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Case Study

EXTENT OF SCHOOL-INDUSTRY RELATIONSHIP IN THE PREPARATION OF AGRICULTURAL EDUCATION GRADUATES THROUGH SIWES PROGRAMME IN TERTIARY INSTITUTIONS IN EBONYI STATE-NIGERIA

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ABSTRACT

The sample for the study survey was 266 and instrument for data collection was structured questionnaire which was validated by two experts from Ebonyi State University. The data collected were analyzed using mean and ANOVA statistics with the application of SPS statistical package. Based on the analysis the study revealed that students are always posted to their areas of specialization during the SIWES programme. Many industries cooperate with the students in the preparation of the graduates by accepting them for the industrial training. Many industries do not take adequate care of the student's welfare during the industrial training. Based on the findings the following recommendations among others were put forward. Industries should always take adequate care of the student's welfare during their industrial training and students should be properly supervised by their supervisors and industrial trainers.

KEYWORDS: Students, Industrial Attachment, Training, Jobless, work skills, Vocational, Education.

INTRODUCTION

Education is the art of training a person intellectually morally and physically. Education is the key factor for economic, social and cultural development as well as development of human potentials (Oduma, 2012). Education also is the training of entire person to enable him/her not only to read, write and calculate but also to enable the individual acquire work skills for a specific job in the industry, public and private organization for a living and as well be self-employed or be employer of labour. It is worrisome that these days many graduates of vocational and technical education roam about in the street in search of white collar job and at the end without getting any. This situation in the society is alarming and worrisome. Tunde (2012) reported that over 80% of Nigerian youths are jobless. The unemployment situation in the society may be attributed to lack of relevant work skills by the graduates. Okorie (2000) emphasized that an individual with relevant work skill can be self-sufficient, enterprising and can contribute to the development of the nation. With this development a wide gap between practical skills required and theoretical training and preparation of graduates was identified by employers of labour indicating that there is a great need for adequate preparatory training for youths/graduates employment in the industries (ITF 2002). This observation led to the introduction of Students Industrial Work Experience Scheme (SIWES) into the formal educational system by the Federal Government of Nigeria in 1974 and being funded by Industrial Training Fund (ITF). The students' industrial work experience scheme is a tripartite programme involving the tertiary institutions, the industries (employers of labour) and the industrial training fund. The SIWES programme is a skill

training programme which forms part of the approved minimum academic standards in various degree, diploma and Nigeria certificate in Education (NCE) programs (Osinem and Nwaji, 2005). The main objectives of SIIWES include:

- To provide an avenue for students in tertiary institution in Nigeria to acquire industrial skills and experience in their course of study
- II. To provide students an opportunity to apply their theoretical knowledge in real work situation, thereby bridging the gap between classroom theory and actual practice in the world of work
- III. To involve the employers of labour in the entire educational process in graduate preparation
- IV. To prepare students for the work situation they are likely to meet after graduation
- V. To expose students to work methods and techniques in handing equipment, machines that may not be available in their institutions
- VI. To make transition from the school to the world of work easier and this enhances students' contact for later job placement after graduation (ITF, 2012).

The programme seeks to bridge the wide gap existing between theory and practice in engineering, technology, sciences and other professional education programmes in Nigeria's tertiary institutions such as agricultural education.

Agricultural education is the aspect of vocational and technical education that prepares individuals on the skills and competencies in agricultural production. It also involves the inculcation of habits, attitudes, values, citizenship, corporation and leadership required for entry into agricultural occupation, (Ndem, 2012). In the tertiary

institution, agricultural education students participate fully in the student's industrial work experience scheme where they are exposed to practical experiences in the industries. It is also worrisome that despite the fact that these students participate in the SIWES programme, they lack the relevant skills needed in the industries especially in the agro-allied industries and other agricultural related fields. It is on this basis that this work is designed to examine the extent of school industry relationship in the preparation of agricultural education graduates through SIWES programme in tertiary institutions in Ebonyi State.

Purpose of Study

The main purpose of the study is to determine the extent of institution-industry relationship in the preparation of agricultural education gradates through SIWES programme in tertiary institutions in Ebonyi State.

The specific purposes are to:

- a) Ascertain the extent of cooperation of the industries with the institutions in graduate preparation through SIWES programme.
- b) Determine the extent of cooperation of the student's with the industries/institutions in graduate preparation through SIWES programme.
- c) Ascertain the cooperation of the institutions with students through SIWES programme.
- d) Determine the possible ways of improving institution, industry and student's cooperation through SIWES programme for agricultural education graduates.

Research Questions

The following research questions guided the study.

- a) What extent do the industries cooperate with the institutions in the preparation of agricultural education graduates through SIWES programme?
- b) What extent do the students cooperate with the industries/institutions through SIWES programme
- c) What extent do the institutions cooperate with the students through SIWES programme,
- d) What are the possible ways of improving institution, industry and student's cooperation through SIWES programme.

Hypothesis

HO₁: There was no significant difference between the mean ratings of the lecturers and staff of the industries on the extent of cooperation of industries with the institutions at 0.05 level of significance.

HO2: There was no significant difference between the mean rating of the lecturers and the staff of the industry on the extent of cooperation of the institution with the students at 0.05 level of significance.

METHODOLOGY

The study adopted a survey design. The population of the study was 798. This comprised of 68 lecturers, 634 Agricultural education students on industrial attachment/training from the three higher institutions in Ebonyi State: (Ebonyi State University, Abakaliki, Ebonyi State College of Education, Ikwo and Federal College of Agriculture, Ishiagu) and 96 staff of the establishments where the students were posted. A simple random sampling technique was used to select 266 respondents from the population as the sample for the study. The instrument used for data collection was a structured questionnaire that was validated by two experts from Ebonyi State University, Abakaliki and its reliability was ensured. The questionnaire has four points rating categories of Very Great Extent (VGE), Great Extent (GE), Low Extent (LE), and Very Low Extent (VLE) for research questions 1-3 while research question 4 was analyzed using Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). Both rating scales have nominal values 4-1. The data collected were analyzed using mean. ANOVA statistics was used to test for the hypothesis formulated.

A mean criterion value of 2.5 was used to determine the questionnaire items acceptability.

Any item with a mean score of 2.5 and above is accepted while below 2.5 is rejected.

Research Question 1: What extent do the industries cooperate with the institutions in the preparation of students through SIWES programme.

TABLE 1: Mean responses on the extent of cooperation of the Industries with the Institutions In the preparation of Agricultural Education Students through SIWES Programme

S/N	possible ways of Cooperation	VGE	GE	LE	VLE	Mean	Decision
1	Collaborating with the institution in the preparation of job- specification for the approved courses for SIWES	-	-	100	166	1.5	Rejected
2	Accepting students for industrial attachment as stipulated in the ITF decree N0 47 as amended (up-to-date)	155	98	10	03	3.0	Accepted
3	Providing welfare services e.g medication and pay for hospitalization of students while on attachments whenever the need arises	-	06	100	160	1.8	Rejected
4	Participating fully in the assessment of programme/ students by completing the necessary instruments eg. ITF forms and log-books.	167	99	-	-	3.2	Accepted
5	Allowing students have access to their facilities.	161	105	-	-	3.0	Accepted
6	Appointing an industrial based supervisors to supervise students	165	101	-	-	3.2	Accepted

Table 1 Shows those items 1 and 3 had their mean scores below 2.5 while items 2, 4, 5 and 6 had their mean scores above the cut-off point of 2.5. This implies that the

industries cooperate with the institutions except in the area of preparation of job specification for approved courses and provision of welfare services to the students.

Research Question 2

What extent do the students cooperate with the industries/ institutions through SIWES Programme.

TABLE 2: Mean responses on the extent of student's cooperation with industries/ institutions through SIWES programme

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S/N	Possible ways of cooperation	VGE	GE	LE	VLE	Mean 🕶	Decision
1	Attending institutions SIWES orientation pregramme before going on	167	97	-	-	3.4	Accepted
	attachment.						
2	Obeying the constituted authorities and adhering strictly to all rules and	130	90	20	21	2.6	Accepted
	regulations of the organization where students are attached						•
3	Being regular and punctual at respective places of attachment.	136	85	25	15	2.6	Accepted
4	Avoiding change of place of attachment, except in special	141	95	22	08	2.8	Accepted
	circumstances which must be approved by the institution's supervisor,						
	the employer and the ITF.						
5	Completing all necessary forms that relate to attachment to ensure	168	98	-	-	3.0	Accepted
	proper assessment						
6	Recording all training activities and other assignment in the log book	166	100	-	-	3.0	Accepted
7	Protecting the employers property throughout the attachment period	136	100	20	10	2.8	Accepted

Table 2: Shows that all the items had their mean scores above the cut-off point. This implies that students cooperate very well with the institutions and the industries. This may be attributed to the facts that SIWES Constitute

part of their requirements for the award of degree, diploma and NCE in their various fields hence they show seriousness in the progamme.

Research Question 3

What extent do the institutions cooperate with the students through SIWES Programme.

TABLE 3: Mean responses on the extent of institution's cooperation with the students through SIWES programme

S/N	Possible ways of cooperation	VGE	GE	LE	VLE	Mean * 15	Decision
1	Establishing SIWES coordinating units, staffing and funding to	160	95	11	-	3.3	Accepted
	ensure effective operation of the scheme.						•
2	Appointing SIWES coordinator	141	105	10	10	2.8	Accepted
3	Preparing and submitting master and placement lists.	155	103	08	-	3.2	Accepted
4	Identifying placement opportunities for students' attachment.	155	101	10	-	3.1	Accepted
5	Organizing orientation courses in collaboration with the ITF for the	150	116	-	-	3.0	Accepted
	students.						
6	Submitting a comprehensive report on the scheme to the ITF at the	140	96	25	05	2.8	Accepted
	end of every years programme.						
7	Gathering and submitting all students' problems and complaints to	136	100	20	10	2.8	Accepted
	ITF.						

Table 3 shows that institutions cooperate very well with the students as all the items were rated above 2.5. This may also be attributed to the fact that it is part of the NUC,

NCCE and NBTE requirements for institutions to pass accreditation in the departments serviced by SIWES.

Research Question 4

What are the possible ways of improving institution, industry and student's cooperation in the preparation of Agricultural Education graduates through SIWES programme.

TABLE 4: Mean responses on the possible ways of improving institution, industry and student's cooperation through SIWES programme

S/N	Possible ways of improving cooperation	SA	A	D	SD	Mean	Decision
1	Giving honorary merits/Awards to employers of labour who accepts students on attachments	160	106	-	-	3.3	Accepted
2	Involving the three parties on policies, programmes and projects concerning the SIWES programme	136	100	20	10	2.8	Accepted
3	Industries/employers of labour releasing/donating their facilities such as equipment, machines etc to the institutions for assistance	150	96	20	-	3.1	Accepted
4	Adequate funding of SIWES unit	166	100	-	-	3.2	Accepted
5	Reaching out the employers of labour and making contract agreement	148	68	30	20	2.7	Accepted
	for students' placement and acceptance for attachment.						

Table 4 Shows that all the above measures are possible ways of improving students, industry and institution

cooperation through the SIWES progrmme. All the items had their mean scores above 2.5.

TABLE 5: t-test Analysis on the mean responses of the lecturers and the staff on co-operation of the industries with the institution

S/N		Fon co-S	Staff of the indi	SD	t-critical
		Lectures R 64	Industries *2 S		
1	Industries collaborating with the institutions in the preparation of job	64	100	0.23	
	specifications for the approved courses or SIWES	1.38	1.39		-0.14
2	Industries accepting students for industrial attachment as stipulated in the	3.01	3.00	0.77	0.07
	ITF decree No 407 as amended up to date.				
3	Providing welfare services eg. Medication and pay for hospitalization of	1.60	1.61	0.23	0.02
	students while on attachments whenever the need arises.				
4	Participating fully in the assessment of students by completing the	3.13	3.12	0.68	0.07
	students log books				
5	Permitting ITF representative to visit students on attachment.	3.01	3.02	0.65	-0.50
6	Appointing experienced staff to train/ supervise students.	3.19	3.18	0.79	0.50

Table 5 above indicates that there was no significant difference between the mean ratings of the lecturers and

staff of the industries. It implies that their opinions did not differ on cooperation of the industries with the institutions.

TABLE 6: t-test Analysis on the mean Ratings of the lecturers and staff of the industry on the cooperation of the students with the industries

	with the madstres					
S/N	Possible ways of cooperation	Lecturer	Staff	SD	t-cal	Interpretation
1	Students attending orientations on SIWES	3.40	3.50	0.34	-0.10	Nsd
	programme organized by the industry the attendant					
2	Obeying the rules and regulations where the students exposed	3.60	3.67	0.76	-0.07	Nsd
3	Students being regular and punctual in their respective places of assignment	3.05	3.08	0.67	0.21	Nsd
4	Avoiding change of place attachment expect on approval by the institution,	3.14	3.21	0.81	-0.50	Nsd
	the employer and the ITF.					
5	Completing all necessary forms that relates to the attachment for proper	3.16	3.15	0.56	0.07	Ns
	assessment					
6	Recording all training activities and other assignments in the log-book	3.10	3.01	0.65	0.64	Nsd
	correctly.					
7	Protecting the employer's property throughout the attachment.	3.89	3.70	0.78	1.35	Nsd

Table 6 shows that all the items had their t-cal less than the t-critical, therefore, the null hypothesis was accepted. This implies that there was no significant difference in the opinions of the lecturers and that of the staff of the industries.

FINDINGS

Based on the analysis of the data, the following findings were made.

- 1. Students cooperate with the institutions and the industries in the course of SIWES programme.
- Industries cooperate with the institutions for the success of SIWES programme but do not take care of the student's welfare.
- Institutions cooperate with the students and the industries but do not involve the industries in the preparation of job specification for the approved courses for SIWES.
- 4. Institutions establishing close ties with the industries or the employers of labour will bridge the gap of seeking for place of attachment for students and reduce rejection by the industries.
- 5. There was no significant difference in the opinions of the lecturers and the staff of the industries on the cooperation of the industries with the institutions and the cooperation of the students with the industries and the institutions.

RECOMMENDATIONS

Based on the findings of this study, the following recommendations are hereby made.

- Industrials/Employers of labour should take students welfare into cognizance or seriously.
- Industries should partake in the preparation of job specification for SIWES Students.
- 3. Institutions should empower the SIWES Coordinators to reach out the employers of labour or the industries to establish close relationship with them.

CONCLUSION

The objectives of SIWES can only be achieved when there is cordial and smooth relationship and cooperation among the industries, institutions and the students as this will ensure quality SIWES programme that will finally empower the students to be job creators not seekers.

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