Integrating Microsoft (MS) PowerPoint in Teaching and Learning Process: An Appraisal of Lecturers Competence in Electronic Teaching

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ABSTRACT

This is a descriptive survey research, which examined the awareness and the lecturers' computer literacy level at the University of Port Harcourt Faculty of Education. It also looked at the skills, use and possible inhibitions against the effective integration of MS PowerPoint in teaching/learning situations. The study further appraised and ascertained the future use of the MS PowerPoint in teaching/learning in the faculty. The faculty of Education constituted the population. The entire 166 lectures in the nominal roll of the faculty as at the time of this study were used for the research work. However, 145 out of the 166 respondents returned their questionnaires. Five research questions guided the study. A self-developed instrument with 32 items questionnaire was validated with a reliability index of 0.70, and the data collected was analyzed using statistical percentage. The findings revealed that: - 120(83%) are computer literate. 94(65%) use MS PowerPoint for presentations; 110(76%) have no skills on MS PowerPoint software use; while 128(88%) cannot create PowerPoint presentation due to lack of training. The research further revealed that there is a high expectation of future use of MS PowerPoint software in teaching/learning process, as 143(99%) are interested in future use of the software. Finally, appropriate recommendations were proffered to improve electronic teaching in the University of Port Harcourt.

Keywords: Electronic teaching, Electronic integration, PowerPoint, Computer literacy, Competence, Skills.

1.1 Introduction

There is no gainsaying that the dawn of Information and Communication Technologies (ICTs) have permeated all aspects of life. Preparing children for the world in which they will live is becoming more difficult than ever. Rapid changes in many fields are making basic knowledge and skills obsolete (Molnar, 1997). The use of the technologies, especially the computer has come to stay in our society today, especially in the education setting. The advents of these technologies have changed the teaching methodology and learning approaches/process. There has been a confluence of changes that have significantly impacted the direction of modern education and imparting education has become easier and much more interesting than before (http://www.slideshare.net/mastermind10538/importance-of-computer-in-education) and Fisseha (2009).

Being aware of the significant role of ICTs, especially in the educational activities, education authorities should be wise enough in implementing the strategies to empower such in supporting the teaching and learning process in the classroom, Kaka (2008) asserts. Such, the onus lies on us to understand the language of the technology in order to apply it appropriately and maximally use it to our advantage. As teachers, we need to be acquainted with the various uses of each of the technologies in our various subject areas.

Kankaanranta & Puhakka (2008) cited in 2AgePro Consortium (2009) observed that there are some reported problems concerning teachers' use of modern technology in teaching. Most common problem as noticed by the scholars is time. They asserted that teachers do not have enough time to learn and utilize new technological tools that they can use to perform their job. Consequently, there is need to integrate neophyte teachers with the use of electronic teaching technologies.

Prior before now, as noticed by Finkelstlein (2003), many computer users (teachers and students) are not familiar with PowerPoint software, but word processing and spreadsheet. But today, it has become an ingrained part of many instructional settings in schools world over. (Harrison, 1998) has also observed that many teachers, from elementary schools through colleges, have enthusiastically embraced PowerPoint as an instructional tool, claiming, for example, that it "enhances instruction and motivates students to learn".

Furthermore, Alster (2002), Mason and Hylnka (1998) in their opinion that the use of PowerPoint aid teaching and learning` affirmed that PowerPoint presentations are excellent tool for use in the classroom. These assertions or claims by these scholars have shown the growing concern for the use of Microsoft PowerPoint software as electronic teaching aid in contemporary education setting.

Some scholars are of the opinion that this new instructional technology possesses a lot of problems for both old and new teachers, especially as it concerns digital learners. The famous theorist of information presentation, Edward Tufte, in his 28-page pamphlet titled: "The Cognitive Style of PowerPoint", argued and/or claimed that Microsoft's ubiquitous software forces people to mutilate data beyond comprehension, and encourages users to rely on bulleted lists" (Nash, 2006).

However, the above aforesaid claim notwithstanding, many scholars are of the opinion that this program has been excitedly embraced at all levels of our educational systems, ranging from primary schools to the universities, claiming that it will enhance instruction and motivate students to learn (Harrison, 1998) and Jones (2003).

Slide presentation software is geared towards information exchange, particularly in large classes. But, PowerPoint has been acclaimed to be a highly effective tool to aid learning. But scholars have warned that if not used carefully, it may rather disengage students and actually hinder learning process. PowerPoint has become one of the world's most powerful presentation software, especially within the academic arena. As Gupta (2008) rightly said, if you want to make your point(s) powerful, you need Microsoft PowerPoint software for that purpose.

1.2 Purpose of the Study
The purpose of this study is to:-
1. appraise the lecturers' computer literacy level
2. examine the lecturers awareness and ascertain the extent of the use of MS PowerPoint software
3. examine the extent of lecturers' skills, utilization and integration of MS PowerPoint software in teaching/learning process in the University of Port Harcourt Faculty of Education.
4. find out the possible inhibitions on the use of MS PowerPoint software in teaching and learning process
5. establish the future use of the MS PowerPoint Software in teaching/learning process.

1.3: Research Questions
1. What is the level of computer literacy among lecturers' in the University of Port Harcourt Faculty of Education?
2. What is the level of lecturer's awareness on the use of MS PowerPoint software at the University of Port Harcourt Faculty of Education?
3. What is the extent of lecturers' skills, utilization and integration of MS PowerPoint software in teaching/learning process in the University of Port Harcourt Faculty of Education?
4. What are the possible inhibitions on the use of MS PowerPoint software in   teaching and learning process?
5. What is the future use of the MS PowerPoint software by lecturers' in   teaching/learning process?

1.4: Significance of the study
1. The findings of this study will reveal that adequately trained Faculty staff will improve the lecturers' skills on the use of PowerPoint software; hence, enhance improved use and integration of PowerPoint software in teaching and learning in the University of PortHarcourt Faculty of Education in particular and the University as a whole.
2. It will equally remind school administrators on the recruitments methodology or criteria by placing emphasis on teachers' competency on electronic teaching, which will in torn, improve the standard of education.
3. The findings will be of immense benefits to school authority, as it will equip them with the tools or strategies to adequately deal with the problems of unskilled MS PowerPoint usage by providing in-service training programmes for lecturers in teaching/learning process.

2.0 Methodology
The descriptive survey research was adopted for this study. The population of study involved all the 166 lecturers in the University of Port Harcourt Faculty of Education at the time of this research. A structured questionnaire with 32 items developed by the researchers was used for the study. The instrument was validity and a reliability index of 0.70 was ascertained suitable for the study. Section "A" of the questionnaire contained

demographic information of the respondents, while section "B' contained items concerning the research work. Oral discussion was also adopted by the researchers in order to obtain information that weren't contained in the questionnaire. The researchers administered the research instrument to the respondents and were retrieved within one week period. 145 out of 166 of the questionnaires were retrieved from the respondents. The data obtained were gathered and analyzed with statistical percentages. Kankaanranta & Puhakka (2008) noted that new skills and support in pedagogical use of modern technology. The knowledge gap need to be filled with continuing education, and new support persons are equally needed to perfect the idea

3.0: Result and Discussions

3.1: Research Questions 1: What is the level of computer literacy among lecturers' in the University of Port Harcourt Faculty of Education? Response is as shown in table 3.1.

Table 3.1: Level of computer literacy amongst lecturers in the University of Port Harcourt, Faculty of Education

S/N	Statement	Responses		
		Yes	No	Total
1	**The Level of Computer Literacy Amongst Lecturers in the University of Port Harcourt Faculty of Education**			
A	Do you know how to effectively use a computer?	120(83%)	25(27%)	145(100%)
B	Do you have a personal computer?	140 (97%)	5(3%)	145(100%)
C	Where you trained on the use of computer by your employer?	9(6%)	136(94%)	145(100%)
D	Can you type and print your document(s) with a computer?	90(62%)	55(38%)	145(100%)
E	Can you save documents in removable storage devices?	86(59%)	59(41%)	145(100%)
F	Can you install computer software?	(58%)	(42%)	145(100%)
G	Did you train yourself on the use of computer?	(95%)	(5%)	145(100%)

Table 3.1 shows the level of computer literacy amongst lecturers in the University of Port Harcourt Faculty of Education. RQ1 as shown in the aforesaid table indicated that 120 out of 145 respondents, representing (83%) of the lecturer can effectively use a computer. 25 respondents representing (27%) cannot effectively use computers. Again, 90 respondents representing (62%) in the aforesaid table can type and print document(s) with computers, while 86 respondents representing (59%) can effectively save documents in removable storage devices? In effect, there is a high level of computer literacy amongst lecturers in the University of Port Harcourt Faculty of Education.

3.2: Research Questions 2: What is the level of lectures awareness on the use of MS PowerPoint software at the University of Port Harcourt Faculty of Education?

Table 3.2: The Level of Lecturers' Awareness of MS PowerPoint Software in the University of Port Harcourt Faculty of Education

S/N	Statement	Responses		
		Yes	No	Total
2	**The Level of Lectures' Awareness of MS PowerPoint Software**			
A	Have you heard about Microsoft PowerPoint (PPT) software?	145(100%)	0(0%)	145(100%)
B	How long have you heard about the PowerPoint software?	6 years (average)		

In (RQ2), table 3.2, 145 representing (100%) of all the lecturers are aware of Microsoft PowerPoint Software. The same table 3.2, as shown above revealed that Microsoft PowerPoint Software is yet at its nascent stage in the Faculty, which scores its use and integrated in teaching/learning very low as depicted in table 3.3 below.

3.3: Research Questions 3: What is the level of lecturers' skills, use and integration of MS PowerPoint software in teaching/learning process in the University of Port Harcourt Faculty of Education?

Table 3.3: The Level of MS PowerPoint Software Skills, Use and Integration in the University of Port Harcourt Faculty of Education

S/N	Statement	Responses		
		Yes	No	Total
3	**The Level of MS PowerPoint Software skills, use and Integration**			
A	Did your employer train you on the use of Microsoft PowerPoint?	0(0%)	145(100%)	145(100%)
B	Can you use MS PowerPoint software?	51(35%)	94(65%)	145(100%)
C	Can you prepare/create MS PowerPoint presentation?	35(24%)	110(76%)	145(100%)
D	Can you apply animations/transitions effects to your slide?	33(23%)	112(77%)	145(100%)
E	Do you know how to apply and change background designs?	46(32%)	99(68%)	145(100%)
F	As a lecturer, have you made presentation(s) with MS PowerPoint software?	136(94%)	9(6%)	145(100%)
G	Can you operate/manipulate the computer during MS Power-Point presentation(s)?	39(27%)	106(73%)	145(100%)
H	Do you know how to print MS PowerPoint slide handouts?	45(31%)	100(69%)	145(100%)
I	If you cannot create MS PowerPoint presentation, who does it for you?	a) Friends/Relations - 9(6%) b) Computer operators - 133(92%) c) Children - 3(2%)		145(100%)

In (RQ3), table 3.3, examined the level of MS PowerPoint software skills, use and integration in the University of Port Harcourt Faculty of Education. The table generally revealed that the lecturers skills, use and integration of PowerPoint Software in teaching/learning is very low as 94(65%) of respondents cannot use PowerPoint Software in teaching/learning process. Even though 136(94%) of the respondents have at one time or the other made presentations with MS PowerPoint as shown in item (f) in the table 3.3, 110(76%) lack skills to prepare or create MS PowerPoint software for presentations. Again, 112(77%) of the respondents lack skills to apply animations/transitions effect to slides. The worst of it all is that at of 136(94%) of lecturers that make presentations with MS PowerPoint, 133(92%) of them cannot create or prepare their own PowerPoint presentations, but rely solely on computer operators at cyber cafes. The table 3.3 also revealed that 106(73%) of the respondents cannot operate or manipulate the computers during Microsoft PowerPoint presentations.

3.4: Research Questions 4: What are the possible inhibitions on the use of MS PowerPoint software in teaching and learning process?

Table 3.4: The inhibitions against the effectiveness use of MS PowerPoint software in teaching/learning

S/N	Statement	Responses		
		Yes	No	Total
4	**Inhibitions against the effectiveness use of MS PowerPoint Software**			
A	Is your inability to create MS PowerPoint presentation as a result of lack of computer knowledge?	25(17%)	120(83%)	145(100%)
B	Is your inability to create MS PowerPoint presentation as a result of lack of Ms PowerPoint training?	128(88%)	17(12%)	145(100%)
C	Is it difficult to create presentation with MS PowerPoint?	116 (80%)	29(20%)	145(100%)
D	Does it waste time to create a PowerPoint presentation?	117(81%)	28(19%)	145(100%)
E	Is it time-consuming to create a PowerPoint presentation?	122(84%)	23(16%)	145(100%)
F	Do you prefer manual presentation to MS PowerPoint presentation?	33(24%)	110(76%)	145(100%)
G	Is your dislike for MS PowerPoint presentation(s) due to lack of electricity supply?	33(23%)	112(77%)	145(100%)
H	Is your dislike for MS PowerPoint presentation due to fear of failure?	9(6%)	136(94%)	145(100%)
I	Is your not using MS PowerPoint because you don't like it at all?	9(6%)	136(94%)	145(100%)
J	Is your not using MS PowerPoint for presentation(s) due to lack of training on the use of MS PowerPoint?	126(87%)	19(13%)	145(100%)

In (RQ3), table 3.4 seeks to find out the inhibitions against the effectiveness use of MS PowerPoint Software in teaching/learning process. From the aforesaid table, 128(88%) are unable to create MS PowerPoint for presentation(s) due to lack of training on the use of MS PowerPoint software.

3.5: Research Questions 5: What is the future use of the MS PowerPoint lecturers' in software by teaching/learning process?

Table 3.5: The lecturers future use of MS PowerPoint Software in teaching/learning process?

S/N	Statement	Responses		
		Yes	No	Total
5	**Lecturers' future use of MS PowerPoint in teaching/learning process?**			
A	Do you have interest on the use MS PowerPoint?	142(98%)	3(2%)	45(100%)
B	Do you hope to learn and use MS PowerPoint in the future?	143(99%)	2(1%)	145(100%)
C	Will you go for training or further training if the Faculty sponsors you?	144(99%)	1(1%)	145(100%)
D	Can you afford to train yourself to gain MS PowerPoint knowledge/skills if the faculty refuses to sponsor you?	94(65%)	51(35%)	145(100%)

In table 3.5, (RQ3) revealed a high expectations on the use of MS PowerPoint software as 142 (98%) of the respondents are interested on its usage in teaching and learning process in the faculty. Secondly, 143(99%) hope to learn and use the software, while 144(99%) of the respondents are willing to go for training if sponsored by the faculty.

4.0: Recommendations
Based on the result of this study, the researchers recommended as follows:-
1. that Microsoft PowerPoint training programmes should be provided for teaching staff in the University of Port Harcourt Faculty of education.
2. that teaching staff with electronic competency should be emphasized during recruitments in the faculty.
3. that a computer laboratory be established in the Faculty of Education to train teaching staff on the use of new media in teaching/learning process.
4. that teaching staff with electronic competency should be encouraged
5. that all teaching staff in the university should be encouraged to adapt to electronic teaching.
6. that staff should not neglect themselves, but endeavour to go for further train if the university could not afford the necessary finance.

5.0: Conclusion
The use of computers in education is becoming the in-thing in contemporary society. Hence, the onus lies on us to reap the advantages inherent in its application. The use of Microsoft PowerPoint software in teaching and learning, especially in Distance Learning is increasing daily. Consequently, most nations, specifically the advanced worlds are fast in its adaptation and adoption. Hence, there is need for institutions in Nigeria, particularly the University of Port Harcourt Faculty of Education to race with time and quickly adopt electronic teaching in order to improve their standard of education in this 21st Century.

References

Alster (2002) in Alkash, K. A. M. & Al-dersi, Z. E. M. (2013). Advantages of using powerpoint presentation in EFL classroom and the status of its use in Sebha University. International Journal of English Language and Translation Studies, Vol. 1, Issue 1, 2013.

Clark, R. C. & Mayer, R. E. (2008). E-learning and the science of instruction: Proving guidelines for consumers and designers of multimedia learning. San Francisco: Pfeiffer.

Effective Use of PowerPoint. Retrieved 10 October, 2016 from http://fctl.ucf.edu/Teaching AndLearningResources/Technology/PowerPoint/index.php

Finkelstlein, A. (2003). How to do everything with microsoft powerpoint 2003. New York: McGraw-Hill.

Fisseha, F. (2009). The roles of information communication technologies in education. Review article with emphasis to the computer and internet. Retrieved 20 December, 2013 from http:www.eprmers.org

Gupta, V. (2008). Secret guide to computers. New Delhi: Dreamtech Press.

Harrison, (1998). Power up! Stimulating your students with powerpoint: Learning & leading with technology, 26(4), 6-9. Retrieved 2 November, 2016 from http://cte.udel.edu/sites/ cte.udel.edu/files/u7/v16n3.htm

Jones, A. M. (2003). The use and abuse of powerpoint in teaching and learning in the life sciences: A personal overview. http://bio.ltsn.ac.uk/journal/voln/beej-2-3.pdf/ Retrieved 3 January, 2017 from http://www.citeulike.org/user/epdrntr/article/6634128

Kaka, S. (2008). The role of ICT in education sector. Retrieved 10 July, 2016 from http://verykaka.wordpress.com/2008/07/25/the-role-of-ict-in-education-sector/

Kankaanranta & Puhakka (2008) *in* The 2AgePro Consortium (2009). Common ICT tools used in teachers' daily work: Current state description. Oulu, Finland: University of Oulu, Learning and Research Services. Retrieved 4 January, 2016 from lmu.de/ download/del_2_2.pdf

Molnar, A. (1997). Computers in education: A brief history. Retrieved 20 June, 2016 from http://thejournal.com/articles/1997/06/01/computers-in-education-a-brief-history.aspx

Nash, A. (2006). Don Norman in defense of powerpoint. Retrieved 10 January, 2017   from http://blog.adamnash.com/2006/11/29/don-norman-in-defence defense-of-powerpoint/

The 2AgePro Consortium (2009). Common ICT tools used in teachers' daily work: Current state description. Oulu, Finland: University of Oulu, Learning and Research Services. Retrieved 10 December, 2016 from http://www.2agepro.psy.lmu.de/ download/ del_2 _2.pdf