done with the industrial attachment (IT) thereby subjecting the students to untold hard ship.
3. Contractors: The contracts awarded to contractors must be ready and willing to accept students for IT rather than rejecting the students when they approach them. Their unwillingness to accept the students for IT has compounded the students' problems.
4. Student attitudes: The student most at times feel the SIWES is just for grades in the school alone, not minding the benefit of acquiring the requisite competencies they will obtain or achieve by paying attention to where they are on attachment, so, they keep playing truancy, this act has compel most establishments to reject subsequent attaché.
5. Inadequacy of industries: The nations industries are grossly inadequate as compared to the institutions that release students for industrial experience. Even when there is one, it does not provide the necessary skills or competencies. This Kingsley (2017) observed that, there is low productivity in the country as some existing companies are out of season or even fold up soon after test run.
6. Corruption: Corruption is a global menace. However, the issue of corruption in Nigeria seems to be worsening by day. Corruption in Nigeria has set the pace for inefficiency even in the budgetary implication on TVET coupled with lack of individuals to inculcate the benefit of entrepreneurship skills in the students. Therefore, this scenario is a detriment to national economic growth and development, Akaninyne (2018).

## **10.0 Conclusion**

Developing entrepreneurial skills or competencies may not be achieved through the implementation of entrepreneurship curriculum alone. There is need to complement the traditional teaching method with a well organized students' industrial work experience scheme. This will provide the students with the required entrepreneurial competencies for self reliance. Also, there is need to utilize the accompanying, catalyzing, showing strategy to get pre-service teachers trained. SIWES is a powerful tool that when used correctly can have a significant impact upon the success of entrepreneur and their new ventures. This according to Iwuoha (2018) can lead to job increased innovation and economic development. The SIWES approach of exposing entrepreneurship techniques to students will help students to develop entrepreneurial skills and also boost their confidence in starting their own business after graduation. This according to Chen, et al (2016) will create employment reduce poverty, hunger, malnutrition, ill health factored by lack of acquisition of saleable skills, which lead to other social vices.

## **11.0 Recommendation**

Though SIWES is observed as providing the practical experiences in entrepreneur, yet some challenges befall it. Therefore, the outlined recommendations should be taken serious.

1. Industries should willingly accept students for industrial attachment without demanding for money.
2. Institutions of higher learning should prepare well ahead of time with all the requirements for SIWES such as logbooks, forms 08, before due date for commencement of attachment.
3. Contractors should as a matter of policy be compelled to accept students for industrial Training (IT) any time they are awarded contracts, else forfeit their contracts.
4. Students should take their IT serious, bearing in mind that the competencies they will acquires are more beneficial for future life endavours.
5. Government and well meaning individuals should establish more companies and lucrative businesses, so that students can go for attachment, and acquire relevant skills in their areas of specialization.
6. Corrupt practices at all levels should be stopped; else the nation will not survive. All the efforts for an egalitarian society will be in vain, as every sector will be in disarray, thereby making no progress, but rather being retrogressive.



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