Lecturer-Students Perception of Artificial Intelligence Usage in Federal University Otuoke

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ABSTRACT :

The study examined the perception of lecturers and students towards the Usage of AI in federal University Otuoke , the student have four objectives , which are to check the extent of AI use among students and lecturers of Federal University Otuoke:to investigate the perception of students and lecturers of Federal University Otuoke:to find the impact of AI on usage among students and lecturers of Federal University Otuoke. Based on these ,research questions, were also generated ,which are :What is the extent of the use of Ai among students and lecturers of the Federal University Otuoke :What is the perception about AI among students and Lecturers of the Federal University Otuoke,one hypothesis was also tested , which is : There Is a significant relationship between AI opportunities and AI usage among students of Federal University Otuoke.The study adopted mixed method as the research design ,the study area was Federal University Otuoke and the population was students and lecturers of Federal University Otuoke, Multi-stage sampling method was adopted which includes cluster and simple randomization sampling technique, questionnaire and interview was adopted for data collection .results showed that AI was extensively used by students and lecturers of federal University otuoke , and the students are active in a number of the AI platforms but more active on ChatGPT, also the result showed that there is a significant relationship between AI opportunities and AI usage among students of Federal University Otuoke, it is recommended that that as much as AI is beneficial in enhancing learning and research ,it is also imperative for them to encourage independent thinking , AI should be seen as only a means to enhance more effectiveness in research and not the ultimate thinking machine , and they should endeavor to humanize whatever information they get from AI

Introduction

Artificial Intelligence is a revolution in the academic sector, it has brought about a new dimension in the area of teaching , learning , research , report writing. Artificial intelligence (AI) has revolutionized various domains, and education is no exception. With the potential to enhance learning experiences, personalize education, and provide intelligent tutoring, AI has garnered significant attention in educational settings. However, the successful integration of AI in education relies on understanding students' perceptions and attitudes towards this emerging technology
The main crux of this paper to examine the perception of about the usage of AI in relation to effective performance in teaching and learning among lecturer and students of Federal University Otuoke , this is necessary because like other students across the world , there has been increase in awareness about the capability of AI , and lecturers has experienced increase its usage among students ,and like any other system ,AI could be misused ,hence its imperative for scholars to understand AI in Federal University Otuoke in its various dynamics ,as opined by HalaMahmod , Samer, Basem . Abunasser, Samy Abu-Naser (2023) Understanding students' perceptions is crucial for successful implementation. Positive perceptions can drive enthusiasm and engagement, while negative perceptions can hinder adoption and acceptance. By exploring students' perceptions, we can identify potential barriers and concerns, allowing educators and policymakers to address them effectively.

Research Objectives

The general objectives of the study is to examine the perception of Ai use onusage of students in Federal University Otuoke ,while the specific objectives are :

1. to check the extent of AI use among students and lecturers of Federal University Otuoke
2. to investigate the perception of students and lecturers of Federal University Otuoke
3. to find the impact of AI on usage among students and lecturers of Federal University Otuoke.

Research Questions

1. What is the extent of the use of Ai among students and lecturers of the Federal University Otuoke
2. What is the perception about AI among students and Lecturers of the Federal University Otuoke

Research Hypothesis

1. There Is a significant relationship between AI opportunities and AI usage among students of Federal University Otuoke.

Literature Review

The range of benefits for AI-human collaboration possibilities is sensed by professionals, experts, and everyday citizens and emphasized by the popular literature making far-reaching promises (Maheshwari, 2023). However, the ability to deploy these imagined opportunities into specific opportunities for an individual is somewhat dependent on an individual's AI literacy (Almatrafi et al., 2024). That is, users and organizations must understand the AI tool, at least at a basic level, to prompt the technology for a particular use.

A recent literature review suggested that this AI literacy sequences through six levels: (1) recognize, (2) know and understand, (3) use and apply, (4) evaluate, (5) create, and (6) navigate ethically (Almatrafi et al., 2024). That is, awareness and recognition of benefits precede the knowledge of particular opportunities to the user. The educational landscape expects to be transformed by human-AI collaboration, with the literature and use cases growing exponentially (Acosta-Enriquez et al., 2024; Bao et al., 2023). The range of potential benefits of AI in higher education includes many aspirational goals, such as personalized learning support, diverse learner access, increased student attention, automation of repetitive tasks, digital library services, and better student retention with lower cost and time to completion (Bates et al., 2020; Chan & Hu, 2023; Kuleto et al., 2021; Rawas, 2024; Slimi& Beatriz VillarejoCarballido, 2023). Literature has begun to share educational cases for AI use. For instance, AI can help students improve their presentation, especially those presenting with English as a second language (J. Chen et al., 2023). Teachers can be freed from tedious tasks such as error analysis, personalized weakness summaries, collection of learning resources, developing learning plans, and homework correction (Niu et al., 2024). While the potential use cases are compelling, student interaction with AI in education has been more limited so far, perhaps stemming from low levels of students' knowledge about the benefits of AI (Surugiu et al., 2024).

Unfortunately, current practices use very little of AI's potential in student-centered ways, such as optimizing class schedules, solving financial aid roadblocks, customizing the pace of learning, and providing feedback (Kuleto et al., 2021), potentially due to concerns about privacy, reliability, bias, and student plagiarism (Michel-Villarreal et al., 2023; Slimi& Beatriz VillarejoCarballido, 2023). While the literature is growing, most studies have centered on helping teachers and administrators find use cases and minimize risk, with little attention to student voices about the benefits and opportunities of AI in education (Niu et al., 2024).

The high level of interactivity and personalization with AI in education attracts students (Kuleto et al., 2021). AI technology's advanced conversational skills convert a student device into a personal tutor, generate useful feedback on drafts, and level the playing field for non-English speaking students (Michel- Villarreal et al., 2023). "AI educators" may be a sustainable way to address many students' needs that would have been too high a burden for human instructors. College students can often recognize their learning needs, making them mature enough to prompt an AI tool and direct their progress (Niu et al., 2024).

Perceptions of AI in Education

Several studies have examined students' perceptions of AI in education, revealing a range of attitudes, beliefs, and expectations. In a study by Smith and Johnson (2019), students expressed excitement and interest in AI, perceiving it as a tool that can enhance their learning experience, provide personalized assistance, and make education more engaging. Similar findings were reported by Johnson et al. (2020), who found that students appreciated AI-powered educational platforms for adaptive learning and instant feedback.

Benefits of AI in Education

The literature indicates various perceived benefits of AI in education as identified by students. Personalization and individualized learning are consistently highlighted as significant advantages. AI systems can adapt to students' unique needs, pace, and learning styles, providing tailored content and recommendations (Li & Dede, 2021). Students recognize the potential of AI to enhance their understanding of complex concepts, reinforce their knowledge, and promote self-directed learning (Wang et al., 2020).

Concerns and Challenges

While students generally view AI positively, there are concerns and challenges associated with its integration in education. Job security is a common worry, with some students fearing that AI advancements may replace human teachers or reduce the demand for certain professions (Li & Dede, 2021). Ethical considerations and privacy concerns also emerge, as students raise questions about data security, algorithmic bias, and the potential for misuse of AI-generated content (Wang et al., 2020).

Impact on Learning Experience and Skill

Students perceive AI as a technology that can positively impact their learning experience. They believe that AI can make learning more interactive, dynamic, and tailored to their needs (Smith & Johnson, 2019). However, concerns are raised about over-reliance on AI, potentially leading to a decrease in critical thinking skills and a dependence on algorithmic recommendations without fully understanding the underlying concepts (Johnson et al., 2020). 4.6 Variations in Perceptions: The literature suggests that students' perceptions of AI in education may vary based on demographic factors.

Age, gender, and academic background can influence attitudes and expectations. For example, younger students tend to exhibit greater enthusiasm towards AI, while older students may have more concerns about its impact on traditional teaching methods (Li & Dede, 2021). Additionally, variations in perceptions across cultural contexts and socioeconomic backgrounds should be considered for a comprehensive understanding.

Method

The study adopted the mixed method as the research design, this involves the use of quantitative and qualitative research designs, this is done in other to give a clearer insight into the subject matter of the study.

Study Area

The study are for the study is the federal University Otuoke , an institution established in 2012 ,with about 52 departments that cut across faculties of Social Sciences ,Sciences ,Humanities , Education ,Medical Science , Engineering ,Management Sciences and Law.

Population

The population of the study will be lecturers and Students of the Federal University Otuoke, the population of students is 528, while the population of students is 13,357(full time students, this excludes part time, post graduates students and studies in the remedial studies)

Sample /sampling Technique.

The study will used multi-stage sampling technique in selecting the participants for the study ,which involves clustering sample technique and simple randomization , Clustering sampling technique was adopted in putting them into clusters ,in was done in line of departments and faculties , while simple randomization was adopted to select the final participants ,this gave the participants equal opportunity to be part of the study. In the final analysis, 20 students were pick across the seven faculties (Law of was not included) which makes a total of 140 participants, while one lecturer was selected in each of the faculty.

Data Collection

In collecting the data for the study, key informant interview was adopted for the qualitative aspect while a self-developed questionnaire was adopted to collect data for the quantitative aspect, a pilot study was conducted to ascertain the validity and reliability for the questionnaire and a Cronbach Alpha reliability of 0.67 was found which found it reliable .

Data Analysis

The study used simple percentage and content analysis to analyze data that was collected for the study.

Results

Demographic Information

Table 1: Showing the types of Academic AI use by students in Federal University Otuoke

Type of AI	Number	Percentage
Elicit	26	18.5%
Grammarly	34	24%
Paperpal	21	15%
QuillBot	22	15.7%
ChatGPT	60	42%

Table 2: Showing the benefits Perceived Benefits of AI Usage among Students of Federal University Otuoke

Benefit	Frequency	Percentage
Enhanced learning experience	53	37.8%
Improved research capabilities	37	26%
Personalized learning	39	27.8%
Research assistance	52	37%
Improved time management	32	22%

Table 3: ANOVA Table - AI Usage

		Sum of Squares	df	Mean Square	F	Sig.
Benefits * AI Usage	Between Groups	41.278	4	10.319	23.617	**<.001**
	Within Groups	200.125	458	.437		

AI Opportunities * AI Usage	Total	241.403	462			
	Between Groups	76.875	4	19.219	34.882	**<.001**
	Within Groups	252.340	458	.551		
	Total	329.215	462			

The test of homogeneity of variances for both AI benefits and AI opportunities was p < .001, indicating that variances are equivalent between the groups. The results of the ANOVA indicated significant group differences for the independent variable of *AI usage* and the dependent variables of AI benefits ($F_{4, 458}$ = 23.617p <.001) and AI opportunities ($F_{4, 458}$ = 34.882 p <.001). For AI benefits and AI opportunities, students who were extremely likely to use AI tools in a typical week scored significantly higher than other groups.

Interview conducted by the researcher shows lecturers believe that students are grossly misusing AI , a lecturer in the faculty of Social Science , StanelyBoroh*said " students no longer think , rather they depend on AI to do assignments and even write projects"*

Raimi Lasisi further gave credence to the assertion, he said "students *using AI is not the real challenge, but my worries is student sacrificing their capacity to think independently, which for kills creativity and the students also fail to humanize it too"*

Another lecturer from the Department of Business Administration, AsaoluLekan , said *" students have abused the use of AI , how will students write exams , and what a lecturer will be reading is AI language , that implies that the student actually brought a phone inside the exam hall,AI generally kills creativity among students"*

Conclusion

From the outcome of the results ,it can be concluded that ,there are mixed feelings about the perception of AI usage among students and Lecturers of Federal University Otuoke, while students feels that AI has facilitated their learning and research endeavors ,lecturers believe that although AI is beneficial but it has been grossly misused by students ,it has taken away their ability to think abstractly and independently .

Recommendation

Based on the outcome of the study the following are recommended

For the students

It is recommended that as much as AI is beneficial in enhancing learning and research ,it is also imperative for them to encourage independent thinking , AI should be seen as only a means to enhance more effectiveness in research and not the ultimate thinking machine , and they should endeavor to humanize whatever information they get from AI

For Lecturers

It is recommended that lecturers should tutor the students in the area of positive application of the benefits of AI , students should thought not be criminal in the usage of AI

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