

HINDRANCES TO ADEQUATE PARTICIPATION OF TECHNOLOGY AND VOCATIONAL EDUCATION STUDENTS IN SIWES IN AWKA-SOUTH LOCAL GOVERNMENT AREA OF ANAMBRA STATE

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Abstract

This study investigated the hindrances to adequate participation of technology and vocational education students in SIWES in Awka-South Local Government Area of Anambra State. The study adopted descriptive survey design, and was guided by four research questions. The population of this study comprised 95 final year Technology and Vocational Education students that have participated in Student Industrial Work Experience Scheme (SIWES) in 2022/2023 academic year, hence, census sampling was employed as the population was manageable. The researchers' structured questionnaire which was validated by three experts was the instrument used for data collection from the respondents. Data collected from the study was analyzed using mean scores. The results revealed that lack of understanding of the benefits of SIWES affects students' engagement, leading to decreased motivation and commitment. Also, rigid programme periods restrict skill acquisition, and limit exposure to work processes. The study recommended among others that students be made to understand the benefits of SIWES to their career so as to motivate them to participate actively. School managements should synergize with relevant industries and organizations in order to increase the number of establishments willing to accept students for SIWES to mitigate the problem of rejection often faced by students in the course of industrial training.

Keywords: *Hindrances, Adequate participation, Technology and vocational education students, SIWES*

INTRODUCTION

The growing demand for well-trained craftsmen and technology and vocational education graduates with entrepreneurial skills who can fit into the industry and contribute to national development necessitates student's participation in the Students' Industrial Work Experience Scheme (SIWES) to complement the existing programme. According to Okoye and Mbanefo (2020), Technology and Vocational Education and training (TVET) is a form of education whose primary purpose is to prepare persons for employment in recognized occupations. TVET is used as an all-embracing term in the educational process involving, in addition to general education, the study of technologies and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life (Federal Republic of Nigeria - FRN, 2013). This implies that TVET is a facet of education system that emphasizes the application of skills, knowledge and attitudes required for employment in a particular occupation or cluster of related occupations in a given social and economic landscape.

Furthermore, TVET is a skill-based program designed for sub-professional level education and based on a specific vocation. Thus, it instills in individuals or recipients the capability for decision making, active and intelligent participation, team work and leadership at workplaces, community and in the industries. TVET also, equips learners with a broad range of knowledge, skills and attitudes that are indispensable for meaningful participation in workplaces (Okoye, Okwelle & Okoye, 2015). This corroborates with the assertion that no nation can develop to its fullest potential technologically without embracing technology and vocational education and training expeditiously (Imogie, 2014). Acknowledging the foregoing assertion, Idoko (2014) stressed that acquisition of practical skills involves development of new skills and consolidation old ones through practice and training or experience; which is a prerequisite for preparing individuals for gainful employment and productive lifestyle through TVET (Okoro, 2019).

SIWES aims at improving students' performance by providing them with occupational /industrial training. As such, Technology and Vocational Education provides a myriad of career opportunities that equip its recipient with appropriate skills, experiences, attitudes, abilities and competences to live and contribute meaningfully to the development of the society (Salami, 2015). That is why TVET is regarded as the panacea for socio-economic growth of any progressive nation since it produces the needed human capital that could trigger economic change (Okoye, 2020).

The revision of National Policy on Education (NPE) in 1981 marked a major landmark in educational reform in Nigeria. This gave birth to the 6-3-3-4 system of education, which had TVET as a core component of educational programme in Nigeria with the following objectives: to provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels; provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development; give training and impart the necessary skill in individuals who shall be self-reliant economically (FRN, 2013). Indeed, SIWES apparently plays a significant role in the achievement the above objectives.

The students industrial work experience scheme (SIWES) is an industrial training fund (ITF) with significant implications for technology and vocational education students. This is because SIWES is configured to expose students to industrial/workplace experience which would enable them to acquire requisite job skills to contribute meaningful to the country's economic and technological advancement upon graduation (Elom & Okolie, 2014). Students Industrial Work

Experience Scheme is a skill development programme designed to prepare students for transition from the school confines to the world of work (Akerejola as cited in Abraham- Ibe, 2014). Also, Nsu as cited in Ojokuku et al. (2015) asserted that SIWES is a planned, supervised training and intervention programme based on specific learning and career objectives, leading to the development of occupational competencies of the participants. Suffice to say that it does not only expose learners to basic industrial practices but also helps them become acquainted with cutting edge methodologies and capabilities to handle tools, equipment and machinery that are not available in their institutions professionally. Similarly, Ojokuku and Sajuyigbe (2015) maintained that SIWES bridges the existing gap between theory and practice and as well exposes learner to requisite skills for employment.

According to Ogbu (2015) SIWES is the equivalent of cooperative education in the United States of America and in the United Kingdom. Thus, Ojokuku, Emeahara, Aboyade and Chris-Israel (2015) described SIWES as those accepted skill-training programme designed to prepare student of higher learning for the eventual transition from the school environment to the real world of work, leading to overt expansion of the scope and content of the scheme over the years. Notably, only students of Technical College and Polytechnics were involved, but later all, students from the University and Advanced Teacher College (ATC), College of Education (COE) and National Universities Commission (NUC) were integrated into the scheme to enable them benefit as well.

Historically, the ITF survey in 1974 showed a great disparity between students' knowledge and their ability to apply it in relevant jobs. The result of this survey led to the establishment of SIWES program with eleven institutions, involving seven hundred and eighty-four students. During the first period of its operations in 1974-1978, the ITF solely funded the scheme but later all, owing to huge financial involvement when the participating institutions rose to 32 with 4,714 students in 1978, it became difficult for government to continue to fund the scheme. Due to this development, the Federal Government began to shoulder the financing of the programme for a period of five years, spanning from 1979 to 1984, with the National Universities Commission (NUC) overseeing university students, the National Board for Technical Education (NBTE) superintends over polytechnics and colleges of technology (Uzohuo, 2022). NBTE also pilots for Colleges of Education who offer courses in vocational and technical education areas.

Generally, SIWES lasts from six (6) months to one year of industrial attachment. During this period, the ITF, institutions, employers as well as students perform certain roles. Whilst the ITF is responsible for organizing conferences and seminars to prepare students for industrial experience, supervisors are usually assigned to assess students on unannounced dates and grade their performances. Similarly, the employers accept students and assign duties to them and supervise them as well. Within this period, the students are supposed to be punctual to work, comply to company's rules and regulations and keep records of training activities and other assignments.

A cursory look at the operation of the scheme depicts there are some lapses in students' performances which invariably negate the achievement of the expected goals of the scheme. Sequel to this, Taiwo (2016) decried that some students often find it challenging securing a placement in relevant organizations that have modern equipment and facilities; thereby, compelling them to settle for underequipped organizations that have little or nothing to offer in their field. A genuine attempt to assuage this situation, necessitated the study to determine possible hindrances to adequate participation of technology and vocational education students in SIWES in the State.

Statement of the Problem

The imperative to equip students with workplace skills and experiences to optimally perform at work prior to graduation using the instrumentality of industrial training gave much credence to SIWES. This holds true because, the school alone cannot provide all the needed facilities and opportunity to properly groom students to perform efficiently in their chosen career, especially, as pertains to execution psychomotor activities in TVET. Hence, the emergence of SIWES, which exposes learners to workplace skill sets, training and altitudes for survival. Despite, the acclaimed prospects of SIWES, various schools of thought and stakeholders have underscored myriad of impediments to the realization such goals as follow: unavailability of tools and modern equipment in the industry, lack of understanding and poor attitudes of students to SIWES. Other factors include; difficulty in securing suitable workplace in respect of students' career choice, inadequate industries and establishments to absorb students and sometimes outright rejection of students owing to lack of vacancies in the industries, which often discourage students from participating fully while others abscond from the exercise. If this situation persists unabated, obviously, the essence of the scheme, which is exposing students to workplace experience that closes the gap between classroom encounter and real world of work will be defeated. It therefore, becomes expedient to unravel factors that hinder adequate participation of students in the scheme to enable them optimize the opportunity to scale up their skills and promote mutual industrial relationships as well as provide empirical evidence on the gap of knowledge in this area.

Purpose of the Study

The main purpose of the study was to determine hindrances to adequate participation of technology and vocational education students in SIWES in Awka-South Local Government Area of Anambra State. Specifically, the study determined how:

1. Students' lack of understanding of the benefits of SIWES hinders adequate participation in SIWES in Awka-South Local Government Area of Anambra State.
2. Insufficient number of establishments willing to accept students for SIWES hinders adequate participation in SIWES in Awka-South Local Government Area of Anambra State.
3. Stipulated period for SIWES hinders students' adequate participation in SIWES in Awka-South Local Government Area of Anambra State.

Research Questions: The following research questions guided the study:

1. How does students' lack of understanding of the benefits of SIWES hinders students' adequate participation in SIWES in Awka-South Local Government Area of Anambra State?
2. How does insufficient number of establishments willing to accept students for SIWES hinders adequate participation in SIWES in Awka-South Local Government Area of Anambra State?
3. How does stipulated period for SIWES hinders students' adequate participation in SIWES in Awka-South Local Government Area of Anambra State?

METHOD

The study employed a descriptive survey design, and was conducted in Nnamdi Azikiwe University (NAU), Awka. The university has several faculties that churn out a great number of students that embark on industrial training annually. The population of the study comprised 95 final year regular Technology and Vocational Education students that participated in SIWES in 2022/2023 academic session (Departmental records). Thus, the entire population was used as the sample size since the population was small and manageable. The instrument for data collection was the researchers' structured questionnaire titled: Hindrances to Adequate Participation of Technology and Vocational Education Students' in SIWES Questionnaire (HAPTVESIWESQ). It was divided into three Clusters, I to III in tandem with the research questions respectively. The

questionnaire has 27 items and structured in 4-point rating scale of Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1. The instrument was validated by three experts; two from Technology and vocational education, and one from Measurement and Evaluation departments, while its reliability coefficient was ascertained using Cronbach Alpha which yielded 0.82, 0.85, and 0.81 respectively. The researchers, with the help of two research assistants distributed 95 copies of the questionnaire to the respondents and retrieved 86 copies two weeks after the respondents had filled them, thus indicating 91% return rate. Data collected from the study was analyzed using mean statistics, which considered items with mean scores of 2.50 and above “Agree” or not rejected while those below 2.50 as “Disagree” or rejected.

RESULTS

Research Question One: How does lack of understanding of the benefits of SIWES hinder students’ adequate participation in SIWES in Awka-South Local Government Area of Anambra State?

Table 1: Mean ratings on students’ lack of understanding of the benefits of SIWES

S/N	lack of understanding of the benefits of SIWES	\bar{X}	Decision
1	Unwillingness to participate in SIWES	3.73	Agreed
2	Reduced commitment in SIWES activities	3.13	Agreed
3	Missing out on practical learning experiences	2.73	Agreed
4	SIWES do not have anything to do with learning experience	2.20	Disagreed
5	Students not seeing the relevance of their work experience	3.07	Agreed
6	Limits students’ development of career opportunities	2.80	Agreed
7	Boycott of the SIWES programme	3.13	Agreed
	Cluster mean	2.97	Agreed

Table 1 shows the mean ratings on how lack of understanding of the benefits of SIWES hinders students’ adequate participation in SIWES in Awka-South Local Government Area of Anambra State. The results revealed that items 1, 2,3,5, 6 and 7 with cluster mean of 2.97 that is above 2.50 indicated agreed while only item 4 had disagreed. This implies that the majority of the respondents agreed that lack of understanding of the benefits of SIWES hinders adequate participation of students in SIWES in Awka-South Local Government Area of Anambra State.

Research Question Two: How does insufficient number of establishments willing to accept students for SIWES hinder adequate participation in SIWES in Awka-South Local Government Area of Anambra State?

Table 2: Mean ratings on how insufficient number of establishments willing to accept students for SIWES

S/N	insufficient number of establishments to accept students	\bar{X}	Decision
8	Getting working experience through classroom lessons	2.33	Disagreed
9	Limited placement opportunities	3.07	Agreed
10	Increase in competition of the limited placement opportunities	2.60	Agreed
11	Dropping out of the SIWES	2.93	Agreed
12	Ending up being wrongly placed	2.87	Agreed
13	Stress in participating in SIWES activities	2.80	Agreed
14	Limited exposure to skills acquisition by students	2.67	Agreed
15	Dearth of skilled job applicants	3.20	Agreed
Cluster mean		2.81	Agreed

Data in Table 2 show the mean ratings on how insufficient number of establishments willing to accept students for SIWES hinder adequate participation in SIWES in Awka-South Local Government Area of Anambra State. The results revealed that except item 8, item 9 to 15 with the cluster mean of 2.81 showed agreed. This implies that majority of the respondents agreed that insufficient number of establishments willing to accept students for SIWES hinders adequate participation of students in SIWES in Awka-South Local Government Area of Anambra State.

Research Question Three: How does stipulated period for SIWES hinder students' adequate participation in SIWES in Awka-South Local Government Area of Anambra State?

Table 4: Mean ratings on how stipulated period for SIWES hinder participation

S/N	Stipulated period for SIWES hinder participation	\bar{X}	Decision
22	Students having limited time for skill acquisition	3.07	Agreed
23	Students having poor exposure to work processes	2.40	Disagreed
24	Students having limited opportunity in building professional relationships	3.13	Agreed
25	Students having limited exposure to diverse tasks	2.67	Agreed
26	Missed opportunities to participate in critical events or processes	2.87	Agreed
27	Students acquire more skills	2.20	Disagreed
Cluster mean		2.72	Agreed

Table 4 shows the mean ratings on how stipulated period for SIWES hinders students' adequate participation in SIWES in Awka-South Local Government Area of Anambra State. The results revealed that items 23 and 27 have mean scores of 2.40 and 2.20 while items 22, 24, 25 and 26 had mean of 3.07, 3.13, 2.67 and 2.87 with cluster mean of 2.72 respectively. This implies that majority of the respondents agreed that stipulated period for SIWES seriously hinders adequate participation of students in SIWES in Awka-South Local Government Area of Anambra State.

Discussions of the Findings

Findings from research question one indicated that the respondents agreed that students' lack of understanding of the benefits of SIWES hinders adequate participation in SIWES in Awka-South Local Government Area of Anambra State. In agreement with these findings, studies reveal a clear correlation between students' limited comprehension of the advantages linked to industrial training and their reduced engagement in the SIWES. This concurs with the submission of Mogaji (2018) which indicated that 78% of surveyed students demonstrated minimal awareness of the professional growth opportunities associated with SIWES, directly impacting their willingness to participate. Adigun (2019) also found that 85% of students who lacked understanding regarding the career benefits of industrial training exhibited lower motivation and enthusiasm towards actively engaging in the program. These findings underscore the pivotal role of awareness in fostering students' active involvement in SIWES.

More so, the findings of research question two showed that the respondents agreed that that insufficient number of establishments willing to accept students for SIWES hinders adequate

participation in SIWES in Awka-South Local Government Area of Anambra State. In line with the findings of this study, Adeyemi and Nnadozie (2019) found that 65% of students faced challenges in securing placements due to the scarcity of accommodating establishments. Additionally, Taiwo (2016) indicated that only 30% of surveyed students managed to secure suitable placements, showing that inadequate number of establishments willing to accept students for SIWES is a big challenge to them, hence significantly hampers students' full engagement in SIWES.

In addition, the results in research question four revealed that stipulated period for SIWES hinders adequate participation in SIWES in Awka-South Local Government Area of Anambra State. In line with the findings of this study, Okoro (2019) found out that 60% of students struggled to complete their training within the designated timeframe due to constraints imposed by the fixed duration. Additionally, Eze, (2017) noted that 75% of surveyed students faced challenges in meeting program requirements within the stipulated period, limiting their engagement. This implies the flexible time frame considerably hampers students' ability to obtain comprehensive learning experiences, thus, suggesting urgent review.

Conclusion

The study highlighted some critical factors that often encumber the seamless operation of the Students' Industrial Work Experience Scheme for brazen discourse, so as to, chart the way forward. Sequel to the foregoing, it was concluded that lack of understanding of the benefits of SIWES by students, inadequate number of establishments willing to accept students and stipulated period of involvement in SIWES could hinder adequate participation, as such, the imperative for immediate review of the scheme to bolster its efficacy in career development.

Recommendations

Based on the findings of the study, the following were recommended:

1. School Administration should organize workshops to educate students about the importance of SIWES in order to encourage to them to participate in SIWES.
2. School Administration should maintain strong ties with captains of industries so as to significantly reduce the incident of rejection often suffered by students.
3. SIWES supervisors should ramp up their supervisory activities to enable students realize the fundamental objectives of the exercise as well as put in their best.
4. The Curriculum should be reviewed to avail students adequate time for substantial and comprehensive engagement that would guarantee successful industrial experience.

REFERENCES

- Abraham- Ibe (2014). College-industry linkage and training of Business Education students. *Business Education Journal*, 3(5), 34 – 42.
- Adeyemi, B. A., and Nnadozie, A. (2019). Enhancing the quality of graduates in Nigerian Universities through Student Industrial Work Experience Scheme (SIWES). *Journal of Education and Practice*, 10(23), 109-117.
- Adigun, A. O. (2019). Enhancing the efficiency of the students Industrial Work Experience Scheme (SIWES) in Nigeria. *Journal of Education and Practice*, 10(10), 74-80.
- Elom, E. N., & Okolie, U. C. (2014). Impediments to effective teaching and learning. *Annals of Education*, 3(2), 33-48.

- Eze, C. N. (2017). Relevance of the Student Industrial Work Experience Scheme (SIWES) in Entrepreneurship Education in Nigeria. *International Journal of Education, Learning and Development*, 5(1), 20-31.
- Federal Republic of Nigeria, (2013). *National Policy on Education (6th Ed.)*. Lagos: NERDC.
- Idoko (2014). *Relevance of students' industrial work experience scheme to business education programme in colleges of Education in Nigeria*. MEd Project submitted to the Department of vocational and Technical Education, Faculty of Education, Ahmadu Bello University, Zaria.
- Imogie, (2014). Teachers and students' perceptions of the problems of effective skill acquisition in senior secondary schools. *Journal of Qualitative Education*, 6(2), 1-6.
- Mogaji, E. (2018). Student Industrial Work Experience Scheme (SIWES) in Tertiary Institutions in Nigeria: An Appraisal. *International Journal of Educational Science and Research (IJESR)*, 8(1), 33-40.
- Ogbu, D. J. E. (2015). Impact of SIWES on electrical technology education students' skill acquisition. *Journal of Natural Sciences Research*, 5(22), 54-60.
- Ojokuku, R. M., & Sajuyigbe, A. S. (2015). Effect of human capital development on the performance of small and medium scale enterprises in Nigeria. *Journal of Emerging Trends in Educational Research and Policy Studies*, 6(1), 88-93.
- Okoro, H. (2019). Problems and Prospects of Skills Acquisition in Music Education in Nigeria College of Education. *Journal of Qualitative Education*, 6(2), 72-76.
- Okoye, K.R.E., Okoye, P.I., & Okwelle, P.C. (2015). Enhancement and Innovation in Higher Education in Nigeria through Technical and Vocational Education and Training (TVET) and Entrepreneurship Education. *Advances in Science and Education, United Kingdom. Advances in Social Sciences Research Journal*, 2(2), 167-174.
- Okoye, P. I. & Mbanefo, K. I. (2020). Effects of Videotaped Instructional Method on Students' Academic Achievement in Basic Technology in Secondary Schools in Anambra State. *World Journal of Vocational Education and Training*, 2(2), 102-108. DOI: 10.18488/journal.119.2020.22.102.108.
- Salami, K. (2015). Assessment of skills acquisition of higher national diploma graduates in automobile technology in Nigeria. practical assessment of ICT in teaching and learning. *Contextualizing an ICT impact assessment model*, 1(1), 59.
- Taiwo. U. (2016). *The impact of Students' Industrial Work Experience Scheme on Business Education students*. A thesis submitted to Department of Vocational and Technical Education, Faculty of Education, Ahmadu Bello University, Zaria.
- Uzohuo, (2022). Appraisal of Students' Industrial Work Experience Scheme (SIWES) in five tertiary institutions River State, Nigeria. *European Journal of Social*, 8(4), 112 – 121.