

Evaluation of the Extent of School Access Programme's Contribution to Computer Education Studies in South-East Nigeria

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Abstract

The major purpose of the study was to evaluate the extent the school access programme contributed to the teaching and learning of computer education studies in South-East Nigeria. One research question was answered and one hypothesis was tested at 0.05 level of significant. The study adopted an evaluation design. The population of the study is 14,141 comprising of 1945 male teachers, 2196 female teachers, 3866 male SS II students and 6134 female SS II students that offered computer education studies in 2016/2017 session. Taw Yamane formula was used to determine the sample size of 389 respondents used in the study. Mean, standard deviation and t-test were used for data analysis. The result revealed that the school access programme contributed to the teaching and learning of computer education studies at very great extent in South-East Nigeria.

INTRODUCTION

Computer education studies is one of the vocational subjects that is taught at the secondary school level in Nigeria. The subject is indispensable and contributes immensely to the educational growth and socio-economic development of Nation. The subject inculcates knowledge, skills and valuable experiences to the students and such educational experiences and skill provides them with the ability to face both educational and lifelong challenges Sanda and Kufi (2013). The knowledge and skills acquired by students through computer Education training exercises can fetch them good career opportunities, employment and self reliant. In addition, not only that the subject creates employment opportunities among the Secondary School graduates, it also exposes them to creativity and wider ICT explorations. Furthermore, computer education studies contribute to the modernization and re-structuring of the labour force both nationally and globally. The labour force worldwide is highly sensitive to ICT utilization. Nwabueze and Adubi (2014) stressing on this, stated that the inculcation of ICT skills are the fundamental objectives and functions of computer education studies at all levels of Education in Nigeria and beyond. By implication, students are expected to be equipped with ICT skills to enable them face the labour market challenges which is ICT demanding in nature.

This means that the nation's socio-economic and technological development depends greatly on computer education studies. The socio-economic development of the Nation will be affected without effective teaching and learning of the subject at the secondary school and higher level of the education. The demand for labour force which depends on high ICT application made both State and Federal Government of Nigeria to encourage schools to produce graduates with high ICT potentials. Such encouragement includes supply of ICT equipments to schools to enhance effective teaching and learning of computer education studies which not only accelerate the socio-economic development of the Nation but also puts the country's labour force at a good competitive level. This means that graduates with high ICT skill will facilitate the socio-economic development of the nation. On this note, to keep the socio-economic development of the nation at sustainability level, Nigerian government explored ways and means of teaching computer Education studies effectively. The effective teaching and learning of any subject is a great advantage and benefit both to the student and the Nation at large. The effective teaching and learning of computer education studies needs qualified and experienced computer Education teachers who will inculcate the required knowledge and skills to the students. The teachers should be knowledgeable in subject matter content and behavioural objective of computer education studies and in addition be disposed to best teaching methods.

Furthermore, even when the teacher is knowledgeable in computer Education studies, he cannot effectively demonstrate the teaching methods without using appropriate and adequate ICT equipments at his disposal. Teaching and learning of computer education studies is practical and theoretical in Nature. The theoretical training is carried out to give students the key concepts orally before engaging them in the practical training. The acquisition of ICT skills can be facilitated with the aid of appropriate and adequate ICT equipments in the school ICT laboratory. The absence of such equipment will create bottlenecks in the teaching and learning of the subject and consequently jeopardize the acquisition of ICT skills needed by students. The teaching and learning of the subject without adequate and appropriate ICT equipments constitute a critical problem which if not solved continues to persist. The procurement and supply of adequate ICT equipments to secondary schools becomes imperative and essential to the teaching and learning of computer education

studies which will lead to the economic development of the nation. This ugly situation made the universal service provision fund (USPF) under the National Communication Commission of Nigeria in 2007 to introduce School Access Programme (SAP) to facilitate the effective teaching and learning of computer education studies at the secondary school levels (USPF 2007). SAP is an ICT outfit designed by USPF to stimulate the ICT and software applications in Nigerian secondary schools. The programme is meant to address critically the problem of effective teaching and learning of computer education studies and also to enhance creativity among the youths Omoniyi (2013). The key objective of the programme is to facilitate the effective teaching and learning of computer education studies. The programme will achieve this objective if it is effectively implemented and all the critical component of the programme put to work. The programme will reduce dropout rate from Nigerian education system, create employment opportunities among the youths and as well enable them to be self reliant. The programme will give the youths the potentials to face the work force and societal challenges (Aniebonam 2013). The youths can meaningfully achieve this by engaging themselves in ICT skill acquisition training for future self reliance. Yusuf (2009) explained that the School Access Program (SAP) has the potential for not only introducing new teaching and learning practices, but also for acting as a catalyst that revolutionize the Educational system. The School Access Programme contributes immensely to the administration of the school. It has the potency of addressing critically the administrative functions of the school. Such administrative functions could be in the area of record up keep of students and Staff biota and School Properties. According to Philip (2014), the School Access Programme is a cohesive entity which has the capacity of addressing critically the administrative functions of the school. On this premise, issues concerning staff, students, community and Ministry of Education are comprehensively kept in the computer memory and retrievable on demand.

In addition, the School Access Programme contributes to the packaging of school exams. The typing of school question papers will be facilitated effectively by SAP. Jurich and Thomas (2009) stressing the importance of School Access Programme to the Educational system of the country explained that the programme will accelerate the packaging of the school internal exams, the registration of NECO, WAEC, JAMB and documentation of students internal exams will be effectively handled with the help of the programme. The School Access Programme will boast the income generation of the school. Income will be generated in the areas of typing and printing of materials by the nearby community, opening and checking of e-mails, receiving and sending of mails, browsing and even facebook communications. All these will accelerate the income generation of the school and the fund could be plugged back in the maintenance of the programme. According to the Director of the USPF, the communities within the vicinity of the programme will pay money to the school for browsing, registration of exams and checking of results, typing and printing of materials, opening and checking of e-mails.

However, the introduction of a good programme is one thing, but the major factor is the proper implementation of the programme to put it to sustainability. The term programme may include any organized action such as media campaigns, service provisions, educational services and public policies (Centre for Disease Control and Prevention, 1999). Programme evaluation is the systematic application of scientific methods to access the design, implementation, improvement or outcome of a programme (Martens and Wilson, 2012). programme implementation is the conversion of human inputs to outputs (Stake, 2004). There is no empirical evidence to show the extent to which School Access Programme contributed to the teaching and learning of computer education studies in South-East Nigeria. The programme therefore needs evaluation to determine the extent of its contribution to the teaching and learning of computer education studies in South-East Nigeria. Evaluation is the passing of judgments on the pertinent data made available by measurement Okoro (2012). The programme should be evaluated to determine the quality of services it renders to its recipients. The programme should be evaluated to determine its cost effectiveness. The cost of the programme is compared with the value of those services the programme offers in monetary value to its customers. The programme needs to be evaluated to determine whether it needs improvement, refocus, expansion or new direction. The non availability of empirical evidence to show the extent SAP contributes to the teaching and learning of computer education studies in South-East Nigeria suggests the need for the researcher to undertake the investigation of this study.

STATEMENT OF THE PROBLEM

The introduction of the School Access Programme to Nigeria secondary schools has been adjudged by many scholars as sound and useful programme whose proper implementation is likely to result in the achievement of the ICT skills needed for the nation's Educational growth and socio-economic development. Meanwhile, the empirical evidence to confirm whether the School Access Programme in South-East Nigeria is enhancing the effective teaching and learning of Computer Education Studies is not available in the literature. The non availability of empirical data to show how effective or other wise the SAP contributed to the teaching and learning of computer education Studies in South East Nigeria suggests the need for the investigation of this study. The problem of the study was: To what extent does School Access Programme (SAP) contributed to the effective teaching and learning of computer Education Studies in South-East Nigeria.

Purpose of the Study

The purpose of the study was to evaluate the extent the School Access Programme contributed to the teaching and learning of computer education studies in South East Nigeria.

Significance of the Study

Theoretically, Robert Dekeyser in 2007 expounded the theory of skill acquisition and in that his theory was of the view that: skill acquisition training is a routinized activity, constant practice makes the trainee proficient in the processing of the

skills, skill acquisition covers covert behaviours (Playing musical instruments, driving a car, typing, ejecting a wall. Productive language skills, speaking and writing skills, language skills, speaking and writing skills; skill acquisitions can be one to one level of learning or it can involve numerous participants. The skill acquisition theory of Dekeyser is applicable to School Access Programme that emphasizes ICT skill acquisition. The theory emphasizes habit formation and routine activity like the School Access Programme. The present study supports the advocacy and stipulations of Dekeyser's theory of skill acquisition.

Practically, this study will be of immense educational value to Government, Ministry of Education, programme planners, programme developers, programme implementers (computer education teachers), the school heads, students and the society at large. The findings of the study will enable government to know whether School Access Programme effectively contributed to the teaching and learning of computer education studies. Such finding will enable government to find a way of improving the programme, expanding it and as well support the programme financially. The findings will enable Ministry of Education to suggest better ways of enhancing the effective teaching and learning of computer education studies. The findings of the study will enable the programme planners to know whether the programme is effecting what they planned as par enhancing the effective teaching and learning of computer education studies. The result of the study will help programme develops to know whether the implementers of the programme comply with the blue print of the programme. The findings of the study will enable the school heads to determine the extent SAP facilitates the teaching and learning of computer education studies. The findings of the study also will enable teachers to have good assessment index of themselves. They will compare what they have achieved in learning computer education studies with what was expected of them. This means through the findings, students will be in a position to estimate their achievements in the ICT skill acquisitions. The

findings of the study will enable the society to find a way of assisting the programme financially for improvement or expansion.

Scope of the Study

The content scope of the study is the evaluation of the extent to which School Access Programme contributes to the effective teaching and learning of computer education studies in South-East Nigeria. The geographical scope of the study is South-East Nigeria.

Research Question

What are the perceptions of teachers and students on the extent to which SAP contributes to the effective teaching and learning of computer education studies in South-East Nigeria?

Hypothesis

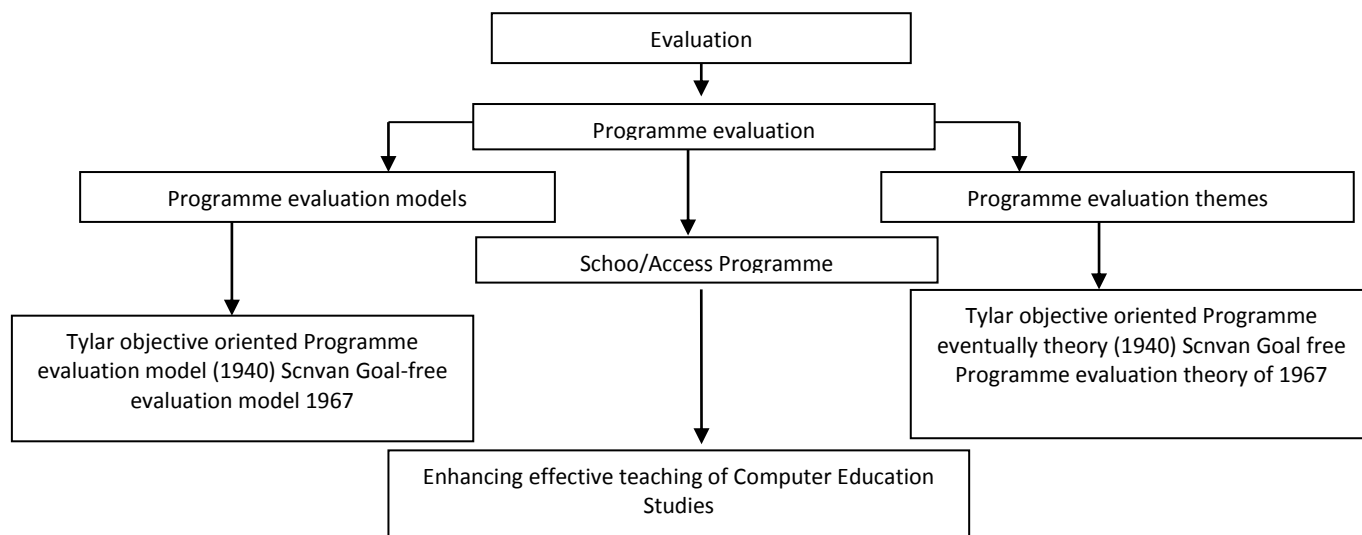
A hypothesis was formulated to guide the study and it was tested at 0.05 level of significance.

H₀₁: There is no significance difference between the mean rating of students and teachers on the extent to which SAP contributes to the effective teaching and learning of computer education studies in South East Nigeria.

LITERATURE REVIEW

In the process of literature review, the concept of evaluation, programme, programme evaluation, programme evaluation models (objective oriented programine evaluation models and Goal free programme evaluation model, Computer Education Studies, School/Access Programme (SAP), and programme implementation were reviewed. Theoretically, Tylas objective oriented programme evaluation theory of 1940 and Screvan 1967 goal free programme evaluation theory were reviewed. Under empirically related studies, evaluated educational programmes were reviewed and summary of literature review was properly articulated.

Conceptual framework of the study :



This is the pictorial representation of the over all critical components of the study. It consists of the concept of evaluation, programme evaluation, programme evaluation models, programme evaluation theories, School Access Programme and the enhancement of the programme to the efferent teaching and learning of Computer Education Studies. The Schema showed the evaluation process of the programme.

RESEARCH METHODS

The study employed evaluation design. An evaluation design is a strategy or structure designed by an evaluator to determine the overall effectiveness of a programme by comparing the objectives proposed in the programme as against the achieved objectives, using an appropriate model of programme evaluation (Campbell & Stanley 2014). The area of the study is South-East Nigeria (Anambra, Abia, Imo, Enugu, Ebonyi States). The population of the study consists of 14,141 teachers and students in the 183 Secondary Schools that benefited from the School Access Programme in South East Nigeria in 2016/2017 session. The population is made up of 1945 male teachers, 2196 female teachers, 3866 SSII male students' and 6134 female SSII students. The sample size was 389 respondents made up of 54 male teachers, 60 female teachers, 106 male SSII students and 169 female SSII students determined by Taro Yamane formula. Sampling techniques used in the study are proportionate stratified random sampling technique. Simple random sampling technique and cluster random sampling technique. Proportionate stratified random sampling technique was used because it gave both teachers and students adequate representation in the sample relative to their composition in the population. The cluster sampling techniques was used to ensure bridge of time frame and to avoid excess waste of fund in studying 5 states and 183 Secondary Schools. Questionnaire was used for the collection of the data of the study. The Questionnaire, a 5- item instrument was developed by the researcher and it was meant to elicit responses from students and teachers to determine the extent SAP contributed to the teaching and learning of computer education studies in South-East Nigeria. The instrument was validated by two experts from Science Education Department and one expert from Vocational Teacher Education Department both from University of Nigeria, Nsukka. The reliability coefficient of the School Access Programme Questionnaire (SAPQ) estimated using Cronbach Alpha reliability coefficient method and the internal consistency of the instrument stood at 0.77. Five research assistants helped the researcher to collect the pertinent data of the study. Mean, standard deviation was used to answer the research question while Student t-test was used to test the hypothesis.

RESULTS

Research Question One

What are the perceptions of teachers and students on the extent to which School Access Programme contributes to the teaching and learning of computer education studies in South-East, Nigeria?

Table 1: Mean and standard deviation of teachers and students on the extent SAP contributes to the teaching and learning of Computer Education Studies in South-East Zone of Nigeria.

S/N	Item Statement	Teachers N = 114		Students N= 275	
		Mean (\bar{X})	Std. Dev	Mean (\bar{X})	Std. Dev
1.	The school access programme facilitates the teaching and learning of computer classifications	3.67	.96	3.62	.93
2.	The school access programme helps in the teaching and learning of computer operating systems	3.48	.83	3.33	.89
3.	School access programme promotes the teaching and learning of computer systems	3.38	.99	3.47	.95
4.	School access programme helps in the teaching and learning of types of computer	3.53	.92	3.54	.93
5.	The school access programme helps in the teaching and learning of programme language.	3.61	.91	3.58	.93
6.	Cluster mean	3.53	.92	3.51	.93

Result in Table 1 revealed that items 1, 4 and 5 had their mean values ranged from 3.53-3.67. These values were within the real limit of 3.50-4.00; indicating that the extent the items contribute to the teaching and learning of computer education studies in South-East Nigeria is to a very high extent. However, items 2 and 3 had their mean values ranges from 3.33-3.48 which were within the real limit of 2.50-3.49. The result implies that the extent the items contribute to the teaching and learning of computer education studies in South-East Nigeria is to a high extent. Generally, the five items had a cluster mean value of 3.53 and 3.51 for teachers and students respectively; indicating that the extent to which SAP contribute to the teaching and learning of computer education studies in South-East Nigeria is to a very great extent. The standard deviation of the five items ranged from 0.83-0.99; indicating that respondents were homogenous in their responses.

Hypothesis One

There is no significance difference between the mean score of teachers and students perceptions on the extent SAP contributes to the teaching and learning of computer education studies in South-East Nigeria.

Table 2: Data showing t-test analysis of the significance difference between the mean score of perception of teachers and students on the extent SAP contributes to the teaching and learning of computer education studies in South-East Nigeria.

Status	N	Mean	SD	df	T	Level of sig.	Sig. (2-tailed)	Decision
Teachers	114	3.53	.35	387	.362	0.05	.717	Accept
Students	275	3.51	.37					

Result in Table 2 shows the t-test for independent samples assuming equal variance. The results from the test shows $t(387) = .362$, $P = .717$. Thus, the null hypothesis of no significant difference is accepted since the P-value (.717) is greater than 0.05 level of significant. The researcher therefore, concludes that, there is no significant difference in the mean score of teachers and students on the extent SAP contributes to the teaching and learning of computer education studies in South-East Nigeria.

DISCUSSION

The result showed that SAP contributed in a very great extent to the teaching and learning of computer education studies in South-East Nigeria. The hypothesis on the extent SAP contributes to the teaching and learning of computer study in South-East Nigeria revealed that there was no significance difference between the mean score of teachers and students. This means that their response pattern were not quite different. The study of Stenbicks and Billany (2010) which centred on institute network programme revealed that the institute network had great impact on the recipients of the programme positively. The study supports the present study which showed that SAP had great contributions to the teaching and learning of computer education studies in South-East Nigeria.

Computer education studies cannot be effectively taught in our secondary school without adequate and appropriate ICT equipments at the disposal of the computer education teachers. This situation led to the introduction of School Access Programme (SAP) in 2007. SAP is sensitive to ICT utilization and it facilitated the teaching and learning of computer education studies in our secondary schools. There was no empirical evidence to show how effective or otherwise the School Access Programme contributed to the effective teaching and learning of computer education studies. The non availability of such vital data calls for evaluation of the programme to determine its efficacy in enhancing teaching and learning of computer education studies. The findings showed that SAP contributed to the teaching and learning of Computer Education Studies in South- East Nigeria. Also the study revealed that there is no significance difference between the mean ratings of teachers and students on the extent SAP contributed to the teaching and learning of computer education studies. This means that the response scores of the respondents were very close and does not show much difference.

IMPLICATIONS

The School Access Programme emphasizes the utilization of ICT equipments. The implication of this is that other public secondary schools which SAP does not exist should be installed with SAP equipments by the Federal Government of Nigeria to enable students in those schools move at the same rate in the acquisition of ICT skills with their counter parts in SAP centres. The authors suggested that other researchers should determine the extent SAP contributes to the effective teaching and learning of Computer Education Studies in other zones in Nigeria apart from South-East Nigeria.

LIMITATIONS

Three SAP centres were primary schools namely Amachara and ozuza community primary school, Enugu Agidi in Njikoka LGA in Imo State. The above three schools are primary schools and the author has no other alternative than to work with 183 secondary schools instead of including the three centre that were of primary status.

CONCLUSION

The conclusion was that School Access Programme contributed to the teaching and learning of computer education studies in South-East Nigeria. The author recommends that the State and federal Government of Nigeria should team-up with universal service provision fund to beef up the supervision of the programme to enable it continue to facilitate the effective teaching and learning of Computer Education Studies in South-East Nigeria.

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