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The Pedagogical Impact of Microsoft Designer: A Survey On Educational Development

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ABSTRACT
The integration of AI-empowered tool such as Microsoft designer into educational paradigm has helped educators as well as students to enhance the creation of visual appealing materials used for interactive presentation. Microsoft Designer is an AI driven graphic design interface that empowers users to create high-grade visual content with minimal effort. Microsoft Designer offers a vast library of templates, icons, and images,, along with innovative design suggestions empowered to meet up with the specific needs of an individual or organization. The implementation of Microsoft Designer with other Microsoft 365 applications, is designed to enhance workflow and allow for easy collaboration effort. The implementation ensures that users can easily import and export content across all paradigms, maintaining their quality and consistency in various aspects of design. This paper study examines the integration of Microsoft Designer into educational settings to enhance the creation of visually appealing materials for interactive presentations. A mixed-methods approach was employed, involving the distribution of carefully designed questionnaires via Google Forms to educators and students. The collected responses underwent reliability analysis to ensure data validityThe findings reveal that Microsoft Designer significantly improves users' ability to produce high-quality visual content with minimal design expertise, thereby enriching educational presentations and communication. The tool's accessibility and integration capabilities support consistent and efficient design processes across various educational tasks. Finally, the paper concludes that Microsoft Designer is a powerful AI driven tool that serves various categories of users, from students to professionals, enhancing visual creativity without prior design experience.

1. INTRODUCTION

Microsoft Designer is an AI driven graphic tool developed to assist users in creating high-quality designs with ease. This innovative design platform provides both amateurs and professionals with user-friendly interface and rich set of features to bring their ideas to reality. Microsoft Designer offers a vast library of images, icons, and templates along with smart design suggestions tailored to the specific needs of its users. The use of Microsoft Designer is highly important to the education sector, offering students, teachers as well as educational institutions a suitable way of creating stunning visual contents. Students can use this amazing tool to visualize concepts, create presentation, and share their ideas in astounding ways; Teachers can use the same tool to create visual teaching aids such as Infographics, charts and diagrams that simplifies information; and Educational institutions can produce high-quality visual design to improve the overall quality of presentation. While Microsoft Designer allows its uses to create polished visuals without the need for additional software, it also provides basic photo-editing capacities.

Pedagogical Applications Of Microsoft Designer For Education

Microsoft Designer is a graphic design application tool that can be used to create classroom posters, worksheets, and other designs for classroom teaching and learning. Viz:

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I. Classroom posters

Microsoft Designer can be used to create posters that will make learning more engaging and fun-fill in order to inspire students.

II. Classroom worksheets

This refers to a loose piece of paper that children use to answer questions or complete a task. Microsoft Designer can be used to add graphics to worksheets .

III. Group Tutorial

Microsoft Designer can be used to create customized learning sheets with fun images for group discussions by simply describing what they want to create through text prompts.

Benefits of Microsoft Designer in education

Using Microsoft Designer in education has numerous advantages. Viz:

I. Visual appeal and creativity

Microsoft Designer features allow teachers to create attractive visual content that can get their attention of students and invariably improve their information retention.

II. Enhancing student presentations

Microsoft Designer features allow students to create engaging visual presentations that can improve their confidence and communication skills.

III. Promoting differentiated learning:

Microsoft Designer features allow teachers to create customized visual contents that can cater for different learning styles within the classroom.

VI. Ease of use and accessibility:

Microsoft Designer interface allows various teachers to create high-quality visual contents, minimizing time spent on teaching and design.

V. Visualizing complex concepts

Microsoft Designer features allow users to create flowcharts, diagrams, and illustrations that can simplify concepts that are complex or abstract in nature.

IV. Customization options

Microsoft Designer offers features that allow for customizing options, enabling teachers to tailor content to specific subject areas.

In recent years, Artificial Intelligence (AI) has significantly impacted on user experiences, facilitating the delivery of solutions in various sectors[12]. The studies of [1, 5, 16] reveal that the use of AI capabilities to improve design processes is becoming more popular. By leveraging AI-powered tools, users can gain valuable insights and generate innovative design [3, 4, 17]. Dave (2024) sees Microsoft Designer as a complete AI-enabled application paradigm that can be used to create AI images, stickers, invitations, wallpapers, avaters and icons, including the ability to remove backgrounds. Microsoft Designer has all the tools a non professional designer needs to create pleasing graphics for social media and more. Education is one of the several sectors that is using AI-powered tools such as Microsoft Designer to improve the quality of services for teachers and students. However, there are a number of challenges for the integration of AI-driven tools in education. For example, [7] noted the concerns that students may copy and paste content from some sites which is tantamount to plagiarism. User privacy is another important issue to worry about.

2. MATERIALS AND METHODS

2.1. Research Model

This paper adopts a mixed review approach on the impact of Microsoft Designer in education, focusing on its applications and benefits.

2.2. Data Collection Technique

The researcher used qualitative approach to collect relevant information. Carefully formulated questions were administered to respondent using online Google form questionnaire instrument with four options, ranking SA (Strongly Agree), A (Agree), D (Disagree), and SD (Strongly Disagree).

2.3. Participants

The resaercher interviewing 23 students, 10 educators and 5 IT professionals from 5 selected schools of higher learning in Nigeria. In order to gather other data deemed necessary for the paper discussion,

2.4. Statistical Analysis

The responses collated were subjected to Cronbach's alpha reliability analysis. The result of 0.78 gave a good reliability index of the instrument.

2.5. Research Duration

The entire exercise took place within 34 days before completion.

3. RESULTS

Based on the question formulated and administered to selected number of interviewee, inferences were drawn from the responses gatherred and analyzed using analysis charts, viz:

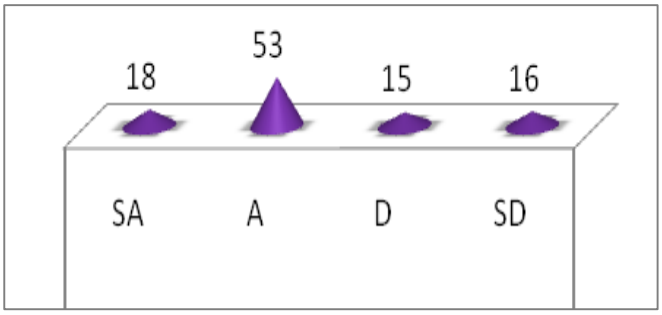

Figure. 1: Chart Analysis 1 presenting responses to 'What is Microsoft Designer?'

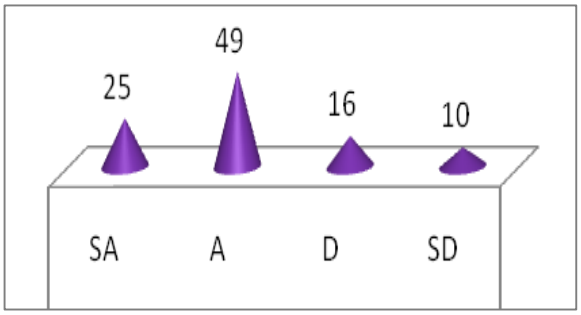

Figure. 2: Chart Analysis 2 presenting responses to 'What is Microsoft Designer used for?'

The graph plotted in chart 1 reveals that a very huge number of respondents sees *Microsoft Designer* is a graphic design tool that helps users to create, design, and edit high-quality visual contents effortlessly, even with little to no design experience. The respondents further added that Microsoft Designer is a graphic design is empowered by Artificial Intelligence (AI) tool that enables users to quickly generate many variations of a graphic design with just a few clicks. According to the respondents, Microsoft Designer can creates eye-catching images with voice command, create craft next-level designs that pop, and even edit photos like an expert.

The graph plotted depicted that most of the respondents agree that Microsoft Designer is a graphic design tool that is used to create images, edit photos, and design graphics. According to the respondents, Microsoft Designer is an AI-powered graphic design app that makes design process quicker, helping users to create amazing social media posts, invitations, postcards, and more, all within the twinkling of an eye. Microsoft Designer can help users to generate customized designs and offer personalized recommendations. The respondents also added that Microsoft Designer can assist users to create and edit various visuals using generative AI prompts.

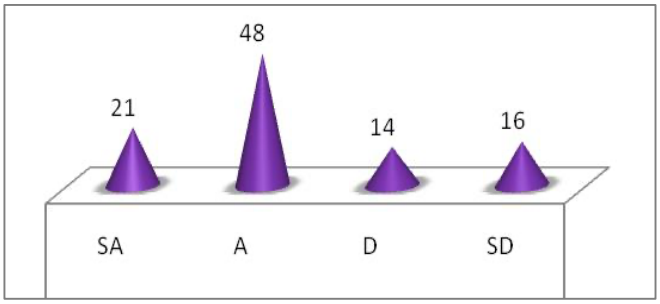

Figure. 3: Chart Analysis 3 presenting responses to 'What is the relevance of Microsoft Designer in education?'

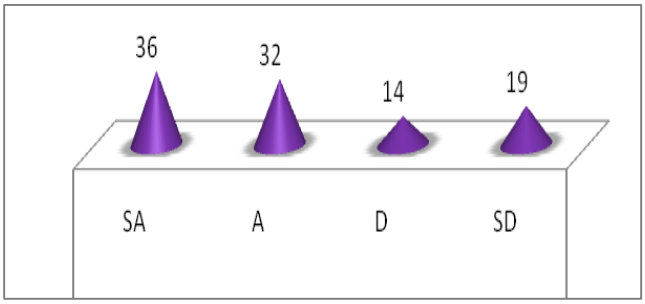

Figure. 4: Chart Analysis 4 presenting responses to 'What is the constructive impact of Microsoft Designer on teaching and learning process?'

The graph plotted in chart 3 showed that most of the respondents supports that Microsoft Designer is relevant in education because it allows students to easily create visually appealing graphics and designs using AI-powered tools, which can enhance their presentations, projects, and learning materials, especially for subjects requiring creative expression. The respondents explained further that Microsoft Designer allows students to build future skills as it allows them to practice with the use of descriptive language in order to have deep insight of their desired outcome.

The graph plotted in chart 4 signifies that a larger number of respondents concur with the statement that Microsoft Designer enables educators to create visually appealing and engaging educational materials quickly, particularly for classroom posters, presentations, and digital learning content, which can enhance student engagement and comprehension. The respondents also highlighted some benefits of using Microsoft

Designer in education including building collaborative classrooms, connection with colleagues, and connection other learning professionals or communities

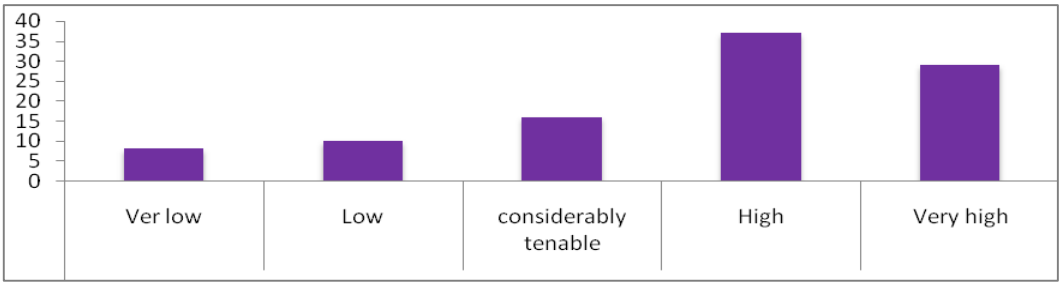

Figure. 5: Chart Analysis 5 presenting responses to 'Does Microsoft Designer have significant impact on education?'

4. DISCUSSION

The findings of the survey conducted in Microsoft Designer provide valuable insight into perception, usefulness and effectiveness in the context of education, particularly through the lens of AI-driven graphic design tools. The results shown in Figures 1 and 2 show that the majority of Microsoft designers interviewed recognise them as AI-influenced graphic designs that simplify the creation, processing and adaptation of high-quality visual content. This corresponds to previous research, in which the transformational potential of AI-controlled design tools is highlighted in the tightening of creative processes [**Hata! Başvuru kaynağı bulunamadı.**, 5]. Microsoft Designer's ability to produce visually engaging content with minimal design capabilities emphasises how it is user-friendly. Respondents' focus on characteristics such as voice command capabilities and fast generation of design variations supports the idea that AI-driven tools improve the efficiency and accessibility of design tasks [2]. The finding is full on a literature review in an AI-supported learning environment. This shows that such tools promote creativity and student skills development [**Hata! Başvuru kaynağı bulunamadı.**, 11]. The respondent's observation that Microsoft Designer promotes the use of description languages to clarify design goals also demonstrates his role in building future skills such as critical thinking and communication that are essentially important in modern educational frameworks [1]. This corresponds to the TPACK framework (knowledge of technical educational content), in which the integration of technology to improve educational outcomes is emphasised [10].

As shown in Figure 4, the constructive effect of Microsoft designers on teaching and learning is particularly noticeable. Respondents emphasise their ability to enable rapid creation of educational material such as classroom posters and digital content, improving student commitment and understanding. This finding is supported by research that emphasises the importance of visually appealing materials to improve learning outcomes [9, 14]. Furthermore, the ability to promote collaboration among educators and combine them with professional communities, with the broader trends of AI control tools, to promote a collaborative learning environment [5]. Focusing on personalised design recommendations also suggests that Microsoft designers support differentiated lessons, an important component of personalised learning [15]. This perception follows the growing evidence that AI-driven devices can revolutionise educational practices by becoming more interactive and accessible [7]. However, such instrument integration also raises questions about the need for proper training and ethical considerations, as described in the literature. It is important to maximise your benefits and at the same time reduce potential challenges [13]. Her participation is not directly related to Microsoft Designer, but suggests that various user groups can provide valuable insights for applying AI tools in creative and collaborative contexts, such as game design and interactive learning environments [9]. This paves the way for future research and allows us to explore how AI tools such as Microsoft Designers can be integrated into Gameified or e-sports-related educational environments to improve commitment [18]. The ability to simplify the design process, promote skills development, and promote commitment aligns with the development of modern education needs. However, further examinations are required to examine its long-term effectiveness and optimal integration strategies, particularly in a variety of educational and joint contexts.

5. Conclusion

Microsoft Designer is a powerful AI driven tool developed to assist users in creating high-quality designs in the most effective manner without much effort on the part of the users. In education, Microsoft Designer has played remarkable roles, offering students the

opportunities to visualize concepts, create presentation, and shares their ideas in astounding ways; helping teachers to create visual teaching aids that simplify the conveyance of information; and improving the overall quality of visual design in educational institutions. Moreover, Microsoft Designer has made design processes more accessible and efficient, enabling users to focus on the most effective way of delivering their messages. Microsoft Designer has the potentials that serve various categories of users, from students to professionals, enhancing visual creativity without prior design experience.

Conflict of interest

No conflict of interest is declared by the authors. In addition, no financial support was received.

Ethics approval

The study protocol was approved by the Research Ethics Committee of the Computer Science Department of Lagos State University of Education.

Author contributions

Study Design, MAA; Data Collection, MAA; Statistical Analysis, IOM; Data Interpretation, IOM and OOA; Manuscript Preparation, MAA; Literature Search, ORO and OOA. All authors have read and agreed to the published version of the manuscript.

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