

## Students' Perception and Attitudes Towards PowerPoint Utilization During Lecture Delivery in Akwa Ibom State College of Education

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### Abstract

*This study examined the perception and attitude of degree programme students on PowerPoint utilization during lecture delivery in Akwa Ibom State College of Education. Two research questions and one hypothesis guided the study. The study employed descriptive survey research design with a population of 234 undergraduate degree students admitted in 2018/19 academic session in the Eleven (11) Degree programme. A sample of 120 final year undergraduate students were selected using Sample random sampling techniques. The researcher developed 30-item structured questionnaire for the study. The instrument for data collection was face validated by three experts and the reliability coefficient of .86, .73 and .82 was established using Cronbach's Alpha statistics which shows the instrument was reliable for the study. Mean, Standard deviation and t-test were used for data analysis. The findings of the study revealed positive perception, attitude and no significant difference between male and female undergraduate final-year degree students on the utilization of PowerPoint during lecture delivery. The findings further revealed that while PowerPoint presentations have the potential to enhance engagement, comprehension, and accessibility, they also pose challenges such as the risk of monotony, technical glitches, and potential distractions. The researchers recommended among others that Stakeholders in the College should develop a PowerPoint presentation that emphasize the importance of clear and concise content organization, visually appealing yet uncluttered slides, and effective use of multimedia elements to enhance learning outcomes.*

**Keywords:** Students, PowerPoint, Perception, Attitude, College of Education

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## INTRODUCTION

Education plays a pivotal role in the development of human resources, contributing significantly to a country's level of transformation. According to Abubakar et al. (2020), teachers are essential resources for effectively implementing and achieving educational policies and objectives at the practical level of the classroom. One of the primary goals of education is to enhance students' critical thinking abilities, logical reasoning, and problem-solving skills. Umoru and Nguwap (2021), Igwe, Oguezie and Nwune (2022) noted that in recent years, the integration of Information and Communications Technology (ICT) in educational practices has become increasingly prevalent, transforming conventional teaching methodologies worldwide across various academic disciplines. The use of electronic media has the potential to encourage active student participation in the classroom (Ristyani, et al., 2020). Similarly, Dewi et al. (2021) stated that the utilization of ICT enhances students' knowledge retention, stimulates interest in the subject matter, and demonstrates the relevance of various concepts. ICT according to Ozaslan and Maden (2013), Umoru and Nguwap (2021) significantly influences the contemporary learning environment by providing digital stimuli and inducing changes in students' perceptions and cognitive processes, ultimately shaping their learning experiences.

In the view of Amasi and Yellowe (2018), ICT represents an innovation encompassing a wide array of digital pedagogical tools available to teachers, students, and administrators. Additionally, Udo et al. (2020) define ICT as a computer-based device and facility that enables users to fulfill their processing requirements in network communication. The emergence of ICT, according to Amasi and Yellowe (2018), has prompted many researchers to anticipate the end to traditional pedagogical, didactic, and philosophical teaching approaches. In the dynamic landscape of contemporary education, the integration of technology has become pivotal in shaping the learning experience. One such technological tool that has gained widespread adoption in classrooms is Microsoft PowerPoint. Effiong and Ekpo (2016), Umoru and Nguwap (2021), note that PowerPoint, a software program developed by Microsoft in 1987 for creating presentations and slides, is an example of an ICT tool frequently utilized by educators to incorporate chart clips, art, photographs, sound, or video segments to illustrate concepts in classrooms or public lectures. The use of PowerPoint as a pedagogical aid has witnessed a remarkable surge in recent years, providing educators with a platform to present information in a visually engaging and organized manner (Abubakar et al., 2020). PowerPoint enables the integration of documents, spreadsheets, graphics, animations, and video clips from other applications into a presentation. Grupta (2010) emphasizes that the learning impact of PowerPoint instructional presentations does not discriminate among users. Microsoft PowerPoint is a software program that offers screen layouts for constructing instructional presentations in various forms and formats through slideshow displays (Etim & Akpaetor, 2015).

To generate a simple PowerPoint mockup, each slide depicts a distinct screen in the application. Using shapes, text, and clipart on the PowerPoint screen, educators can allocate space for notes and ideas, and subsequently view the document in slideshow mode to observe its interactivity (Effiong & Ekpo, 2016). Projected PowerPoint signals have a cognitive impact on learners, stimulating their mental faculties and leading to observable and measurable effects, thereby promoting learners' visual literacy (Etim & Akpaetor, 2015). The presentation of information combines the expressive quality of graphics (such as pictures, diagrams, posters, and cartoons), text, and animation, all of which have the potential to enhance students' learning outcomes in various academic subjects. According to Ratu et al. (2021) and Syaha et al. (2020),

PowerPoint presentations can be employed in the classroom to support student learning by combining computers and projectors to display slides that illustrate a lesson. The potential of Microsoft PowerPoint includes its capacity for spell-check, enabling users to add, correct, and modify lesson content, and the ability to create printed materials for students' personal use. PowerPoint allows users to incorporate visual and auditory elements into a presentation, offering a range of editing and text modification features. Users can easily remove existing slides and add new ones to ensure that the lesson is organized and adaptable. PowerPoint presentations can be considered an effective instructional medium that facilitates a successful teaching and learning process.

However, the efficacy of PowerPoint in enhancing student learning experiences is contingent upon various factors, including the receptiveness and attitudes of the students themselves. Abubakar et al. (2020) highlighted that teachers need a certain level of expertise in PowerPoint to effectively integrate this multimedia computer application into their teaching. Understanding how students perceive and interact with PowerPoint presentations is essential for educators and institutions striving to optimize teaching methodologies. Students' perceptions of a class can influence their attitudes toward it. Onah et al. (2021), Igwe, Oguezue, and Nwune (2022) emphasized that PowerPoint can positively impact classroom learning for both male and female students. The concept of attitude is deemed essential in learning environments (Male & Lumbantoruan, 2020). Negative attitudes toward learning can disrupt the classroom atmosphere significantly (Liau, Kiat, & Nie, 2014). Therefore, fostering the right attitude is instrumental in maintaining a positive and stable classroom environment. Perception refers to an individual's personal regard, interpretation, and understanding of a concept (Igwe, Oguezue, & Nwune, 2022). Longman (2021) defines perception as an individual's thoughts about something. On the other hand, attitude reflects how individuals respond to a concept or environment. Attitude, as defined by Igwe, Oguezue, and Nwune (2022), is a psychological construct that shapes and defines particular behaviors.

In Nigeria, according to UNESCO (2015), Ramadan, Chen, and Hudson (2018), and Danladi et al. (2020), Colleges of Education play a crucial role in the training of manpower responsible for teaching in primary and secondary schools. Over the years, these institutions have produced degree students in various education programmes, including English, Mathematics, Biology, Chemistry, Integrated Science, Physics, Early Childhood/Primary Education, Social Studies, Agricultural Science, Business and Technical Education effectively addressing the nation's middle-level manpower challenges (FRN, 2013). Amidst the ongoing educational transformation, it is crucial to critically evaluate the perceptions and attitudes of students in Nigerian Colleges of Education regarding the use of PowerPoint as a pedagogical tool (Effiong & Ekpo, 2016). Akwa Ibom State College of Education serves as an intriguing backdrop for this investigation, given its diverse student body and the potential influence of cultural factors on the acceptance and effectiveness of educational technologies. By conducting a comprehensive analysis of students' perceptions and attitudes, this research aims to contribute valuable insights to the ongoing discourse on the integration of technology in educational practices, with a specific focus on PowerPoint utilization. The assessment of students' perspectives involves delving into their preferences, challenges, and overall satisfaction with PowerPoint-based lectures. Given the potential of PowerPoint in teaching and learning, in Akwa Ibom State College of Education, this study aims to examine students' perceptions and attitudes toward the utilization of PowerPoint.

### **Statement of the Problem**

In the evolving landscape of educational technology, the integration of Microsoft PowerPoint as a pedagogical tool has become increasingly prevalent, transforming traditional lecture formats and offering educators a dynamic means of content delivery. Understanding the extent to which PowerPoint enhances or detracts from students' engagement with course content is essential. However, despite the widespread adoption of PowerPoint in classrooms, there exists a gap in understanding the nuanced perspectives and attitudes of students towards its utilization during lecture delivery. Despite the widespread integration of ICT in education, there is a gap in understanding the specific impact of PowerPoint on students' learning experiences and outcomes. Okwelle and Owo (2017), Opoko et al. (2018), Brown (2018), Danladi et al. (2020), Ubogu (2020), Ogunode et al. (2020), Adeoye, et al. (2020) and Gbadamosi (2021) have pointed out the inadequacy of PowerPoint facilities, projectors, and interactive whiteboards as a notable challenge faced by tertiary institutions in Nigeria. Furthermore Igwe, Oguezue, and Nwune (2022), stated that perceptions and attitudes of students, especially at the undergraduate level of tertiary education, have not been fully ascertained.

The diverse student body of Akwa Ibom State College of Education exhibit varying perceptions of PowerPoint's effectiveness as a teaching aid. Exploring the spectrum of attitudes towards visual aids in lectures is crucial for discerning the nuanced preferences and expectations of students. By addressing these problem areas, this study aspires to contribute valuable insights to the ongoing discourse on the integration of technology in education, specifically within the context of Akwa Ibom State College of Education. The findings will not only inform educators and administrators about the current state of technology acceptance among students but will also guide future efforts in optimizing the use of PowerPoint as a pedagogical tool to create a more effective and engaging learning environment.

### **Purpose of the Study**

The purpose of the study was to evaluate the perception and attitude of undergraduate degree students on PowerPoint utilization during lecture delivery in Akwa Ibom State College of Education. Specifically, the study had the following objectives:

1. Determine the perception of undergraduate students toward the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education.
2. Assess the attitude of undergraduate students toward the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education.

### **Research Questions**

The following research questions guided the study

1. What are undergraduate students' perceptions toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education?
2. What are undergraduate students' attitudes toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education?

### **Research Hypotheses**

The following null hypotheses guided the study:

1. There is no significant difference in the mean ratings of male and female undergraduate students on their perceptions in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education.

- There is no significant difference in the mean ratings of male and female undergraduate students on their attitudes in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education.

## METHODOLOGY

The study employed descriptive survey research design. The research method was suitably adopted because the study seeks to assess the current status quo in any given research incident (Nworgu, 2015). The study was conducted in Akwa Ibom State College of Education, Afaha Nsit. The population of the study was made up of 234 undergraduate degree students admitted in 2018/19 academic session in the Eleven (11) Degree programme. A sample of 120 undergraduate final-year students were selected using Sample random sampling techniques.

The researchers developed 30-item structured questionnaire titled: Degree Students' Perception and Attitude on Utilization of PowerPoint for Lecture Delivery (DSPAUPLD) Questionnaire" used for data collection. The instrument was designed with a 5-point rating scale with 30 items designed with response option of Strongly Agreed (SA=4.50-5.00), Moderately Agreed (MA=3.50-4.49), Undecided (U=2.50-3.49), Disagreed (D=1.50-2.49), Strongly Disagreed (SD =1.00-1.49) in which the students used to the answer research questions. It was made up of two sections A and B and was validated by relevant research experts. Thus, the five-point rating scale and the equivalence in percentage (%) were used in taking decisions.

The instrument data collection was face validated by two experts in Industrial Technology Education and one Test and Measurement from the University of Uyo, Akwa Ibom State. To ensure instrument reliability, Cronbach's Alpha statistics were employed, resulting in a reliability coefficient of .86, .73 and .82 which shows the instrument was reliable for the study. The researchers administered the questionnaire directly to the respondents in Akwa Ibom State College of Education with the help of three research assistants immediately after their final year examination. The instrument was collected immediately after completion which recorded 100% return rate.

The research questions 1-3 were answered using statistical inferences of Mean and Standard deviation. The hypotheses were tested using t-test statistical tool 0.05 level of significance. This was because it is the most suitable inferential statistical tool which can determine whether significant difference exists or not. Where the calculated t-value was greater than the tabulated value, hypothesis was rejected, where the calculated t-value was less than the tabulated value hypotheses was upheld.

## Presentation of Results

**Research Question 1:** What are undergraduate students' perceptions toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education?

**Table 1:** Undergraduate students' perceptions toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education.

S/N	Students' Perceptions Toward Using PowerPoint during Lecture Delivery	Male			Female		
		Mean	SD	Dec.	Mean	SD	Dec.
1.	I perceive the use of PowerPoint aids in the visual representation of data, graphs, and statistics, making it easier for interpretation.	5.00	0.32	SA	4.98	1.04	SA
2.	I perceive the use of PowerPoint slides help in effective organization of lectures, enabling a	4.94	2.06	SA	4.99	0.11	SA

	structured and coherent understanding of the lecture material.						
3.	I perceive the use of PowerPoint bridges the gap between abstract and concrete concept	4.98	1.22	SA	5.00	0.17	SA
4.	I perceive the use of PowerPoint are effective tools for simplifying and clarifying complex ideas	4.49	0.37	MA	4.43	0.24	MA
5.	I perceive the use of PowerPoint slides serve as reference points for note-taking, allowing me to focus on key details.	4.97	1.29	SA	4.98	1.03	SA
6.	I perceive the use of PowerPoint slides facilitate note comparison and fostering a collaborative learning environment.	5.00	0.93	SA	4.96	0.59	SA
7.	I perceive the use of PowerPoint highlights key information, ensuring that critical points are emphasized and not overlooked during the lecture.	4.96	1.34	SA	5.00	1.15	SA
8.	I perceive the use of PowerPoint presentations improve my memory recall and comprehension of the lecture content	4.95	1.27	SA	5.00	0.09	SA
9.	I perceive the use of visually appealing slides, images, and graphics in PowerPoint enhances engagement and interest, making the learning experience captivating.	5.00	1.38	SA	4.97	1.18	SA
10.	I perceive the use of PowerPoint can help in reviewing and accessing lecture material outside of the classroom.	3.49	2.02	U	2.49	0.13	D
11.	I perceive the use of PowerPoint provide a step-by-step understanding of complex topics.	5.00	0.87	SA	4.93	1.34	SA
12.	I perceive the use of PowerPoint assist in effective communication of ideas and concepts.	4.97	1.03	SA	5.00	1.09	SA
13.	I perceive the use of PowerPoint slides help grasp the overall structure of the lecture, providing a roadmap of the topics covered and their interrelationships.	4.99	1.30	SA	4.92	1.03	SA
14.	Lecturers used PowerPoint frequently to deliver lectures	2.47	0.68	D	3.42	0.34	U
15.	I perceive the use of adequate PowerPoint facilities in the College for Lecture delivery.	2.49	2.13	D	2.37	0.83	D
<b>Grand Mean and Standard Deviation</b>		<b>4.51</b>	<b>1.21</b>	<b>SA</b>	<b>4.50</b>	<b>0.69</b>	<b>SA</b>

**Note:** Strongly Agreed (SA), Moderately Agreed (MA), Undecided (U), Disagreed (D)

The analyzed data in Table 1 revealed mean responses and standard deviation of undergraduate students' perceptions in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education. The students disagreed with Items 10, 14 and 15, which represent negative perceptions toward using PowerPoint during lecture delivery, while positive perceptions were recorded in items 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12 and 13. Overall, the grand mean and standard deviation of 4.51(1.21) and 4.50(0.69) for male and female respondents respectively showed that students positively perceive the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education, Afaha Nsit.

**Research Question 2:** What are undergraduate students' attitudes toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education?

**Table 2:** Undergraduate students' attitudes toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education.

S/N	Students' Attitudes Toward Using PowerPoint during Lecture Delivery	Male			Female		
		Mean	SD	Dec.	Mean	SD	Dec.
1.	Dense slides filled with excessive text leads to cognitive overload, making it challenging for me to process and internalize the information effectively	4.93	2.09	SA	4.97	1.16	SA
2.	I can effectively visualize complex concepts with PowerPoint presentations, making it easier for me to grasp and retain information.	4.68	2.11	SA	4.99	1.38	SA
3.	PowerPoint-based lectures encourage me in rote memorization rather than promoting a deeper understanding of the subject matter	4.55	1.36	MA	4.49	0.31	SA
4.	Unclear or ambiguous content on PowerPoint slides create confusion and misunderstandings, negatively impacting my ability to grasp essential concepts.	4.41	0.29	MA	4.47	1.15	MA
5.	I find it challenging to earn high grades in lectures that incorporate PowerPoint presentation.	3.44	1.24	D	2.48	0.43	U
6.	I find it challenging to take effective notes if the lecturer's speech merely mirrors the text on the PowerPoint slides.	4.90	2.16	MA	4.43	1.18	SA
7.	Poorly designed slides with distracting animations, illegible fonts, or inconsistent formatting detract me from the learning.	4.87	1.38	SA	5.00	1.15	SA
8.	I can comprehension abstract or challenging concepts through clear and concise visual representations using PowerPoint.	5.00	1.33	SA	4.96	1.01	SA
9.	PowerPoint lectures are monotonous and unengaging, leading to disinterest and disengagement.	4.97	1.31	MA	4.48	1.28	SA
10.	PowerPoint lectures foster a passive learning environment and inhibit knowledge retention due to insufficient opportunities for engagement, discussion, or interactive activities.	3.48	2.14	MA	3.45	1.17	MA
11.	Engaging visuals, multimedia elements, and interactive slides capture my attention, fostering an interactive and dynamic learning environment.	4.93	1.27	SA	4.98	1.14	SA
12.	Visual aids, clear, concise information on PowerPoint slides enhance my memory retention, aiding in long-term comprehension and recall.	4.78	1.39	SA	4.93	1.26	SA
13.	Dynamic and well-designed PowerPoint presentations encourage creative thinking, fostering a deeper understanding of the material.	4.89	1.34	SA	5.00	0.53	SA
14.	Interactive elements within PowerPoint encourage me to actively participate in discussions and exercises.	4.43	2.28	SA	4.98	1.39	MA
15.	Availability of PowerPoint facilities allow me to revisit and review the material at my pace, promoting flexible and self-directed learning outside of the classroom.	2.46	1.43	D	2.49	1.53	D
<b>Grand Mean and Standard Deviation</b>		<b>4.45</b>	<b>1.54</b>	<b>MA</b>	<b>4.41</b>	<b>1.07</b>	<b>MA</b>

**Note:** Strongly Agreed (SA), Moderately Agreed (MA), Undecided (U), Disagreed (D)

The analyzed data in Table 2 revealed mean responses and standard deviation of undergraduate students' attitudes in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education. The students disagreed with Items 5 and 15, which represent negative attitudes toward using PowerPoint during lecture delivery, while positive attitudes were recorded in items 1, 2, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13 and 14. Overall, the grand mean and standard deviation of 4.45(1.54) and 4.41(1.07) for male and female respondents respectively showed that students positively perceive the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education, Afaha Nsit.

**Hypothesis 1:** There is no significant difference in the mean ratings of male and female undergraduate students on their perceptions in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education.

**Table 3:** *t-test analysis of difference in the mean ratings of male and female undergraduate students on their perceptions in the use of PowerPoint during lecture delivery.*

Respondents	N	$\bar{X}$	SD	df	t-cal.	t-crit.	Dec.
Male Students	68	4.51	1.21	118	0.06	1.67	NS
Female Students	52	4.50	0.69				

Note NS = Not Significant.

The analyzed data in Table 3 revealed t-cal as 0.06 while the t-crit. is 1.67 hence, since the t-cal at 118 degree of freedom is less than t-crit. thus the null hypothesis of no significant difference in the mean ratings of male and female undergraduate students on their perceptions in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education was upheld. This implies that the students have positive perception of using PowerPoint during lecture delivery in Akwa Ibom State College of Education.

**Hypothesis 2:** There is no significant difference in the mean ratings of male and female undergraduate students on their attitudes in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education.

**Table 4:** *t-test analysis of difference in the mean ratings of male and female undergraduate students on their attitudes in the use of PowerPoint during lecture delivery.*

Respondents	N	$\bar{X}$	SD	df	t-cal.	t-crit.	Dec.
Male Students	68	4.45	1.54	118	0.18	1.67	NS
Female Students	52	4.41	1.07				

The analyzed data in Table 4, revealed t-cal as 0.18 while the t-crit. was 1.67 hence, since the t-cal at 118 degree of freedom is less than t-crit. thus the null hypothesis of no significant difference in the mean ratings of male and female undergraduate students on their attitudes in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education was upheld. This implies that the students have positive attitudes of using PowerPoint during lecture delivery in Akwa Ibom State College of Education.

## Discussion

From the analyzed data in Table 1, the mean responses and standard deviation of undergraduate students' perceptions in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education was measured. Overall, the grand mean and standard deviation for male and female respondents respectively showed students positive perception on the utilization of PowerPoint during lecture delivery in Akwa Ibom State College of Education, Afaha Nsit. The finding is in agreement with Onah, Obe, and Ude (2021), Igwe, Oguezie and Nwune (2022), who stated that PowerPoint has the power to influence classroom learning positively for male and female students alike. The wide acceptance is because PowerPoint presentations make the students interested in learning. With its flexible ability to combine words, pictures, motion pictures, video clips and capture attention, the students believe it will improve their academic competence. However, some students responded negatively to the sampled items. Students' negative responses is in agreement with the studies



conducted by Ogunode et al., (2020) and Adeoye et al (2020) who believed that PowerPoint facilities, projector and interactive whiteboard are inadequate in tertiary institutions in Nigeria.

From the analyzed data in Table 2, the mean responses and standard deviation of undergraduate students' attitudes toward using PowerPoint during lecture delivery in Akwa Ibom State College of Education was measured. Overall, the grand mean and standard deviation for male and female respondents respectively showed students positive attitude on the utilization of PowerPoint during lecture delivery in Akwa Ibom State College of Education, Afaha Nsit. The findings agree with Onah, Obe, and Ude (2021), who reported students' positive attitudes toward using PowerPoint. Based on the study, the positive perception of the students toward PowerPoint usage can be attributed to the fact that it makes the students effectively visualize complex concepts with PowerPoint presentations, making it easier for me to grasp and retain information, dynamic and well-designed PowerPoint presentations encourage creative thinking, fostering a deeper understanding of the material. also, this study is in support of the study conducted by Igwe, Oguezie and Nwune (2022) who stated that students find it challenging to earn high grades in lectures that incorporate PowerPoint presentation.

From the analyzed data in Table 3, the calculated t-value is less than the table value. Thus, the null hypothesis of no significant difference in the mean ratings of male and female undergraduate students on their attitudes in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education was upheld. This implies that the students have positive perception of using PowerPoint during lecture delivery in Akwa Ibom State College of Education. The finding of this study is in agreement with Igwe, Oguezie and Nwune (2022) who stated that using PowerPoint in lecture delivery has the same effect on both male and female students and not gender-biased; therefore, not a barrier to using PowerPoint in the classroom.

From the data in Table 4, the calculated t-value is less than the table value. Thus, the null hypothesis of no significant difference in the mean ratings of male and female undergraduate students on their attitudes in the use of PowerPoint during lecture delivery in Akwa Ibom State College of Education was upheld. This implies that the students have positive attitudes of using PowerPoint during lecture delivery in Akwa Ibom State College of Education. The findings agree with Onah, Obe and Ude (2021), who reported no significant difference in students' attitudes toward using PowerPoint.

## **Conclusion**

This study has endeavored to unravel the intricate tapestry of students' perceptions and attitudes towards the utilization of PowerPoint during lecture delivery in the esteemed Akwa Ibom State College of Education. The findings highlighted the potential benefits of PowerPoint presentations in enhancing engagement, understanding, and accessibility. The findings indicate a diverse range of perspectives among students regarding the effectiveness of PowerPoint as a pedagogical tool. While some students express a preference for the visual aid's ability to enhance content comprehension and organization, others are facing challenges including the risk of monotony, technical issues, possible distractions, potential distractions or a perceived over-reliance on slides. Students demonstrated varied levels of enthusiasm, skepticism, and concerns about excessive reliance, emphasizing the need for a balanced approach to instructional design that incorporates diverse teaching methods.

These findings underscore the need for educators to adopt a balanced and adaptive approach, leveraging technology to enhance, rather than replace, dynamic and interactive

teaching methodologies. This study not only provides a comprehensive understanding of students' perceptions and attitudes towards PowerPoint in Akwa Ibom State College of Education but also offers practical implications for educators and administrators. The insights gleaned from this research can inform the development of tailored strategies to optimize the integration of PowerPoint, ensuring that it aligns seamlessly with the diverse needs and expectations of students in the pursuit of effective and engaging educational experiences. As the educational system navigates the ever-evolving landscape of educational technology, the knowledge generated from this study contributes to the ongoing refinement of pedagogical practices, ultimately enriching the teaching and learning environment for both educators and students alike. Based on the study's results, the researchers concluded that students generally hold positive perceptions and attitudes toward the use of PowerPoint, particularly in areas such as active participation and interaction, conceptual clarity, and focused concentration.

### **Recommendations**

To address the perceptual variability identified in students' attitudes towards PowerPoint, educators in Akwa Ibom State College of Education should TVET Stakeholders in the College should

1. Ensure that classrooms are adequately equipped with functional projectors, compatible devices, and reliable internet connectivity to minimize disruptions during lectures.
2. Integrate interactive elements in PowerPoint presentations, such as quizzes, polls, and discussion prompts, to foster active student participation and stimulate critical analysis of the subject matter.
3. Establish regular feedback mechanisms from students regarding the use of PowerPoint can provide valuable insights for educators to fine-tune their presentation styles. Soliciting constructive feedback will empower educators to adapt their approaches based on student preferences and needs.
4. Explore collaborative technologies that allow students to actively participate in the creation and delivery of presentations can enhance engagement and foster a sense of ownership in the learning process.
5. Offer ongoing professional development opportunities for educators to stay abreast of evolving educational technologies is crucial. This includes training on the latest advancements in presentation software, effective integration of multimedia elements, and strategies for maintaining a balance between technology use and active student participation

### **Declarations**

#### **Competing interests**

The authors have no competing interest to declare.

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#### **Author contributions**

The authors were in charge of the research design, data collection and analysis, and writing. George, Williams Kennedy was in charge of data analysis and editing. The author(s) read and approved the final manuscript.

## References

- Abubakar, A.B., Muhammad, G.A., Umar, A.S., & Mahmud, A. (2020). Assessment of teachers' utilization of Powerpoint usage for mathematics instructions in Senior Secondary Schools in Sokoto Metropolis, Nigeria. *International Journal of Research and Scientific Innovation*, 7(11), 246-251.
- Adeoye, I.A., Adanikin, A.F. & Adanikim, A. (2020). COVID-19 and E-learning: Nigeria Tertiary Education experience. *International Journal of Research and Innovation in Applied Science*. 5(5), 28-31.
- Amasi, J. & Yellowe, I.T. (2018). Availability and Utilization of ICT gadgets in Faculties of Education in Rivers State Universities, Nigeria. *International Journal of Education and Evaluation*. 4(4), 26-36.
- Brown, P.B. (2018) Why everyone will have to become an entrepreneur (Crowd Sourced Version) retrieved from <https://www.forbes.com/sites/actiontrups/everyone/2018/11/03/why-will-have-to-become-an-entrepreneur-crowd-sourced-version>
- Danladi, J., Adamu, A.A., Usman, N.J & Doma, S.Y. (2020). Challenges and opportunities in technical and vocational education (TVET) in Nigeria. *Capital Journal of Educational Studies*, 6(1), 71 – 82.
- Dewi, T., Kareviati, E. & Siliwangi, I. (2021). The Use of PowerPoint as the Instructional Media in Teaching English for Young Learners. *Professional Journal of English Education*, 4(4),617-621.
- Effiong, A.A. & Ekpo, O.E. (2016). Interactive effect of PowerPoint instructional package and academic performance of educational technology students in the University of Calabar. *Equatorial Journal of Education and Curriculum Studies*, 1(2), 57- 68.
- Etim, P.J. & Akpaotor, F.B. (2016). Utilization of power point instructional package and academic performance of SSII Agricultural Science students in Ukanafun Local Government Area of Akwa Ibom State, Nigeria. *Asia Pacific Journal of Contemporary Education and Communication Technology*, 2(2), 83-89.
- Federal Republic of Nigeria (FRN, 2013). *National policy on education* (6th ed). Nigerian Educational Research and Development Council Publishers, Yaba, Lagos-Nigeria.
- Gbadamosi, T.V. (2021). University of Ibadan Undergraduates' Level of Employability Skills. *Humanity and Social Sciences Journal*,16 (1), 01-09
- Grupta, V. (2010). *Secrete Guide to Computer*. New York: Dreamtech Press.
- Igwe, C.M.G., Oguezue, N.K. & Nwune, E.C. (2022). Undergraduate students' perception and attitude toward the use of PowerPoint for lecture delivery in tertiary institution. *Social Sciences and Education Researcher View*, 9(2), 21-28.
- Liau, A.K., Kiat, J.E., & Nie, Y. (2014). Investigating the Pedagogical Approaches Related to Changes in Attitudes Toward Statistics in a Quantitative Methods Course for Psychology Undergraduate Students. *Asia-Pacific Education Researcher*, 24(2), 319-327.
- Longman (2021). Online dictionary on meaning of perception retrieved from the Net on 17th October, 2023.
- Male, H. & Lumbantoruan, J.H. (2020). Students' Perceptions and Attitudes towards Statistics. *Advances in Social Science, Education and Humanities Research*, volume 560. Proceedings of the 2nd Annual Conference on Blended Learning, Educational Technology and Innovation (ACBLETI 2020).
- Nworgu, B.G. (2015). *Educational Research Methodology*. Nsukka. Hallman

- Ogunode, N., Niyi, J., Abigeal, I., & Lydia, A.E. (2020). Impact of Covid-19 on the Higher Institutions Development in Nigeria. Retrieved on October 22, 2023 from <https://www.eresearchjournal.com/wp-content/uploads/2020/04/o-impact-of-COVID.pdf>
- Okwelle, P.C. & Owo, O.T. (2017). Skills Acquisition in Technical Vocational Education Training: Tool for Sustainable Entrepreneurship Development of Electrical/Electronic Students in Polytechnics, Rivers State. *Science and Industrial Technology Education Journal*, 5 (2), 73-83.
- Onah, E.N, Onah, O., Obe, P.I & Ude, V.C., (2021). Perception Of Enugu State Basic Teachers on Use of PowerPoint as Innovation in Teaching During Lecture Preparation, Delivery and Evaluation for Sustainable Developmental Goals' Attainment 151-173
- Opoko, A.P. Badmus, F.O. Abiola, I.T. Odizia, C.I. Oluwole, O.O. Pamilerin, D.E. Rotimi, D.O. Chima, N.O. Mabadeje J. & Otusemade, T.O. (2018). The Role of Technical and Vocational Education and Training (TVET) in Nation Building: A Review of the Nigerian Case, *International Journal of Mechanical Engineering and Technology*, 09(13), 1564–1571
- Ozaslan, E.N., & Maden, Z. (2013). The use of PowerPoint Presentations at in the Department of Foreign Language Education at Middle East technical university. *Middle Eastern & African Journal of Educational Research*, 2(4), 47-62.
- Ramadan, A., Chen, X. & Hudson, L.L. (2018). Teachers' Skills and ICT Integration in Technical and Vocational Education and Training TVET: A Case of Khartoum State-Sudan. *World Journal of Education*, 8(3), 31-43.
- Ratu, R.P. & Komara, C. (2021). An Analysis of EFL Students' Perception of PowerPoint used as English Learning Media in Classroom. *Ellter Journal*, 2(1), 1-13.
- Ristyani, N.A., Nurhayati, & Husnussalam, H. (2020). Improving Students' Interest by Using Picture Media at TK Nur Assalam. *Professional Journal of English Education*, 3(1), 1-4.
- Syaha, M.F.J., & Harsono, E.R.L. (2020). The development of motion-graphic media in learning: an advanced use of PowerPoint in schools X and Y generation teachers. *Development Journal*, 12(1), 36-49.
- Ubogu, R. (2020). Entrepreneurship Education: Challenges and Strategies towards promoting entrepreneurship in Higher Education in Nigeria. *Academic Journal of Interdisciplinary Studies*, 9(5),125-137.
- Udo, E.S., Abner, I.P., Victor, I. & Akpan, E.J. (2020). SARS-Cov-2 pandemic on the Nigerian Educational System. *International Journal of Management*. 11(10), 626-635.
- Umoru, T.A. & Nguwap, S.T. (2021). Effects of PowerPoint presentation on academic performance of office technology and management students in webpage design. *Nigerian Journal of Business Education*, 8(1), 104-110.
- United Nations Educational, Scientific and Cultural Organization (UNESCO, 2015). *Transforming Our World: The 2030 Agenda for Sustainable Development*. New York, United Nations. <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf> (Accessed 14 October 2023).