ASSESSMENT OF BUSINESS STUDIES TEACHERS COMPETENCY IN THE APPLICATION OF INFORMATION AND COMMUNICATION TECHNOLOGY FOR INSTRUCTIONAL DELIVERY AMONG SECONDARY SCHOOLS IN PORT-HARCOURT METROPOLIS, RIVERS STATE.

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Abstract

The study investigated the assessment of Business Studies teachers competency in the application of ICT for instructional delivery among secondary schools in Port Harcourt Metropolis, Rivers State. The study design was descriptive survey. The population comprised of two hundred and twenty seven (227) Business Studies Teachers while the sample size was one hundred (100) teachers, selected using simple random sampling techniques. The instrument for data collection was questionnaire. The instrument was partitioned into three sections and structured in the pattern of Likert 5 point rating scale of agreement, the instrument was face and content validated by experts. The reliability of the instrument was established using PPMC method. The reliability coefficient (r) achieved was 0..87. mean statistics was used to answer the research questions, with a criterion mean value of 3.00. The findings identified that majority of the schools do not have ICT facilities, also majority of the teachers are not competent in the application of ICT. Therefore, it was recommended that periodic retraining exercises should be organized to refresh teachers that way, they can in turn impact the knowledge to the students among others.
Keywords: Assessment, Business Studies Teachers, Information and Communication Technology, Secondary Schools, Port Harcourt Metropolis.

Introduction

The use of Information and Communication Technology (ICT) in the education process is incomparable. ICTs are information handling tools that are used to produce, store, process, distribute and exchange information. ICT could be seen as an increasingly powerful tool for participating in global markets, promoting political accountability; improving the delivery of basic services and enhancing local development opportunities. Volman and Van in Agbo (2015) posited that the use of ICT creates a powerful learning environment and transforms the teaching process in which teachers deal with knowledge in an active, self directed and constructive way. ICT is not just regarded as a tool which can be added to or used as a replacement of existing teaching methods, it can also be seen as an important instrument to support new ways of teaching and learning.

Apple Computers (2002) asserts that teachers who use Information and Communication Technology (ICT) in instructional delivery gain deeper understanding of complex topics and are more likely to recall information and use it to solve problems both in and outside of the classroom. Similarly, Chief Executive Officer Forum on Education and Technology (2001) noted that teachers extend and deepen their knowledge of investigation and inquiry according to their needs and interest when access to information is available on multiple levels. Emma and Ajaji (2004) opined that instructional materials creates change and

progress only when the teacher is knowledgeable and knows how to make use of it, thus portraying the professional attributes of the teacher and the general knowledge or his creativity in selecting, developing and using instructional ,materials effectively.

Olson in Shazia (2006) noted that ICT offers teachers ways to enhance what and how they teach, but at the same time threatens those very practices by calling them into question. ICT also threatens illusions which teachers have about what they are doing. Some think ICT makes better teachers, while others imagine that ICT help teachers do what they do better. Olson went further to state that teachers act to protect their influence over core elements of their work, such as covering the curriculum and maintaining their credibility.

Veen (1993) observed that many factors influence teacher's take up of ICT, among them is teachers' factor which far outweighs the school factors. Despite essential technical support provided by the school through the school principal, the teacher factors that involved beliefs about the way the subject should be taught and skills associated with competence in managing classroom activities and computer-handling technical skills were the most influential in teachers use of ICT. Schools through the administrator or schools board can only encourage the use of ICT, but the actual take-up depends largely on teachers personal feelings, skills as well as attitudes to ICT in general. Cox, Preston & Cox (1999) in their study noted that teachers who have a high value for ICT and perceive it to be useful completely transform their teaching. Becker & Riel (2000) added that teachers who are motivated and have strong commitments to their student's learning and their own professional development will evidently integrate ICT more easily within their teaching. Moseley & Higgins in Shazia (2006) found that teachers who successfully use technology in the classroom have positive attitudes to ICT and focus on pupil choice and individual study rather than teacher direction.

The application of ICT in the education process has been divided into two broad categories: ICTs for Education and ICTs in Education (Rashedul & Abu 2016). ICTs for education according to Rashedul & Abu refer to the development of information and communication technology specifically for teaching/learning purposes. ICTs in education involves the adoption of general components of information and communication technologies in the teaching/learning process. Different teachers use different methods to improve their teaching skills. Such methods according to Roberts (2003), Gonalez (2009) and Gonzalaz (2010) are self-paced method, network learning method and online discussion method. The importance of ICT in promoting new instructional delivery method for teaching and learning is tremendous. Similarly, effective use of ICT can facilitate student-centered activity learning, engage students in collaborative learning and also enhance their social interaction (Ellis, Goodyear, Calvo & Prosser 2008 and Colker & Heroman 2003).

ICT has changed the face of teaching and learning globally, and most countries are expected to take the advantage to impact on the educational sector. Some secondary schools do not apply ICT in their teaching, they still use old pattern of teaching even where there are ICT facilities the teachers do not teach the students. This situation is worrisome in this technological era and raises questions as to what could be the problem. Could it be that the facilities are not available? Or the teachers are not competent in the use of ICT for teaching or what other challenges could be constraining the use of ICT in the schools. The need to answer these questions necessitated this study.

Purpose of the Study

The main purpose of the study is to investigate the Assessment of Business Studies Teachers competency in the application of ICT for instructional delivery among secondary schools in Port Harcourt Metropolis, Rivers State. Specifically, the study sought to:

1.   Ascertain the extent of availability of ICT for instructional delivery among secondary schools in Rivers Port Harcourt Metropolis.
2.   Determine the level of teacher's competency in the application of ICT for instructional delivery in secondary schools in Port Harcourt Metropolis.
3.   Determine the challenges affecting the application of ICT in instructional delivery among secondary schools in Port Harcourt Metropolis.

Research Questions
1.   To what extent is ICT available for instructional delivery in secondary schools in Port Harcourt Metropolis?
2.   What is the level of teachers competency in the application of ICT for instructional delivery among secondary schools in Port Harcourt Metropolis?
3.   What are the challenges affecting the application of ICT for instructional delivery among secondary schools in Port Harcourt Metropolis?

Methodology
The study was conducted in secondary schools in Port Harcourt Metropolis, Rivers State. The study adopted a descriptive survey design. The population of the study comprised of two hundred and twenty seven (227) business studies teachers. The sample size was one hundred (100) teachers, selected using simple random sampling techniques . The instrument for data collection was a structured questionnaire. The questionnaire was partitioned into three sections and structured in the pattern of Likert 5 point rating scale of agreement: Strongly Agreed (5), Agreed (4), Undecided (3), Disagreed (2), and Strongly Disagreed (1). The instrument was face and content validated by expert. The reliability of the instrument was established using PPMC method. The reliability coefficient (r) achieved was 0.87. Mean statistics was used to answer the research questions, with a criterion mean value of 3.00.

Results and Discussions
Research Question 1
To what extent is ICT available for Business Studies Teachers for instructional delivery in secondary schools in Port Harcourt Metropolis, Rivers State?

Table 1: Extent of ICT available for Business Studies Teachers

S/NO	Variables	VHE	HE	U	LE	VLE	M	Decision
1.	Fax machine	20	20	10	30	20	2.90	Reject
2.	Overhead projector	10	10	30	40	10	2.70	Reject
3.	Internet	10	5	10	50	25	2.25	Reject
4.	Spreadsheet	5	10	5	30	50	1.90	Reject
5.	Power-point facilities	14	16	40	10	20	2.94	Reject
6.	Photocopying machine	15	15	25	25	20	2.80	Reject
7.	Scanner	5	25		50	30	2.55	Reject
8.	Printer	10	10	30	40	10	2.70	Reject
9.	Interactive whiteboard	20	15	30	25	10	3.10	Accept
10.	E-mail	14	16	40	10	20	2.94	Reject

Source: Field Survey, 2018
≥ - 3.00 and above Accept
≤ -3.00   Reject

Result in Table 1 showed respondents opinion on the availability of ICT for instructional delivery by business studies teachers in secondary schools in Port Harcourt metropolis. Mean on fax machine was (2.90), overhead projector (2.70), internet (2.25), spreadsheet (1.90), power-point facilities (2.94), photocopying machine (2.80), scanner (2.55), printer (2.70), interactive whiteboard (3.10), and E-mail is (2.94). The findings is in agreement with Okwudishu (2005) who in his study titled "Awareness and use of ICT among village secondary school teachers in Aniocha South Local Government Area of Delta State", found that unavailability of ICT components in schools hampers teachers' use of ICTs.

Research Question 2

What is the level of teachers' competency in the application of ICT for instructional delivery in secondary schools in Port Harcourt Metropolis?

Table2: Level of teachers' competency in the application of ICT

S/N	ITEMS	VHL	HL	U	LL	VLL	M	Decision	
1.	Fax machine		20	20	10	30	20	2.90	Reject
2.	Overhead projector		10	10	30	40	10	2.70	Reject
3.	Internet		10	5	10	50	25	2.25	Reject
4.	Spreadsheet		5	10	5	30	50	1.90	Reject
5.	Power-point facilities		14	16	40	10	20	2.94	Reject
6.	Photocopying machine		15	15	25	25	20	2.80	Reject
7.	Scanner		5	25		50	30	2.55	Reject
8.	Printer		10	10	30	40	10	2.70	Reject
9.	Interactive whiteboard		20	15	30	25	10	3.10	Accept
10.	E-mail		14	16	40	10	20	2.94	Reject

Source: Field Survey, 2018

 ≥ - 3.00 and above Accept

 ≤ -3.00   Reject

Results in Table 2 showed that most of the variables listed were rejected, fax machine had a mean value of (2.90), overhead projector (2.70), internet (2.25), computers are connected to the internet (2.94), spreadsheet (1.90), power-point facilities (2.94), photocopying machine (2.80), scanner (2.55), printer (2.70), interactive whiteboard (3.10) and finally E-mail (2.94).The study is in tandem with Ademiluyi (2007), who in his study observed that most business studies students do not have the ability to succeed in private enterprise, and attributed it to teacher's incompetency in transmitting the necessary knowledge to the students. In the same vein, Emma & Ajaji (2004) in their study titled "educational technology method, material, and machines." opined that instructional materials creates change and progress only when the teacher is knowledgeable and knows how to make use of it, thus, portraying the professional attributes of the teacher and the general knowledge or his creativity in selecting, developing and using instructional materials effectively. Similarly, Omoniyi & Quadri (2013) stated that majority of teachers in secondary schools do not have the required competence in the use of ICT.

Research Question 3

What are the challenges affecting the application of ICT in secondary schools in Port Harcourt Metropolis, Rivers State..

Table 3: Challenges affecting the application of ICT

S/NO	Challenges	SA	A	U	DA	SD	M	Decision
1	Poor funding	22	10	35	27	6	3.15	Accept
2	Inadequate power supply	18	12	50	5	15	3.13	Accept
3	Poor maintenance culture	26	24	30	5	15	3.41	Accept
4	Mismanagement of available fund	20	15	30	25	10	3.10	Accept
5	Lack of qualified teachers With requisite skills	23	27	25	15	10	3.38	Accept
6	Lack of computers and its accessories	19	31	10	20	20	3.09	Accept
7	Non-existence of computer laboratories	15	20	30	20	15	3.00	Accept
8	Lack of technical support	10	10	30	40	10	2.70	Reject
9	Lack of interest	30	20	10	20	20	3.20	Accept
10	Lack of grant for ICT	40	10	30	10	10	3.60	Accept
11	Lack of awareness	15	15	25	25	20	2.80	Reject

Source: Field Survey, 2018

≥ - 3.00 and above Accept

≤ -3.00   Reject

Result in Table 3 showed respondents opinion on the challenges affecting the application of ICT in secondary schools in Port-Harcourt metropolis. Mean on poor funding was (3.15), inadequate power supply (3.13), poor maintenance culture (3.41), mismanagement of available funds (3.10), lack of qualified teachers with requisite skills (3.38), lack of computers and its accessories (3.09), non-existence of computer laboratories (3.00), lack of technical support (2.70), lack of interest (3.20),lack of grant for ICT (3.60), lack of awareness (2.80). The result is in line with Pelgrum in Badau & Sakiyo (2013) who reported that ICT teacher's incompetence is always a barrier to the implementation of ICT curriculum in developing countries. Similarly, Ltogboje & Okubote (2002), who in their work titled "Internet: A pragmatic aid to education and research", noted that the high cost of ICT equipment is a challenge to the availability and accessibility of the materials. In the same vein, Ltogboje & Okubote (2002) in their study titled "interne: A pragmatic aid" noted that the high cost of ICT equipment is a challenge to the availability of the materials.

Conclusion

From the findings, it was deduced that:

Majority of the schools do not have ICT facilities, secondly, majority of the teachers are not competent in the application of ICT. Finally, teachers incompetency in the application of ICT s well as unavailability of ICT facilities are some of the challenges affecting the application of ICT.

Recommendations

1.   Government through the Ministry of Education should provide well equipped ICT facilities in secondary schools, by so doing; teachers will be able to teach effectively.

2.   Periodic retraining exercises should be organized to refresh teachers that way, they can in turn impact the knowledge acquired to the students.

3.   Government through the Ministry of Education should periodically organize in-service training for the teachers as that will help in developing their skills.

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