Examining Lecturers Computer Literacy/Competency Level and the Integration of Microsoft PowerPoint Software in Teaching-Learning in University of Port Harcourt Faculty of Education

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Abstract – Technological advancements have displaced most of all the traditional known mode of instruction in recent times. It has also been ascertained that teachers, who are conversant with the use of technologies in classroom instruction have much more advantages over other teachers, who are ICT illiterate/incompetent. Therefore, the major objective of this paper is to examine the Lecturers Computer Literacy/Competency Level and the Integration of Microsoft PowerPoint Software in Teaching-Learning in University of Port Harcourt Faculty of Education. It will further find out how the lecturers have effectively integrated the Microsoft PowerPoint software technology into teaching-learning practice in recent years. Based on the interviews and the existing literature, the paper will further identify the major benefits and pitfalls for the integration of Microsoft PowerPoint software in teaching-learning process in the faculty. In the same manner, the futuristic use of ICTs in the classroom environments will concisely be discussed. Nonetheless, this is a descriptive survey design method that employed the questionnaire and interviews methods to assess the teachers’ computer literacy/competency level and the integration of Microsoft PowerPoint (MS PPT) software in teaching-learning. The purposive sampling technique was used; hence, the participants in this study involved 142 of all the 154 lecturers in the University of Port Harcourt Faculty of Education. The researchers used the four Likert-type scale questionnaire, ranging from “Strongly agree” (SA), “Agree” (A), “Strongly Disagree” (SD) and “Disagree” (D). The data gathered was analyzed using frequency counts and percentage to analyze the research questions. The findings of the research revealed that 103 (72.5%) of the lecturers are computer literate, while 128 (90.2%) of the lecturers could not effectively integrate MS PowerPoint software into teaching-learning purposes. Nonetheless, valuable recommendations/suggestions were made to enhance the use of ICTs effectively in the present classroom environment.

Keywords – Technology, Computer literacy, ICT integration, Academic Staff, and MS PowerPoint.

I. INTRODUCTION AND LITERATURE REVIEW

In modern times, where the blackboard is becoming a history in many schools, Microsoft PowerPoint Software has taken the center stage in most classrooms in Nigeria because the presentation contains bullet points that make explanation very easy. PowerPoint can also embrace all forms of graphics - pictures, graphs, diagrams, etc. that help to enhance teaching-learning, bearing in mind that it is easy to remember what you see than the story merely told in the class. Therefore, a PowerPoint presentation improves the intellect of students/learners.

The Office of Educational Technology (2017) made us understand that conversations, especially from the education sector have shifted from whether to adopt technology in learning to how it can improve learning to ensure that all students have access to
high-quality educational experiences and to personalize learning and give students more choice over what and how they learn, and at what pace, preparing them to organize and direct their learning for the rest of their lives.

One can emphatically say that technology has brought significant changes in the way teachers/educators use media in schools, which has gone through the era of chalk-and-talk to flip-charts to overhead transparencies, and recently to PowerPoint slides. PowerPoint, according to Hopper & Waugh (2014) has become one of the ever-present media dominating the world of teaching and training, from elementary school classrooms to graduate programs. PowerPoint has generated considerable interest among educational researchers about how successfully it can be utilized in the education arena (Uzun, & Kilis, 2019). According to the literature, PowerPoint is one of the most used technologies, both by students and teachers at schools (Uzun, & Kilis, 2019). At this time when digital technologies are changing the demands in the education sector, the teachers’ training institutions/institutes need to play a crucial role in meeting these numerous teachers’ technological demands.

Otunla, Adekunle, Amuuda and Caleb (2015), Ogunsakin, Taiwo and Shogbesan (n.d.), and Darko-Adjei (2019) have noticed the influence of ICTs on human activity, which cannot be underestimated. According to scholars, it is highly needed to solve some problems, which human beings cannot solve easily, most especially in the field of education. ICTs are constantly changing teaching methodologies; hence, these changes need to be addressed in teachers’ training institutions/institutes to take the benefits of ICTs, because the challenges towards education cannot be solved anymore within the existing conventional educational framework.

Ajeigbe, Taiwo, Ogunsakin and Shogbesan (n.d.) observed that in developing countries, most especially in Nigeria, the level of accessibility and utilization of ICT facilities is still very low, especially its effective usage in teaching and learning within the four walls of classroom and beyond. Consequently, there is every need to integrate ICTs in the classroom, since the teachers’ integration of ICTs in teaching-learning is to improve the quality of education by improving students’/learners’ academic performances. This assertion has been confirmed by (Yusuf, 2005). The scholar claimed that the use of ICT facilities in teaching is an indispensable part of educational administration as their applications enhance and facilitate teachers' pedagogical activities. As a result, teachers’ training institutes need to be reformed, and the curriculum modified or completely changed to reflect the current realities in the education sector.

The paradigm is fast shifting with the advent of computers, with notable educational software that has the potential to dramatically change everyday classroom practice (Siddiqui, 2008). In recent times, there is no gainsaying that technological innovations (educational software) of the 21st century have taken a center stage in all facets of classroom administration and management in most developing countries, of which, Nigeria is a good partaker. New technologies, particularly Microsoft PowerPoint software has invaded almost all modern classrooms irrespective of the subject taught. It has been avowed by scholars that the introduction of these new educational technologies in the classroom increases students’ academic achievements and motivates them to learn. Therefore, teachers must take the lead in extending ICT expertise to classroom teaching to enhance the standard and quality of education in Nigeria (Sudhir, 2015). This is because studies have shown that inadequate computer-literate teachers are militating against the implementation of ICTs in today’s classrooms (Kwache, 2007).

Based on the need to integrate ICT into the Nigerian education system necessitated the establishment of the National Information Technology Development Agency (NITDA) by the Federal Government of Nigeria, which the implementation of the ICT policy started in April 2001. One of the policies specified is the integration of ICT into the mainstream of education and training is yet to be fully achieved (NITDA, 2003; Alayi, 2003); especially in the area that concerns the operational teaching and learning processes in secondary schools (Ajeigbe et al, n.d.). Since its implementation 21 years now, observations and research show that Nigeria is still lagging in the ICTs sector.

It has also been observed that the lack of students’ active participation in ICT is one of the factors responsible for students' poor performances in the West African Examination Council (WAEC) results in introductory technology, physics, chemistry, biology, and other science-related subjects (WAEC, 2000).

Consequently, the computer being the powerhouse of the current technological drives, this paper attempts to address the issue of computer literacy/competency level among lecturers in the University of Port Harcourt Faculty of education, in an attempt to integrate Microsoft PowerPoint software in teaching-learning practice. It is on record that any teacher without computer education cannot attempt to integrate any form of computer-based instruction/training in modern classroom environments. The paper will
also highlight the educational advantages and disadvantages of incorporating this Microsoft PowerPoint educational software in the contemporary classroom. On the other hand, the futuristic use of this educational software in the education sector in Nigeria will be concisely discussed, and invaluable suggestions made on how to effectively integrate ICTs in the teaching-learning process without much hindrance.

**Microsoft PowerPoint as Instructional Software**

Microsoft PowerPoint, originally named “Presenter” was developed by Robert Gaskins and Dennis Austin for the American computer software company Forethought, Inc. and later released to the Apple Macintosh in 1987. PowerPoint, as it is popularly called, is a part of the Microsoft Office suite, a graphic-feature-rich package, made up of electronic slides, and has remained one of the most popular presentation software found in the education arena (Oriji, 2021). The software can be used for several purposes, such as personal, business, and educational presentations. The software is user-friendly and endowed with templates that are very easy to use or user-friendly (Rusu, 2023).

PowerPoint enables individuals, businessmen and women, and educators to build a presentation that suits their peculiar programmes and audience. These presentations could be built by using, texts, images, video, audio, and tables of data, and at the same time use a variety of animations and transitions that can help illustrate/clarify concepts or ideas, based on the target audience. The advent of MS PowerPoint software has rendered blackboard, whiteboard, and other forms of traditional technologies redundant.

**Merits of MS PowerPoint in the Teaching-Learning Process**

The gains of ICT in education are enormous. According to the Office of Educational Technology (2017), technology can empower educators to become co-learners with their students by building new experiences for deeper exploration of content. Harris, Al-Bataineh and Al-Bataineh (2016) declared that technology allows the most difficult tasks to become seamlessly easy and more efficient. Even in other science subjects like mathematics and physics, research has shown that students taught with ICT facilities performed better than when they are taught using the traditional method (Onasanya, Fakomogbon, Shehu & Soetan, 2010; and Scott, 2022). PowerPoint presentation software uses the power of words and images to engage the audience and retain attention. Again, PowerPoint is a widely used presentation software that is available for all major operating systems (Scott, 2022 & Rehman, 2022).

The scholars further observed that technology enables students to be engaged and learn in ways that never happened in a classroom setting before now. Ajeigbe, et al (n.d.) has also declared that ICT enables teachers to take the students beyond the traditional limits to ensure their adequate participation in the teaching and learning process, and create vital environments to experiment and explore with the aid of ICT facilities. Throughout the entire African continent, and the world at large, many educational institutions presently are integrating electronic learning into their curricula to enhance student’s learning experience, and also remain competitive in a digitalized world. It has been affirmed that the willingness to bring new teaching techniques or strategies into the lesson plan is one of the best qualities of a good teacher (Kampen, 2022). Hence, teachers should continue to strive harder to adopt these new technologies to improve their lesson plans for effective teaching.

The introduction of Microsoft PowerPoint software in the 21st-century classroom has become a game changer in the education arena. Many learning theories, such as arousal theory, and the cognitive theory of multimedia learning, are other theoretical frameworks used to explain how slides can aid/support learning, and also explain how PowerPoint contributes to the teaching-learning process. For instance, the dual channel assumption hypothesized that human beings have two different channels (visual and auditory) for processing information. The cognitive theory of multimedia learning claims that learning is enhanced when multiple sources of information (visual and auditory channels) are presented to learners (Mayer, 2009). Additionally, lectures delivered via PowerPoint were perceived to be more organized, as slides present the key information, emphasizing the most important information by summarizing and simplifying the content (Baker, Goodboy, Bowman, & Wright, 2018). This theory enhances learning, especially with learners with different learning styles, such as visualizers and verbalizers. For example, the dual channel assumption posits that people have two distinct channels for processing visual and auditory information and PowerPoint slides provide such opportunities for instructors to couple up visual and verbal information that leads to a better learning outcome. Invariably, MS PowerPoint engages learners in multiple learning styles.
The use of PowerPoint in classroom learning is more meaningful as it addresses the issue of different learning styles. A well-planned and professionally prepare PowerPoint slide helps teachers deliver an effective presentation to the target audience, especially when visual points stand out without overwhelming the audience. When visuals are properly positioned in a good PowerPoint presentation, it helps to complement the message on the slide, thereby enhancing various sensory channels (Uzun & Kilis, 2019). Patil1 and Jadhav (2021) affirmed that by PowerPoint presentations, student understanding was more than the traditional method, and also a performance on the test was better, so concluded that the PowerPoint presentations method is an excellent method for both teaching and learning.

The next advantage of PowerPoint software is that it suits larger class sizes/audiences. With PowerPoint slides, teachers can organize their thinking segmentally, which makes it easy for students to understand. A well-prepared PowerPoint incorporates hypermedia tools, such as images, graphics, animations, and sound into PowerPoint presentations to engage visual and auditory channels. PowerPoint slides can save the time of both the instructors and the students because it enhances students’ not taking, as lectures are segmentally presented. Lessons supported with PowerPoint slides are more organized because the key points of the topic are usually emphasized and highlighted, since each of the slides as in concise and straight to the point.

The use of MS PowerPoint in the classroom improves learners' focus. Learners have to be very attentive to what the presenter is presenting to jot down important points on their notes. In the same manner, the use of MS PowerPoint software in the classroom increases visual impact. In the traditional classroom, it may be possible for teachers to draw a complete set of a computer on the blackboard. But, with the use of MS PowerPoint software, it is possible to incorporate and display many graphics in the slides for learners’ clarification. It is also very easy to analyze and blend complexities and at the same time increase spontaneity and interactivity among learners.

Pop, M. G., Vesa, S. C., Micu, C., Dinu, D., Bîldaru, D., Szabo, B., Cristian, S., Badea, C., Crivii, A. & Opincariu, L. (n.d) attest that PowerPoint (PPT) presentations interactively expose the information, using various audio-visual components that can be attractive to the audience (students). One of the biggest advantages of PowerPoint PPT is that it allows image-text association, thereby contributing to the understanding of anatomical details. PowerPoint reduces the tediousness experienced in flip charts, overhead projectors, and transparencies, which their quality cannot be compared to PowerPoint presentation; it offers numerous tools and techniques for designing, and running dynamic electronic slides that change via time set, and enables users to communicate to the audience with ease (Oriji, 2021).

MS PowerPoint package can be used virtually anywhere (Rusu, 2023), as it can be used with a USB flash drive, CD, or in any cloud storage app, and presentation at hand anytime and anywhere, because it can be hosted on the Internet for learners, use 7/24hrs. It is an excellent way to convey information, usually in the form of an online to a large audience (Patil1 & Jadhav (2021).

PowerPoint software facilitates an effective way of communication with the audience because images and videos help presenters to explain/clarify ideas or abstract concepts better, and engagingly, and it makes it easy to import images, videos, and sound into slides (Rusu, 2023; Patil1 & Jadhav, 2021). One other merit of PowerPoint software is that it can be exported in different formats, such as .pptx. It can be saved also in .pdf, .png, or .jpg to reduce file size. Furthermore, videos can be exported as mp4, and for gif; there is a specific option to save them as animated gifs (Rusu, 2023). Frankly, MS PowerPoint Software has made teaching-learning very easy for educators that know how to incorporate it in contemporary classroom environments.

**Pitfalls of MS PowerPoint Software in Teaching-Learning Process**

Various studies have shown the negative factors affecting the effective integration of ICT into the mainstream of education. The constraints of PowerPoint presentation software in the classroom setting could be addressed through technology, presentation, and persons involved. According to (Nwite, 2007); Ajeigbe, Ogunsakin & Shogbesan (n.d.); (Yusuf, 2005; Ofodu, 2007); Bolaji, H. O & Ajia, I. S. (2023); Kwache, 2007); Onasanya, Fakomogbon, Shehu &Soetan, 2010); https://tell.college.org/mod/book/view.php?id=175&chapterid=258 and https://www.free-power-point-templates.com/articles/pros-and-cons-teaching-via-powerpoint/

These may include the following:
1. lack of competent ICTs teachers, or a low percentage of teachers who have ICT skills that will match the population of the students in the area of teaching and learning processes;

2. teachers reluctant to adapt to the use of ICT facilities in Teaching-learning;

3. inaccessibility to ICT infrastructure capable of transporting multimedia messaging;

4. absence of, or irregular power supply in most parts of the country even in cases where there is adequate telecommunication coverage;

5. many PowerPoint presenters overload the slides with too much text information that may distract the audience (students/learners), thereby rendering the presentation ineffective;

6. poorly designed slides distract learners’ attention and focus;

7. Inadequate facilities to support the teaching of computers; lack of technology infrastructure in schools, that is, if the needed resources that aid presentation is not available; this may in addition create serious obstacles during a presentation.

8. lack of accessibility to computer equipment and other accessories;

9. lack of motivation from the government to school administrators for proper implementation of ICT policy;

10. high cost of purchasing ICT facilities;

11. inadequate funding of the educational sector from the budgetary allocation may have contributed to the limitation of the full implementation of ICT policy in Nigeria which in turn affect secondary school education;

12. Some presenters are too fast in presenting their topic or subject matter, thereby jeopardizing learners’ engagement with the content;

13. inadequate computer literate teachers;

14. reinforce traditional teacher-centered approaches (lecture);

15. poor perception of the use of ICTs facilities for teaching;

16. it enforces learners’ inactivity (slide show);

17. inadequate time for computer practical for lecturers;

18. lack of proper emphasis on computer education and motivation by policymakers on the use of ICT in teaching and learning processes;

19. it limits learners’ understanding, as they may only concentrate/look at the ‘key points’ (reductive) on the slide;

20. equipment failure can happen anytime; connectivity issues may also occur due to VGA or adaptor. Again, the incompatibility of hardware and software can be very frustrating during PowerPoint presentations, which makes some presenters resort to reading from handouts, thereby rendering the audience helpless;

21. sometimes, the background and the colour may not march, either it is blurred or not visible to the audience;

22. Most PowerPoint presenters focus mainly on preparing slides rather than effectively preparing to deliver a good presentation to their audience; instead, they will end up reading from the slides. Based on this, the audience becomes dissatisfied because they want to hear more from the speaker instead of reading from the slides;

23. PowerPoint can sustain and keep the audience (students) motivated by employing various types of animation effects, thereby keeping the audience more focused, interested, and even fun while learning;

24. computer systems can easily crash without notification. A situation like this during a presentation may be too bad for both the presenter and the audience;
25. Virus attacks on a computer system or data/information contained can occur at any time. This scenario has frustrated many presenters who come the presentation arena with USB flash drives;

26. Some PowerPoint presenters use multiple colours, which makes it very difficult for the audience to read;

27. Presentation of too many illegible fonts, and pictures most times may bring setbacks for the audience;

28. Too many moving animations may make the whole presentation look funny and very fanciful, thereby may shift the audience's focus from the actual content.

29. According to Paas & Sweller (2014), learning theories suggest that PowerPoint may also constitute a danger to learning. For example, according to cognitive theories of learning, effective learning occurs if limited cognitive resources are used optimally.

All these problems, if not properly taken care of, will pose serious challenges to the effective and appropriate integration of ICT educational software, especially MS PowerPoint in teaching and learning practice.

**Prospects of MS PowerPoint in the Teaching-Learning Process**

Earlier before now, most educators are technologically or computer naive. Computers were very uncommon within our environments. When they are seen, they are usually under locks and keys in cupboards or big drawers. But the scenario has changed; the sight of a computer is no longer a mirage to most individuals. Most educators and governments at all levels today are aware of the technological benefits of adopting technology in contemporary classroom environments. Hence, teachers training institutions/institutes have started changing their curricula by introducing some technological and educational programmes for the training of pre-service teachers. As a result, modern teachers are at present gaining experience and confidence in using technology to achieve learning outcomes. Additionally, the introduction of sophisticated software has begun to allow teachers to adapt assessments and instruction to the needs and abilities of individual learners and provide near real-time results (Office of Educational Technology, 2017). With numerous advantages of technological advances in the education sector, and also the recent significant progress being made towards ensuring that most schools, especially higher educational institutions, have high-speed classroom connectivity as a foundation for other learning innovations has started giving insight into the future of learning in our educational institutions.

**II. RESEARCH OBJECTIVES**

1. To find the level of computer literacy/competency level of lecturers in the University of Port Harcourt Faculty of Education?

2. To find the extent to which the lecturers are using Microsoft PowerPoint software in teaching-learning at the University of Port Harcourt Faculty of Education?

3. To find the merits of using Microsoft PowerPoint software in teaching-learning by lecturers in the University of Port Harcourt Faculty of Education?

4. To find the constraints of using Microsoft PowerPoint software in teaching-learning by lecturers in the University of Port Harcourt Faculty of Education.

5. To find the prospects of using Microsoft PowerPoint software in teaching-learning by lecturers in the University of Port Harcourt Faculty of Education.
III. RESEARCH QUESTIONS

1. What is the level of computer literacy/competency of lecturers in the University of Port Harcourt Faculty of Education?

2. To what extent are the lecturers using Microsoft PowerPoint software in teaching-learning at the University of Port Harcourt Faculty of Education?

3. What are the merits of using Microsoft PowerPoint software in teaching-learning by lecturers at the University of Port Harcourt Faculty of Education?

4. What are the constraints of using Microsoft PowerPoint software in teaching-learning by lecturers in the University of Port Harcourt Faculty of Education?

5. What are the prospects of using Microsoft PowerPoint software in teaching-learning by lecturers at the University of Port Harcourt Faculty of Education?

IV. SIGNIFICANT OF THE STUDY

The outcome of this research, to a great deal, will be of much importance to the lecturers, staff, students, parents, government, curriculum developers, and society as a whole.

The lecturers will enable them to recognize the importance of integrating PowerPoint software in teaching-learning, which will invariably enhance the academic performance and retention of the students. It will expose the teachers to the technology of PowerPoint (the new way of instruction) as never before, and also ginger them to be technologically relevant in a digitalized society like ours. Additionally, it will reveal the pitfalls/setbacks of integrating this MS PowerPoint software and prepare them to get rid of or minimize them before embarking on its integration.

To students, it will expose them to a new way of learning, which enhances more than one sensory channel and prepare them to acquire the relevant skills. In the same manner, the parents will be happy when their children improve in academic performance due to the introduction of this new instructional technology. This happiness will motivate their morale to spend more money to train their children the more.

Government, knowing the impact of MS PowerPoint software in the classroom, especially on the academic impact on the students, any responsible government will invest in the provision of necessary equipment/gadgets that will support the use of instructional technology in teaching-learning practice.

To society, if the students are taught well today and are positively impacted by the new technologies, this will boost the teachers of tomorrow, since they will take over from the teachers of today. Hence, they will be able to practice what they learnt today with the new generation of learners, thereby positively impacting society technologically.

V. RESEARCH METHODOLOGY

This study adopted a descriptive survey research design because a survey methodology is a popular research design for economically collecting data/information; in addition, it allows for the use of a questionnaire, which aids in data comparison (Kumar, 2011). The population of the study comprised 142 out of all 154 lecturers that returned their questionnaires to the University of Port Harcourt Faculty of Education. The Faculty is comprised of seven departments with the under-mentioned population as following lecturers: Department of Adult and Non-formal Education (17); Department of Curriculum Studies & Educational Technology (40); Department of Educational Management and Planning (37); (Department of Early Childhood & Primary Education (04); Department of Educational Foundations; Department of Human Kinetics & Health Education (17); Department of Educational Psychology, Guidance & Counseling (34), and Department of Library and Information Science (05). Five (5) research questions guided the study. A research instrument titled: “Questionnaire on Examining Lecturers Computer Literacy Level and Microsoft PowerPoint Software Integration in Teaching-Learning in University of Port Harcourt Faculty of Education” was developed by the researchers, and the questionnaire was reviewed by 2 research experts in the field of Research and Evaluation. The questionnaire was used to collect data from the respondents (lecturers). However, the questionnaire consists of 26 research items relevant to the research topic, and the possible merits, demerits, and prospects of MS PowerPoint software
usage by lecturers were briefly discussed. The data gathered was analyzed using frequency counts and percentages to explore the research questions.

VI. RESULT AND DISCUSSION

Table 1: What is the level of computer literacy/competency of lecturers in the University Port Harcourt Faculty of Education?

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>SD</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I am computer literate</td>
<td>103 (72.5%)</td>
<td>10 (7%)</td>
<td>13 (9.2%)</td>
<td>16 (11.3%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>2</td>
<td>I have a computer</td>
<td>112 (78.9%)</td>
<td>4 (2.8%)</td>
<td>24 (16.9%)</td>
<td>2 (1.4%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>3</td>
<td>I can input and retrieve data/information from the computer</td>
<td>106 (74.6%)</td>
<td>5 (3.5%)</td>
<td>19 (13.4%)</td>
<td>12 (8.5%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>4</td>
<td>I can install some common application software in my computer</td>
<td>48 (33.8%)</td>
<td>17 (12%)</td>
<td>70 (49.3%)</td>
<td>7 (4.9%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>5</td>
<td>I can use a printer to print my documents</td>
<td>100 (70.4%)</td>
<td>1 (0.7%)</td>
<td>29 (20.4%)</td>
<td>12 (8.5%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>6</td>
<td>I can use a computer scanner to scan my documents</td>
<td>32 (22.5%)</td>
<td>15 (10.6%)</td>
<td>73 (51.4%)</td>
<td>22 (15.5%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>7</td>
<td>I make use of e-mail for teaching/instruction</td>
<td>20 (14.1%)</td>
<td>2 (1.4%)</td>
<td>114 (80.3%)</td>
<td>6 (4.2%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>8</td>
<td>I use any of the search engines’ (e.g., Google) to get information from the Internet</td>
<td>101 (71.1%)</td>
<td>12 (8.5%)</td>
<td>25 (17.6%)</td>
<td>4 (2.8%)</td>
<td>142 (100%)</td>
</tr>
</tbody>
</table>

Key: SA= Strongly Agree; A=agree; SD = Strongly Disagree; and D=Disagree.

Research question 1 seeks to find out the level of computer literacy/competency of lecturers in the University of Port Harcourt Faculty of Education. Table 1, item 1 above shows in the affirmation that 113(79.5%) against 29(20.5%) of the respondents (lecturers) are computer literate. They are not only computer literate, but also possess computers, which item 2 on the same table, revealed that 116(101.7%) against 26 (18.3%) respondents have computers. Again, the level of computer literacy/competency of lecturers in the faculty has also been demonstrated in table 1, item 3. This demonstrates that the lecturers can competently input and retrieve data/information from and to the computer, as 111(78.1%) respondents against 31(21.9%) of the respondents affirmed that they can input and retrieve information to and from the computer. The research also revealed that 65 (45.8%) against 77 (54.2%) of the lecturers can install some common application software on their computers. Furthermore, the study revealed that 101(71.1%) against 41(28.9%) of the respondents as reported in table 1 item 6 can effectively use computer printers to print their documents. Item 7 on the same table also revealed that 95(66.9%) against 47(33.1%) of the respondents are not conversant with the use of computer scanners. The study further shows that even though 113(79.5%) of the respondents are computer literate, as shown in table 1 item 1, the majority of the respondents, that is, 120(84.5%) against 22(5.5%) cannot effectively use e-mail for instruction. On the use of search engines, 113 (79.6%) of the respondents agreed that they use Google tools to download information from the Internet. Most of the respondents interviewed stated that even though they are not very much competent in the use of computers, they mechanically learnt how to download information from the Internet with Google for research purposes, especially to escape from the “Publish or Perish” slogan in the academic circle.
Table 2: To what extent are the lecturers using Microsoft PowerPoint software in teaching-learning in the University of Port Harcourt Faculty of Education?

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>SD</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I use MS PowerPoint software in classroom instruction.</td>
<td>10 (7%)</td>
<td>4 (2.8%)</td>
<td>110 (77.5%)</td>
<td>18 (12.7%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>2.</td>
<td>Having used the PowerPoint software, I considered it very useful in the education sector.</td>
<td>84 (59.2%)</td>
<td>8 (5.6%)</td>
<td>48 (33.8%)</td>
<td>2 (1.4%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>3.</td>
<td>I am computer literate, but I don’t know how to prepare MS PowerPoint slides for presentation.</td>
<td>49 (34.5%)</td>
<td>27 (19%)</td>
<td>52 (36.6%)</td>
<td>14 (9.9%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>4.</td>
<td>I can confidently prepare Microsoft PowerPoint slides for presentations.</td>
<td>45 (31.7%)</td>
<td>5 (3.5%)</td>
<td>70 (49.3%)</td>
<td>22 (15.5%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>5.</td>
<td>I usually employ the services of computer operators to prepare PowerPoint slides for my presentations.</td>
<td>51 (35.9%)</td>
<td>10 (7%)</td>
<td>71 (47.9%)</td>
<td>10 (7%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>6.</td>
<td>I cannot use Microsoft PowerPoint software for presentations because it is very difficult to use.</td>
<td>30 (21.1%)</td>
<td>4 (2.8%)</td>
<td>83 (58.5%)</td>
<td>25 (17.6%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>7.</td>
<td>I cannot use Microsoft PowerPoint software for presentations because it takes a lot of time to prepare.</td>
<td>38 (26.8%)</td>
<td>5 (3.5%)</td>
<td>69 (48.6%)</td>
<td>30 (21.1%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>8.</td>
<td>I have once attended training on the use of Microsoft PowerPoint software.</td>
<td>5 (3.5%)</td>
<td>0 (0%)</td>
<td>112 (78.9%)</td>
<td>25 (17.6%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>9.</td>
<td>I have once attended a seminar/workshop on the use of Microsoft PowerPoint software.</td>
<td>6 (4.2%)</td>
<td>0 (0%)</td>
<td>132 (93%)</td>
<td>4 (2.8%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>10.</td>
<td>I have gone on training on the use of Multimedia projector.</td>
<td>20 (14.1%)</td>
<td>7 (4.9%)</td>
<td>85 (59.9%)</td>
<td>30 (21.1%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>11.</td>
<td>I could not use PowerPoint software in teaching due to lack of computer education.</td>
<td>27 (19%)</td>
<td>2 (1.4%)</td>
<td>90 (63.4%)</td>
<td>23 (16.2%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>12.</td>
<td>I don’t have enough time to learn MS PowerPoint software.</td>
<td>99 (69.7%)</td>
<td>14 (9.9%)</td>
<td>19 (13.4%)</td>
<td>10 (7%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>13.</td>
<td>There is constant electricity in the faculty.</td>
<td>3 (2.1%)</td>
<td>6 (4.2%)</td>
<td>117 (82.4%)</td>
<td>16 (11.3%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>14.</td>
<td>Lack of regular electricity supply affected the use MS PowerPoint software in instruction.</td>
<td>84 (59.2%)</td>
<td>6 (4.2%)</td>
<td>33 (23.2%)</td>
<td>19 (13.4%)</td>
<td>142 (100%)</td>
</tr>
</tbody>
</table>

Key: SA = Strongly Agree; A = agree; SD = Strongly Disagree; and D = Disagree.
One of the major purposes of this research is to find out the use or the integration of MS PowerPoint software in classroom instruction in the aforesaid Faculty of Education at the University of Port Harcourt. Therefore, the research of this study as revealed in table 2 item 1 shows that only 14(9.8%) of the respondents use Microsoft PowerPoint for classroom instruction. While as many as 128(90.2%) of the lecturers show no consideration for the application of Microsoft PowerPoint in classroom instruction. This result is not surprising since only 14(9.8%) of the respondents as shown in table 2 item 1 use MS PowerPoint in instruction in the faculty. This confirms the declaration of Ajeigbe, Taiwo, Ogunsakin and Shogbesan (n.d.) that in developing countries, the level of accessibility and utilization of ICT facilities is still very low, especially its effective usage in teaching and learning within the four walls of classroom and beyond. In an attempt to further find to what extent the lecturers are using Microsoft PowerPoint software in teaching-learning in the University of Port Harcourt Faculty of Education, table 2, item 3 revealed that 76(53.5%) of even respondents that are computer literate among those who are not do not know how to prepare MS PowerPoint slides for presentation.

Table 2 item 4 shows that 92(64.8%) against 92(64.8%) of the respondents cannot personally and confidently prepare PowerPoint slides for presentations. In the same manner, table 2 item 5 shows that since they cannot confidently prepare MS PowerPoint slides for presentations, they resort to hiring the services of computer operators to prepare PowerPoint slides for them for presentations. The response on this issue revealed that 81(49.1%) against 61(42.9%) are customers of computer operators. Further, the difficulty of preparing MS PowerPoint and the time taken to prepare it was no hindrance to its usage in instruction, as shown in table 2 items 6 and 7. This is in line with the findings of the following scholars ((Nwite, 2007); Ajeigbe, Ogunsakin & Shogbesan (n.d.); (Yusuf, 2005; Ofodu, 2007); Kwache, 2007); Onasanya, Fakomogbon, Shehu & Soetan, 2010). Lack of in-service training, workshops/seminars on MS PowerPoint, and multimedia projector training are some of the major factors militating against the use of PowerPoint software in teaching-learning in the faculty of education of the University of Port Harcourt, Nigeria. These can be exemplified in Table 2 items 8-10 above.

Item 11 on the same table 2 above revealed that computer education is not a hindrance to the non-implementation of MS PowerPoint software presentation in classroom activities. This means that possessing computer education is not a yardstick for the effective utilization of MS PowerPoint for instruction. This goes to show that even if the lecturers are computer literate, they require special training skill(s) on the use of MS PowerPoint for instruction purposes. Another factor, as displayed in table 2, item 12 that is affecting the effective use of PowerPoint in the University of Port Harcourt Faculty of Education in instruction is the lack of time for the lecturers to acquire the necessary skills to prepare PowerPoint slides for their lessons. This research finding is in line with that of Ajeigbe, Taiwo, Ogunsakin & Shogbesan (n.d.).

Furthermore, the electricity supply is yet another huddle for the effective integration of PowerPoint software in the teaching-learning process by lecturers in the faculty. A quick look at items 13 and 14 in table 2 revealed that lack of electricity supply hindered the implementation of PowerPoint presentation software in instruction. Item 13 as stated earlier in the above table revealed that 91(93.7%) against 9 (6.3%) respondents show that electricity supply is near zero, and 90(63.4%) against 52 (36.6%) claimed that lack of regular electricity supply affected the use of MS PowerPoint software for instruction in modern classroom settings. This is in line with the research findings of Adeyemi and Olaleye (2010), which claimed that the intermittent disruption of electricity supply was the most notable constraint to the usage of ICT facilities in secondary schools in Ekiti State of Nigeria.
Examine Lecturers Computer Literacy/Competency Level and the Integration of Microsoft PowerPoint Software in Teaching-Learning in University of Port Harcourt Faculty of Education

Table 3: What are the merits of using Microsoft PowerPoint software in teaching-learning by lecturers in the University of Port Harcourt Faculty of Education?

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>SA F%</th>
<th>A F%</th>
<th>SD F%</th>
<th>D F%</th>
<th>Total F%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Having used, heard, and observed the use of PowerPoint software in</td>
<td>84</td>
<td>8</td>
<td>48</td>
<td>2</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>the classroom environments, do you consider it very useful in the</td>
<td>(59.2%)</td>
<td>(5.6%)</td>
<td>(33.8%)</td>
<td>(1.4%)</td>
<td>(100%)</td>
</tr>
<tr>
<td></td>
<td>education sector</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Having used, heard and observed the use of PowerPoint software in</td>
<td>122</td>
<td>5</td>
<td>13</td>
<td>2</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>the classroom, do you consider students being motivated for its use</td>
<td>(85.9%)</td>
<td>(3.5%)</td>
<td>(9.2%)</td>
<td>(1.4%)</td>
<td>(100%)</td>
</tr>
<tr>
<td></td>
<td>in the classroom instruction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key: SA= Strongly Agree; A= agree; SD = Strongly Disagree; and D=Disagree.

Question 3 attempts to find out the merits of using Microsoft PowerPoint software in teaching-learning by lecturers at the University of Port Harcourt Faculty of Education. The result in table 3 shows that the respondents that used the PowerPoint software for presentation are very much enthusiastic about using it for instructional purposes. During the interviews with some of the respondents, it was revealed that the use of PowerPoint software in the classroom setting makes learning simpler and less stressful. Table 3, item 1 as stated earlier revealed that 92 (64.8%) against 50(35.2%) considered the use of PowerPoint software very useful. In the same manner, table 3 item 2 also revealed that 127 (89.4%) as against 15(10.6) students are in favour of the use of MS PowerPoint in the class. Some of the respondents’ interviewed expressed that the majority of the students are motivated because they are focused and engaged during the classroom session. This is the views of Onasanya, Fakomogbon, Shehu & Soetan (2010); https://tell.colvee.org/mod/book/view.php?id=175&chapterid=258 and https://www.free-power-point-templates.com/articles/pros-and-cons-teaching-via-powerpoint/.

Table 4: What are the Constraints of using Microsoft PowerPoint Software in Teaching-Learning by Lecturers in the University of Port Harcourt Faculty of Education?

<table>
<thead>
<tr>
<th>SN</th>
<th>Item</th>
<th>SA F%</th>
<th>A F%</th>
<th>SD F%</th>
<th>D F%</th>
<th>Total F%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I am computer literate</td>
<td>103</td>
<td>10</td>
<td>13</td>
<td>16</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>(72.5%)</td>
<td>(7%)</td>
<td>(9.2%)</td>
<td>(11.3%)</td>
<td>(100%)</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I have once gone for computer training via an in-serve programme</td>
<td>3</td>
<td>0</td>
<td>123</td>
<td>16</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>(2.1%)</td>
<td>(0%)</td>
<td>(86.6%)</td>
<td>(11.3%)</td>
<td>(100%)</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I can setup a multimedia projector for teaching/presentations</td>
<td>38</td>
<td>1</td>
<td>79</td>
<td>24</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>(26.8%)</td>
<td>(0.7%)</td>
<td>(55.6%)</td>
<td>(16.9%)</td>
<td>(100%)</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I am computer literate, but I have not gone for training on how to</td>
<td>49</td>
<td>27</td>
<td>52</td>
<td>14</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>prepare and use MS PowerPoint slides for presentation</td>
<td>(34.5%)</td>
<td>(19%)</td>
<td>(36.6%)</td>
<td>(9.9%)</td>
<td>(100%)</td>
</tr>
<tr>
<td>5.</td>
<td>I have gone on training on the use of Multimedia projector</td>
<td>20</td>
<td>7</td>
<td>85</td>
<td>30</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td>(14.1%)</td>
<td>(4.9%)</td>
<td>(59.9%)</td>
<td>(21.1%)</td>
<td>(100%)</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>There is constant electricity in the faculty</td>
<td>3</td>
<td>6</td>
<td>117</td>
<td>16</td>
<td>142</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(14.1%)</td>
<td>(4.9%)</td>
<td>(59.9%)</td>
<td>(100%)</td>
<td></td>
</tr>
</tbody>
</table>
Examining Lecturers Computer Literacy/Competency Level and the Integration of Microsoft PowerPoint Software in Teaching-Learning in University of Port Harcourt Faculty of Education

<table>
<thead>
<tr>
<th>Item</th>
<th>SA (%)</th>
<th>A (%)</th>
<th>SD (%)</th>
<th>D (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Lack of regular electricity supply made me not to use MS PowerPoint software</td>
<td>84 (59.2%)</td>
<td>6 (4.2%)</td>
<td>33 (23.2%)</td>
<td>19 (13.4%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>8. I can setup a multimedia projector for teaching/presentations *</td>
<td>38 (26.8%)</td>
<td>1 (0.7%)</td>
<td>79 (55.6%)</td>
<td>24 (16.9%)</td>
<td>142 (100%)</td>
</tr>
</tbody>
</table>

Key: SA= Strongly Agree; A=agree; SD = Strongly Disagree; and D=Disagree.

Question 4 attempts to find the constraints teachers face in the course of using Microsoft PowerPoint software in teaching-learning at the University of Port Harcourt Faculty of Education. As revealed in Table 4, item 1, even though the majority of the respondents (113 or 79.5%) are computer literate, lack of training on the use of MS PowerPoint software greatly slowed down its effective adoption as reported in Table 4, item 4, where 76 (53.5%) against 66 (46.5%) agreed not to have gone for training on how to prepare and use MS PowerPoint slides for presentations.

As earlier stated in Table 2, items 13 and 14, and as also revealed in Table 4, items 6 and 7 on electricity supply, the use of PowerPoint as an instructional technique in the University of Port Harcourt Faculty of Education had been seriously hampered as revealed in the above tables. For instance, items 13 & 14 in Table 4 above, as earlier stated clearly revealed that 91 (93.7%) against 9 (6.3%) and 90 (63.4%) against 52 (36.6%) respectively revealed a lack of regular electricity supply in the faculty under discussion. In the same manner, the majority of respondents have not once gone for in-service training on the use of multimedia, which must be used in conjunction with computers for MS PowerPoint presentations as revealed in Table 4 item 8, where 103 (72.5%) favoured not going for training for once.

Table 5: What are the prospects of using Microsoft PowerPoint software in teaching-learning by lecturers in the University of Port Harcourt Faculty of Education?

<table>
<thead>
<tr>
<th>Item</th>
<th>SA</th>
<th>A</th>
<th>SD</th>
<th>D</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am ever willing to learn the use of PowerPoint software in teaching-learning if I am sent on in-service training</td>
<td>90 (63.4%)</td>
<td>23 (16.2%)</td>
<td>27 (19%)</td>
<td>2 (1.4%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>2. I don’t have enough time to learn MS PowerPoint software</td>
<td>19 (13.4%)</td>
<td>10 (7%)</td>
<td>101 (71.1%)</td>
<td>12 (8.5%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>3. There will be improvements on the use of MS PowerPoint software in the future learning</td>
<td>111 (78.2%)</td>
<td>19 (13.4%)</td>
<td>8 (5.6%)</td>
<td>4 (2.8%)</td>
<td>142 (100%)</td>
</tr>
<tr>
<td>4. My students are motivated for the use of MS PowerPoint software in the classroom instruction</td>
<td>122 (85.9%)</td>
<td>5 (3.5%)</td>
<td>13 (9.2%)</td>
<td>2 (1.4%)</td>
<td>142 (100%)</td>
</tr>
</tbody>
</table>

Key: SA= Strongly Agree; A=agree; SD = Strongly Disagree; and D=Disagree.

Question 5 attempts to find out the futuristic use of Microsoft PowerPoint software in the teaching-learning process by lecturers at the University of Port Harcourt Faculty of Education. The results from Table 5 expressively revealed that there is high hope for improvement in the use of Microsoft PowerPoint software in teaching-learning practice by lecturers in the faculty. Table 5, item 1 shows that 113 or 79.6% of the respondents enthusiastically agreed to learn the use of PowerPoint software in teaching-learning if allowed to do so. Again, when the respondents were asked if they do not have time to learn the MS PowerPoint software, in affirmation, 113 (79.6%) of the respondents against 29 (20.4%) agreed that they have enough time to learn MS PowerPoint software to improve in teaching and learning processes.

In the same manner, the respondents in Table 5 item 3 agreed that there will be a lot of improvements in the use of MS PowerPoint software in future learning. Conclusively, therefore, the respondents agree that the students are very much motivated when they
implement MS PowerPoint software in presenting their lessons. The prospects of the use of PowerPoint in the classroom setting are no longer in doubt because both the oral interview and table 5 item 4 shows that 127(89.4%) of 15(10.6%) are motivated by the use of MS PowerPoint software in classroom instruction. Thereby revealing that all things being equal, the students will be much interested in using this software in the classroom setting in the future.

VII. SUMMARY

The new technologies of the 21st century have changed the way things are done in the industry, education, and the society at large. In the words of Reddy, Sharma and Chaudhary (2020), the 21st century citizens are provided with new opportunities that have been created with the advancement of ICT; hence, individuals need a wide range of abilities, competencies, and skills to adapt to the technological era. As a result, the integration of Microsoft PowerPoint software in the education system has given the education sector a new boost that has never been. The authors have concisely looked into lecturers’ computer literacy/competency level and the integration of Microsoft PowerPoint software in teaching-learning in the University of Port Harcourt Faculty of Education; the research however revealed that despite the fact that the majority of the lecturers are computer literate, only insignificant few of them could effectively integrate the MS PowerPoint technology into real teaching-learning situation.

VIII. CONCLUSION

Most teachers today are still adhering to the traditional forms of teaching. Many things have really changed in contemporary times. According to Shatri and Shala (2022), students undoubtedly need to break away from such learning routines and embrace new learning streams that make them curious about the learning content, connect to their smart devices, and make them feel close to each other in class. Moulton et al (2017) opined that presentation applications have become an indispensable part of our personal and professional lives, including various types of learning environment. Microsoft PowerPoint is a very good and useful educational support software for teachers when prepared correctly, properly and moderately used in the classroom setting. Hashemi, Azizinez, and Farohki (2012) opined that if PowerPoint is used thoughtfully, it can enhance the teaching sessions by providing a good roadmap, reinforcing what you say and allows you to use graphics and other multimedia to clarify understanding, and support different learning styles. The main purpose of the educational software is to engage the audience (mainly students), and help them understand and provoke thoughts. MS PowerPoint has really been credited with many drawbacks, but in spite of these pitfalls, it continues to be one of the most powerful educational software ever invented that enhances teaching-learning process.

IX. RECOMMENDATION

To facilitated lecturers’ effective/efficient use and integration of ICT (MS PowerPoint Software) in the classroom setting, the following measures were recommended hereunder.

1. The lecturers should be sent for adequate training on the use of MS PowerPoint software for teaching-learning process.
2. Adequate computers and other ICT facilities should be provided in the Faculty and in the University by relevant school authorities or government agencies.
3. Regular electricity supply should be provided by government authorities, relevant agencies and bodies.
4. Adequate time should be provided for lecturers for computer practical for proper utilization of MS PowerPoint software for effective utilization (Nwite, 2007). Also, well trained and motivated computer science teachers should be employed to ensure effective teaching of Computer studies as a subject in the secondary schools.
5. Computer/ICT studies should be made compulsory for all secondary school students.
6. Relevant authorities in schools should motivate their teacher towards the use of ICT facilities for the teaching of Computer studies (Ajeigbe, Taiwo, Ogunsakin, & Shogbesan, Y. O. (n.d.).

REFERENCES

Experiencing Lecturers Computer Literacy/Competency Level and the Integration of Microsoft PowerPoint Software in Teaching-Learning in University of Port Harcourt Faculty of Education


