

Students' Entrepreneurial Skill Acquisition through SIWES in Nigeria: An Analytical Approach

Okolocha Chimezie Comfort

*Department of Vocational Education
Nnamdi Azikiwe University, Nigeria
E-mail: chimezie4gilbert@yahoo.com*

Okolocha Chizoba Bonaventure

*Department of Business Administration,
Limkokwing University of Creative Technology, Malaysia
E-mail: chizzyworldbank@yahoo.com*

Abstract

This study presents an analytical approach to students' entrepreneurial skill acquisition through Students' Industrial Work Experience Scheme (SIWES) in Anambra State, Nigeria. The study was guided by two research questions and two hypotheses. Mean and standard deviation were used to analyze data collected through a validated four point structured questionnaire. The null hypotheses were tested at 0.05 level of significance using ANOVA. Students rated SIWES as having positive impact on their academic achievements (entrepreneurship skill acquisition). However, students identified difficulty in securing placement for industrial training as the most pressing problem encountered prior to SIWES exercise. It was recommended among others that the SIWES coordinators at state and institutional levels should devise effective strategies for sourcing out places of placement on behalf of the students and post them to relevant industries that will match their fields of study which will help them to acquire practical skills.

Keywords: Students' entrepreneurial skill, acquisition, SIWES, Nigeria.

1. Introduction

In Nigeria today, transition from school to the world of work seems to create problems for young school leavers. Their ability to adopt school-based knowledge, skills, attitudes and competencies to work often depends on how adequately exposed they are to real-life business and office environment while they were in school. It has been an established fact that the formal and non-formal education systems as practiced in Nigeria and most African countries patterned after the British public schools has resulted in the production of graduates for jobs that are not available. The geometric progression of the unemployed in Nigeria today has shown that most graduates from higher institutions seem not to possess requisite entrepreneurial skills needed for proper transition from school to the world of work. To buttress this assertion, Okwuanaso (2000) pointed out that many graduates who go to work through entrepreneurial route fail because of their little knowledge of what it takes to manage a business effectively. Yahya (2007) equally expressed the view that the type of education offered to our students has constrained their entrepreneurial capability and is unable to equip them for success in the world of business. The result of the study carried out by Okebukola (2006) confirmed that most Nigerian graduates are deficient in self-reliance and entrepreneurial skills. The major problem with our country today is our inability to assess the true needs of our people and try to match them with appropriate training, equipment, and adequate funding that will facilitate the acquisition of the right skills and competencies needed for proper adaptation within the environment of practice. Since most Nigerian tertiary institutions seem not to have all it takes in terms of equipment and facilities to equip the young graduates with necessary skills and competencies, it then becomes necessary for schools to liaise with industries where these modern facilities can be found so that these students can be exposed to real

practical activities. The exposure and the experiences acquired in such cooperation will help them to be independent, self-reliant, self-fulfilled and self-actualized when they graduate. It will also enable them to set up businesses of their own in the absence of white collar jobs.

1.1 History of Nigerian Unemployment Problem

The origin of unemployment in Nigeria can be traced back to the oil boom era of 1970's. During this period, Nigerian government and individuals abandoned skill acquisition and utilization through diversified entrepreneurship practices that have the capability to boost both individual and the country's economic ego. An increase in the economic status of the country prior to the oil boom was as a result of diversified activities bordering on agricultural products such as cocoa, groundnut, palm kernel, palm oil, cassava in addition to other craft practices. Nigerian citizens before the oil boom believed in what one can do in order to ensure self-sustenance, self-dependency, self-actualization and self-fulfillment. The educational system in Nigeria then encouraged craft practices even at the primary school level. During this period, Nigeria had so many skilled technicians – carpenters, painters, auto-mechanics, fashion designers, hair dressers among others. With the oil boom, emphasis shifted from entrepreneurial practices to paper qualification until late 1980's when the petroleum market crashed as the Organization of Petroleum and Exporting Countries (O.P.E.C) lost its near monopolistic position in the energy industry. The fallout of the crash was that Nigeria started grappling with the challenges of human development, education and the economy.

1.2 Effort towards Solving Unemployment Problem in Nigeria

As a nation, Nigeria has been working tirelessly since the collapse of oil boom to achieve youth independence, poverty eradication and improved economic status through several reforms and program initiatives such as the Operation Feed the Nation, Poverty Eradication Program (PEP); Structural Adjustment Program (SAP), National Directorate of Employment (NDE) among others. Regrettably, however these program initiatives aimed at capacity building and utilization may seem, they have not helped in any way to equip young school leavers (Youth's) with appropriate skills that will empower them after graduation from school. However, all the education and economic program and policies initiated by both military and civilian governments including emphasis on small scale businesses after the crash of the oil boom seem not to have made any serious positive impact because almost all program initiatives were focused on providing the youths with food without teaching them how to produce food themselves. Most of the program were politically motivated and initiated by politicians for personal glory. None of the politicians were interested in the perfection of the existing program which in most cases was initiated without a need assessment of the masses that will utilize the program. Funds meant for the programme were sometimes shared among the implementers of the program while some percentages were diverted to other areas.

2. Literature Review

Entrepreneurship skill acquired in the context of this study refers to an individual's knowledge and ability to perform specific tasks successfully; while entrepreneurship according to Anerua & Obiazi (2009) is the process of perceiving business opportunities, mobilizing both human and material resources and initiating action(s) under an enterprise which is characterized by risk taking, innovation and creativity to meet individual, group or societal needs. Entrepreneurship skills therefore, are business skills which one acquires to function effectively in the turbulent business environment as an independent or self-employed person in order to improve one's economic status and the society at large.

The importance of entrepreneurship skill cannot be over-emphasized since appropriate skill acquisition through entrepreneurship will help to make young school leavers to be self-reliant and boost their economic status. Isike (2008) stated that entrepreneurship has been identified globally and nationally as a tool for generating a sustainable economy which is the core value of the National Economic Empowerment Development Strategies (NEEDs). The establishment of small businesses helps to generate substantial amount of employment and income which are essential parts of a country's Gross National Product (GNP).

For the laudable benefits of entrepreneurship to manifest in our youths' and the general public, the skills must be learned through formal or non-formal settings. Uloko & Ejinkonye (2010) remarked that when youths' are empowered through the acquisition of entrepreneurial skills, there is the possibility that they will use the skills to create new avenues for wealth. Empowering the youth to set up businesses involves

proper acquisition of skills through education and training. Education opens one's eyes to forecast business opportunities using appropriate entrepreneurship skills.

Educational attainment according to Similor (1997) is more of learning which is central to successful entrepreneurship business. Entrepreneurs learn from customers, suppliers, competitors, experience and every other thing that will make business to survive. It is on this premise that it becomes necessary for the youth to embark on Student Industrial Work Experience Scheme (SIWES)/Industrial Training (IT) exercise while still in school in order to see things for themselves, ask questions, practice things in the real business environment, interact with stakeholders in the business environment and relate their experiences to what they were taught in school. The practical skill acquired through educational attainment and training will help them after graduation to harness their full potentials and utilize the entrepreneurial skills acquired for enhanced economic status and self-sustenance. Stuart (2008) saw educational attainment as that which makes entrepreneurs professional learners and successful. To buttress this assertion, Clark (2001) emphasized that the world is changing at an ever-increasing pace and the only way to keep up with the changes is to keep learning.

Learning how to survive in the business environment involves learning practically from experienced entrepreneurs via their industries and organizations. It is in recognition of the importance of school industry relations in empowering youths' with entrepreneurial skills necessary for full adaptation in the business environment that the Federal Government of Nigeria (FGN) introduced in 1973 for the first time, the Industrial Training Fund (ITF) to provide skilled manpower where basic skills were lacking among the technical workforce. In 1974, the Students' Industrial Work Experience Scheme (SIWES) came into existence and was funded by the Industrial Training Fund (ITF).

In an effort to close the gap between theory and practice, the Industrial Training Fund-ITF (2002) Information Guideline outlined the objectives of SIWES program as follows:

- To provide an avenue for students' in institutions of higher learning to acquire industrial skills and experience in their course of study.
- To prepare students for the industrial work situations they are to meet after graduation.
- To expose students to work methods and techniques in handling equipment and machinery that may not be available in their institutions.
- To make the transition from school to the world of work easier and enhance students contacts for later job placement.
- To enlist and strengthen employers' involvement in the entire educational process and prepare students for employment in industry and commerce.

The above objectives of SIWES show that proper implementation by the participating institutions and industries will help to ascertain the students' level of practical capabilities in line with business ethics and characteristics in office environment. Nigerian youths should be seen as the propeller that triggers off the development and economic status of the nation. Empowering them with entrepreneurial skills through SIWES when they are still in school will be a positive way of empowering Nigerians who are now passing through horrible unemployment and economic challenges. For useful results to be achieved, institutions must evaluate properly their students' capabilities and deficiencies; pursue school-industry relations through proper SIWES objective program implementation and ensure that the students are posted to offices where they can close the gap created by their skills and entrepreneurship deficiencies.

The problem of this study is that students' in tertiary institutions in Anambra State, Nigeria seem not to understand and appreciate SIWES objectives of equipping them with entrepreneurial skills hence they do not take SIWES exercise serious.

2.1 Research Questions

The following research questions guided the study.

- To what extent has SIWES helped students to acquire entrepreneurial skills?
- What problems do students encounter during the SIWES program?

2.2 Null Hypotheses

The following null hypotheses were tested at 0.05 level of significant.

- There is no significant difference in the mean responses of SIWES participants from universities and college of education on the extent the SIWES program has helped to equip them with required entrepreneurial skills.
- There is no significant difference in the mean ratings of male and female students' on the problems they encounter during the SIWES program.

3. Research Methodology

Descriptive survey design was used. The study was carried out in tertiary institutions in Anambra State, Nigeria. The population comprised of students from tertiary institutions in Anambra State, Nigeria who participated in the 2008/2009 SIWES program in their penultimate years of study. A total of 258 students were sampled using purposive sampling techniques. Questionnaire was the instrument used for data collection. Copies of the structured questionnaire were distributed by the researchers with the help of three research assistants. The consistency and reliability of the instrument was tested using Cronbach Alpha reliability test which yielded reliability co-efficient of 0.76. Data collected was analyzed using mean and ANOVA. Results were presented in table 1-4.

4. Findings

4.1 Research Question 1

To what extent has SIWES helped students to acquire entrepreneurial skills?

Results presented in Table 1 show that the students agreed generally that SIWES impacted positively on different aspects of their academic achievements by making what is learnt in the classroom more meaningful with mean responses ranging between 4.20 and 4.56. This implies that SIWES helped them to acquire entrepreneurial skills.

4.2 Research Question 2

What problems do students encounter during the SIWES program?

Results in Table 2 show that students accepted that all the eight factors listed were problems they encounter during the SIWES program. However, difficulty in securing placement for industrial training in some firms with mean response of 4.38 was the most pressing problem while delay in the issuance of introduction and placement letters from SIWES units of their various institutions with a mean response of 2.90 was identified as the least problem they encountered.

4.3 Hypotheses Testing

4.3.1 Hypothesis 1: There is no significant difference in the mean responses of SIWES participants from various departments on the extent SIWES has helped them to acquire entrepreneurial skills.

Information contained in Table 3 shows that 5 items out of 7 of the calculated values of F (2.047, 2.324, 4.485, 2.1970 and 3.272) were greater than the critical F values (1.91). The null hypothesis was therefore rejected. It was however, concluded that the students' who participated in the SIWES program from various departments differed significantly on their mean responses on the extent SIWES has helped them to acquire entrepreneurial skills (See Table 3).

4.3.2 Hypothesis 2: There is no significant difference in the mean responses of male and female SIWES participants on the problems they encountered during their SIWES program.

Using T-test statistics, all the calculated t-values were less than the Table 4, t (1.96). The null hypothesis of no significant difference was upheld. This shows that no significant difference existed between the mean responses of male and female SIWES participants regarding the problems they encountered during their SIWES program (see Table 4).

The findings in Table 1 revealed that the students agreed generally that SIWES helped to make what was learnt in the classroom more meaningful by exposing and equipping them with real life practical experiences. The ANOVA summary of the respondents indicated a significant difference in the mean responses of students from various departments who participated in the 2008/2009 SIWES programme.

The difference might be attributed to lack of seriousness on the part of some students coupled with the deployment of some students to offices that have nothing to do with their areas of specialization. The insensitivity in approving placement for students in offices not related to their field of study affected their level of exposure and experiences acquired, thus defeating the SIWES objectives. This corroborates the views of Okoroafor (2006) who alluded that universities do not tend to go out of business, rather, they tend to lose quality. The essence of the SIWES program is to make the students fit to face the challenges of unemployment and economic crises. Students need exposure to areas that will benefit them based on their areas of specialization. Exposure of students to different areas will make the exercise fruitful. Supporting this assertion, Okwuanaso (1992) noted that graduates who go to work through entrepreneurial route fail because of their little knowledge of what it takes to manage a business effectively.

The data in Table 2 disclosed that students accepted all the eight items listed as problems encountered during their SIWES program. The t-test summary of the students showed no significant difference in their mean ratings. This is a clear indication that the coordination of SIWES is a hydra-headed problem, in which deliberate and concerted effort must be made to marshal out solutions to the problems. This result is in line with the findings of Anyakoha (1997) as cited by Olumese & Clark (2010) that training for entrepreneurship skill development is not currently being well articulated by Nigerian universities. Okebukola (2005) confirmed that most university graduates are deficient in entrepreneurship skills. Lack of entrepreneurship skills while in the school has serious effects on individual students as most of them come out of school half-baked, not having the necessary exposure and experiences in the areas of skills, attitude and knowledge required for the challenge of the labor market, self-reliance and economic improvement. Standards in education imply functionality which is expected to serve the needs of the education stakeholders by taking cognizance of the survival of individuals in the global society. When standards in higher institutions via school-industry exposure of students to acquire practical experiences through SIWES is compromised with poorly articulated and improper implementation of SIWES program, then the objectives of the federal government for establishing SIWES will be a fruitless venture. To avoid this, government must put in place all necessary machinery in order to ensure smooth school-industry relations.

5. Conclusion

Students Industrial Work Experience Scheme (SIWES) has been identified as an important program that can help to bridge the gap between school life and the world of work by blending meaningful job experiences with related instructions learnt in the classroom. For SIWES to help students to acquire appropriate entrepreneurship skills that will help them face the challenges of unemployment and economic crises, proper machinery therefore must be put in place. The only way students can gain the right experiences is when they are posted to the right offices with the right equipment and facilities; monitored closely and supervised effectively by both institution and industry based supervisors as stipulated in the guideline. This, when properly done, will help to change the mindset of the students by increasing their level of seriousness so that SIWES will no longer be seen by most of the students' as a mere fulfillment of academic requirement especially now that the possession of mere university certificate is no longer attractive without the ability to perform a task in the midst of other challenges.

6. Recommendations

These findings underscore the importance of treating students' entrepreneurship skill acquisition in Nigeria as a core objective of SIWES and ensuring that SIWES program is result-oriented, and evidence-based. It is thus recommended that:

1. The period of students' industrial work experience scheme should be increased from six months to one year (full academic session) for the students to make necessary adjustment, acquire meaningful exposure and practical experiences on the job.
2. The SIWES Coordinators at state and institutional levels should source out places of placement on behalf of the students and post them to relevant industries that will match their fields of study. This will help to stop some students from buying some top officers to sign their logbooks without actually under-going the training due to difficulty in securing placement for the exercise.

3. A sensitization campaign should be carried out to enable industries/parastatals realize the need to accept these students without rejecting them and at the same time post the students to sections/units of their offices where these students can put into practice, the theory they learn in the classroom by allowing them access to the industries' equipment, machines and facilities which are the major thrust of the training.
4. The institution-based SIWES Coordinators should ensure that supervisors assigned to supervise these students visit them as scheduled since proper supervision will help to detect problems the students encounter in their offices and come up with solutions where necessary. It will also help to identify students' who do not take part in the training.

When all these recommendations are properly executed it will go a long way to make our students to be enterprising entrepreneurs especially now that the Nigerian government cannot cope with the magnitude of unemployed youths roaming the streets of our country, involving themselves with all manner of crimes.

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Table 1: Mean Responses of Students' on the Extent SIWES has Helped them to Acquire Entrepreneurial Skills

S/n	Impact of SIWES on Students' performance	N	Mean	Std. deviation
SIWES program has helped students' who participated in the program to:				
1	Improves on their technical skills by seeing, touching and practicing on machines, equipment and facilities not available in their institution	258	4.56	.78
2	Practice in a standard industry workshop/laboratory which helped them to imbibe the work place culture of safety practices/ethics.	258	4.39	.91
3	Embibe the culture of punctuality to office work by signing attendance/movement register	258	4.49	.68
4	Work as a team by relating with co-workers	258	4.25	.86
5	Improves on their communication skills by following the industry/organizations communication channel	258	4.20	1.06
6	Adapt to real industry/organization routine operations	258	4.20	.90
7	Improve on their public relation skills by interacting with suppliers, customers and competitors	258	4.29	1.08

Table 2: Mean Responses of Students on the Problems they encountered during SIWES Program

s/n	Impact of SIWES on Students' performance	N	Mean	Std. deviation
8	Undue delay in the issuance of introduction and placement letters from SIWES departments/units	258	2.90	1.3
9	Difficulty in securing placement for industrial training in some firms	258	4.38	.82
10	The period of SIWES program is too short to acquire meaningful experience	258	3.30	1.2
11	Students are employed and posted to the section of the industry or office that have little or nothing to do with their area of specialization	258	3.30	1.2
12	Students are not always accepted in offices or industries where they intend to do their SIWES program	258	4.23	.89
13	The stipend N15,000/N1000 respectively paid to the students is too meager to support students financially. This influence their level of participation	258	4.26	.97
14	Most offices where students were posted have inadequate training facilities for adequate exposure of students to practice skills	258	3.74	1.11
15	Non-supervision of students by most of the institution based supervisor also constitute a problem	258	3.59	1.34

Table 3: ANOVA Comparison of Mean Responses of SIWES Participants from Various Departments on the Extent SIWES has helped them to Acquire Entrepreneurial Skills

the extent SIWES has helped them to acquire Entrepreneurial Skills							
Items	Variables	Sum of square	df	Mean	f-cal	f-crit	Decision
SIWES program helps students who participated in the program to:							
Improve on their technical skills by seeing, touching and practicing on machines, equipment and facilities not available in their institutions	Between group	10.898	9	1.211	2.047	1.91	Significant
	Within group	146.730	248	.592			
	Total	157.628	2571				
Practice in a standard industrial/laboratory/workshop which helps them to imbibe the	Between groups	16.547	9	1.839	2.324	1.91	Significant

culture of safety practices/ethics	Within groups Total	196.228 212.775	248 257	.791			
Embibe the culture of punctuality to office work by signing the attendance/movement register	Between groups	4.047	9	.450	.975	1.91	Not significant
	Between groups	114.418	248	.461			
	Total	118,465	257				
Gain experience on how to work as a team by relating with co-workers	Between Groups	10.923	9	1.214	1.661	1.91	Not significant
	Within Groups	181.	201	248	.731		
	Total	192.124	257				
Improve on their communication skills by following industry/organization communication channel	Between groups	40.719	9	4.524	4.4585	1.91	Significant
	Within groups	250.199	248	1.009			
	Total	290,919	257				
Adapt to industry/organization real life job environment by working in some aspect of the company/organization routine operation	Between groups	20.032	9	2.226	2.970	1.91	Significant
	Within groups	185.848	248	.749			
	Total	290.919	257				
Knowledge gained during SIWES help students to improve on their public relation skills by interacting with suppliers, customers and competitors	Between groups	32.015	9	3.557	3.272	1.91	Significant
	Within groups	269.597	248	1.087			
	Total	301.612	257				

Table 4: T-test of no significant difference between male and female SIWES Participants on the Problems they encounter during their SIWES Program

Problems	Sex	N	Mean	SD	df	t-cal	t-crit	Decision
Undue delay in the issuance of introduction and placement letter from SIWES department/unit	Male	158	2.90	.93512	256	.867	1.96	Not significant
	Female	100	4.2600	1.02				
The period of SIWES program is too short to acquire meaningful experience	Male	158	3.52	.9704	256	.351	1.96	Not significant
	Female	100	3.58	1.120	126	1.101	1.96	
Some students were employed and posted to department/units of offices which have little nothing to do with their area of specialization	Male	158	4.1835	.87	256	1.036	1.96	Not significant
Students were not always accepted in offices or industries where they intend to do their SIWES program	Male	18	4.03	.89	256	.431	1.96	Not significant
	Female	100	3.97	1.02	256	3.70		

The stipend of N15,000/N10,000 respectively paid is too merger to support students financially. This influenced their level of specialization	Male	158	3.9367	.96	256	.445	1.96	Not significant
	Female	100	3.9900	.90				
Most offices where the students were posted have inadequate training facilities for adequate exposure to practical skills	Male	158	4.0443	.90	156	.382	1.96	Not significant
	Female	100	4.0000	.91010				
Non supervision of students by most of the institution based supervisors hinder progress	Male	158	3.920	.96511	256	.3911	1.96	Not significant
	Female	100	4.011	.90336	.391			