# STRATEGIES FOR ENSURING EFFECTIVE SCHOOL-INDUSRIAL COLLABORATION FOR THE PRODUCTION OF 21<sup>ST</sup> CENTURY OFFICE TECHNOLOGY AND MANAGEMENT STUDENTS

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#### Abstract

Office Technology and management is an area of study offered in Universities, Polytechnics, Colleges of Education and Staff Training Centers in Nigeria; and it is aimed at producing personnel who, after successful training can offer secretarial and management services with high level degree of competence bequeathed to the classroom and the office. It perturbs the researchers that OTM graduates still find it difficult to secure employment after graduation and ended up joining the long queue of unemployed graduates because they lack the skills needed for employment by the workplace. This study investigated the strategies for ensuring effective school-industrial collaboration for the production of 21st century Office Technology and Management Students. . The design of the study was survey. Research question was raised for the study. An instrument which consisted of 31 items was distributed to 30 respondents in the two polytechnics located in Kaduna State. Frequency and descriptive statistics were used in analyzing the data. The findings of the study revealed, among others, that they are compliant among industries and that graduates of our institutions today are half backed, lacking the skills required for employment and that they need retraining for employment. The study went further to outline strategies needed for effective school industrial collaboration to include. organising Workshops/seminars by industries for students, Also challenges to effective school industrial collaboration like inadequate Grants from government for school industry collaboration amongst others were outlines Conclusions were drawn and it was recommended amongst others that schools should create enabling environment for school industrial collaboration.

**Key words**: Strategies; School-Industry Collaboration, OTM Programmes;

EDE NBTE; Polytechnics;

## Introduction

Gone are the days when employers of labour spend huge amount of money in organising training programmes like on the job training to newly employed office technology and management graduates on the utilization of various office machines and equipment's used in the organisation. Nowadays no employer is ready to waste his hard earned money on any form of training. They believe that OTM graduates should possess the technical know-how on the manipulation of all office machines. The common knowledge today is, most graduate lack the needed skills, and competencies to operate

most office machines because they were not exposed to many office machines and even the few once they were exposed too, constant power failure did not give them enough room to manipulate them effectively. In recent times, graduates from the nation's tertiary institutions of learning have been plagued by the inability to get jobs in corporate industries and companies in Nigeria. Supporting the above statement Esene, (2015) said that when students graduate with no practical skills, they will be compelled to join the unemployed because they lack the requisite skills and competencies required for the jobs that are available. Esene went further, that the jobs are available but the people seeking them don't have employable skills.

The industries now complain of inadequate skills required especially in the current cutting edge technology, having low practical know-how and lack of confidence. Many authors have related this problem to the quality of training received by these graduates while in school which is devoid of skills required to meet up with the demand of the world of work. Buttressing these facts, Essia and Nwazor (2012) describe the failure to the educational programmes offered in higher institution especially in the business education programme which OTM is one of its component to prepare students and graduates for real life situation. Odu (2017) lamented that there is a sharp rise of compliant among industries and graduates of our institutions today are half backed, lacking the skills required for employment, having retraining needed for employment. The poor state of business education, OTM programme in Nigeria clearly indicates that tertiary institutions and government may not be able to promote functional skill oriented and successful OTM education programme. Hence there is need for effective and coordinated school-industry collaboration in the provision of OTM programme. Supporting the above assertion, Barimo (2015) said that one of the important requirements for enhancing OTM programme is through effective school-industry collaboration with effective strategic plans.

Strategy refers to the managerial action plan for achieving organisational objectives. In effect, strategy is a management tool for achieving strategic targets. It is the mechanism used to align firms with their environments. Supporting the above, Ugwuanyi (2012) opined that strategy is a broad basic plan of action which individuals and organisations intend to reach its/their goals. Therefore, ensuring effective school-industrial collaboration in OTM programme there is need for strategies in the input and output of teaching and learning.

Office Technology and Management (OTM) is one of the 88 programmes and 8 disciplines/occupations offered by polytechnic/colleges of technology under the auspices of the National board for technical education (NBTE). (OTM) is a programme of instruction which offers specialized instruction for office occupations and general business orientation. This is in tune with the objective of the Federal Republic of Nigeria (FRN) (2014) which among others is the acquisition of appropriate skills, abilities and competencies both mentally and physically as equipment's for the individual to live and contribute to the development of the society. It embodies the ability to transfer skills and knowledge to work situation within the occupational area. The OTM Curriculum and Course Specification by NBTE (2004) was designed to equip students with management and secretarial skills for employment in various fields of endeavour. The course programme, in addition to the above, leads to the acquisition of vocational skills in OTM studies, equipped students with effective work competence and socio psychological work skills.

Hence, the secretaries, office managers/administrative assistants as they are presently called are seen as people who among other skills, possess a mastery of office skills, who demonstrate the ability without supervision, who exercise initiatives and judgment and also make decisions within the scope of assigned authority and training. In the same vain, Baba and Akarahu (2012) assert that OTM is an aspects of the educational process involving in addition to general education the study of the related technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sector of the economy and social life. Despite the fact that the Office Technology and Management Curriculum of the National Diploma (ND) and Higher National Diploma (HND) respectively have been expanded to include ICT and management courses, , vocational and entrepreneurship education courses, in addition to its old nomenclature "secretarial" there is still high rate of unemployment among graduates of OTM due to lack of relevant skills and school industrial collaboration. Umoru (2011) buttress that lecturers who teach OTM courses use the traditional lecture method, thereby conducting theoretical classroom lessons rather than using the practical strategies that would enable student acquire practical skills and knowledge both in the classroom and through school industrial collaboration to enable its recipients function properly in the world of work.

School-industry collaboration is the partnership between formal education and industrial sector to create an enabling environment for students to acquire hands-on experience, knowledge, skills and appropriate attitude to world of work. There are industries within the communities that have highly skilled workforce of production, functional facilities and materials that could be very useful in the practical training of OTM students. (Uwaneze, 2016). These industries, through collaboration with schools could be made to meaningfully contribute to the training of students in appropriate skills that relates to their areas of interest (Oviawe, Uwameiye and Uddin, 2017). In the same vain, Jim (2017) opined that available programmes in business education that needed school-industry collaboration include, SIWES, skill acquisition programmes for students, special skill training/retraining for lectures, curriculum planning and review, research collaboration and grant, scholarship to OTM students amongst others.

Lack of collaboration between industry and tertiary institutions In Nigeria, is a serious problem affecting the performance of OTM graduates. The student while in school should learn practical, build skills related to commerce, trade and industry for which they have to practically visit the business location. If the school-industry linkage is week, the students will not be able to able to acquire the practical exposure required for the world of work (Rotua 2017).

OTM industrial collaboration is critical for skills development, the generation, acquisition and adoption of knowledge and the promotion of entrepreneurship. OTM is basically occupational education programme which makes individuals self-sufficient and reliant. Buttressing these fact, Ikechukwu and Najimu (2011) believed that the acquisition of practical skills relating to occupation in various sector of economic and social life will improve the standard of living of the people, and assist in eradicating poverty in the society. Aina and Akintunde (2013) posited that the aim of school industrial collaboration is to execute or jointly carry out projects with the aim of sharing the profits and risk together. Secondly, It is a relationship in which the government and private resources are voluntarily put together mainly for achieving educational goals The linkage between industry and

institution is very week in Nigeria and do not produce the relevant skills needed for industrial productivity leading to the low absorption level by the available industries. OTM graduates need the industrial collaboration in order to be effective in their chosen field of work.

Some developed countries have been able to overcome the problem of graduates unemployment through school-industry collaboration. For instance, University of Munich (TUM) is in partnership with Audi motor company, University of California is also in partnership with the industrial sector of the economy. (Belfield 2012). The essence of this collaboration is to identify the higher order of skills needed by the students for success in school and in the work place after graduation so as to inculcate same in the students while in school. With regards to the needs and relevance of the Nigeria tertiary educational institutions, to foster collaboration with industries, Ojimba (2013) opined that, with the right and conducive learning environment, school-industrial linkages could be developed into solid partnership. Ojimba went further that the benefits of partnership are enormous, student acquire industrial skills, develop work habit and instil positive attitude in OTM students towards work environment.

Oviawe, Uwameiye &Uddin, (2017) opined that a lot of challenges tend to slow down the collaboration between school and industry. These include students apathy to SIWES, disruption of academic calendar by recurrent strikes, poor attitude of students during SIWES, poor supporting attitude of the industries, Industries apathy to SIWES, poor economic state of the industry, lack of school industry liason offices, mismanagement of industry amongst others. Oviawe, Uwameiye &Uddin, went further to say that school-industry collaboration could be improved through the identified strategies like SIWES, continuous curriculum planning and review to meet the needs of both the society and the industry, research collaboration and grant, scholarship to OTM students, planning of work visit/excursion/fieldtrips, organising seminars and workshops by the industry for OTM students, inviting industrial workers for special lectures amongst others.

#### **Statement of the Problem**

OTM programme is an aspect of business education, that is aimed at producing personnel who, after successful training can offer secretarial and management services with high level degree of competence. Therefore a functional OTM programme need effective school industrial collaboration in other to be relevant in the world of work. The worry of this study therefore, is that, it appears that there are little or no effective collaboration between educational institutions and the employers of their graduates despite the inherent mutual benefits derived from such partnership and no curriculum harmonization to reflect what is in the real-life situation. Hence it becomes necessary to ascertain the strategies for effective school-industry collaboration for the production of 21st century office technology and management students.

# Purpose of the study

The main purpose of the study is to ascertain the strategies for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management student. Specifically the study sought to:

- Assess the strategies for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management students in Kaduna.
- 2. Ascertain the challenges to effective school industrial collaboration

# **Research Question**

The following research question guided the study:

- 1. What are the strategies for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management students.
- 2. What are the challenges to effective school industrial collaboration collaboration for the production of 21<sup>st</sup> century office technology and management students.

# **Hypotheses**

The following hypotheses are tested at 0.05 level of significance

- There is no significant difference in the mean response of the opinions of male and female OTM educators in polytechnics on the strategies needed for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management students.
- 2. There is no significant difference in the mean response of the opinions of male and female OTM educators in polytechnics on challenges of effective school industrial collaboration

#### Methods

The study adopted descriptive survey research design. This research design was considered appropriate for the study to elicit information from OTM educators. The study was carried out in the two Polytechnic located in Kaduna State namely, Federal Polytechnic Kaduna and Nuhu Bamali Polytechnic, Zaria, Kaduna State. The population for the study comprised 30 OTM educators in the schools. 17 from Federal Polytechnic Kaduna and 13 from Nuhu Bamali Polytechnic, Zaria. The instrument used for data collection was a 20 items structured questionnaire developed by the researcher from literature reviewed titled Strategies for Effective School Industrial Collaboration Questionnaire (SESICQ). The instrument was face-validated by two experts in business education. The researcher adopted personal contact approach of data collection. One research assistants was hired and briefed to join the researcher in administering and retrieving copies of the questionnaire. Data collected was analysed using mean for answering the research questions while t-test statistics was employed for testing the null hypotheses at 0.05 level of significance.

#### Results

# **Research Ouestion 1:**

What are the strategies for effective school-industry collaboration for the production of 21st century office technology and management students

Table 1: Mean ratings of strategies for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management students

S/No. Item on Strategies			Domork		
S/No Item on Strategies	Mean	SD	Remark		
1 Skills acquisition programmes for students	4.34	0.96	Accepted		
2 constant school visit to industry for information	4.18	1.08	1		
			Accepted		
3 Involving OTM educators in curriculum planning	3.78	1.34	Accepted		
4 Exposure of students to industrial practice and	2.00				
collaboration	3.90	1.27	Accepted		
5 organising Workshops/seminars by industries for st			Accepted		
6 Skill acquisition training/retraining of OTM educ			Accepted		
7 Skill acquisition programme for OTM students		1.52	Accepted		
8 Grants from government for school industry colla	aboration	3.60 1.4	41 Accepted		
9 Research partnership and grant	3.67	.42 A	Accepted		
10 Students regular excursion to industries			ccepted		
11 Employing qualified graduates with adequate skills	and		1		
Competencies both in school and industry		.96 A	ccepted		
12 Creating enabling environment for school-industry	collaboratio	n			
			ccepted		
13 Effective communication between stakeholders			ccepted		
14 Reduction of tax to industries collaborating with so			Accepted		
15 Provision of adequate infrastructure's by both	21001 2.21	1.50	riccepted		
Government and schools	4.21 0.	73 Ac	cepted		
16 Narrowing gap between theory between theory and	practical				
	3.51 1.3	38 Acc	epted		
17 Regular funding by government	3.75 1.1		epted		
18 constant reviewing of curriculum to meet	3.73	7100	epied		
The present need of the society	3.66 1.	27 Acc	epted		
The present need of the society	3.00 1.	21 ACC	cpica		
19 Improving the quality and relevance of practical's	3.78 1.	34 Acce	epted		
20 SIWES	3.90 1.2	27 Acce	epted		

The data shown in Table 1 reveals that all sixteen items listed to answer Research Question One, were accepted by the respondents as the strategies for effective school-

industry collaboration for the production of 21st century office technology and management students. which implies that OTM educators in the Polytechnic unanimously accepted with all the items listed as strategies for effective school-industry collaboration for the production of 21st century office technology and management students.

### **Research Ouestion 2**

What are the challenges to effective school industrial collaboration collaboration for the production of 21st century office technology and management students.

Table 1: Mean ratings of challenges to effective school-industry collaboration for the production of 21st century office technology and management students

S/No	Item on Challenges		Mean	SD	Remark
1.	poor attitude of students during SIWES		3.50	0.67	Accepted
2.	Inadequate Infrastructure and equipment		3.00	1.00	Accepted
3.	Disruption of academic calendar by recurre strikes	ent	3.50	0.50	Accepted
4.	Inadequate qualified personnel.		2.90 1.1	14	Accepted
5.	poor supporting attitude by the industries		3.50 0.5	0	Accepted
6.	Inadequate Funding by Government		2.90 0.9	4	Accepted
7.	Over - dependence on Foreign Innovation ar	nd			
,	Technologies		3.20 0.7	75 A	Accepted
8. poor e	economic state of the industry	2.70	1.10	Accep	oted
9. lack	of school industry liason offices	3.66	1.27	Acce	oted
10. Bac	d governance and corrupt practices. 3	3.40	1.08	Acce	pted
11. Ind	ustries apathy to SIWES	2.70	1.00	Accep	oted
Gran	nd mean	3.15	0.87	Accep	oted

Data in Table 2show that all the items have mean scores between 2.70 and 3.50 which indicated that the respondents agreed that all the these items are some of the challenges

The main purpose of the study is to ascertain the strategies for effective schoolindustry collaboration for the production of 21st century office technology and management student. The standard deviation scores indicated that the respondents were homogenous in their responses. These findings were supported by Ayomike et al (2014) that posited that there are several factors militating against TVET Institution-Industry partnership such as Lack of finance, lack of interest by both parties, poor government policies among others.

Table 3: t-test Analysis of male and female OTM educators in polytechnics on the strategies needed for effective school-industry collaboration for the production of 21st century office technology and management students.

Type of Institution	N	X	SD	DF	P	t-cal	t-crit
Decision							

Male	19	4.06	1.17				
				28	0.05	0.22	0.64
Not significant							
Female	11	3.87	0.46				

The data in table 2 revealed a t-calculated of 0.22 with a degree of freedom of 28 and a t-cirt value of 0.64 which is greater than 0.05. It implies that we retain the null hypotheses which stated that there is no significant difference between the mean response of the opinions of male and female OTM educators in polytechnics on the strategies needed for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management students on the 16 identified strategies. Therefore, the null hypothesis of no significant difference.

Table 4: t-test Analysis of male and female OTM educators in polytechnics on the challenges to effective school-industry collaboration for the production of 21st century office technology and management students.

Type of Institution	N	X	SD	DF	' P	t-c	al	t-crit
Decision								
Male	10	3.17	0.68					
				148	0.71	0.479-	0.71	No
Sig								
0.479 0.05Not significan	ıt							
Female	140	3.33	0.69					

The data in Table 4 revealed a t-calculated value of -0.71 with a degree of freedom of 148 and a P value of 0.479 which is greater than 0.05. It implies that we retain the null hypothesis which stated that there is no significant difference in the mean response of the opinions of male and female OTM educators in polytechnics on challenges of effective school industrial collaboration.

#### **Discussion of Findings**

The main purpose of the study is to ascertain the strategies for effective school-industry collaboration for the production of 21<sup>st</sup> century office technology and management student. One of the findings is that there student should be allowed to go for regular excursion to industries. Another was that government should provide grant for school industry collaboration. The provision of adequate infrastructure's, Skill acquisition training/retraining for OTM educators and students will help in equipping the students with requisite skills to assess the word of work. It was also agreed upon that enabling environment should be created for school-industry collaboration. The findings of this study is in tune with the view of Emeasoba and Mmuo(2017), who opined that school industry collaboration could be improved through the following strategies: formulation of government practices that will encourage school-industry collaboration, Involving business educators in planning their curriculum, establishment of special grant scheme for school industry collaboration by the government, creation of enabling environment for school industry collaboration amongst others. The listed strategies will equip OTM

students with employable skills needed to access available work at the same time be relevant in the work place.

#### Conclusion

On yearly basis, students are exposed to Student Industrial working Experience Scheme, with the sole aim of having a feel of the word of work. The three months experience is not adequate to equip students with appropriate skills needed to function effectively, efficiently and productively in the world of work. Schools need to partner with industries effectively by Creating enabling environment for school-industry collaboration, Provision of adequate infrastructure's by both Government and schools and Employing qualified graduates with adequate skills and Competencies both in school and industry to enhance the effective production of  $21^{st}$  century office technology and management students.

#### Recommendation

On the basis of the findings derived from the study and the conclusion reached, and to enhance effective school industrial collaboration for the production of 21<sup>st</sup> century office technology and management students, we can take some of the following steps:

- 1. Government should provide OTM programme with enough funding for training and retraining of both Student and lecturer's on skill acquisition.
- For effective teaching and learning of OTM, there must be adequate infrastructures. So government, school and industry should make necessary provision for infrastructures that will be used in training the students
- 3. Also, Association of Business education (ABEN) and stakeholders in industry should be involved in planning and reviewing OTM curriculum to reflect current trends in the society.
- 4. Schools should create enabling environment for industry to come partner with them in the training of the students.
- 5. Finally, only OTM educators that have adequate practical skills and competencies should be allowed to teach at the Polytechnic.

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