Business Excellence and Management
Volume 15 Special Issue 5 / 2025

# ASSESSMENT OF FACILITATORS' STRATEGIES FOR MANAGING ARTIFICIAL INTELLIGENCE CHALLENGES IN HIGHER EDUCATION ASSESSMENT AND EVALUATION IN TANZANIA

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**Abstract**
Adoption of Artificial Intelligence (AI) by higher learning institutions is transforming the processes of assessment and evaluation worldwide. In Tanzania, while there are documents and policies such as the Tanzania Development Vision 2025 (Government of Tanzania, 1999), the Education and Training Policy (Ministry of Education and Vocational Training, 2014), and the National ICT Policy (Ministry of Communications and ICT, 2003) that recognize the impact of technology on education, direct guidance on AI integration into assessment is not available. This study explores how facilitators in Tanzanian institutions of higher learning cope with challenges introduced by AI during assessment and evaluation. Documentary review and Semi-structured interviews was conducted with twelve purposively sampled facilitators in selected Higher Learnings Institution in Tanzania. The findings from the study revealed that the facilitators value AI because it is efficient and objective but face problems like plagiarism, unauthorized use of AI, and institutional lack of guidelines. Technical tools, pedagogical adjustments, and reliance on personal judgment are the coping mechanisms applied. The research recommends open policies discussions, capability building, and infrastructure support to enable ethical and effective use of AI.
**Keywords:** Artificial intelligence (AI), Higher education, Education policy, Tanzania, Digital transformation.
**DOI:** https://doi.org/10.24818/beman/2025.S.I.5-18

## 1. INTRODUCTION

Artificial Intelligence (AI) has changed the way the world educates and has revolutionized the assessment and evaluation process significantly (Al-khresheh, 2024; Alwaqdani, 2025). In colleges and universities of higher education, AI-driven technologies such as automatic marking systems, adaptive assessment tools, plagiarism detection software, and text generation software have been implemented for their potential to

enhance efficiency, fairness, and scalability (Dimitriadou & Lanitis, 2023; Hwang & Tu, 2021). These technologies allow lecturers to handle large classes, provide prompt feedback, and minimize human bias in grading. At the same time, the same technologies create ethical and pedagogical issues. Relying on AI to generate essays, solve assignments, and undertake examinations increases the challenge in maintaining authenticity and originality of academic work, thus compromising the credibility of assessment outcomes (Anshari et al., 2025). This paradox wherein AI brings opportunity and danger has made assessment and evaluation the most contentious sector of higher learning.

The global controversy regarding AI in higher education reflects the tension between innovation and integrity. In high-resource settings, universities are piloting innovative tests that emphasize creativity, problem-solving, and real-world application of knowledge to minimize dependence on AI (Amin, 2023; Chen, 2023; Nikolic et al., 2023; Oliveira et al., 2024). Meanwhile, there are concerns still about data privacy, unfair access to resources for AI, and over-automating teaching and testing. Global organizations such as UNESCO have made calls for policies that balance the adoption of AI with measures for fairness and equity in education (UNESCO, 2023). Although there have been such debates, most frameworks remain theoretical, with very little practical guidance on how facilitators or lecturers are supposed to adapt assessment to be robust against AI-induced disruptions. Such a lacuna stresses context-specific research, particularly in nations whose capacities in institutions vary significantly.

In the case of Sub-Saharan Africa, the use of AI in education is both a challenge and an opportunity. The vast majority of universities are faced with systemic issues, including a lack of digital infrastructure, underfunding, constrained technical capacity, and unbalanced access to learning technology (Ahmad Malik et al., 2025; Butcher et al., 2021; Odoh et al., 2024). These pose the threat of AI making education more unequal between students with access to and the ability to use such technology and students without. But there is growing momentum across African countries to embrace digital transformation of higher learning because of the global knowledge economy and regional aspirations for innovation-led growth. South African, Kenyan, and Nigerian universities are piloting AI-driven plagiarism detection and online test technology, although institutional-level responses are patchy and irregular (Obi & Ojo, 2025). For Tanzania, in investing to expand its higher education, these regional patterns hold lessons and warning signals.

Tanzania is a fascinating case because it is simultaneously pursuing both its expansion of higher education and digitalization (Machemba & Biswal, 2024; Ponera & Madila, 2024; Sarakikya & Kitula, 2024). National policy strategies, including the Tanzania Development Vision 2025, the Education and Training Policy, and the National ICT Policy, all recognize the importance of technology for changing education (URT, 1999, MoEVT, 2014, ICT Policy 2013). While such policies issue calls for digital learning and ICT integration, there are no specified standards or guidelines for the use of AI in educational



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evaluation and assessment contained in these documents. Therefore, institutions and facilitators have no choice but to interpret AI implications on their own. In the absence of a coordinated national policy, lecturers employ institutional regulations, professional judgment, and standard approaches to deal with AI issues such as plagiarism, abusive use of generative tools, and compromised examination integrity. Decentralization leads to inconsistency across institutions, something that is an issue in terms of fairness and quality assurance in the national higher education system.

Facilitators therefore play a critical role in determining how AI impacts assessment practice within Tanzanian higher education institutions. They not only have the responsibility to identify and forestall academic dishonesty but also to formulate fresh strategies that uphold integrity while advancing quality learning. What they believe, perceive, and act upon determines the degree to which AI-related hazards are being addressed at the classroom level. But while their crucial role is clearly established, few empirical studies exist on Tanzanian facilitators' perceptions of AI and what specific strategies they use in their assessment practice. The study fills this gap by examining national policy papers, existing research work, and institutional practice to establish how Tanzanian facilitators are dealing with challenges caused by AI. Specifically, the paper critically has examined existing education and ICT policies in Tanzania and assess the extent to which they address challenges related to the integration of AI in assessment and evaluation; identify and evaluate the strategies that facilitators employ in higher learning institutions to mitigate AI-related challenges in assessment and evaluation practices and finally, it explores facilitators' perceptions, attitudes, and experiences regarding the use and impact of AI in educational assessment and evaluation processes. In the process, it underscores the imperative necessity for policy reform, institutional backing, and capacity-building initiatives to ensure that AI is deployed ethically and effectively in higher education evaluation and assessment.

## 2. THEORETICAL FRAMEWORK

### 2.1 Constructivist Learning Theory

Constructivist Learning Theory, which is guided by scholars such as Jean Piaget and Lev Vygotsky, maintains that learners construct knowledge actively rather than passively receiving information (Hein, 1991; Mohajan & Mohajan, 2022). This perspective holds that assessment is not just a measure of recall but an opportunity to demonstrate how learners use, synthesize, and interpret knowledge in practical situations. The theory emphasizes higher-order cognition, problem-solving, and creativity, all of which are prominent in the age of Artificial Intelligence. AI technologies excel at generating generic answers, summaries, and even problem solutions but are less good at replicating original insights from individual

experiences or context learning. Here, constructivist-inclined assessment methods prove useful in differentiating genuine student learning from AI-generated outputs.

One of the Constructivist Learning Theory's most significant strengths in this regard is its focus on learner-centred formative activities such as projects, portfolios, reflective journals, and case studies. These cannot be replaced by AI tools since they involve critical thinking and context-sensitive understanding (Hein, 1991; Pardjono, 2016). With its approach of engaging facilitators to design assessments that include original contributions, constructivism offers a robust mechanism to counter AI-based attacks on academic integrity. However, the theory is also imperfect upon its usage in resource-constrained environments. Constructivist strategies are time-consuming, require smaller class sizes, and necessitate greater facilitator training compared to traditional tests. In most Tanzanian institutions, high student enrolment and limited infrastructure would make complete adoption of constructivist tests impractical.

Constructivist Learning Theory in this study provides an effective tool for evaluating facilitators' strategies. When facilitators are restructuring assessment to include oral defense, project-based assessment, or reflective writing, these are squarely in line with constructivist theory. Constructivist theory is applied to explain why facilitators who adopt constructivist methods are more likely to prevent AI abuse since they move away from memorization assessments that can readily be produced by machines. It also brings into focus the need for institutional capacity development to facilitate facilitators' use of constructivist assessment methods effectively.

### 2.2 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) of Davis (1989) provides a theory of how some technologies come to be adopted and used by real users (Davis & Granić, 2024). The two most significant determinants of adoption in TAM are perceived usefulness and perceived ease of use. Among higher education facilitators, intentions to employ AI detection tools, digital platforms, or redesigned assessment technologies depend largely on whether they see these tools as elevating their work efficiency and whether these are easy to integrate into existing practice. In light of the fact that the majority of Tanzanian facilitators function in resource-limited environments, TAM constitutes a critical prism through which to analyze their readiness to employ AI in evaluation.

Strength of TAM lies in its predictability and simplicity. TAM has been heavily employed in ICT adoption research in education to illustrate the effect of usefulness and ease of use perceptions on implementation (Silva, 2015). It has been criticized for failing to incorporate broader environmental issues such as organizational culture, availability of resources, and ethics. To the Tanzanian higher education situation, these limitations are particularly relevant since facilitators' choices are influenced not only by personal



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perceptions but also by institutional policy, workload, and technical setup. Thus, TAM accounts for facilitators' behaviors to some extent and needs to be complemented with other theories that take institutional and ethical factors into consideration.

For this study, TAM accounts for differences in adoption of AI-related strategies among facilitators. For instance, facilitators who benefit from plagiarism detection tools as convenient and useful are likely to implement them in instruction, while others employ old techniques like oral questioning due to lack of belief in the application of computers. TAM also highlights training and institutional support in the development of facilitators' ease and usefulness perceptions. The model is therefore important in describing facilitators' attitudes and experiences toward AI-based assessment tools in Tanzanian higher learning institutions.

## 3. METHODOLOGY

The study adopted a qualitative approach with the use of multiple case study research design to explore strategies used by facilitators in overcoming Artificial Intelligence-induced challenges in assessment and evaluation of education in Tanzanian higher learning institutions (Basias & Pollalis, 2018). The qualitative design was appropriate as the study sought to develop in-depth explanations of facilitators' lived experiences, strategies, and attitudes rather than deriving statistical generalizations. The design enabled the researcher to have direct contact with facilitators, review documents by reading policy documents, and analyze related literature, hence coming up with a holistic understanding of the phenomenon under investigation.

The primary data collection method for this study was in-depth interviews with 12 facilitators at selected higher learning institutions in Tanzania, while the secondary data collection tools were the use of documentary review. Participants were chosen purposively based on their teaching experience, active involvement in assessment and evaluation processes, and prior exposure to technology-enhanced teaching and learning. The institutions involved in the study included Sokoine University of Agriculture (SUA), Malimu Nyerere Memorial Academy (MNMA), Institute of Accountancy Arusha (IAA), and the University of Dar es Salaam (UDSM). Semi-structured interviews were the preferred approach as they provide scope to explore more in-depth the participants' experiences while keeping the discussions on track to cover the areas of main interest, namely AI integration, academic integrity, and institutional assessment management approaches. Face-to-face interviews were conducted where feasible, and remotely via video conferencing where necessary, each lasting 45 minutes to one hour. This approach allowed the researchers to obtain rich, contextually placed understandings of facilitators' perceptions, experiences, and strategies for addressing the issues posed by AI for university assessment.

In addition to interviews, the study also relied on a documentary review of the key Tanzanian education and ICT policy documents, including the National ICT Policy (2016), Education and Training Policy (2014),

and institutional guidelines governing evaluation practices. The documents were examined to determine the extent to which AI-related challenges are addressed in national and institutional regulatory documents. Complementing this, a trawl of academic literature was undertaken to situate the Tanzanian experience within the broader African and global landscape with a focus on AI adoption in education, assessment integrity, and facilitators' roles.

Data received from interviews were analyzed using thematic content analysis. This involved transcription of the interviews verbatim, coding, and categorizing responses into general themes in line with the research objectives. Thematic categories included facilitators' resolutions to overcome AI-related challenges, comprehending AI in assessment, and policy support (Braun & Clarke, 2021) . Policy documents and scholarly literature were coded and triangulated with interview findings as well to increase validity. Through this process, the researcher was able to identify convergent and divergent perceptions across sources.

To establish credibility and trustworthiness, the study employed triangulation by mixing interview data with policy documents and literature. Member-checking was carried out by feeding back summaries of key findings to a few purposively selected facilitators for interpretation checking. Ethical concerns were strictly followed: informed consent was requested from all the participants, confidentiality was maintained by anonymizing responses, and institutional ethical clearance was sought prior to data collection.

## 4. RESULTS AND DISCUSSION

The study findings are discussed and presented critically against the existing literature and policy. The results are communicated in terms of the three research goals: (i) examination of existing education and ICT policy in Tanzania, (ii) facilitators' response to addressing AI-related challenges in assessment, and (iii) facilitators' experiences and perceptions on using AI in assessment and evaluation.

### 4.1 Evaluation of existing education and ICT policies in Tanzania

In evaluation of existing education and ICT Policies in Tanzania, evidence shows that the country has made notable efforts towards incorporating information and communication technology (ICT) into education through national policies such as the Education and Training Policy (2014), the National ICT Policy (2016), and the Tanzania Development Vision 2025. The policies are aimed at digital literacy, inclusive access to ICT infrastructure, and the modernization of teaching and learning processes. For example, the National ICT Policy values the ability of technology to enhance the quality of learning, improve learning efficiency, and enable innovative pedagogies. Similarly, the Education and Training Policy emphasizes the need to develop skills in line with the knowledge economy and integration of ICT



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into the teaching and assessment processes. However, while such policies cover the integration of technology in general, they are not clear regarding the nascent issues arising from the use of Artificial Intelligence (AI) in assessment and evaluation in tertiary learning. Such absence of clarity leaves tertiary learning institutions that are increasingly confronted with AI tools that can generate assignments, essays, and even exam answers in doubt.

Facilitator interviews revealed that this kind of policy gap leaves the interpretation of ICT guidelines to lecturers and universities themselves, which often results in differing approaches to handling AI-related concerns. There are internal policies in some institutions for academic integrity, such as plagiarism detection guidelines and the application of digital tools. The policies vary widely between universities, though, and there is no universal national approach for addressing AI in educational environments. For instance, while there is strict prohibition of AI use in assignments in one institution, another institution provides guidelines for appropriate use of AI without concrete mechanisms for enforcement. Trainers reported that such inconsistency creates challenges for them to ensure equal and fair evaluation of practices across institutions because they must deal with policy uncertainties and practical challenges in monitoring student work.

Sequential review of policy documents revealed some notable observations, as identified in Table 1 below. The table captures purpose of each policy, relevance to AI, gaps that are present, and implications to assessment and evaluation practice at institutions of higher education.

**TABLE 1. ANALYSIS OF TANZANIAN EDUCATION AND ICT POLICIES IN RELATION TO AI IN HIGHER EDUCATION ASSESSMENT**

| Policy document | Key objectives | Relevance to AI in assessment | Observed gaps | Implications for facilitators |
|---|---|---|---|---|
| Education and Training Policy (2014) | Promote ICT integration in teaching and learning; improve quality and equity | Encourages digital tools in learning but does not mention AI | No specific guidance on AI-assisted learning or academic integrity | Facilitators must create local strategies to manage AI use |
| National ICT Policy (2016) | Enhance ICT literacy; expand infrastructure; promote e-learning | Supports ICT adoption in education; encourages technology use | Lacks directives for AI in assessments; does not define ethical use of AI | Institutions rely on internal rules; facilitators depend on personal judgment |
| Tanzania Development Vision 2025 | Develop knowledge-based economy; modernize education systems | Advocates for digital transformation in higher education | General vision without operational guidelines for AI integration | Facilitators face uncertainty in applying AI in assessments |
| University Institutional Guidelines | Ensure academic integrity; regulate student conduct | Some guidelines reference plagiarism detection; limited AI-specific content | Inconsistent across universities; limited enforcement and clarity | Facilitators rely on discretion; enforcement uneven |

Source: Field Data (2024).

The findings in Table 1 show that while Tanzanian policies recognize the role of technology in the modernization of higher education, they do not articulate the ethical, operational, and regulatory guidelines for AI integration in testing. Facilitators therefore operate in a context of uncertainty where they largely rely on institutional discretion, personal experience, and ad-hoc measures to manage AI-related risks. This aligns with international observation that emerging technologies are ahead of policy development in developing countries, and teachers are left to innovate at the local level in the absence of official policy (Luckin et al., 2022; Khan et al., 2024).

The conversation identifies the urgent need for policy transformation and capacity-building initiatives. Specifically, Tanzanian education and ICT policies should articulate clear standards for AI in educational assessment, define acceptable and unacceptable uses, and provide practical guidelines for facilitators. Furthermore, institutions must adopt standardized frameworks to ensure consistency, fairness, and integrity in assessments while taking advantage of AI's potential to enhance learning outcomes. Without such reforms, facilitators remain the frontline defense against AI-enabled academic malpractice, highlighting the essential role of professional judgment, training, and institutional support.

### 4.2 Strategies employed by facilitators

The study sought to examine strategies that Tanzanian higher learning institutions employ to counter challenges of AI in students' examinations and evaluations. Interviews with twelve facilitators revealed that effective management of AI-related challenges requires a combination of technical, pedagogical, and regulatory approaches. The facilitators mentioned using both preventive and corrective measures to make students' evaluations genuine, fair, and reflective of actual learning achievements. These steps ranged from the use of electronic programs in detecting plagiarism and AI-based content to innovative test formats that shut down the scope for exploitation, to reliance on institutional policy and peer support mechanisms.

TABLE 2. STRATEGIES EMPLOYED BY FACILITATORS

| Strategy | Percentage of facilitators using | Objective |
|---|---|---|
| Plagiarism detection tools | 100% | Ensure originality of student submissions |
| Assessment redesign | 83% | Reduce AI reliance and promote higher-order thinking |
| Adjusted assessment formats | 75% | Minimize AI misuse and monitor student progress |
| Institutional guidelines & codes | 58% | Provide a framework for acceptable AI use |
| Capacity-building & peer support | 50% | Improve facilitator skills and knowledge of AI challenges |

Source: Field Data (2024).

Table 2 presents a summary of the main strategies identified in the research, with the percentage utilization of each strategy by facilitators and their respective goals. The compilation demonstrates the variety of approaches and where facilitators exercise personal discretion versus institutional regulations. Through an



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analysis of these strategies, the research sheds light on evidence-based solutions to AI difficulties in Tanzania and identifies gaps wherein policy action, training, and infrastructure support are necessary.

#### 4.2.1 Plagiarism detection software (100%)

All facilitators reported the application of plagiarism detection software such as Turnitin in developing identification of AI-supported or plagiarized work. They said that such software is essential in large classes where manual checking is impossible, providing detection and deterrence.

> *"We employ Turnitin and other software on a regular basis because AI assignments are becoming so competent these days. For instance, I just had a batch of essays sent to me that appeared genuine on the surface but when we plugged them into the software, it was apparent that vast sections had been written by an AI product. We wouldn't have even guessed that unless we had that technology, and the students would have submitted work that didn't even reflect what they know. This made me aware that plagiarism software is not something we can choose to exclude ourselves from anymore; it's essential to maintain academic integrity as AI products become more common. Now I need every submission to be screened electronically before they're graded to ensure that results accurately reflect student achievement".* [Lecturer, August 2025].

The universal use of plagiarism detection software demonstrates facilitators' recognition of AI as a major threat to academic integrity. While these tools are effective for detecting AI-generated content, they do not prevent misuse entirely, particularly with sophisticated generative AI that can produce paraphrased or contextually altered text. For instance, Almazova et al. (2021) indicated Russian university instructors increasingly utilize software tools to identify AI-assisted plagiarism, especially in large courses. Likewise, Luckin et al. (2022) reported that UK instructors include digital plagiarism detection as one of multiple layered methods to maintain assessment integrity in AI-intensive environments. While Tanzanian facilitators' experiences mirror such global trends, Tanzanian issues are the absence of guiding national policies pushing the application of AI in assessment. As opposed to countries where AI detection processes are established within organizational frameworks, Tanzanian lecturers essentially exercise their own judgment and software, which might result in inconsistent application.

#### 4.2.2 Redesign of assessment (83%)

Ten facilitators redesigned tests to emphasize critical thinking, project work, oral presentation, and case studies that are difficult for AI to replicate. Iterative exercises and in-class defenses were also mentioned time and again as effective countermeasures.

> *"To resist the increasing use of AI in homework, I've shifted most of the tests to multi-step projects and oral presentations. For instance, students submit drafts, I provide feedback, and*

*they then defend it in class. It not only allows me to gauge their grasp step by step but also prevents them from using AI-provided answers. I've discovered even when students attempt to use AI, the iterative process unearths inconsistencies, which I then correct one-on-one. It is a labor-intensive process, but it actually improves learning outcomes and maintains fairness. I've also observed that students are more engaged as they must think critically and apply what they know rather than copying or using AI tools".* [Senior Lecturer, August 2025].

Assessment redesign is an effective strategy that directly addresses the limitations of AI in replicating human reasoning and context-specific knowledge. By emphasizing process-oriented tasks and oral defense, facilitators can assess true understanding rather than mere output. Redesigning the assessment aligns with global evidence for the best AI-mitigation practice. Zawacki-Richter et al. (2019) suggest that higher-order cognitive tasks such as project-based and problem-solving tests are resistant to interference by AI. Similarly, Alpay et al. (2021) found that iterative and formative tests in European universities improve authenticity as well as learning outcomes. Tanzanian facilitators' methods reflect congruence with the above international practices but are restricted in their application by workload, lack of training in AI, and lack of institutional support. While institutions in developed countries have AI-based assessment systems, Tanzanian universities rely primarily on facilitator initiative, as indicated by the need for systematic back-up systems.

#### 4.2.3 Modified assessment formats (75%)

The study found that, nine (9) facilitators modified test formats to favor timed tests in class, online proctored testing, and incremental submission. These modifications allow for more supervision and reduce the risk of AI misuse.

*"We've moved away from lengthy take-home assignments because students increasingly use AI to complete them. Now, we make more use of timed tests in controlled settings and incremental submissions wherein students present their knowledge step by step. This has served us well because AI software is unable to simulate the thought processes and reasoning demonstrated over several stages. Students increasingly have adjusted to demonstrating their capabilities directly rather than leveraging tools external to them, and this has significantly improved learning outcomes over the long term".* [Assistant Lecturer, July 2025].

This confirms that, adjusted assessment formats strengthen the authenticity of student evaluations by limiting the applicability of AI-generated solutions. The emphasis on staged submissions and controlled assessments reflects a proactive approach to maintaining academic integrity. Baker et al. (2021) reported that timed and proctored tests in North American institutions effectively curbed cheating by AI. Similarly,



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Hinchliffe & Jolly (2019), report that successive submissions allow lecturers to monitor students' progress and detect inconsistencies that are an indication of AI misuse. Tanzanian facilitators' behaviors are in line with these findings, but application is largely resource-based. In contrast to well-funded organizations elsewhere in the globe, Tanzanian universities lack funds and personnel, and mass adoption therefore becomes challenging and requires policy intervention and investment.

#### 4.2.4 Institutional codes and guidelines (58%)

Seven facilitators had applied codes of conduct within institutions to guide proper AI use, although policies were ambiguous. Many times decisions were based on individual discretion, thus resulting in non-uniform enforcement.

> *"Our institution has a broad code of conduct that mentions plagiarism and cybermisconduct, but not explicitly talking about AI-generated material. So, we do not have any clarity around what misuse is. For example, I had an incident just recently with a student who'd written a report partially generated by an AI. The guidelines did not specify, so I had to discuss with peers and take necessary steps. This process tells us that institutional codes are useful, but without explicit AI-guided policies, facilitators will have to make a call in their own mind, which is stressful and inconsistent".* [Senior Lecturer, August 2025].

The reliance on institutional guidelines highlights the partial support facilitators receive in managing AI challenges. While codes of conduct provide a foundation for academic integrity, their ambiguity regarding AI necessitates personal judgment, which can lead to inconsistency in enforcement. This finding underscores the urgent need for explicit, AI-focused policies at both institutional and national levels to provide clear guidance and ensure fairness in assessment practices.. Other studies also point to the shortcoming of vague institutional policies. Selwyn et al. (2020) argues that broad codes of academic integrity are not enough to deal with AI issues, and exact rules are necessary to regulate AI application. Tanzanian facilitators also face the same phenomenon, where excessive reliance on personal judgment increases stress and potential inconsistency. As compared to detailed AI policies in developed countries' higher learning institutions, Tanzanian higher learning institutions lack well-defined frameworks, which mean national and institutional reform is crucial to have uniform AI governance and ensure equity.

#### 4.2.5 Capacity-building and peer support (50%)

Six facilitators emphasized the importance of peer learning, workshop participation, and professional development in order to increase their capacity to address issues relating to AI. These platforms allow for strategy sharing and problem-solving in unison.

> *"I have regular departmental meetings and peer workshops where we share ideas on how to deal with AI-related issues in assessment. These are extremely useful as colleagues share how they have adapted in their classes, from the design of AI-proof assignments to spotting suspicious student submission patterns. Without these opportunities for collaboration and continuous learning, I would not be able to keep up with the rapidly evolving development of AI tools. It goes without saying that building facilitator capacity is important to maintain assessment quality and integrity in this digital world. These discussions have also challenged me to devise creative new assessment forms that put the students to test and reduce AI usage to a minimum, which I would not have done otherwise".* [Assistant Lecturer, August 2025].

The findings revealed that capacity-building initiatives are vital for equipping facilitators to respond to AI challenges effectively. Peer learning and professional development foster knowledge sharing and the adoption of best practices. However, the limited adoption rate (50%) suggests that such initiatives are not universally accessible, leaving some facilitators underprepared. Institutional investment in regular training and collaborative forums is therefore essential to enhance the overall preparedness and confidence of educators in managing AI-related risks. Eynon & Malmberg (2021) highlight that professional development and peers raise the confidence of lecturers in applying digital technology and resisting academic fraud. Tanzanian facilitators also share the same patterns but only half of them have opportunities to do so. Compared to developed countries with official training programs, Tanzanian universities rely on informal workshops, which suggest the need for systematic well-funded professional development activities for building facilitator competence and AI mitigation consistency.

### 4.3 Facilitators' perceptions and experiences

Facilitators' attitudes and experiences should be understood in order to assess how AI is utilized in educational testing and how effectively teachers manage the issues it poses. Results from twelve in-depth interviews suggested that facilitators' experiences are constructed along three dimensions: the perceived benefits of AI in improving assessment efficiency and objectivity, academic integrity issues and potential abuse of AI-generated content, and attitudes to the availability of institutional support and direction for ethical use of AI. These dimensions reflect the complex interplay between technological options and pedagogical responsibilities in Tanzanian higher learning institutions. Table 3 presents a summary of the facilitators' most salient perceptions and the proportion of participants with each one, shading in areas of similarity as well as concern. The table provides a starting point for appreciating how these perceptions inform the strategies facilitators deploy and the pragmatic issues they encounter in everyday assessment work.



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TABLE 3. FACILITATORS' PERCEPTIONS AND EXPERIENCES

| Perception | Percentage of facilitators expressing | Key Theme |
|---|---|---|
| AI enhances efficiency in grading | 67% | AI speeds up routine assessment tasks and improves consistency |
| AI poses academic integrity risks | 100% | Concerns over plagiarism, cheating, and AI misuse |
| Mixed attitudes toward AI adoption | 50% | Facilitators are cautiously optimistic but emphasize constraints |
| Need for institutional guidance | 75% | Clear policies and support are required for effective integration |

Source: Field Data (2024).

The study revealed that facilitators in Tanzanian higher learning institutions hold conflicting opinions regarding the application of AI in examinations. The majorities of facilitators were open and acknowledged the fact that AI enjoys a staggering efficiency gain, particularly in large classes or high-stakes testing. Eight (8) of the twelve (12) interviewed facilitators mentioned that AI technologies allowed them to grade multiple-choice questions and short-answer responses easily, instantly detect common errors, and provide consistent judgments. One facilitator explained:

> *"Personally, AI has increased grading speed and accuracy, especially for large classes with hundreds of students. For example, I recently used an AI system to mark multiple-choice quizzes and short-answer questions. The system automatically flagged errors, provided automatic marking, and flagged areas where the students struggled. It has helped me focus on providing detailed feedback on complicated assignments rather than spending days manually calculating marks".* [Tutorial Assistant, August 2025].

This reflection illustrates that facilitators view AI as a complementary tool that enhances efficiency without replacing professional judgment. The result is in line with that of Luckin et al. (2022) and Almazova et al. (2021), who also reported that AI reduces burdens in repetitive tasks and offers timely feedback. But while in some developed countries the AI assessment tools are integrated into institutional learning management systems, Tanzanian facilitators are largely applying stand-alone tools, thus limiting the scalability and general impact of productivity gains.

In spite of these benefits, all twelve facilitators had very grave concerns about academic integrity. They underscored how AI makes it all the more easier for students to produce essays, reports, or code that look legitimate yet are produced outside. A facilitator reminisced:

> *"I am always mindful that students can use AI to write essays, reports, or even code for a task. I have recently encountered one instance where a student had turned in a project that appeared comprehensive, but upon closer reading and deeper questioning, it became clear that most significant portions of the work were AI done. It was frustrating because existing institutional*

*guidelines fail to specify how to act in such an instance. The issue is that AI can produce something that appears possible, and whether one has engaged in misuse encompasses technical tools as well as good judgment from humans. As a facilitator, I have a very important role to play to provide academic integrity in service to student learning, a delicate balance to perform".* [Lecturer, July 2025].

From this quote, it is evident that AI challenges create both ethical and practical dilemmas for facilitators. These challenges mirror global trends reported by Selwyn et al. (2020) and Baker et al. (2021), who indicate that teachers globally are facing increased difficulties with AI-supported academic fraud. The rising difficulty in Tanzania is contributed by a lack of explicit institutional policy, which forces facilitators to rely on their own discretion and make decisions on an ad hoc basis, which might lead to non-uniform application.

Facilitators showed blended attitudes in taking up AI for assessments. Six showed cautious optimism, realizing the potential of AI to automate mundane tasks and give analytical data while focusing on practical and ethical limitations. One noted:

*"I think AI can revolutionize assessments, particularly by automating repetitive work and giving instant analytics about students' performances. But I am careful since technology continues to evolve, and many students can misuse it to avoid learning the actual content. In my classes, I try to utilize AI applications minimally and provide students with ethics of usage. While doing this, I also worry about over-reliance on AI since it may hamper critical thinking and creativity if not properly managed. I hope that with proper institutional support and staff training, AI can do better and not undermine learning outcomes".* [Lecturer, August 2025].

The conclusion drawn here is that facilitators are open to AI adoption but require structured support to ensure ethical use. Such remarks align with the observations of Zawacki-Richter et al. (2019), observing that across the world, educators balance the efficiency and analytic potential of AI with ethical, pedagogical, and contextual limitations. In Tanzania, this conservative perspective is also guided by limited access to advanced AI systems and the absence of well-formulated institutional facilitation, further emphasizing the critical need for institutions and policy to facilitate fruitful adoption.

Among the most frequent concerns with facilitators was a need for immediate institutional direction to regulate AI use in educational testing. Nine facilitators emphasized that in the absence of policies or guidelines, they often have little direction when determining how to address AI-submitted assignments. One facilitator put it this way:

*"It is hard to manage AI use in the absence of specific institutional policies. Sometimes I do not know whether to penalize students who are using AI tools or guide them towards ethical use. A student recently submitted a report full of AI-based content; I had to consult colleagues and make*



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> *an informed choice because there were no clear-cut guidelines. I believe that clear institutional and national policies for AI in exams would reduce uncertainty, make enforcement fairer, and allow teachers to maintain integrity without excessive personal strain. Clarity would also encourage the legitimate use of AI to enhance learning rather than police it".* [Senior Lecturer, August 2025].

This observation underscores the need for comprehensive frameworks that combine technical tools, policy guidance, and professional development. Such sentiment is supported in other emerging contexts (Selwyn et al., 2020; Eynon & Malmberg, 2021), in which instructors were firm that formally established policies and structured guidance are essential to maintain academic integrity effectively. Organizations within developed countries are likely to provide thoroughly defined systems and centralized AI monitoring tools to alleviate the burden on single instructors and allow for the equitable enforcement of policy.

## 5. CONCLUSIONS AND RECOMMENDATIONS

### 5.1 Conclusions

This study investigated how facilitators in Tanzanian higher education institutions are managing to deal with Artificial Intelligence (AI) issues in education assessment and evaluation. Based on the findings, it is evident that AI is both a challenge and an opportunity. Facilitators understand the efficiency, consistency, and analysis benefits that AI tools offer for grading and assessment administration. However, they also refer to significant concerns regarding academic integrity, including plagiarism, contract cheating, and misuse of AI-generated content. These concerns are compounded by the absence of clear national or institutional guidelines, limited access to state-of-the-art AI tools, and insufficient professional development opportunities.

Analysis of existing education and ICT policies revealed that even if Tanzanian policy documents acknowledge the importance of technology in education, they provide no policy direction regarding AI use during exams. Facilitators thus have to rely on institutional rules, personal judgment, and ad hoc interventions to maintain academic integrity. Solutions such as plagiarism detection software, assessment redesign, adapted assessment types, and capacity-building initiatives are at different stages of implementation, with some being adopted across the board (e.g., plagiarism detection at 100%) and others less consistently implemented (e.g., institutional guidelines at 58%). This indicates a fragmented approach that underscores the need for overarching policy frameworks to guide AI uptake in assessment practice.

Facilitators' experiences indicate that while AI can enhance efficiency, its misuse presents pedagogical and ethical risks. Facilitators were cautiously optimistic, commenting that AI adoption must be followed by

clear policies, institutional support, and staff training. Without these, academic integrity monitoring remains inconsistent and opportunities for AI-enhanced learning may be limited. Comparisons with international research show that Tanzanian teachers' issues mirror worldwide trends, though these are exacerbated at the local level by an absence of infrastructure and policy guidance.

### 5.2 Recommendations

Based on the study's findings, it is clear that successful uptake of Artificial Intelligence (AI) in educational testing in Tanzanian universities has to be tackled from different fronts. To begin with, there is a pressing need for the establishment of national and institutional policies that address the use of AI in academic testing specifically. The policies should explicitly outline acceptable standards, define ethical issues, and incorporate standard enforcement protocols for instances of AI misuse. Implementing such guidelines will reduce ambiguity for facilitators, promote equity, and can enable AI to be integrated responsibly into assessment practice with minimal academic misconduct risk.

Secondly, capacity-building initiatives for facilitators are necessary to equip educators with the ability to deal with AI issues appropriately. Professional development programs need to familiarize facilitators with AI assessment tools, teach them to detect AI-generated content, and provide guidance on designing assessments that reduce the potential for abuse. Training should also emphasize ethical issues and pedagogical best practices so that facilitators can balance the efficiency benefits of AI with the need to maintain academic integrity and ensure authentic learning outcomes.

Third, the universities should invest in robust infrastructure to enable efficient and ethical use of AI in examinations. This includes having secure online examination platforms, efficient plagiarism checkers, and learning management systems with AI capabilities to automate grading and monitor student submissions. Proper technological assistance will not just enhance facilitators' capacity to implement AI-based strategies but also safeguard the integrity of evaluation processes and enable students to have equitable learning opportunities.

Finally, but not least, promoting collaboration between facilitators is key to strengthening collective responses to AI challenges. Facilitators should be incentivized to share experiences, best practices, and creative solutions through workshops, peer networks, or institutional forums. Collaborative fora will foster consistency in the implementation of AI-related policies, encourage ongoing learning, and provide a supportive community where facilitators can respond confidently to arising challenges while maintaining high levels of academic integrity.



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## ACKNOWLEDGEMENT

The authors of this paper express profound gratitude to all people and institutions that played a pivotal role throughout various phases of the study. We also genuinely thank the all the officials from all the areas where this study was conducted for their significant contribution during fieldwork for data collection.

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