

The Challenges and Attitude of Teachers toward the Implementation of Data Processing Curriculum in Secondary Schools in Ondo State, Nigeria

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Received: 11 June 2015 Accepted: 30 June 2015 Published: 15 July 2015

Abstract

The purpose of the study is to examine the challenges and attitude of teachers toward the implementation of Data Processing Curriculum in Secondary Schools in Ondo State of Nigeria. It is a survey research which employed a descriptive design. The sample for the study comprised of 200 teachers randomly selected from the ten secondary schools in Akoko South West Local Government Area of Ondo State. Twenty teachers were drawn from each school using purposive sampling technique giving a total of 200 respondents. A four likert- type of questionnaire was used as an instrument for the collection of data. A trial test was carried out to ascertain the reliability of the instrument using Cronbach alpha statistics technique and a value of 0.75 was obtained from the test. Two hundred copies of the questionnaire were administered in all the selected secondary schools. Mean was used to analyse and interpret the result obtained. Curriculum. The study also reviewed those things that must be put in place to ensure Data Processing curriculum is fully implemented in secondary schools in Ondo State. Two null hypotheses were generated and tested at 0.05 level of significance. It was revealed that availability of computer resources and availability of Data Processing (DP) Subject teachers had no significant influence on attitude of teacher toward the implementation of Data Processing Curriculum.

Index terms— challenges, attitude, teachers, implem-entation, data processing, curriculum, secondary schools.

1 Introduction

Cording Osuafor (2012), the new Senior Secondary School curriculum structure developed by Nigeria Education Research and Development Council (NERDC, 2008) and approved by the National subjects are organized into four clear groups of Science and Mathematics, Business Studies, Humanities and Technology is a major reform in the right direction towards achieving the National Education goals. The introduction of 'Trade Subjects' into the Senior Secondary (SS) Education Curriculum is equally a welcome innovation in the Nigerian Education System. The restructuring of the SS curriculum is no doubt aimed at meeting emerging educational needs and global competitiveness; as well as ensure that entrepreneurship and technical subjects are properly embedded in the curriculum. This will go a long way to ensuring national socioeconomic growth and sustainable development. The restructuring of the senior secondary education curriculum is therefore a giant step towards achieving a

strong and self-reliant nation with great and dynamic economy and full of opportunities for her citizens (Federal Republic of Nigeria (FRN, 2004 as quoted by ??suafor,2012) .The Federal Republic of Nigeria in the National Policy on ??ducation (2004) articulated what the curriculum of the various levels of education in Nigeria should be. ??banya (2004) defined implementation of curriculum as day-to-day activities which school management and classroom teachers undertake in the pursuit of the objective of any given curriculum. Obanya (2007) contends that effective curriculum is the one that reflects what the learner eventually takes away from an educational experience, which he termed 'the learned curriculum'. The introduction of the New Secondary School Curriculum in the secondary schools in Nigeria is a fresh initiative which according to NERDC (2011) aims at ensuring that graduates from secondary Schools are trained in entrepreneurship skills and possess relevant Information Communication Technology (ICT) skill that will equip them for challenges of labour market. According to the National Policy on Education (2004), the broad aims and objectives of secondary education in Nigerian educational system are preparation for useful living within the society (self-employment) and preparation for higher education. Almost three decades after adoption of the laudable initiative, majority of Nigerian youth are idle while some are involved in various vices due to unemployment. A good number of students who have completed their secondary education but failed to secure admission into institutions of higher learning are in dilemma. This is because they are not equipped with the requisite skills for self or paid employment (Igwe 2007). Dike (2009) UNESCO (2002), teachers need to be adequately prepared to implement a state-of-the-art ICT curriculum. Indeed, introducing any new curriculum calls for careful preparation, management, resourcing, and continuing support. The effective implementation of the Trade/Entrepreneurship Curriculum is expected to equip the students with requisite handy skills and knowledge for Job creation, wealth generation & Poverty alleviation (Orji, 2013).

2 II.

3 Specific Objectives of the Study

This study is designed to investigate the Challenges and attitude of teachers toward the implementation of Data Processing Curriculum in Secondary Schools in Ondo State, Nigeria. Specifically therefore, the study is set out:

1. To examine the availability of computer resources in the secondary schools in Ondo State.
2. To examine availability of Data Processing subject teachers.
3. To investigate the attitude of the education stakeholders toward the implementation of Data Processing.
4. To determine the remedies in ensuring the full implementation of Data Processing in secondary schools.

4 a) Research Questions

The following research questions were raised to guide this study:

1. Are computer resources available in the schools?
2. Do the schools have enough Data Processing subject teachers to teach the subject?

5 c) Research Methods

The design of the study is a descriptive survey type. This method was deemed appropriate as it involved the collection of extensive and cross-sectional data for the purpose of describing and interpreting an existing situation under study. The population of the study consisted of all the teachers in public secondary schools in Akoko South West Local Government Area of Ondo State. The sample for the study comprised of 200 teachers randomly selected from the ten secondary schools in Akoko South West Local Government Area of Ondo State. Twenty teachers were drawn from each school using purposive sampling technique giving a total of 200 respondents. In order to answer the above stated questions, a questionnaire was designed to survey the challenges and teachers' attitude toward the implementation of Data Processing Curriculum in Secondary Schools in Ondo State. The instrument was subjected to reliability test using Cronbach alpha method and a value of 0.75 was obtained as the reliability of the instrument. Two hundred (200) questionnaires were taken to schools and distributed to teachers concerned. On the spot distribution and collection were adopted and the instrument was used in the data analysis. Mean was used to answer the research questions. Decision rule was based on the result of 2.5 and above as being high and anything below that as being low. The hypothesis generated was tested using t-test to identify if a significant different existed or not in the responses of teachers toward the implementation of Data Processing Curriculum in Secondary Schools at 0.05 alpha level of significance. 4 show that all the items have mean scores above 2.50. These responses indicate that all the above points must be put in place to ensure Data Processing curriculum is fully implemented in the secondary schools.

6 d) Testing of Hypothesis i. Hypothesis one H0: There is no relationship between availability of Computer resources and attitude of teachers toward implementation of Data Processing curriculum.

Result of the analyzed data as shown in the table above reveals that the calculated t-value of 1.04 is less than the t-tabulated of 1.96. This implies that availability of Computer resources has no significant difference on attitude of teacher. Therefore the null hypothesis of no significant difference is retained.

The fact that attitude of teacher had higher mean score of 2.81 against 2.45 of the availability of computer resources did not indicate a significant difference.

7 ii. Hypothesis two H0: There is no relationship between availability of Data Processing (DP) Subject teachers and attitude of teachers toward implementation of Data Processing curriculum.

Table ?? : T-test comparison of mean of availability of Data Processing (DP) Subject teachers and attitude of teachers Result of the analyzed data as shown in the table above reveals that the calculated t-value of 0.98 is less than the t-tabulated of 1.96. This implies that availability of Data Processing teacher has no significant difference on attitude of teacher. Therefore the null hypothesis of no significant difference is retained. The fact that attitude of teacher had higher mean score of 2.81 against 2.42 of the availability of teacher did not indicate a significant difference.

8 III.

9 Discussion

Summary of data based on table one on the availability of computer resources had grand mean of 2.45 which include 3.03 for computer availability in the school laboratory, 2.47 for the status of computers in the school laboratory, 2.19 for adequacy of computers in the laboratory, 2.03 for presence of enough computer accessories in the school laboratory and availability of Data processing textbooks. This study revealed that computer resources are not available in the schools. This finding is in agreement with Ololube (2006) Table ??our above reviews those things that must be put in place to ensure Data Processing curriculum is fully implemented in the secondary schools. The table above indicates grand mean of 3.56 which include 2.77 for school to source for funds from well wishers, 3.27 for incorporating Computer Education into teacher Education Institutions, 2.74 for regular in-service training, for provision of enough ICT facilities, 3.62 for employing qualify Data Processing teachers, 3.46 for provision of funds and 3.56 for ensuring ICT gadget usage. Results in table 4 show that all the items have mean scores above 2.50. These responses indicate that all the above points must be put in place to ensure Data Processing curriculum is fully implemented in the secondary schools. This is in agreement with Osuafor(2012), there should be continuous in-service training of teachers both within and outside the country. There is need to sponsor teachers to International Conferences for them to interact with their colleagues in other countries and acquaint. This finding is also in agreement with Adeyinka et al.(2007) and Yusuf (2005).¹

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Figure 1:

S/N	Items	SA	A	D	SD	X _i
1.	Computers are available in my school laboratory	68	91	19	22	3.03
2.	Computers in the laboratory are functioning well	31	69	62	38	2.47
3.	Computers in the laboratory are adequate	24	47	72	57	2.19
4.	There are enough computer accessories in my school laboratory	11	43	87	59	2.03
5.	Data processing textbooks are available my school.	26	87	54	33	2.53
Grand Mean						2.45

Figure 2:

1

Figure 3: Table 1 :

2

S/N	Items	SA	D	SD	X
	A				
1.	There are enough teachers to teach Data Processing	25	35	82	58 2.14
2.	School have qualified Data Processing teachers	22	50	69	59 2.18
3.	Auxiliary and PTA teachers are employed to teach the subject.	89	41	38	32 2.94
	Grand Mean				2.42

Summary of result on Table 2 above reveals that Data Processing subject teachers in secondary schools in C not enough.

iii. Research Question 3: Do the teachers show positive attitude toward the implementation of Data Process Curriculum?

Figure 4: Table 2 :

3

S/N	Items	SA	D	SD	X
	A				
1.	Principals have a positive attitude towards Data Processing	66	103	23	8 3.14
2.	Teachers show positive attitude towards Data Processing.	74	103	16	7 3.22
3.	Teachers are willing to implement Data Processing curriculum in secondary schools.	41	99	36	24 2.96
4.	Teachers are not willing to teach the subject in the school	13	35	74	78 1.92
	Grand Mean				2.81

[Note: iv. Research Question 4: What are those things that must be put in place to ensure Data Processing curriculum is fully implemented in the secondary schools?]

Figure 5: Table 3 :

4

S/N	Items
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Figure 6: Table 4 :

Figure 7:

IV.

1.1 Recommendations

Based on the findings of the study and conclusion thereof, the following recommendations are made: 1. The government should provide enough funds for schools to purchase computer for instructional purposes and make available suitable computer environment in our secondary schools. 2. Government should ensure effective monitoring of the implementation of Data Processing curriculum in secondary schools. 3. Entrepreneurship education should be incorporated into secondary school programme right from the junior secondary school in order to instill the spirit of job creating in the mind of the students at their formative stage of life 4. They must be a concerted effort from all education stakeholders to tackle the challenges and create a conducive environment for successful implementation of Data Processing curriculum.

1.2 Young graduates who have specialized in Computer

Science Education or Information Technology should be given automatic employment after their National Youth service Corps. 6. There should be continuous in-service training of teachers both within and outside the country.

[Adeyinka et al. (2007)] *An assessment of Secondary school Teachers uses of ICT'S: Implications for further development of ICT'S use in Nigerian secondary schools. The Turkish online journal of Educational Technology -TOJET*, A Adeyinka , A Tella , Tella , A Adeyinka . 2007. July 2007. 6. (Issue 3)

[Yusuf ()] 'An Investigation into Teachers' Self-Efficacy in Implementing Computer Education in Nigerian secondary schools'. M O Yusuf . *Meridan: A middle school computer Technologies Journal* 2005. 8 (2) .

[Ololube ()] 'Appraising the relationship between ICT usage and integration and the standard of teacher education programs in a developing economy'. N P Ololube . *International Journal of Education and Development using ICT* 2006. 2 (3) .

[Duguryil and Katnyon ()] 'Availability and level of use of ICT as a resource in STM instructional delivery'. A I Duguryil , H D Katnyon . *Proceedings of the 47th Annual Conference of STAN*, (the 47th Annual Conference of STAN) 2006. p. .

[Okoli and Osuafor ()] 'Availability, accessibility and extent of use of new technologies for STM curriculum delivery'. J N Okoli , A M Osuafor . *49th STAN Annual Conference Proceedings*, 2008. p. .

[Cox et al. (1999)] M J Cox , C Preston , K Cox . *What motivates teachers to use ICT? Paper presented at the British Educational Research Association Conference. Brighton*, 1999. September.

[Osuafor ()] 'Implementation of the Nigeria New Senior Secondary Education Curriculum Structure: Prospects, Challenges and the Way Forward for Sustainable Development'. A M Osuafor . <http://.usdnhp.undp.prg/it4dev/> *Science And Public Policy In Africa* 2158-5598-2158-558X -. 18. UNDP. 2012. 2006. (Information communication technologies and development)

[Unesco ()] 'Information and Communication Technologies in Teacher education: A planning Guide'. Paris Unesco . *UNESCO* 2002.

[Mac-Ikemenjima ()] D Mac-Ikemenjima
10. NERDC. . *Paper presentation at the 8th UN Task force Meeting April 13-15*, (Dublin, Ireland; Jibowu, Yaba, Lagos State) 2005. 2005. 2008. NERDC press. (The New Senior Secondary curriculum structure at a glance)

[Frcn ()] *National policy on education*, Frcn . 2004. Lagos: NERDC Press.

[Orji ()] *Nigerian Educational Research and Development Council (NERDC). The New Senior Secondary Education Curricula*, S N Orji . 2013. Trade/Entrepreneurship.

[Bukaliya and Mubika (2011)] 'Teacher Competence in ICT: Implications for Computer Education in Zimbabwean Secondary Schools'. R Bukaliya , A K Mubika . *International Journal of Social Sciences* 2223-4934. 2011. October 2011.

[Dike ()] *Technical and Vocational Education: Key to Nigeria's Development*, V E Dike . 2009.

[Obanya ()] *The Dilemma of Education in Africa*, P Obanya . 2004a. Ibadan: Heinemann Educational Books Nigeria Plc.

[Okeke et al. ()] 'The level of preparedness of STM teachers for the challenges of ICT in the new millennium. Uni' {ik'. S O C Okeke , J N Okoli , A M Osuafor . *Orient journal of Education* 2008. 4 (1) p. .

[Evey et al. ()] 'The need for ICT in secondary schools curriculum in Nigeria'. C K Evey , O O Emmanuel , A Joseph , U Denis , F A Asinde . *Nigerian Journal of Teacher Education and Teaching* 2010. 8 (2) p. .

[Obanya ()] *Thinking and Talking education*, P Obanya . 2007. Ibadan: Evans Brothers (Nigeria publishers) Ltd.

[Igwe ()] 'Transforming the secondary school curriculum for effective social development in Nigeria'. R O Igwe . *International Journal of Educational Studies* 2007. 7 (1) p. .