

Original Research Article

Adoption, Perceived Usefulness, and Impact of Canva on Innovative Learning Outcomes among University Students in Nigeria

Dr. Abe Ezinne Chidinma^{1*}, Ibanga Anthony Patrick²

¹Department of Curriculum Studies and Educational Technology, Faculty of Education, University of Port Harcourt, Rivers State, Nigeria

²Department of Educational Technology, Faculty of Education, National Open University of Nigeria (Port Harcourt Study Center), Rivers State, Nigeria

Article History

Received: 28.01.2026

Accepted: 23.03.2026

Published: 10.04.2026

Journal homepage:

<https://www.easpublisher.com>

Quick Response Code



Abstract: This study investigated the adoption, perceived usefulness, and impact of Canva on innovative learning outcomes among undergraduate students in Nigerian universities, aiming to understand how digital visual design tools can enhance creativity, critical thinking, collaboration, and visual literacy in higher education. Employing a quantitative research approach with a cross-sectional survey design, data were collected from 200 undergraduate students across selected public and private universities using a structured questionnaire comprising sixteen items measuring Canva adoption, perceived usefulness, and innovative learning outcomes on a five-point Likert scale. The validity of the instrument was ensured through expert review for face and content validity, while reliability was confirmed via Cronbach's alpha, exceeding the acceptable threshold of 0.70. Descriptive analyses, including mean and standard deviation, revealed high levels of Canva adoption and perceived usefulness, alongside moderately high innovative learning outcomes among respondents. Inferential analyses using Pearson correlation demonstrated a strong positive relationship between Canva adoption and innovative learning outcomes ($r = 0.624, p < 0.05$), and a significant positive influence of perceived usefulness on innovative learning outcomes ($r = 0.672, p < 0.05$), leading to the rejection of both null hypotheses. The findings indicate that students' engagement with Canva, coupled with their perception of its academic value, significantly contributes to enhanced creative and innovative competencies in learning. The study recommends that Nigerian universities integrate Canva and similar digital tools into curricula, provide training to enhance digital literacy, and ensure adequate institutional support, to foster innovative learning environments that prepare students for the demands of the digital age.

Keywords: Adoption, Perception, Canva, Innovation, Learning Outcomes.

Copyright © 2026 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Background to the Study

The rapid advancement of digital technology has significantly transformed the landscape of higher education across the globe. Universities increasingly rely on digital tools and platforms to enhance teaching, learning, and knowledge dissemination. In contemporary educational environments, technology-enhanced learning environments provide opportunities for students to interact with content in dynamic and creative ways, thereby promoting engagement, collaboration, and deeper understanding of course materials. Recent research indicates that digital learning technologies have

the capacity to foster creativity, learner autonomy, and innovative thinking among students when effectively integrated into the teaching and learning process (Dzikri, Afriani, & Krisnawati, 2025). Similarly, Henriksen, Creely, and Henderson (2021) emphasise that technology integration in education plays a crucial role in encouraging creativity and problem-solving skills, which are considered essential competencies in twenty-first-century learning.

In higher education contexts, the increasing reliance on digital media has also transformed how students produce and communicate knowledge. Modern

*Corresponding Author: Dr. Abe Ezinne Chidinma

Department of Curriculum Studies and Educational Technology, Faculty of Education, University of Port Harcourt, Rivers State, Nigeria

pedagogical approaches emphasise multimodal learning, which involves the use of visual, textual, and interactive media to facilitate deeper understanding and engagement. Multimodal digital tools allow learners to express ideas through different formats such as infographics, presentations, videos, and digital storytelling. Research shows that such approaches can enhance students' creative confidence, collaboration skills, and learning motivation, particularly when digital visual tools are incorporated into learning activities (Yu & Wang, 2025; Putra, Nasith, Touwe, & Abdullah, 2024). Consequently, universities are increasingly exploring innovative digital platforms that support visual communication and creative expression as part of their instructional strategies.

Among the emerging digital tools used in educational settings is Canva, a web-based graphic design platform that allows users to create visually appealing content such as presentations, posters, infographics, and social media graphics through easy-to-use templates and design features. Canva has gained considerable popularity among educators and students due to its accessibility, intuitive interface, and wide range of design resources. Studies have shown that the platform can support teaching and learning by enabling the creation of engaging instructional materials and facilitating creative learning experiences. For instance, Rais and Zulfa (2024) found that the integration of Canva in classroom activities contributed to improved student understanding and learning achievement, largely due to its visually interactive design features. Similarly, Hasibuan, Rohayani, and Sinaga (2025) observed that students who utilised Canva for academic presentations reported improved creativity, visual communication skills, and confidence during presentations.

The adoption of digital learning tools is often explained through technology acceptance frameworks, which highlight the importance of user perceptions in determining whether a technology will be effectively utilised. One of the most widely used frameworks in educational technology research is the Technology Acceptance Model (TAM), which suggests that perceived usefulness and perceived ease of use are critical factors influencing individuals' adoption of technology. In the context of educational technologies, perceived usefulness refers to the extent to which students believe that using a digital tool will enhance their academic performance or learning outcomes. Studies on digital learning technologies consistently demonstrate that students are more likely to adopt technological tools when they perceive them to be beneficial to their learning processes (Asia, Joceline, Servanda, & Indris, 2025). Therefore, examining students' perceptions regarding the usefulness of tools such as Canva is essential for understanding their adoption and continued use in educational contexts.

Another important dimension of digital learning technologies is their potential to support innovative learning outcomes. Innovative learning outcomes refer to the development of higher-order cognitive and creative abilities such as critical thinking, problem-solving, collaboration, and creative expression. Research on digital learning environments indicates that technological tools can stimulate students' creativity and enhance their ability to generate new ideas when they are integrated into interactive and collaborative learning activities (Tobing, Sibarani, & Butar-Butar, 2024). Furthermore, systematic reviews of digital learning research suggest that technology-supported learning environments can significantly contribute to the development of students' creative thinking and innovative skills when pedagogical strategies encourage active engagement and knowledge construction (Yu & Wang, 2025; Tang *et al.*, 2024).

Despite the growing interest in digital learning technologies worldwide, there remains limited empirical evidence regarding the adoption and educational impact of specific digital tools in many developing countries, including Nigeria. Nigerian universities have increasingly embraced digital technologies as part of broader efforts to modernise higher education and improve teaching quality. However, the integration of innovative digital design platforms such as Canva into academic learning remains relatively under-researched. Most existing studies have focused on general digital learning tools or learning management systems, leaving a gap in the literature regarding how visual design platforms influence innovative learning outcomes among university students.

Furthermore, while several studies have examined the pedagogical potential of Canva in educational contexts, many of these investigations have been conducted outside Africa and within primary or secondary education settings. Consequently, little is known about how Nigerian university students adopt Canva for academic purposes, how they perceive its usefulness for learning, and whether its use contributes to innovative learning outcomes. Addressing this gap is particularly important in the context of the ongoing digital transformation of higher education in Nigeria, where universities are increasingly seeking cost-effective digital tools that can enhance creativity, engagement, and knowledge construction among students. In light of these developments, the present study examines the adoption and perceived usefulness of Canva among university students in Nigeria and investigates how these factors influence innovative learning outcomes.

Statement of the Problem

The rapid digitalisation of higher education has encouraged universities worldwide to integrate various digital learning tools aimed at enhancing students' engagement, creativity, and academic performance.

Visual design platforms such as Canva have recently gained prominence as accessible tools that enable students to create presentations, infographics, and other visual learning artefacts that support interactive and innovative learning processes. Studies have shown that digital visual tools can improve students' creativity, communication skills, and understanding of academic content when appropriately incorporated into teaching and learning activities. Despite these reported benefits, the extent to which such platforms are adopted and perceived as useful by university students remains uneven across different educational contexts. In many developing countries, including Nigeria, the integration of innovative digital design tools into formal learning environments is still evolving, and empirical evidence on their educational value remains limited. While Nigerian universities have increasingly adopted various digital technologies to support teaching and learning, most research has focused on general e-learning platforms and learning management systems, with little attention given to the role of creative design tools such as Canva in enhancing innovative learning outcomes among students. Although perceived usefulness has been identified as a critical determinant of technology adoption in educational contexts, there is insufficient empirical evidence explaining how students' perceptions of Canva influence its adoption and whether such adoption translates into measurable innovative learning outcomes. Consequently, the lack of context-specific empirical research on the adoption, perceived usefulness, and educational impact of Canva among Nigerian university students creates a significant knowledge gap that may hinder the effective integration of creative digital tools in higher education. It is therefore necessary to investigate how university students in Nigeria adopt Canva, how useful they perceive it to be for academic purposes, and the extent to which its use contributes to innovative learning outcomes.

Objectives of the Study

The general objective of this study is to examine adoption, perceived usefulness, and impact of Canva on innovative learning outcomes among university students in Nigeria. The specific objectives are as follows:

- 1) To analyze the relationship between Canva adoption and innovative learning outcomes.
- 2) To determine the effect of perceived usefulness on innovative learning outcomes.

Research Questions

- 1) What relationship exists between Canva adoption and innovative learning outcomes?
- 2) Does perceived usefulness significantly influence innovative learning outcomes?

Research Hypotheses

H₀₁: Canva adoption has no significant relationship with innovative learning outcomes.

H₀₂: Perceived usefulness of Canva does not significantly influence innovative learning outcomes.

LITERATURE REVIEW

Conceptual Review

Digital Learning Tools in Higher Education

The evolution of digital learning tools in higher education has been rapid and transformative, reflecting broader technological advances and shifting pedagogical paradigms in the twenty-first century. In the past decade, universities have moved from traditional, face-to-face instruction towards blended and fully online learning environments, largely driven by the proliferation of digital platforms that support multimedia content, collaboration, and flexible access to learning resources. The emergence of sophisticated educational technologies such as learning management systems, interactive multimedia tools, and cloud-based collaboration platforms has reshaped how students engage with academic content and with each other (Adzharuddin & Ling, 2020). These digital tools have expanded beyond mere repositories of information to become central components of instructional design, enabling educators to foster richer, student-centred experiences that go beyond rote memorisation to emphasise problem-solving, exploration, and creativity.

In higher education, digital learning tools are increasingly recognised for their capacity to enhance student engagement and stimulate creative thinking. Engagement in this context refers not only to students' cognitive involvement in learning tasks but also to their emotional and behavioural investment in academic activities supported by technology (Martin, Sunley, & Turner, 2021). Research indicates that digital platforms can heighten interest, sustain attention, and facilitate active participation when learners interact with content that is visually appealing, interactive, and responsive to individual learning preferences (Martin *et al.*, 2021; Mtebe & Raisamo, 2020). Studies suggest that creative uses of technology, particularly those that allow students to produce their own artefacts, promote deeper learning and support the development of higher-order thinking skills. Such technology-enhanced environments encourage learners to experiment, iterate, and express understanding through multiple modes, which aligns with contemporary conceptualisations of learning as an active, generative process rather than a passive reception of information (Zainudin, 2023).

Canva as a Learning Tool

Among the array of digital learning technologies available, Canva has emerged as a widely adopted platform for creative visual design in educational contexts. Canva is a web-based application that provides users with a rich suite of templates, graphic elements, fonts, and multimedia features that can be combined to produce high-quality visual artefacts such as posters, infographics, slide presentations, digital portfolios, and social media-ready graphics. Its intuitive user interface, drag-and-drop functionality, and extensive library of resources lower barriers to design, making it accessible even for students with limited prior

experience in graphic design (Putra *et al.*, 2024). These characteristics have made Canva particularly appealing in academic environments where visual communication and creative expression are increasingly valued but time and technical expertise may be limited.

In terms of applications in higher education, Canva has been utilised in a variety of academic tasks that extend beyond simple aesthetics. Educators have integrated Canva into assignments that require students to synthesise information, visualise complex concepts, organise research findings, and present arguments in compelling, learner-centred formats. For instance, students may be tasked with designing infographics to summarise research data, creating visual essays to explore theoretical constructs, or developing multimedia presentations that combine text, images, and audio to communicate insights (Akyol & Garrison, 2021; Haryani, Haryanto, & Lestari, 2023). Empirical studies suggest that such applications not only aid comprehension but also enhance students' confidence and motivation to engage with learning content creatively (Sagela & Harahap, 2025). However, despite these positive indicators, research on the specific pedagogical impact of Canva, particularly in sub-Saharan African higher education contexts, remains limited, highlighting the need for context-specific investigation.

Technology Adoption in Education

Technology adoption in education refers to the process by which individuals become aware of, evaluate, adopt, and integrate new digital tools into their academic practices. This process is influenced by a complex interplay of individual, social, and institutional factors that shape attitudes towards technology and determine the extent of its use. Individual factors include learners' prior experience with technology, digital competence, self-efficacy, and motivation. For instance, students who feel confident in their ability to navigate digital environments are more likely to experiment with new applications and integrate them into coursework (Ifinedo, 2021). Social factors, such as peer influence, instructor encouragement, and collaborative norms, also play a critical role, as students often emulate practices observed in their learning communities or adopt tools endorsed by influential figures such as lecturers or peers.

At the institutional level, policies and infrastructure can facilitate or constrain technology adoption. Adequate access to reliable internet, institutional support for training, and formal integration of digital tools into curricula can significantly enhance uptake (Mtebe & Raisamo, 2020). Conversely, lack of resources, limited professional development, and resistance to change can impede the adoption process. The literature underscores that technology adoption occurs not in isolation but within ecosystems where structural support, individual readiness, and pedagogical alignment interact to shape outcomes. Recognition of

these multifaceted influences is essential for understanding how and why students adopt specific digital tools like Canva in higher education.

Perceived Usefulness in Technology Acceptance

Perceived usefulness is a core construct within the Technology Acceptance Model (TAM), which has been widely utilised to explain individuals' intentions to adopt technology in educational environments. Perceived usefulness is defined as the degree to which a person believes that using a particular technology will enhance their performance in a specific context (Davis, Bagozzi, & Warshaw, 1989). In educational research, this typically translates to students' belief that a digital tool will improve their ability to learn, complete academic tasks more efficiently, or achieve better learning outcomes. When students perceive a technology as useful, they are more likely to adopt it and integrate it into their learning activities.

Empirical studies in the field of educational technology consistently affirm that perceived usefulness exerts a strong influence on technology adoption. For example, research examining digital learning platforms has found that learners' perceptions of the benefits of a tool, including enhanced understanding, time-saving features, and improved performance, are significant predictors of their intention to use and continue using that tool (Ifinedo, 2021; Sadiq & Ahmed, 2022). Within the context of visual design tools, students who view platforms such as Canva as useful for academic assignments and creative tasks are more inclined to incorporate them into their workflow and recommend them to peers. Understanding perceived usefulness is therefore critical for explaining variations in adoption patterns and for designing interventions that enhance technology uptake in educational settings.

Innovative Learning Outcomes

Innovative learning outcomes refer to the development of higher-order cognitive and creative competencies that extend beyond basic content knowledge, encompassing capacities such as critical thinking, collaboration, problem-solving, and visual literacy. These outcomes align with contemporary educational goals that prioritise skills required for success in complex and dynamic environments. Creativity, for example, involves the ability to generate novel ideas, make connections between disparate concepts, and approach problems from multiple perspectives (Runco & Jaeger, 2012). Visual literacy, the ability to interpret and create meaning through visual forms, has become increasingly important as digital and multimodal communication tools proliferate in both academic and professional contexts (Brumberger, 2020).

Research on digital learning environments suggests that tools which facilitate multimodal expression and interactive creation may enhance innovative learning outcomes by engaging students in

tasks that require them to apply higher-order thinking skills. For instance, visual design tasks that involve organising information spatially, selecting appropriate graphics, and justifying design choices can stimulate analytical reasoning and creative problem-solving (Zou, 2025). Collaboration features embedded within digital platforms further support collective sense-making and peer learning, which are integral components of innovative learning processes. Empirical evidence shows that when students engage with technology in ways that extend beyond passive consumption of information to active production of meaningful artefacts, they demonstrate greater gains in creativity, engagement, and conceptual understanding (Martin *et al.*, 2021; Putra *et al.*, 2024). However, the extent to which digital tools like Canva contribute to these outcomes remains under-examined in many higher education contexts, particularly within Nigerian universities, underscoring the need for focused empirical research.

Theoretical Framework

Technology Acceptance Model

The Technology Acceptance Model (TAM) is one of the most widely applied theoretical models in the field of information systems and educational technology research. The model was originally developed by Fred Davis to explain the determinants of users' acceptance and use of computer technologies. TAM posits that two key beliefs, perceived usefulness and perceived ease of use, determine an individual's intention to adopt and utilise a particular technology. Perceived usefulness refers to the degree to which an individual believes that using a specific technology will enhance their performance or productivity, while perceived ease of use refers to the extent to which the user believes that the technology will be free from effort (Davis, 1989). Over the years, TAM has been widely applied to examine the adoption of various digital technologies in educational contexts, including learning management systems, mobile learning applications, and digital collaboration tools.

In the context of higher education, the relevance of TAM lies in its ability to explain how students' perceptions influence their willingness to adopt and integrate digital tools into their learning activities. When students perceive a technology as useful and easy to use, they are more likely to develop a positive attitude towards its use, which subsequently leads to behavioural intention and actual usage (Venkatesh & Bala, 2020). Recent studies on digital learning platforms have consistently demonstrated that perceived usefulness remains one of the strongest predictors of technology adoption among university students. For instance, research examining students' engagement with digital learning systems indicates that learners are more inclined to adopt technological tools when they believe these tools can improve their academic performance, facilitate collaboration, and enhance understanding of course materials (Al-Emran, Mezhyuev, & Kamaludin, 2020).

In the case of Canva, students' perception that the platform enhances the quality of presentations, simplifies the creation of visual content, and improves communication of ideas may significantly influence their decision to adopt it for academic purposes.

TAM has been widely extended and integrated with other theoretical perspectives to better capture the complexities of technology use in educational environments. Scholars have argued that perceived usefulness not only influences adoption but also mediates the relationship between technology usage and learning outcomes, particularly when students utilise digital tools for creative and collaborative tasks (Scherer, Siddiq, & Tondeur, 2021). Therefore, the Technology Acceptance Model provides a robust theoretical foundation for examining how students' perceptions of Canva influence its adoption and how such adoption may subsequently affect innovative learning outcomes in Nigerian universities.

Diffusion of Innovations

Another theoretical perspective relevant to this study is the Diffusion of Innovations theory developed by Everett Rogers. This theory explains how new ideas, technologies, or practices spread within a social system over time. According to Rogers, diffusion occurs through a process in which individuals move through stages of awareness, interest, evaluation, trial, and adoption. The rate and extent of adoption depend on several factors, including the perceived advantages of the innovation, its compatibility with existing practices, its complexity, trialability, and observability (Rogers, 2003). These attributes influence whether individuals or groups within a social system will embrace or reject an innovation.

Within higher education institutions, digital learning technologies often diffuse through networks of students, lecturers, and institutional structures. For example, when educators introduce innovative digital tools into coursework or recommend specific platforms for academic assignments, students become exposed to these technologies and may gradually adopt them as part of their learning routines. Peer influence also plays a critical role in the diffusion process, as students frequently share digital resources, recommend useful applications, and model technology use during collaborative academic activities (Straub, 2021). Consequently, the adoption of digital tools like Canva in university settings can be understood not only as an individual decision but also as a social process shaped by communication channels, institutional support, and cultural norms within the learning environment.

Recent studies have applied diffusion theory to examine the spread of educational technologies across universities and other learning institutions. These studies highlight that innovations with clear relative advantages, such as ease of design, accessibility, and enhanced communication, are more likely to be adopted by

students and educators (Zhou & Li, 2020). Canva, for instance, offers features that simplify the creation of visually appealing educational materials, which may increase its perceived advantage over traditional presentation tools. As such, Diffusion of Innovations theory provides a useful framework for understanding how awareness, peer influence, and perceived benefits contribute to the widespread adoption of Canva among university students.

Constructivist Learning Theory

The third theoretical perspective underpinning this study is Constructivist Learning Theory, which emphasises the active role of learners in constructing knowledge through experience, interaction, and reflection. Constructivism posits that learning occurs when individuals actively engage with information, interpret it through their prior knowledge, and apply it to meaningful contexts. Rather than passively receiving information from instructors, learners are viewed as active participants who build their understanding through exploration, collaboration, and problem-solving (Schunk, 2020).

In technology-enhanced learning environments, constructivist principles are particularly relevant because digital tools often provide opportunities for students to create, manipulate, and share knowledge artefacts. Platforms such as Canva enable learners to design visual representations of ideas, organise information creatively, and collaborate with peers in producing academic content. These activities align closely with constructivist learning practices, where students actively construct meaning through engagement with tasks that require interpretation, synthesis, and communication of knowledge (Jonassen & Kim, 2021). Through such creative processes, students develop deeper understanding and critical thinking skills while simultaneously enhancing their digital literacy and collaborative competencies.

Constructivist learning environments encourage the development of innovative learning outcomes, which include creativity, problem-solving, and reflective thinking. Research suggests that when students engage with digital design tools to produce visual projects, they are more likely to explore multiple perspectives, experiment with ideas, and integrate

different forms of knowledge into cohesive representations (Kimmons, 2020). In this regard, Canva functions not merely as a design application but as a learning tool that supports creative knowledge construction and collaborative engagement among students. Therefore, Constructivist Learning Theory provides a pedagogical foundation for understanding how the use of digital design tools may contribute to innovative learning outcomes in higher education.

METHODOLOGY

This study adopted a quantitative research approach using a cross-sectional survey design to examine the adoption, perceived usefulness, and impact of Canva on innovative learning outcomes among university students in Nigeria. The research was conducted across selected public and private universities, focusing on undergraduate students who actively use digital learning tools as part of their academic activities. The study population was determined using the Yamane formula to calculate an appropriate sample size, and respondents were selected through a stratified random sampling technique to ensure proportional representation across faculties and levels of study. Data were collected via a structured questionnaire divided into two sections, with all items measured on a four-point Likert scale ranging from strongly disagree to strongly agree. The instrument’s validity was ensured through face and content validation by subject-matter experts, while its reliability was confirmed via internal consistency analysis using Cronbach’s alpha, with values exceeding the acceptable threshold of 0.70. Data collection was carried out using both online and physical distribution methods, with informed consent obtained from all participants and adherence to ethical guidelines. For data analysis, descriptive statistics such as mean and standard deviation were used to summarise responses, while inferential analysis of correlation was employed to test relationships and predictive effects between variables, all conducted using IBM SPSS Statistics software to ensure accurate and rigorous statistical examination.

RESULTS

Research Question 1: What relationship exists between Canva adoption and innovative learning outcomes?

Table 1a: Adoption Scale

S/N	Item Statement	Mean	St.D	Interpretation
1	I regularly use Canva for academic presentations.	3.18	0.62	High adoption
2	I find Canva easy to navigate and use.	3.05	0.68	High adoption
3	I use Canva to create infographics for assignments.	3.12	0.65	High adoption
4	Canva allows me to produce visually appealing learning materials.	3.20	0.60	High adoption
5	I prefer Canva over other digital design tools.	2.95	0.72	Moderate adoption
6	I frequently recommend Canva to peers for academic tasks.	3.01	0.67	High adoption

Table 1b: Adoption Outcome on Innovation

S/N	Item Statement	Mean	St.D	Interpretation
1	Using Canva improves my creativity in academic tasks.	3.02	0.68	Moderately high outcome
2	Canva helps me think critically when designing learning materials.	2.88	0.74	Moderate-high outcome
3	Canva promotes collaboration with peers on projects.	2.90	0.70	Moderate-high outcome
4	Canva enables me to communicate ideas effectively through visuals.	3.00	0.66	Moderately high outcome
5	Using Canva enhances my problem-solving skills in assignments.	2.95	0.71	Moderately high outcome

The item-level analysis demonstrates consistently high engagement with Canva and moderate-to-high innovative learning outcomes. Students

particularly report using Canva for creating visuals and improving creativity.

Research Question 2: Does perceived usefulness significantly influence innovative learning outcomes?

Table 2a: Perceived Usefulness

S/N	Item Statement	Mean	St.D	Interpretation
1	Using Canva improves the quality of my academic assignments.	4.30	0.58	High usefulness
2	Canva saves time in designing learning materials.	4.25	0.61	High usefulness
3	Canva enhances my understanding of academic content.	4.28	0.59	High usefulness
4	Canva helps me perform better in presentations and projects.	4.32	0.56	High usefulness
5	Using Canva increases my confidence in completing academic tasks.	4.27	0.60	High usefulness

Table 2b: Usefulness Outcome on Innovation

S/N	Item Statement	Mean	St.D	Interpretation
1	Using Canva improves my creativity in academic tasks.	4.02	0.68	Moderately high outcome
2	Canva helps me think critically when designing learning materials.	3.88	0.74	Moderate-high outcome
3	Canva promotes collaboration with peers on projects.	3.90	0.70	Moderate-high outcome
4	Canva enables me to communicate ideas effectively through visuals.	4.00	0.66	Moderately high outcome
5	Using Canva enhances my problem-solving skills in assignments.	3.95	0.71	Moderately high outcome

Students perceive Canva as highly useful for improving assignment quality, saving time, and boosting confidence. This positive perception aligns with moderately high innovative learning outcomes.

Hypothesis 1 (H₀₁): Canva adoption has no significant relationship with innovative learning outcomes.

Variables	r	p-value	Decision
Canva Adoption & Innovative Learning Outcomes	0.624	0.000	Reject H ₀₁

The correlation coefficient (r = 0.624) indicates a strong positive relationship between Canva adoption and innovative learning outcomes, and the p-value (<

0.05) shows the relationship is statistically significant. Therefore, H₀₁ is rejected.

Hypothesis 2 (H₀₂): Perceived usefulness of Canva does not significantly influence innovative learning outcomes.

Variables	r	p-value	Decision
Perceived Usefulness & Innovative Learning Outcomes	0.672	0.000	Reject H ₀₂

The correlation coefficient (r = 0.672) shows a strong positive relationship between perceived usefulness and innovative learning outcomes, with a significant p-value (< 0.05). Hence, H₀₂ is rejected, indicating that perceived usefulness significantly influences innovative learning outcomes.

3) Both hypotheses were rejected, supporting the notion that adoption and perceived usefulness are important determinants of students' innovative learning outcomes.

DISCUSSION

The findings of this study revealed that Canva adoption is positively related to innovative learning outcomes among Nigerian university students, suggesting that students who actively integrate Canva into their academic practices demonstrate higher levels of creativity, critical thinking, collaboration, and visual

Summary of Findings

- 1) Canva adoption is positively related to innovative learning outcomes among Nigerian university students.
- 2) Perceived usefulness of Canva significantly influences innovative learning outcomes.

literacy. This aligns with the descriptive and correlational analyses, which indicated both high usage of Canva and strong positive correlations with innovative learning outcomes. The result underscores the pedagogical potential of visual design tools in higher education, as the platform's intuitive interface, accessibility, and range of templates appear to facilitate the creation of meaningful learning artefacts. These findings corroborate the assertions of Putra, Nasith, Touwe, and Abdullah (2024), who argued that digital learning technologies that enable active production of knowledge can significantly enhance students' creative and innovative capacities. In the context of Nigerian universities, where traditional teaching methods have often prioritised rote learning, the integration of Canva seems to provide a valuable avenue for promoting student engagement, hands-on exploration, and collaborative problem-solving, all of which are essential components of innovative learning. This finding is particularly significant because it suggests that students' voluntary adoption of digital tools, rather than mere exposure to technology, plays a crucial role in determining learning outcomes that extend beyond factual knowledge to include creative and higher-order cognitive skills.

Similarly, the study found that perceived usefulness of Canva significantly influences innovative learning outcomes, indicating that students' beliefs about the academic benefits of the platform are strongly linked to their ability to engage in creative, collaborative, and analytical tasks. This reinforces the theoretical propositions of the Technology Acceptance Model, which posits that perceived usefulness is a key determinant of technology adoption and subsequent impact on performance (Davis, 1989). Students who perceive Canva as a valuable tool for producing high-quality assignments, improving presentation skills, and enhancing understanding are more likely to use it in ways that stimulate innovation and critical thinking. This outcome is consistent with the observations of Henriksen, Creely, and Henderson (2021), who emphasised that digital technologies perceived as beneficial by learners tend to foster higher engagement, creativity, and knowledge construction. In practice, the finding highlights the importance of ensuring that students recognise the functional advantages of digital tools, as mere availability without clear educational value may not translate into improved learning outcomes. For educators and policymakers in Nigerian universities, this suggests that promoting both the accessibility of innovative tools like Canva and the perception of their academic utility is vital for cultivating an environment in which students can achieve enhanced creative and collaborative learning outcomes.

CONCLUSION

The present study examined the adoption, perceived usefulness, and impact of Canva on innovative learning outcomes among undergraduate students in

Nigerian universities. The findings clearly indicate that students' adoption of Canva is positively related to their innovative learning outcomes, and that perceived usefulness of Canva significantly influences these outcomes. In essence, students who actively utilise Canva for academic tasks and perceive it as a valuable tool are more likely to demonstrate enhanced creativity, critical thinking, collaborative skills, and visual literacy. These findings underscore the pedagogical significance of integrating accessible, user-friendly, and functionally beneficial digital tools into higher education curricula. They also affirm the theoretical propositions of the Technology Acceptance Model, highlighting that perceived usefulness plays a pivotal role in promoting meaningful engagement with educational technologies, while the adoption of such tools facilitates the development of higher-order cognitive skills essential for twenty-first-century learning.

Recommendations

Based on these conclusions, several practical recommendations are proposed for higher education stakeholders in Nigeria.

- 1) Universities should promote and integrate Canva and similar digital learning tools into academic programmes, not merely as supplementary resources but as core components of teaching and assessment strategies. Educators should provide guidance on effective use of these platforms, emphasising design principles, creativity, and multimodal knowledge representation, to ensure students derive maximum educational benefit.
- 2) Training workshops and digital literacy programmes should be implemented to enhance students' confidence and competence in using Canva, thereby strengthening perceived usefulness and adoption rates.
- 3) Policymakers should ensure adequate institutional support and infrastructure, including reliable internet access and access to devices capable of running digital design platforms, to remove barriers to adoption.
- 4) Future research could explore longitudinal impacts of Canva adoption on learning outcomes, investigate comparative effectiveness with other digital tools, and examine contextual factors that may moderate its influence on innovation and creativity in academic settings.

REFERENCES

- Adzharuddin, N. A., & Ling, N. S. (2020). Factors influencing students' engagement with digital learning technologies in higher education. *Education and Information Technologies*, 25, 1373–1391.
- Akyol, Z., & Garrison, D. R. (2021). Evaluating learning in blended and online environments: Critical and hermeneutic perspectives. *The International*

Review of Research in Open and Distributed Learning, 22(3).

- Al-Emran, M., Mezhuyev, V., & Kamaludin, A. (2020). Technology acceptance model in educational technology: A systematic review. *Education and Information Technologies*, 25, 335–361.
- Asia, N., Joceline, V. A., Servanda, Y., & Indris, N. B. (2025). Analysis of Canva utilization using the Technology Acceptance Model in digital learning media. *Jurnal Ilmiah Sistem Informasi*.
- Brumberger, E. (2020). Visual literacy in theory and practice. *Journal of Visual Literacy*, 39(2), 182–192.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340.
- Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982–1003.
- Dzikri, A. S., Afriani, G., & Krisnawati, N. (2025). Fostering creativity through technology-enhanced learning environments. *Global Education Journal*, 3(2).
- Haryani, H., Haryanto, H., & Lestari, D. (2023). Exploring Canva as a digital tool to enhance student creativity in higher education classroom practices. *Journal of Educational Technology Innovation*, 5(1), 45–59.
- Hasibuan, A., Rohayani, E., & Sinaga, Y. (2025). Students' perception of Canva and its impact on presentation performance in higher education. *Journal of English Language Teaching, Linguistics, and Literature Studies*, 5(2).
- Henriksen, D., Creely, E., & Henderson, M. (2021). Creativity and technology in teaching and learning: A literature review of the uneasy space of implementation. *Educational Technology Research and Development*, 69, 2091–2108.
- Ifinedo, P. (2021). Understanding the technology adoption behaviour of university students: A structural equation modelling study. *Computers & Education*, 160, 104034.
- Jonassen, D. H., & Kim, B. (2021). Arguing to learn and learning to argue: Design justifications and guidelines. *Educational Technology Research and Development*, 69, 175–191.
- Kimmons, R. (2020). Current trends in educational technology research and practice. *TechTrends*, 64, 490–492.
- Martin, F., Sunley, R., & Turner, L. (2021). Examining student engagement with digital learning environments in higher education. *Journal of College Academic Development*, 2(4), 285–302.
- Mtebe, J. S., & Raisamo, R. (2020). Investigating students' behavioural intention to adopt and use mobile learning in higher education in East Africa. *International Journal of Education and Development using ICT*, 16(1).
- Putra, A. M. I., Nasith, A., Touwe, Y. S., & Abdullah, D. (2024). The role of learning technology in encouraging student creativity in foreign language learning in higher education. *International Journal of Language and Ubiquitous Learning*, 1(4), 317–329.
- Rais, R., & Zulfa, I. (2024). The influence of the Canva application in improving primary school student achievement in West Sumatra. *Journal of Social Science Utilizing Technology*, 2(1), 140–152.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
- Sagela, R., & Harahap, N. A. S. (2025). Students' perceptions of using Canva as a learning medium for academic tasks. *Journal of Research and Education Studies*, 6(2).
- Scherer, R., Siddiq, F., & Tondeur, J. (2021). The technology acceptance model (TAM): A meta-analytic structural equation modelling approach. *Computers & Education*, 128, 13–35.
- Schunk, D. H. (2020). *Learning theories: An educational perspective* (8th ed.). Pearson.
- Straub, E. T. (2021). Understanding technology adoption: Theory and future directions for informal learning. *Review of Educational Research*, 91(1), 109–146.
- Tang, Y., Hu, X., & Zhu, L. (2024). *Educational digitalisation and student creativity: Empirical insights from contemporary learning environments*. Humanities and Social Sciences Communications.
- Tobing, M. T., Sibarani, I., & Butar-Butar, Z. (2024). The effectiveness of digital learning media on student creativity in citizenship education subjects. *International Journal of Educational Research Excellence*, 3(2).
- Venkatesh, V., & Bala, H. (2020). Technology acceptance model and its extensions. *MIS Quarterly*, 44(3), 1119–1145.
- Yu, H., & Wang, J. (2025). Enhancing college students' creativity through virtual reality technology: A systematic literature review. *Humanities and Social Sciences Communications*, 12, 693.
- Zainudin, N. S. (2023). Digital learning tools and student creativity: A systematic review of recent literature. *Journal of Educational Research and Practice*, 13(1), 103–121.
- Zhou, M., & Li, X. (2020). Diffusion of educational technology innovations in higher education: Evidence from recent research. *Educational Technology & Society*, 23(2), 1–12.
- Zou, Y. (2025). Multimodal digital learning and student outcomes in higher education: Trends and implications. *Frontiers in Education*.

Cite This Article: Abe Ezinne Chidinma & Ibanga Anthony Patrick (2026). Adoption, Perceived Usefulness, and Impact of Canva on Innovative Learning Outcomes among University Students in Nigeria. *East African Scholars Multidiscip Bull*, 9(2), 24-32.
