PERCEPTIONS OF STUDENTS AND LECTURERS ON THE ROLE OF ARTIFICIAL INTELLIGENCE IN STUDENTS' PERFORMANCE EVALUATION IN HIGHER INSTITUTIONS IN KWARA STATE

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Abstract

This study explored the perceptions of students and lecturers on the role of artificial intelligence in students' performance evaluation in a selected higher institution in Kwara State. The study utilised a descriptive survey research design with asample of 254 respondentsdrawn using stratified random sampling technique. A structured self-designed questionnaire titledwas used to collect data. The instrument was validated by three specialists in the Department of Educational Technology and Measurement and Evaluation, while a pilot research generated a reliability coefficient of 0.89, showing strong internal consistency. Mean and standard deviation were utilised to answer the research questions. The findings demonstrated that both students and instructors held good attitudes regarding the employment of AI in performance evaluation. Respondents strongly agreed that AI offers tailored feedback (M = 3.50), accessible learning resources (M=3.41), enhanced academic emotions (M = 3.71), collaborative creativity (M=3.37), and improved assessment effectiveness. The study indicated that AI offers tremendous potential to improve students' performance evaluation through better efficiency, accessibility, personalisation, and learning support. It was recommended, among others, that higher institutions provide adequate training for lecturers and students on the effective use of AI toolsin educational assessment.

Keywords: Artificial Intelligence, Student Assessment, Performance Evaluation, Higher Education, Educational Assessment.

Introduction

Perception is an individual's interpretation, understanding, or evaluation of a particular phenomenon based on experiences, beliefs, attitudes, and knowledge. In educational research, perception refers to the way students, teachers, and other stakeholders view, interpret, and respond to educational innovations, policies, or practices. According to Ajzen (1991), perceptions influence attitudes, intentions, and behavioural responses toward new technologies and innovations. Similarly, Davis (1989) explains that users' perceptions regarding the usefulness and ease of use of a technology significantly determine its

acceptance and utilization. In the context of Artificial Intelligence in education, the perceptions of students and lecturers are particularly important because they determine the level of acceptance, trust, adoption, and effective use of AI-driven assessment systems. Positive perceptions may encourage the integration of AI technologies into teaching and evaluation practices, while negative perceptions may hinder their implementation and acceptance. Therefore, understanding how lecturers and students perceive the role of Artificial Intelligence in students' performance evaluation is essential for successful adoption and effective utilization of these emerging technologies in higher education institutions.

In recent years, artificial intelligence (AI) technologies have been developed and applied widely in education, learning, and evaluation. Many tools and techniques utilised in evaluation processes, such as deep learning and machine learning techniques, are based on artificial intelligence (AI) (Owan*et al*., 2023). Routine synchronous and asynchronous tasks, such analysing written work or test results, often incorporate AI for assessment and evaluation (Yağcı, 2022). By employing algorithms or neural networks to accomplish tasks requiring cognitive behaviour, AI can aid in the examination of massive amounts of educational data. Using AI to give more accurate educational assessments has a number of benefits (Hamon*et al.,* 2022).

Using AI to continuously enhance educational evaluations can help develop educational measurements that are more in line with the changing requirements of a growing range of educational processes and activities (George, 2023). Modern societies are growing increasingly reliant on new technologies, where either machines or human-centered technology-based activities dominate educational processes, outside of more conventional and permanent formal and structured educational institutions (such as schools and universities) (George, 2023; Holmes et al., 2019). In this context, a diversity of teaching, learning, and instructional design alternatives within the rapidly growing activities of remote education are creating an increasing need for educational evaluations. Automatic grading systems, interval reminders, teacher feedback, virtual teachers, personalised learning, adaptive learning, augmented reality/virtual reality, precise reading, intelligent campuses, and distance learning are just a few of the ten areas in which AI technology has been used in education (Yufeia*et al*. 2020).

Furthermore, AI technologies promote accessibility, inclusivity, and equity in educational practices by providing affordable digital alternatives to conventional evaluation methods. By producing adaptable learning activities, developing realistic assessment situations, and promoting engagement through individualised instructional support, intelligent systems can assist both students and teachers (Kasneci*et al*., 2023). These technologies also make it possible to create a variety of question forms, such as scenario-based, analytical, and problem-solving questions that evaluate higher-order thinking abilities and the practical application of knowledge (Holmes *et al*., 2022).

In particular, higher education institutions are increasingly utilising AI tools to enhance their administrative, teaching, and learning procedures. One of the primary applications of AI in education is the assessment of student performance. Exams, assignments, and standardised tests have long been used to evaluate students' performance; yet, these approaches can require teachers to devote a substantial amount of time and effort to them. However, the addition of AI tools has made the process more efficient, customised, and data-driven, enabling teachers to make well-informed decisions on learning objectives and student development (Wu, 2025). AI systems use a range of technologies, including machine learning algorithms, natural language processing, and predictive analytics, to assess student performance. These systems analyse large databases related to student behaviour, academic

performance, and engagement levels in order to provide prompt feedback and customisedrecommendations (Kim *et al*., 2022). Institutions that use these technologies have the potential to change how assessments are conducted as well as how teachers help various students achieve their academic goals.

Artificial intellect (AI) refers to the capability of computer systems to execute tasks that traditionally require human intellect, including learning, reasoning, problem-solving, decision-making, natural language processing, and pattern recognition (Russell &Norvig, 2021). AI comprises a wide range of technologies such as machine learning, deep learning, neural networks, expert systems, natural language processing, and predictive analytics. These technologies let computers to examine vast volumes of data, detect patterns, produce insights, and perform tasks with minimum human participation.

In higher education, AI is increasingly being integrated into teaching, learning, administration, and evaluation procedures. AI-powered solutions are utilised to customise learning experiences, automate administrative duties, provide intelligent tutoring, monitor student progress, and simplify educational decision-making (Zawacki-Richter *et al*., 2019). The introduction of generative AI technologies such as ChatGPT, Gemini, Claude, and Copilot has further altered educational practices by offering learners and instructors with quick access to information, feedback, and content generating capabilities (Kasneci*et al*., 2023).The expanding usage of AI in education is driven by its promise to improve efficiency, accuracy, accessibility, and student engagement.

On the other hands, students' performance evaluation refers to the systematic process of gathering, evaluating, and interpreting information regarding learners' knowledge, abilities, competences, attitudes, and academic achievements for the goal of making educational decisions (Brown & Knight, 1994). Assessment serves as a vital component of the teaching and learning process because it offers evidence of learning outcomes and informs instructional improvement. Educational evaluation normally occurs in two forms: formative and summative assessment. Formative assessment is completed during the learning process to provide feedback that helps improvement, while summative assessment examines learning outcomes at the end of a course, programme, or instructional time (Black &Wiliam, 2009). Traditional techniques of performance evaluation include written tests, assignments, quizzes, presentations, practical exercises, projects, and classroom observations.In higher education institutions, effective performance evaluation serves various functions. It helps identify students' academic achievement, gives feedback for learning improvement, encourages accountability, influences curriculum creation, and supports quality assurance programs (Biggs & Tang, 2011).

Artificial Intelligence plays a vital part in current educational assessment by boosting the accuracy, efficiency, consistency, and responsiveness of performance evaluation systems. One of the most significant applications of AI in assessment is automated grading, which enables educational institutions to analyse objective questions, essays, and assignments with better speed and consistency than traditional manual approaches (Luckin*et al.,* 2016). AI also provides individualised feedback by assessing individual student performance and offering specific recommendations for development. Personalised feedback helps learners discover strengths and limitations, hence facilitating self-regulated learning and academic improvement (Chen *et al.,* 2020). Unlike conventional assessment systems that frequently provide delayed feedback, AI-powered platforms can deliver immediate responses that foster continuous learning.

Another major role of AI is predictive analytics. Through the examination of historical and real-time learning data, AI systems can detect students at risk of poor academic

performance and offer appropriate interventions. This competence promotes educational decision-making and adds to enhanced student retention and achievement. AI also helps adaptive assessment, where test difficulty and material are automatically altered based on learners' replies and performance levels. Such adaptive systems provide more accurate evaluations of student abilities and create tailored assessment experiences. Despite these benefits, AI-driven assessment also brings obstacles. Scholars have emphasised issues surrounding algorithmic bias, transparency, fairness, data security, privacy, and the potential degradation of human judgement in educational evaluation (Holmes *et al.,* 2022). Therefore, successful implementation demands a balance between technological innovation and ethical responsibility.

Numerous studies have studied the application of Artificial Intelligence in educational contexts. Zawacki-Richter *et al*. (2019) conducted a thorough assessment of AI applications in higher education and concluded that AI technologies considerably improved personalised learning, administrative efficiency, and educational support services. However, the review observed that studies focusing explicitly on assessment procedures remained very scarce.

Chatterjee and Bhattacharjee (2020) researched AI adoption in higher education institutions and reported that perceived utility and technological maturity strongly influenced stakeholders' acceptance of AI technologies. The study further demonstrated that AI-supported evaluation tools boosted feedback quality and learning effectiveness. However, the research focused primarily on institutional adoption rather than users' opinions of evaluation efficacy.

Almaiah*et al.* (2020) evaluated factors impacting educational technology adoption and found that accessibility, technological infrastructure, and user competency greatly affected successful implementation. Their findings underscored the importance of supportive conditions in determining the success of technology-enhanced educational methods. Kasneci*et al.* (2023) studied the implications of generative AI technologies in education and reported that systems such as ChatGPT could support customised learning, automated feedback, and academic writing aid. Nevertheless, worries over academic integrity, disinformation, and overdependence on AI were noted as important challenges.

Chaka (2023) studied students' perspectives of generative AI in higher education and found generally positive sentiments towards AI-assisted learning and evaluation. Students rated AI as effective for boosting learning efficiency, creativity, and academic performance. However, ethical issues and fears of technological dependence were also noted. Similarly, Al-Emran*et al*. (2023) evaluated AI adoption in educational institutions and concluded that perceived utility, simplicity of use, and institutional support greatly impact acceptance. The report advised further research into stakeholders' opinions of AI-based assessment systems.

Although past studies have given useful insights regarding AI adoption and educational technology, some gaps remain visible. First, much of the existing studies focuses on AI adoption, instructional effectiveness, or learning outcomes rather than the efficacy of AI in students' performance evaluation. Second, many studies highlight technological skills while paying scant attention to lecturers' and students' perspectives. Third, empirical information from developing-country contexts remains rather limited. Consequently, this study tries to fill these gaps by investigating lecturers' and students' perspectives of the efficacy of Artificial Intelligence in students' performance evaluation within higher education.

Therefore, this study is primarily grounded on the Technology Acceptance Model (TAM), developed by Davis (1989), and Unified Theory of Acceptance and Use of

Technology (UTAUT). Technology Acceptance Model remains one of the most popular models for describing individuals' embrace and application of technology breakthroughs. The concept developed from the Theory of Reasoned Action (TRA) proposed by Fishbein and Ajzen (1975) and was specifically created to explain users' behavioural intentions towards information technology systems. Since its development, TAM has been extensively applied in studies investigating the adoption of educational technologies, e-learning systems, artificial intelligence applications, digital assessment platforms, and other technology-enhanced learning environments (Al-Emran*et al*., 2020).According to Davis (1989), technology acceptability is essentially controlled by two cognitive beliefs: perceived usefulness and perceived ease of use. The theoretical assumption behind TAM is that people are more likely to embrace and employ a technical system when they see it as beneficial, efficient, and easy to run. Consequently, the success of any technical breakthrough rests significantly on users' positive opinions and acceptance of the technology.

The Unified Theory of Acceptance and Use of Technology (UTAUT) was established by Venkatesh*et al*. (2003) to provide a more comprehensive explanation of technology adoption behaviour. The theory includes essential constructs from eight prominent technological adoption theories, including TAM, the Theory of Planned Behaviour, the Innovation Diffusion Theory, and the Motivational Model.According to UTAUT, technology acceptance and usage behaviour are influenced by four primary determinants: performance expectancy, effort expectancy, social influence, and facilitating factors (Venkatesh*et al.,* 2003). UTAUT is particularly relevant to the current study because AI adoption in educational evaluation extends beyond individual views and is influenced by institutional, technological, and societal variables.

Methodology

This study adopted a descriptive survey research design to investigate the perceptions of students and lecturers on the role of Artificial Intelligence (AI) in students' performance evaluation in higher institutions in Kwara State. The descriptive survey design was considered appropriate because it enables the collection of data from a relatively large group of respondents regarding their opinions, perceptions, and attitudes toward a particular phenomenon.The population of the study comprised 4,500 students and lecturers drawn from the selected higher institution in Kwara State. The population included both students and lecturers because they are the principal users and stakeholders of AI-driven assessment practices within higher education institutions.To select the respondents, a stratified random sampling technique was employed. The population was first divided into two strata, namely students and lecturers, after which respondents were randomly selected from each group to ensure adequate representation and reduce sampling bias.A sample size of 254 respondents, consisting of 224 students and 30 lecturers, was then selected. Data were collected using a structured self-designed questionnaire titled *Artificial Intelligence and Students' Performance Evaluation Questionnaire (AISPEQ)*. The instrument was developed based on an extensive review of literature relating to Artificial Intelligence, educational assessment, technology acceptance, and students' performance evaluation.The questionnaire consisted of three sections. Section A elicited respondents' demographic information such as status (student or lecturer), gender, and educational level. Section B contained items measuring respondents' perceptions of the role and effectiveness of Artificial Intelligence in students' performance evaluation, including personalised feedback, learning outcomes, accessibility, inclusiveness, creativity, engagement, and academic emotions as well as items relating to the challenges associated with AI-based assessment, including performance anxiety, digital divide, overdependence on technology, ethical concerns, and privacy issues.The questionnaire items

were structured on a four-point Likert-type scale as follows: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (D) = 2, and Strongly Disagree (SD) = 1.

The instrument was subjected to face and content validation by three experts from the Departments of Educational Technology and Measurement and Evaluation. Their observations and recommendations regarding clarity, relevance, and appropriateness of the items were incorporated into the final version of the instrument.To establish the reliability of the instrument, a pilot study was conducted among respondents outside the study area who possessed characteristics similar to those of the actual participants. The responses obtained from the pilot study were analysed using the Cronbach Alpha reliability method, which yielded a reliability coefficient of 0.89, indicating that the instrument possessed a high degree of internal consistency.

The researchers, with the assistance of two trained research assistants, administered 254 copies of the questionnaire to the selected respondents. All copies were successfully retrieved, resulting in a 100 percent response rate.Data collected were analysed using descriptive statistics. Mean and standard deviation were employed to answer the research questions. The following decision rule was adopted for the interpretation of the mean scores:

a. 3.25–4.00 = Strongly Agree
b. 2.50–3.24 = Agree
c. 1.75–2.49 = Disagree
d. 1.00–1.74 = Strongly Disagree

Findings and Discussion

This section presents the results and findings of the questionnaires administered on the sampled respondents.

Table 1: Mean and standard deviation of responses on the Perceptions of lecturers and students on the role of AI in students' performance evaluation in higher education institutions.

S/N	ITEMS	MEAN	SD	REMARK
1	Over-reliance on AI	3.42	0.86	Strongly Agree
2	Accessible Learning Resources	3.41	0.89	Strongly Agree
3	Personalized Feedback	3.50	0.79	Strongly Agree
4	Performance Anxiety	3.80	0.71	Strongly Agree
5	Collaborative Creativity	3.37	0.90	Strongly Agree
6	Enhanced Academic Emotions	3.71	0.73	Strongly Agree
7	Digital Divide	3.25	0.92	Strongly Agree
8	Technical Frustration	3.56	0.81	Strongly Agree
9	Emotional Support	3.34	0.62	Strongly Agree
10	Creativity Constraints	3.71	0.87	Strongly Agree
11	Emotional Disengagement	3.01	0.91	Agree

12	Stimulated Creativity	3.09	0.78	Agree
13	Ethical Concerns	2.89	0.81	Agree
14	Increased Engagement	2.98	0.91	Agree
15	Stress Levels	2.91	0.94	Agree
	Average Mean	**3.33**	**0.83**	**Strongly Agree**

Source: Field Survey, 2025

The views of the lecturers and students about the use of artificial intelligence (AI) in evaluating student performance in higher institutions are shown in the table 1 above. The findings show that, on a 5-point rating scale, all items had mean ratings between 3.25 and 3.80, falling into the "Strongly Agree" category. While the average standard deviation of 0.83 indicates that responses were consistent among participants, the overall mean of 3.50 shows that lecturers and students have very good opinions about AI's role in performance evaluation.

Regarding specific perceptions, performance anxiety had the highest mean score (3.80), suggesting that respondents are aware that students may experience some worry while using AI-driven evaluation tools because of their accuracy, impersonality, or perceived lack of human empathy. However, this worry coexists with a great appreciation of the advantages of AI. For instance, items on accessible learning resources (M = 3.41) and personalized feedback (M = 3.50) show that participants see AI as a useful tool for guaranteeing that learning materials are more easily accessible and for offering tailored help. This implies that people believe AI will improve evaluation procedures' inclusivity and flexibility.

Furthermore, opinions on improved academic emotions (M = 3.71) and collaborative creativity (M = 3.37) demonstrate that respondents think AI can promote motivation, engagement, and teamwork when appropriately incorporated into instruction and assessment. These results provide an understanding of how AI may foster dynamic and engaging learning environments. In the meantime, agreement on the digital divide (M = 3.25) and over-reliance on AI (M = 3.42) demonstrates the respondents' knowledge of potential disadvantages, especially the risk of relying too much on technology or excluding students with limited access to digital resources.

Generally, the table's perception pattern indicates that while both teachers and learners acknowledge the ethical, emotional, and accessibility issues that AI presents, they also see it as a transformative tool in performance evaluation that improves feedback, efficiency, and learning outcomes. A balanced but upbeat view of AI integration in higher education evaluation systems is highlighted by the high degree of agreement across items.The results show that instructors and students have very positive opinions about the use of artificial intelligence (AI) in evaluating students' performance in higher education. The total mean score of 3.50 shows that respondents had a generally positive attitude toward AI-driven evaluation systems, indicating that they see AI as a crucial breakthrough that can improve assessment efficiency, fairness, and customisation. A common conviction in the transformative potential of AI in educational evaluation is seen in the comparatively low standard deviation (0.83), which suggests that the participants' opinions were consistent and grouped closely around the mean.Examining the individual elements in more detail provides crucial information about how instructors and students view AI's impact on the assessment

process. Performance anxiety had the highest mean score (3.80), indicating that although participants value AI's contribution to increased assessment accuracy, they also recognize that automated systems may cause stress or anxiety in pupils. This view is consistent with the findings of Amornkitpinyo*et al.* (2021) and Rane (2024), who pointed out that because AI-mediated evaluations are impersonal and give the impression of continuous monitoring or algorithmic judgment, they can increase emotional stress. In order to preserve empathy and emotional support in learning environments, such considerations underscore the need for a balanced approach where AI tools supplement human evaluative judgment rather than replace it.

Additionally, respondents strongly believed that AI encourages accessible learning resources (M = 3.41) and tailored feedback (M = 3.50). These results show that AI is viewed as a potent enabler of customized learning experiences by both instructors and students. According to Kim *et al.* (2022) and Johnson and Smith (2019), AI's capacity to evaluate large datasets enables it to produce targeted feedback and modify exams to students' unique requirements. In a similar vein, as AI can offer content to students in a variety of contexts and learning styles, more access to digital resources through AI systems promotes equity in learning chances. This view emphasizes how inclusive AI can be when it is appropriately included into educational settings.

Another notable finding is the high agreement on items relating to enhanced academic emotions (M = 3.71) and collaborative creativity (M = 3.37). This suggests that respondents believe AI can foster emotional engagement, curiosity, and creativity when used interactively in assessment contexts. The work of George (2023) and Holmes *et al*. (2022) supports this perspective, noting that AI can facilitate innovative learning environments where assessment becomes a process of collaboration and discovery rather than mere judgment. These findings affirm that both students and lecturers view AI not only as an evaluative tool but also as a catalyst for creativity, reflective learning, and emotional investment in academic tasks.

Respondents, however, also strongly agreed with assertions about the digital divide (M = 3.25) and an excessive dependence on AI (M = 3.42). This shows that the application of AI in performance evaluation may provide certain difficulties. Participants acknowledged that an over-reliance on AI tools could undermine human judgment, creativity, and interpersonal contact in evaluation. Concerns regarding the digital gap also stem from worries that unequal access to technology could worsen educational disparities, particularly in situations where infrastructure and digital literacy are still uneven. These opinions align with research by Williamson (2017) and West and Allen (2022), who cautioned that concerns about algorithmic bias, fairness, and access could jeopardize the moral and egalitarian application of AI in education.

In conclusion, the results show that both instructors and students view AI as a double-edged innovation, a technology with great promise to improve engagement, fairness, and personalization in performance evaluation, but one that necessitates cautious regulation and ethical protections. While noting the necessity for human oversight, equal access, and emotional sensitivity in its application, the general impression is still positive, highlighting hope about AI's place in contemporary evaluation. These results corroborate the idea that attaining a balanced integration that blends technical efficiency with human-centered teaching would be essential to the success of AI in educational evaluation.

Conclusion

Based on the outcomes of the study, it can be inferred that lecturers and students typically regard Artificial Intelligence as an effective instrument for students' performance

evaluation in higher education. The study established that AI contributes greatly to enhancing the assessment process through greater accuracy, efficiency, consistency, and objectivity. The findings further demonstrated that AI offers customised and timely feedback, hence helping students detect learning gaps, improve academic performance, and achieve better learning outcomes. However, the successful integration of AI into educational assessment requires adequate technological infrastructure, digital literacy training, institutional support, and appropriate ethical safeguards to ensure that its benefits are maximised while its associated challenges are effectively managed.

Recommendations

In view of the findings of this study, the following recommendations were made:

1. Comprehensive training: Institutions should implement training programs for both educators and students to foster a thorough understanding of AI tools and their proper use.

2. Clear guidelines and validation protocols: Establish robust standards for AI deployment that include the regular validation of AI-generated information and clear guidelines to prevent over-reliance on technology.

3. Ethical and privacy considerations: Develop and enforce policies to protect students' data and mitigate potential biases in AI systems.

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