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RESEARCH ARTICLE

SIWES Engagement and Business Education Programme in Nigeria

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ABSTRACT

SIWES, one of the Industrial Training Fund (ITF) programs, was introduced because students need to be able to relate the theoretical knowledge they have learned in school to the practical aspects of their industry training. In secondary and tertiary institutions across Nigeria, such as universities, colleges, and polytechnics. Business education is taught as part of technical and vocational education. This study aimed at examining SIWES engagement and business education programme in Abuja, Nigeria. The participants in this study were residents of Abuja metropolis, FCT, Nigeria. The sample size was calculated using the population figure, from which a total of 134 responders were chosen. The research design selected for this study was survey research design and Taro Yamane's formula was utilized. The results based on respondents' responses show that there is effectiveness of SIWES in meeting the work experience needs of business education products. Additionally, 8 of the respondents strongly disagreed that there is a relationship between SIWES and business education programme objectives. The study recommends that organizations should always accept students for SIWES and then place them in appropriate positions.

INTRODUCTION

In secondary and tertiary institutions across the nation, such as universities, colleges, and polytechnics, business education is taught as part of technical and vocational education. Osuala (2012) states that business education is divided into two parts: office education, which is vocational in nature for office employment, and general business education, which is a curriculum that transmits information and skills necessary for managing firms. The main goal of business education is to support the development of the business competencies needed to function effectively in the workplace, whether as an employer or employee. Agbeze (2012) devised the Student Industrial Works Experience Scheme (SIWES) to make sure that students' academic understanding and practical skills aligned.

SIWES, one of the Industrial Training Fund (ITF) programs, was introduced in 1974 because of the inability of engineering and technology students at Nigerian universities and polytechnics to complete the practical requirements of their education (ITF, 2006). In other words, students need to be able to relate the theoretical knowledge they have learned in school to the practical aspects of their industry training. According to Ekpenyong (2011), integrating the theoretical and practical learning that distinguishes traditional classroom settings with the goal of balancing theory and practice is one of the guiding principles of any industrial work experience program for students at educational institutions. The author also underlined that the ITF was designed to ascertain the degree to which students in Nigerian schools that offer technology-based degrees relate to the kind of job experience that employers desire from them in terms of theoretical knowledge of engineering

technology. The results of the ITF survey showed that students' knowledge and their ability to apply it in relevant jobs differed significantly. In 2014, the ITF introduced a co-operative internship program to bridge the gap between the two, enabling technology students to work while completing some of their curriculum. familiarity with pertinent industries in the Nigerian economy (Abraham, 2015; Abbas et al., 2024). The article claims that SIWES, the internship program, is intended to give Nigerian students taking courses relating to their line of work real-world experience to supplement their classroom learning.

The ITF, a student's school, and employers are responsible for the efficient operation of SIWES. The ITF is tasked with a number of duties to ensure the success of SIWES, some of which include recruiting students for industrial attachment, providing logistical support for the program, monitoring and evaluating the performance of students on industrial attachment, making sure that students receive their monthly allowances, setting up a group insurance plan for students on attachment, and disciplining disobedient students and those who perform poorly on the program (Jacob et al., 2020). Additionally, the institution has a unique function to play in guaranteeing the scheme's efficacy. The institution is responsible for making sure that students are ready for industrial attachment and are then placed with employers. Additionally, it guarantees that students on attachment are properly and thoroughly supervised (Karunaratne, 2015; Jam et al., 2025). Employers have a responsibility to accept students on attachment and place them in appropriate positions that will provide the best opportunity for skill development and supervision. Additionally, the employer makes sure that students follow the laws and regulations governing the program and receive their monthly allowances. The main responsibilities of the students are to complete the student logbook and arrive at the attachment location on time and consistently (Ogbu, 2015).

Apart from the school and other supervisory agencies of the government (that is National Universities Commission, National Board for Technical Education and National Commission for Colleges of Education), the organizations play a very crucial role in ensuring that business education students are properly and adequately trained in line with the demands of the modern office (Adam, 2007). For there to be effectiveness and the realization of the overall mandate of SIWES, there must be proper collaboration between the schools where students are exposed to theoretical knowledge and the organization where they are exposed to detailed practical knowledge (Egelhoff, 2005). Once the gap between the school and the industry (organization) has been bridged, there would be assurance of greater quality and productivity of the graduates from the various institutions (Gambari, 2009). Limited concrete proof of SIWES's efficacy has been found throughout the years, especially when it comes to business education students who have joined the program. Because opinions of the scheme's efficacy in Nigeria are varied and unsupported, the study aimed to evaluate SIWES engagement and business education programme in Nigeria.

LITERATURE REVIEW

These theories guiding work experience are those propounded by Prosser in 1940s. Okoh (2010); Amolo et al. (2014), stated that these theories developed by Prosser are still useful today as they were first developed. Olumese et a1 (2016) stated these theories as follows:

Work experience will be efficient in proportion as the environment in which the learner is trained is a replica of the environment in which the learner must subsequently work". To apply this idea to student work experience, students must be trained in an industrial setting like the one they would work in after finishing their education. Work experience can only be achieved where the training jobs are carried out in the same operations, the same tools and the same machines as in the occupation itself." The industry can successfully accomplish this through SIWES, which suggests that students should be trained in the same operation, using the same equipment and machines as those they will use in the job they secure after graduation.

Work experience has a body of content which is peculiar to specific occupation, and which practically has no functional value in any other occupation." According to this theory, since information and skills gained in one occupation cannot be transferred to another, it is important to master and stay in that occupation. Work experience will be effective if the individual capitalizes his interest, aptitudes and intrinsic intelligence to the highest possible degrees." According to this theory, a student can only gain valuable job experience if he is receiving instruction in an area that aligns with his interests, skills, and intelligence. Work experience will be effective if the only reliable source of content for specific training in an occupation is the experience of masters in that occupation". This suggests that the content of a particular training program in each occupation should be decided by those who have experience in that field.

Amerua et al. (2009) and Obasi (2015), the apprenticeship system of training in various practical business skills is where Nigerian business education history began. The apprentice, or learner, is bonded to his master, or instructor, who is the artisan and from whom he is supposed to learn the skills required for the occupation under this training method. The history of business education in Nigeria had a significant phase in the early 19th century. To facilitate business transactions with their partners and meet the demands of their export market, Nigerian citizens involved in business partnerships with their foreign counterparts were required to acquire rudimentary business knowledge at this time. As a result, several commercial schools with business courses in the curriculum had to be established in Nigeria. Nevertheless, the schools were based on the British grammar school system, which at the time had a completely academic curriculum (Gartner, 2009).

It appears that the goals of business education have been expressed in a variety of ways. The development of occupational knowledge and skills necessary for work and a business career has historically been the goal of business education, according to Akintola (2001). This was reiterated by Bandura (2018), who said that business education programs have historically been designed to prepare graduates for wage-based work that meets the needs of large and medium-sized businesses.

Effiah et al. (2014), the main goal of business education is to give students the opportunity to acquire occupational abilities (Olabiyi et al., 2012); Oyedele (2000) and (Isah, 2003); to land a business profession (Bukaliya, 2012 and Olugbenga, 2009). Uramah (2003) argued that business education may be separated into two elements, namely: vocational (education of business) and general education (education about business). Confirming the assumption, Ekwue et al. (2002), underlined that business education teachers need to realize the existence of two basic classifications of business education- vocational and general education.

After completing the theories of the various courses offered during the classroom period, business education students must connect these to the live practice in the industry or any establishment that conveys the practical approach to the courses that have been taught in the classroom (Wodi et al., 2009). This will help to broaden the students' horizons and their perceptions of the courses and bridge the gap between abstract and reality. The Student Industrial Work Experience Scheme (SIWES) is a skill training program built to expose and prepare students at universities, polytechnics, colleges of agriculture, and colleges of education for the industrial work situation they are likely to encounter after graduation (Omorogouwa, 2006).

Olusegun et al. (2022) defined placement as the assignment of students to a suitable job with the aim of giving the students the opportunity to acquire skills in each area to which he or she has theoretical knowledge. NCE approved a four (4) month (sixteen weeks) industrial training course for those on the NCE program at the end of second year classroom-work and for those in bachelor's degrees. ITF (2006) approved that it is the responsibility of the institution through the SIWES coordinator to source and post eligible students to appropriate industry or company for practical exposure. According to Emah (2006), certain payments were designated as SIWES allowance from the beginning of the students' Industrial Work Experience Scheme by the Industrial Training Fund Handbook, 2010; these included supervisory and student allowances. The supervisory allowances

were intended to help Colleges of Education defray some of the costs associated with supervising students during Industrial Attachment while the students were on personal expenses like transportation and food during Industrial Attachment (Omoankhanlen et al., 2009).

The supervision that is a part of this plan is one exceptional component that makes it valuable. "Students on attachment are to be supervised by supervisors from their institutions, professional staff of the ITF, institution supervisors are to visit students at least twice during the attachment," states the ITF information and reference guideline (Imeokparia et al., 2012). Additionally, zonal supervision defined as "a system whereby students on attachment in a given zone are not necessarily supervised by their own lecturers, but by other lecturers from designated supervising institutions in that zone" (Oviawe et al., 2009) is provided. Furthermore, there must be a maximum number of students that a supervisor can comfortably manage for supervision to be effective; however, given the rate at which students are growing, which is not proportionate to the lecturer, supervision of all students may not be effective unless a different approach is developed (Binvometers et al., 2021).

A study by Anyaeneh and Ochuba (2019) aimed to determine how students' SIWES affected the improvement of business education students' marketable skills in federal tertiary institutions in the state of Anambra. Most business education students who were understudied benefited greatly from SIWES, according to the findings. Typing abilities, time management abilities, creativity abilities, leadership abilities, and teamwork abilities were among the marketable talents improved by SIWES. Among the notable issues SIWES faces are financial difficulties, student placements due to certain businesses' refusal to accept students into their enterprises, insufficient trainee supervision, and irregularities in the academic calendar of schools. Given all of the abilities that SIWES has improved, one would anticipate that children would do better academically when they return to school.

Ojokuku et al. (2015) examined the impact of SIWES on the professional development of library and information science students in South-West Nigeria and found that LIS students had a high positive opinion of SIWES as a professional development influencer (97.7% agreement), and that SIWES introduced them to new work methods (97.7% agreement). The ideals of SIWES and librarianship as a profession are closely related, and they believe that SIWES is an essential program for LIS students' professional development because librarians' intellectual work is based on the application of scientific principles in the organization, storing, retrieval, and dissemination of information.

Awojobi (2002) in a study Some of the findings from the study, which was titled College Industry Linkage and the Training of Business Education Students, include: (i) 51% of the respondents accused the college-based supervisors of not visiting them as often as the scheme required; (ii) Many students on the SIWES program were unable to find relevant placements that would improve their course of study; and (iii) a significant number of students claimed that the SIWES program was irrelevant to their studies because they thought it was a waste of time and money. Wodi and Dokubu (2009) a related investigation found that students had trouble finding placement, the school was not providing enough supervision, and supervisors' and students' allowances were not paid on time.

METHODS

For this study, the survey research design was adopted. The population for this study were residents in Abuja metropolis, FCT, Nigeria. A total of 134 respondents were selected from the population figure out of which the sample size was determined. The reason for choosing Abuja metropolis is because of its proximity to the researcher.

The researcher used Taro Yamane's formula to determine the sample size of the population.

Taro Yamane's formula is given as

$$n = \frac{N}{\quad}$$

$$1+N\,(e)^2$$

Where N = Population of study (134)

n = Sample size (?)

e = Level of significance at 5% (0.05)

1 = Constant

$$\therefore \quad n = \frac{134}{\frac{1 + 134\,(0.05)^2}{134}} = \frac{134}{\frac{1+134(0.0025)}{100}} = \frac{134}{\frac{1+0.3}{1.335}}$$

The sample size therefore is 100 respondents.

Data for this study was acquired from primary and secondary sources. The primary source of data acquired was mainly the use of a constructed questionnaire which was designed to elicit information on the assessment of SIWES involvement and business education curriculum in Abuja, Nigeria. Textbooks, journals, and academic publications served as secondary sources for data collection.

Face validation was applied to the study's instrument. The suitability of the questionnaire items is tested through face validation. This is since face validation is frequently used to determine if an instrument seems to measure what it includes. Therefore, the goal of facing validations is to ascertain how pertinent the questionnaire is to the study's goals. Copies of the first draft of the questionnaire will be verified by the supervisor before the instrument is submitted for face validation. The supervisor is supposed to evaluate the instrument's items critically considering the study's particular goals and offer helpful recommendations to raise the instrument's caliber. Before being used for the study, the instrument will be modified and re-modified in accordance with his suggestions.

After collecting the data through the administration of a questionnaire, the data will be coded, tabulated, and analyzed using SPSS statistical software in accordance with the research question and hypothesis. The chi square method will be used for testing independence in order to efficiently analyze the data collected for ease of management and accuracy. The data will be analyzed using frequency tables, percentages, and mean score analysis, while the nonparametric statistical test (Chi-square) was used to test the formulated hypothesis using SPSS (statistical package for social sciences). Chi square is given as

$$X^2 = \frac{\sum (o-e)^2}{e}$$

Where X^2 = chi square

o = observed frequency

e = expected frequency

Level of confidence / degree of freedom

When employing the chi – square test, a certain level of confidence or margin of error must be assumed. Moreover, the degree of freedom in the table must be determined in simple variable, row and column distribution, degree of freedom is: df = (r-1) (c-1)

Where, df = degree of freedom

r = number of rows

c = number of columns.

In determining the critical chi _ square value, the value of confidence is assumed to be at 95% or 0.95. A margin of 5% or 0.05 is allowed for judgment error.

RESULTS AND DISCUSSION

Analysis of Demographic Data of Respondents

Table 1: Gender of Respondents

		Frequency	Percent	Cumulative Percent
Valid	Male	65	65.0	65.0
	Female	35	35.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 1 above shows the gender distribution of the respondents used for this study. Out of the total number of 100 respondents, 65respondents which represent 65.0percent of the population are male. 35 which represent 35.0 percent of the population are female.

Table 2: Age range of Respondents

		Frequency	Percent	Cumulative Percent
Valid	20-30years	15	15.0	15.0
	31-40years	10	10.0	25.0
	41-50years	25	25.0	50.0
	51-60years	20	20.0	70.0
	above 60years	30	30.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 2 above shows the age grade of the respondents used for this study. Out of the total number of 100 respondents, 15 respondents which represent 15.0percent of the population are between 20-30years. 10 respondents which represent 10.0percent of the population are between 31-40years. 25 respondents representing 25.0percent of the population are between 41-50years. 20 respondents which represent 20.0percent of the population are between 51-60years. 30 respondents, which represent 30.0percent of the population, are above 60years.

Table 3: Educational Background of Respondents

		Frequency	Percent	Cumulative Percent
Valid	FSLC	20	20.0	20.0
	WASSCE/GCE/NECO	25	25.0	45.0
	OND/HND/BSC	35	35.0	80.0
	MSC/PGD/PHD	15	15.0	95.0
	OTHERS	5	5.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 3 above shows the educational background of the respondents used for this study. Out of the total number of 100 respondents, 20 respondents which represent 20.0percent of the population are FSLC holders. 25, which represent 25.0percent of the population are SSCE/GCE/WASSCE holders. 35, which represent 35 percent of the population, are OND/HND/BSC holders. 15 which represent

15.0percent of the population are MSc/PGD/PhD holders. 5, which represent 5 percent of the population, had other types of educational qualifications.

Table 4: Marital Status

		Frequency	Percent	Cumulative Percent
Valid	Single	30	30.0	30.0
	Married	55	55.0	85.0
	Divorced	5	5.0	90.0
	Widowed	10	10.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 4 above shows the marital status of the respondents used for this study. 30 which represent 30.0percent of the population are single. 55, which represent 55.0percent of the population, are married. 5, which represent 5.0percent of the population who are divorced. 10 which represent 10.0percent of the population are widowed.

Table 5: Category of Respondents

		Frequency	Percent	Cumulative Percent
Valid	Civil servant	25	25.0	25.0
	Self-employed	15	15.0	40.0
	Students Unemployed	25 35	25.0 35.0	65.0 100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 5 shows the category of respondents used for the study. 25 respondents representing 25.0perrcent of the population under study are civil servants. 15 respondents representing 15.0percent of the population under study are self-employed. 25 respondents representing 25.0perrcent of the population under study are students while 35 respondents representing 35.0perrcent of the population under study are unemployed.

Table 6: There is a relationship between SIWES and business education programme objectives

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	30	30.0	30.0
	Agree	42	42.0	72.0
	Undecided	10	10.0	82.0
	Disagree	10	10.0	92.0
	Strongly disagree	8	8.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 6 shows the responses of respondents if there is a relationship between SIWES and business education programme objectives. 30 respondents representing 30.0percent strongly agreed that there is a relationship between SIWES and business education programme objectives. 42 respondents representing 42.0percent agreed that there is a relationship between SIWES and business education programme objectives. 10 respondents representing 10.0 percent were

undecided. 10 respondents representing 10.0percent disagreed that there is a relationship between SIWES and business education programme objectives. 8 respondents representing 8.0percent strongly disagreed that there is a relationship between SIWES and business education programme objectives.

Table 7: There are no challenges confronting the effectiveness of SIWES in Nigeria

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	10	10.0	10.0
	Agree	15	15.0	25.0
	Undecided	5	5.0	30.0
	Disagree	40	40.0	70.0
	Strongly disagree	30	30.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 7 show the responses of respondents if there are no challenges confronting the effectiveness of SIWES in Nigeria. 10 of the respondents representing 10.0percent strongly agree that there are no challenges confronting the effectiveness of SIWES in Nigeria. 15 of the respondents representing 15.0percent agree that there are no challenges confronting the effectiveness of SIWES in Nigeria. 5 of them, representing 5 percent, were undecided. 40 of the respondents representing 40.0percent disagree that there are no challenges confronting the effectiveness of SIWES in Nigeria. 30 of the respondents representing 30.0percent strongly disagree that there are no challenges confronting the effectiveness of SIWES in Nigeria.

Table 8: There is effectiveness of SIWES in meeting the work experience needs of business education products

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	60	60.0	60.0
	Agree	25	25.0	85.0
	Undecided	10	10.0	95.0
	Disagree	5	5.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 8 shows the responses of respondents if there is effectiveness of SIWES in meeting the work experience needs of business education products. 60 of the respondents representing 60.0percent strongly agree that there is effectiveness of SIWES in meeting the work experience needs of business education products. 25 of the respondents representing 25.0percent agree that there is effectiveness of SIWES in meeting the work experience needs of business education products. 10 of them representing 10.0percent were undecided. 5 of the respondents representing 5.0percent disagree that there is effectiveness of SIWES in meeting the work experience needs of business education products.

Table 9: There is no clear evidence of effectiveness of SIWES

Source: Field Survey, 2025.

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	25	25.0	25.0
	Agree	32	32.0	57.0
	Undecided	13	13.0	70.0
	Disagree	15	15.0	85.0
	Strongly disagree	15	15.0	100.0
	Total	100	100.0	

Table 9 shows the responses of respondents if there is no clear evidence of effectiveness of SIWES. 25 of the respondents, representing 25.0percent, strongly agree that there is no clear evidence of effectiveness of SIWES. 32 of the respondents representing 32.0percent agree that there is no clear evidence of effectiveness of SIWES. 13 of the respondents representing 13.0percent were undecided. 15 of the respondents representing 15.0percent disagree that there is no clear evidence of effectiveness of SIWES. 15 of the respondents representing 15.0percent strongly disagree that there is no clear evidence of effectiveness of SIWES.

Table 10: SIWES promotes business education objectives

		Frequency	Percent	Cumulative Percent
Valid	Strongly agree	65	65.0	65.0
	Agree	30	30.0	95.0
	Disagree	3	3.0	98.0
	Strongly disagree	2	2.0	100.0
	Total	100	100.0	

Source: Field Survey, 2025.

Table 10 shows the responses of respondents if SIWES promotes business education objectives. 65 of the respondents representing 65.0percent strongly agree that SIWES promotes business education objectives. 30 of the respondents representing 30.0percent agree that SIWES promotes business education objectives. 3 of the respondents representing 3.0percent disagree that SIWES promotes business education objectives. 2 of the respondents representing 2.0percent strongly disagree that SIWES promotes business education objectives.

CONCLUSION AND RECOMMENDATIONS

SIWES, a fundamental program for efficient teaching and learning of skill-based courses like business education, has been reasonably examined in this study. This article thus indicates that SIWES is effective in fulfilling the work experience requirements of Business Education students in tertiary institutions in Abuja, Nigeria, based on the data gathered and the ensuing analysis. Therefore, the workforce's competencies will be greatly increased and improved by the appropriate and efficient administration of SIWES. As a result, businesses will have to spend less on staff training and retraining. It can also be said that organizations with students on industrial attachment do not adequately handle SIWES. This trend implies that the participants in SIWES training would have low morale, and the scheme's overall goal might not be achieved.

The empirical inquiry has shown outstanding findings and based on that; the following recommendations are consequently advanced:

i. To achieve their goals, all parties involved must strengthen the Students' Industrial Works Experience Scheme (SIWES).

ii. For students on attachment, regular monthly allowances must be paid on time.

iii. It is imperative that organizations always accept students for SIWES and then place them in appropriate positions.

iv. Students should always be trained in attachment by experienced staff.

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