

**STRATEGIES FOR UP-SCALING STUDENTS' INDUSTRIAL WORK EXPERIENCE  
SCHEME (SIWES) BEYOND LITERACY AND NUMERACY AMONG  
BUSINESS EDUCATION GRADUATES IN AKWA IBOM AND CROSS RIVER  
STATES**

**BY**

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**NSINI AKPAN, Ph.D**

**&**

**MR.ENEAWAJI F. UKOIMA**

**DEPARTMENT OF VOCATIONAL EDUCATION**

**UNIVERSITY OF UYO, UYO**

**AKWA IBOM STATE, NIGERIA.**

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***ABSTRACT***

*This study examined strategies that could have desirable outcomes from Students' Industrial Work Experience Scheme (SIWES) with the hope to opening a new vista that ensures education beyond literacy and numeracy among business education graduates. In achieving this, variables such as job shadowing, funding and school-based enterprise were used to carry out the study. Three research questions and hypotheses were formulated to guide the study. The design of the study was descriptive design and the area of the study was Akwa Ibom and Cross River States, Nigeria. The population of the study comprised 1500 graduates of Business Education graduates and a simple random sampling technique was used to select 146 respondents as sample. Structured questionnaire was used to collect data for the study. The internal consistency index of .76 was obtained using Cronbach's Alpha formula. A total of 146 copies of the instrument were correctly filled and returned for analysis. The data were analyzed using mean and standard deviation to answer research questions and one sample t-test to test the null hypotheses at .05 level of significance. It was identified that job shadowing, funding and school-based enterprise were all significantly high for ensuring education beyond literacy and numeracy among Business Education graduates. Recommendations made among others is that Regulatory bodies like National University Commission (NUC) and National Commission for Colleges of Education (NCCE) should make it a condition for granting accreditation to programmes (like Business Education) to have School-Based Enterprise Classroom resources or school based enterprise academy that will help boost the career development of graduating students from the business education programme.*

***Keywords: SIWES, Literacy, Numeracy and Business Education Graduates***

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**INTRODUCTION**

Literacy and numeracy are among the most important life skills that schools teach. No child leaves school without acquiring any one of the two skills or both. Literacy and numeracy skills are crucial to a person's ability to develop fully as an individual, to live a satisfying and rewarding life and to participate fully in our society. Ensuring that all young people acquire these skills is one of the greatest contributions that our educational system must achieve as its primary obligation. To be able to appreciate and establish a firm ground upon which to assess whether our educational system has imparted these skills to its outputs, it is necessary to know the meaning of literacy and numeracy. Hence, what are literacy and numeracy?

Literacy simply means the ability to read, view, write, design, speak and listen in a way that allows one to communicate effectively and to make sense of the world. It allows one to

make sense of a range of written, visual and spoken texts including books, newspapers, magazines, timetables, DVDs, television and radio programs, signs, maps, conversations and instructions. On the other hand, Numeracy is that aspect of education that enables people to develop logical thinking and reasoning strategies in daily life. According to Larry (2015) numeracy skill is needed to solve a range of human problems and make sense of time, numbers, patterns and shapes for activities like cooking, reading a map or bill, reading instructions and even playing of sports. Numeracy encompasses the ability to use mathematical understanding and skills to solve problems and meet the demands of day-to-day living in complex social settings.

The Student Industrial Work Experience Scheme is a programme that was designed to serve as an accepted skill training as part of the minimum academic standard in the various degree programmes for all Nigerian Universities, wherein the beneficiaries will be skilled up or saleable and be more employable or become better self-employed. Despite the introduction of this programme, there has been an observable growing unemployment, thereby questioning the functionality of the SIWES programme in achieving the intended literacy and numeracy. Based on this background, this paper explores the strategies of scaling up Students' Industrial Work Experience Scheme (SIWES) in order to achieve education beyond literacy and numeracy among Business Education graduates. Among the strategies that are considered in this paper are job shadowing, funding and school-based enterprise.

Job shadowing simply means an arrangement made by one person (the shadow) to visit another (the host) to experience their work by observing them for an agreed period of time. There are no hard and fast rules for the time being involved, and this should be agreed in advance between the parties. However, a day or two half day time period would be usual. Job shadowing provides a unique opportunity to find out how other staff work. It enables participants to gain a deeper knowledge and understanding of other roles and functions in the School. Funding is another aspect that this paper intends to examine. Funding as used in this paper refers to the availability of finance that can facilitate the up-scaling of SIWES such that the graduating students from business education programme would be self-employed or be employers. It can also be seen as the organizational decision geared towards raising the required fund and applying such funds (money) in a manner that facilitates the achievement of organizational pre-determined goal(s) (Owen, 2005).

School-Based Enterprise (SBE) is an entrepreneurial operation in a school setting that provides goods and services to meet the needs of the market. SBEs are managed and operated by students as hands-on learning laboratories that integrate National Curriculum Standards in marketing, finance, hospitality or management (Stephen, 2007).

SBEs provide realistic and practical learning experiences that reinforce classroom instruction. It is an effective educational tool in helping to prepare students for the transition from school to work or college. For many students, they provide the first work experience; for others, they provide an opportunity to build management, supervision and leadership skills. While some in the education community have only recently discovered the value of school-based enterprises, educators and advisors have used them as a powerful teaching tool for more than four decades.

### **Statement of the Problem**

Ensuring that the evolving generations acquire life skills is one of the greatest contributions that the educational system ought to achieve as its primary obligation. But recently there have been significant public concerns about how well our young people are developing skills beyond literacy and numeracy such that enable them live a satisfying and rewarding life,

and to participate as active and informed citizens in our society. These concerns stem from the perceived heavy economic loss that is currently confronting the nation in terms of idle (unemployed) human resources tied up in the labour market; which add little or no value to the nation's economy. The question therefore is: why are graduates from our educational system not employable, or even self-employed? In other words, this paper makes an ambitious attempt to address this problem by asking further whether up-scaling SIWES scheme can help in the attainment of educational goals beyond literacy and numeracy among business education graduates.

### **Purpose of the Study**

The main purpose of the study was to determine the extent to which up-scaling of SIWES scheme would result in education beyond literacy and numeracy among business education graduates. Specifically, the study sought to determine:

1. The level to which job shadowing ensures education beyond literacy and numeracy among business education graduates.
2. The level to which funding ensures education beyond literacy and numeracy among business education graduates.
3. The level to which school based entrepreneurs' education stands beyond literacy and numeracy among business education graduates.

### **Research Questions**

The following research questions were developed to guide the study:

1. What is the level of job shadowing for ensuring education beyond literacy and numeracy among business education graduates?
2. What is the level of funding for ensuring education beyond literacy and numeracy among business education graduates?
3. What is the level of school based enterprise for ensuring education beyond literacy and numeracy among business education graduates?

### **Null Hypotheses**

The following null hypotheses were formulated and tested at .05 significant level:

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|-----------------------|---|
| <b>H<sub>01</sub></b> | Job shadowing for ensuring education beyond literacy and numeracy among business education graduates is not significantly high.           |
| <b>H<sub>02</sub></b> | Funding for ensuring education beyond literacy and numeracy among business education graduates is not significantly high.                 |
| <b>H<sub>03</sub></b> | School based enterprise for ensuring education beyond literacy and numeracy among business education graduates is not significantly high. |

### **Research Method**

This study adopted descriptive survey design. This design enables the researcher to collect, organize, analyze and describe data as they exist without any interference (Uyanga and Etudor-Eyo, 2011). This therefore informs the choice of this design. The study area was Akwa Ibom and Cross River States, Nigeria. The population of the study consisted of 146 Business Education graduates of University of Uyo and University of Calabar, post-graduate students in Business Education (which includes Masters and Ph. D students currently on the programme as at the time of this study) provided easy access to the population of the study since they are graduates of Business Education.

Random sampling technique was used to select the sample of 146 Business Education Graduates for the study. Structured questionnaire was used to collect data for the study. The

questionnaire items contained information gathered from the review of literature. The responses were rated on a four point scale: Very High Level = 4, High Level = 3, Moderate Level = 2, Low Level = 1.

The instrument was validated by three validators, two from the Department of Vocational Education particularly from Business Education unit and one from Test and Measurement Unit of the Department of Educational Foundations, all from the University of Uyo. The instrument was pretested on 20 of the Business Education graduates who were not part of the sample for the study. The internal consistency reliability index of .79 was determined using the Cronbach's Alpha formula. Copies of the questionnaire were administered to the respondents with the help of one research assistant who was properly briefed on the mode of administration. A total of 146 copies of the instruments were correctly filled and returned for analysis.

The data were analyzed using mean and standard deviation to answer the research questions and one sample t-test to test the null hypotheses at .05 level of significance. The decision rule for research questions were as follows: items within the range of 1.00 to 1.49 were regarded as 'Strongly disagree', and items within 1.50 to 2.49 were 'Disagree', while items within the range of 2.50 to 3.49 were 'Agree', and 3.50 to 4.00 were 'Strongly agree'. On the other hand, when the calculated t-value was greater or equal to the t-crit, the null hypotheses ( $H_0$ ) were rejected in favour of the alternative and when the calculated t-value is less, the t-crit were upheld.

**Null Hypothesis One**

Job shadowing for ensuring education beyond literacy and numeracy among business education graduates is not significantly high.

**Table 1:** One sample t-test analysis of Job shadowing for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high. (N=146)

Variable	Mean	S.D	t-Cal	t-Crit
Job shadowing for ensuring education beyond literacy and numeracy among Business Education students	13.8	1.52	31.24	1.96
Reference Mean Score	10.0	0.00		

The results presented in Table 1 reveal that the mean (13.80) of the variable (Job shadowing for ensuring education beyond literacy and numeracy among business education ) is greater than the reference mean score of 10.0; hence, Job shadowing for ensuring education beyond literacy and numeracy among Business Education students is high. However, the standard deviation with the range of 1.52 - 0.00 indicates that the result tilted a bit away from the mean. Also, the result of the hypothesis ( $H_{01}$ ) indicates that the t- cal of 31.24 is higher than the t-crit of 1.96 at .05 level of significance levels with 145 degree of freedom. Therefore, the null hypothesis that Job shadowing for ensuring education beyond literacy and numeracy among business education is not significantly high is rejected.

**Null Hypothesis Two**

Funding for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high.

**Table 2:** One sample t-test analysis of funding for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high. (N=146)

Variable	Mean	S. D	t-Cal	t-Cri
Funding for ensuring education beyond literacy and numeracy among Business Education graduates	14.08	1.54	32.35	1.96
Reference Mean Score	10.0	0.00		

The results presented in Table 1 reveal that the mean (14.08) of the variable (funding for ensuring education beyond literacy and numeracy among business education graduates) is greater than the reference mean score of 10.0; hence, funding for ensuring education beyond literacy and numeracy among Business Education students is considered high. However, the standard deviation with the range of 1.54 - 0.00 indicates that the result tilted away from the mean. Also, the result of the hypothesis ( $H_{01}$ ) indicates that the t- cal of 32.35 is higher than the t-crit of 1.96 at .05 level of significance levels with 145 degree of freedom. Therefore, the null hypothesis that funding for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high is rejected.

**Null Hypothesis Three**

School based enterprise for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high.

**Table 3:** One sample t-test analysis of school based enterprise for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high. (N=146)

Variable	Mean	S. D	t-Cal	t-Cri
School based enterprise for ensuring education beyond literacy and numeracy among Business Education graduates	13.88	1.55	30.25	1.96
Reference Mean Score	10.0	0.00		

The results presented in Table 3 reveal that the mean (13.88) of the variable (school based enterprise for ensuring education beyond literacy and numeracy among Business Education graduates) is greater than the reference mean score of 10.0; hence, school based enterprise for ensuring education beyond literacy and numeracy among Business Education graduates is considered high. However, the standard deviation with the range of 1.55 - 0.00 indicates that the result tilted away from the mean. Also, the result of the hypothesis ( $H_{01}$ ) indicates that the t- cal of 30.25 is higher than the t-crit of 1.96 at .05 level of significance levels

with 145 degree of freedom. Therefore, the null hypothesis that school based enterprise for ensuring education beyond literacy and numeracy among Business Education graduates is not significantly high is rejected.

## **Discussion**

### **Job shadowing for ensuring education beyond literacy and numeracy among Business Education graduates**

The analysis in Table 1 shows that education beyond literacy and numeracy among Business Education graduates can be achieved through job shadowing. The result could be attributed to the fact that job shadowing serves as one of the key elements of attaining education beyond literacy and numeracy among Business Education graduates. This substantiates the opinion of Ebuka (2014), that absence of job shadowing usually manifests in more graduates with little or no skills that will promote self-employment or the possession of employable skills that will guarantee their hiring by employers of labour.

### **Funding for Ensuring Education beyond Literacy and Numeracy among Business Education Graduates**

The analysis in Table 2 shows that education beyond literacy and numeracy among Business Education graduates can be achieved through good funding. The result could be attributed to the fact that funding serves as one of the key elements for attaining education beyond literacy and numeracy among Business Education graduates. This supports the opinion of Ebuka (2014) that funding remains central to the successful achievement of a generation of graduates that will be functional and active in stimulating the economy by being employed.

### **School Based Enterprise for Ensuring Education beyond Literacy And Numeracy among Business Education graduates**

The analysis in Table 3 shows that education beyond literacy and numeracy among Business Education graduates can be achieved through funding. The result could be credited to the fact that funding serves as one of the key elements of attaining education beyond literacy and numeracy among Business Education graduates. This validates the view of Akpan (2014), that school based enterprise provides realistic and practical learning experiences that reinforce classroom instruction.

Also UNESCO (2015), maintains that school-based enterprises are effective educational tools in helping to prepare students for the transition from school to work or college. For many students, they provide the first work experience; for others, they provide an opportunity to build management, supervision and leadership skills.

## **Conclusions**

This study was carried out to determine whether up-scaling of SIWES scheme could promote and result to education beyond literacy and numeracy. Based on the findings of the study, it was concluded that long term planning, formulation of strategies and performance appraisal were all significantly high management strategies for sustainable business operation. By implication, up-scaling strategies such as job shadowing, funding and school based enterprise are significant factors for achieving education beyond literacy and numeracy in Akwa Ibom and Cross river States, Nigeria.

### **Recommendations**

1. Federal Government through its regulatory bodies like National University Commission (NUC), National Commission for Colleges of Education (NCCE) and National Commission for Polytechnics (NCP) in collaboration with the National Assembly should come up with a law that promotes social scheme for students wherein participating students will be required to be shadowed in their respective areas of specialization. By so doing, students will gradually develop the skills that will be expected of them to be easily employed, or become self-employed after graduation. For instance, an Accounting student who intends to specialize in Auditing that undergoes shadowing under the mentorship of the Internal Auditor of the school is more likely to imbibe the skills required of an auditor, and in this way will achieve education beyond literacy and numeracy.
2. Since implementation of policy like the foregoing hinges on finance, relevant government bodies should provide funds required to enable the realization and functionality of education beyond literacy and numeracy. Such fund can be designed in like manner as social service fund that are used by developed countries to address the problems of the unemployed.
3. Management of tertiary institutions should design an action plan to own school enterprises where students will readily be shadowed to have first-hand experience of what has been taught in the class. By so doing, students will gradually develop the skills expected of them to be easily employed or be self-employed after graduation. For instance, an Accounting student who intends to specialize in Auditing that undergoes shadowing under the mentorship of an internal auditor in the school is more likely to imbibe the skills required of an Auditor which in this way will help to achieve education beyond literacy and numeracy.
4. Regulatory bodies like National University Commission (NUC) and National Commission for Colleges of Education (NCCE) should make it a condition for granting accreditation to programmes (like Business Education) to have School-Based Enterprise Classroom resources or school based enterprise academy that will help boost the career development of graduating students from Business Education programmes

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