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Evaluating Academicians' Perspectives on Education-based Assessments Strategies with Generative AI (GenAI)

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Abstract: *This study investigates the use of Generative AI (GenAI), in university assessments in Malaysia to understand its impact on evaluations. It explores the implications, challenges and academic viewpoints related to this advancement. The research methodology involves a combination of methods, including gathering feedback from education experts at three universities using a 5-point Likert scale. The main results show that educators generally see AI as beneficial for improving assessment accuracy but highlight some considerations that need attention. Additionally, the findings suggest that while AI can enhance assessments by providing optimized learning experiences ethical issues such as data privacy and excessive automation need to be addressed. Educators also acknowledge the importance of training programs to help them develop the skills needed to integrate AI into their practices effectively. The study concludes that although AI shows potential for transforming education, maintaining a balance between technology and human-centered learning is crucial for implementation.*

Keywords: Generative AI (GenAI), Education-Based Assessments, Malaysian Public Universities, Academic Integrity, AI Integration in Education

1. Introduction

In today's era of technology, the rapid progress of artificial intelligence (AI) is significantly reshaping the landscape of education. In education more and more graduate students are turning to AI tools to support their studies. This trend has offered students a effective way of learning while also posing new challenges, for academicians. The swift evolution of AI (GenAI) applications in education is creating global challenges, including in countries like Malaysia. These issues revolve around disparities in education exacerbated by access to resources. To bridge this gap, some universities have introduced AI driven learning systems to customize learning paths and improve course delivery. However, academicians believe that assessment methods in education need to adapt with the emergence of AI technologies such as ChatGPT, Jenni.Ai, Conch AI and others. Undoubtedly, students in education are increasingly using AI powered assessment tools for their efficiency and ability to provide information needed for assignments completion.

In the realm of studies, education-based assessments encompass a range of tasks aimed at gauging students' learning and comprehension. These evaluations may involve writing

assignments, analyzing materials critically, crafting reports, scripting presentations and more. Each type of assessment evaluates aspects of student knowledge and skills. For instance:

i. Written Assignments require students to showcase their understanding of a subject through essays, research papers or brief responses.
ii. Critical reviews showcase their thinking skills and subject knowledge by evaluating and critiquing various materials such as books, articles, or films.
iii. Report writing tests students capabilities in collecting, analyzing and presenting organized data, on topics.
iv. Crafting presentation scripts involve creating and delivering content verbally with the support of aids to assess students' communication skills and comprehension of the subject matter.

Given the emergence of GenAI technology Malaysian universities are urged to revamp their assessment methods to offer perspectives on student performance (Alam, 2021; Chowdhery et al., 2021; Razali et al., 2022). In exploring the applications of GenAI, in education settings there exist both advantages and disadvantages that warrant examination through empirical research. Postgraduate students are increasingly utilizing AI tools for their tasks, such as learning, content creation, and writing. These tools not only personalize the learning experience. Also offer immediate feedback and valuable suggestions to enhance efficiency. However, the use of AI in education raises concerns regarding ethics, potential bias, exposure to inaccurate information reduced independence in learning and blurred lines of integrity. To address these issues this study aims to delve into the challenges faced by academicians amidst the evolving landscape of education influenced by AI. Insights will be drawn from a case study conducted at a university, in Malaysia.

2. Literature Review

Trends and Impacts of AI on Students' Learning

With the growth and use of AI technology the field of education has seen remarkable changes. AI is now playing a role in education impacting areas such as learning environments, teaching methods, student support and evaluations. These AI driven systems are transforming how students learn by offering experiences tailored to their needs and learning preferences. Virtual tutors and chatbots powered by AI have also become tools in teaching providing students with feedback help and extra learning materials when needed.

Reflecting trends Malaysia's education sector has actively embraced the integration of AI. The MyDigitalMaker program in Malaysia focuses on enhancing students understanding of AI concepts and computational thinking skills. This initiative aims to equip students with the knowledge and skills to navigate the world confidently. By nurturing these abilities students are better prepared to tackle challenges and opportunities, in our increasingly digital society.

Despite the challenges posed by gaps and infrastructure limitations in Malaysia there is a clear exacerbation of these issues (Benjamins & Salazar, 2020; Kousa & Niemi, 2022). Conversely with the rise of ChatGPT and other AI generative tools many academicians and students, in circles are increasingly turning to AI to boost teaching efficiency enhance learning outcomes and streamline administrative tasks (Alam, 2021; Chen et al., 2020). Generative AI falls under intelligence. Is capable of producing fresh content across various mediums like text, images, audio and synthetic data. By employing learning algorithms that identify patterns in existing data this technology generates high quality content. Debates, among scholars continue regarding whether AI can optimize student engagement and understanding through learning

platforms and intelligent tutoring systems (Rizvi, 2023; St-Hilaire et al., 2022). In regions integrated AI systems have employed advanced algorithms to tailor the learning experience according to individual student requirements and preferences (Silva & Janes, 2020).

These educational apps powered by AI also use algorithms to analyze how students learn and offer feedback encouraging students to take control of their learning and understand their own thinking processes (Tiwari, 2023). While scholars widely recognize the potential of AI, in education there has been limited discussion on its impact on assessing student performance and providing feedback in evaluating students' assignments. Apart from relying on Turnitin to identify AI misuse in tasks academicians and institutions should explore approaches to assessment methods to accurately gauge learning outcomes at esteemed universities, in Malaysia.

Challenges in AI Implementation

Exploring the impact of AI on education, in Malaysian education sector presents various challenges. Implementing policies that encourage the use of AI to evaluate students' assignments is crucial while preventing any unethical exploitation of generative AI. The primary challenge lies in barriers, including limitations in infrastructure and compatibility issues hindering the adoption of AI in education. Ethical concerns related to data privacy, algorithm bias and accountability demand attention and regulatory oversight. Additionally, complexities such as training academicians on AI literacy and allocating resources for AI related teaching add layers of difficulty to the integration process requiring planning and institutional support.

To overcome these challenges a collaborative effort involving policymakers, academicians and technology providers is essential. Establishing frameworks and guidelines for incorporating AI resources into educational settings is key to navigating this landscape effectively.

As AI technology continues to advance as a tool there is a growing emphasis, on reshaping how students are evaluated, streamlining, and enhancing the accuracy and efficiency of assessment processes (Crompton & Song, 2021). Recent studies by Pedro et al. (2019) indicate that higher education institutions in Malaysia are gradually embracing AI powered assessment platforms to simplify grading procedures reduce biases and offer feedback to students. Although sophisticated machine learning algorithms empower these platforms to analyze datasets recognize patterns and provide insights into student performance trends thereby supporting data informed teaching approaches there remains a need to enhance AI assessment tools to accommodate assessment formats and settings effectively addressing the changing requirements of diverse academicians and learners (Barrett, 2020). By integrating AI into assessment practices educational institutions can advocate for fairness, transparency and efficiency in the evaluation process while maintaining standards (Anuyahong et al., 2023; Barrett, 2020). However, the rapid evolution of AI technology also poses challenges for institutions when assigning student tasks based on education. While it enhances assessment efficiency for academicians it also raises concerns about errors due, to student utilization (Gardner et al., 2021).

The ethical and moral dilemmas that arise are well known but still unsettled in today's environment (Anuyahong et al., 2023; Barrett, 2020). This research delves into the opinions of education scholars at a leading university regarding the use of AI in tasks. It also examines the challenges and approaches faced during its implementation to provide evidence for stakeholders, like education administrators and policymakers.

Faculty Readiness and Training in using generative AI.

The use of AI technology in education requires both academicians and students to be well prepared and equipped to navigate the changing landscape. It is also crucial to understand how academicians view the integration of AI in their teaching practices. Research shows that many students view AI tools positively as resources that can enhance their learning experiences. These tools offer learning paths, adaptive feedback and access to a range of educational materials enabling students to learn at their own pace and according to their preferences (Chen et al., 2020; Huang et al., 2021). Additionally, AI supported learning tools can facilitate simulated learning experiences to encourage participation and improve critical thinking skills among students (Chen et al., 2020; Hooda et al., 2022). Students who embrace AI technologies recognize their potential in enhancing learning outcomes. Are actively preparing for the challenges of the age (Alam, 2021).

On the other hand, many academicians expressed reservations and concerns about relying heavily on AI in the educational process. Issues related to privacy breaches, data security and biases in algorithms raise questions for students leading to skepticism, about these technologies (Garrote Jurado et al., 2023).

Furthermore, some students have raised concerns, about relying on technology and the potential loss of the human touch in education due to machines (Borenstein & Howard, 2020; Garrote Jurado et al., 2023). Borenstein and Howard (2020) suggest that it's important to teach students how to think and make decisions when using AI. To address these differing viewpoints enhancing students' digital literacy, information fluency and computational thinking skills will prepare them to navigate AI driven learning settings effectively. Emphasizing awareness and ethical considerations can empower students to assess the impacts of integrating AI into their educational journeys. Research also emphasizes the crucial role academicians play in engaging students with AI technologies and enhancing outcomes. Academicians should receive training to become familiar, with AI based teaching tools, assessment techniques and learning analytics systems (Silva & Janes, 2020). They recommend prioritizing development programs that focus on incorporating AI technologies into curriculum planning teaching methods and assessment approaches.

Fostering a culture of teamwork, transparency and continuous learning among academicians can help them better adapt to the changing landscape influenced by AI advancements (Lampou, 2023; Silva & Janes, 2020). Consequently, ensuring that academicians and students are well prepared and adequately trained is crucial, for incorporating AI technologies into teaching (Lampou, 2023; Zaman, 2023). Developing a generation of students who're proficient in navigating the complexities of the digital era involves understanding their perspectives and providing them with digital literacy and critical thinking skills. Nonetheless addressing how to offer academicians the assistance and opportunities, for professional growth to leverage AI's transformative potential and deliver engaging, inclusive and impactful learning experiences for students poses a significant challenge.

AI Educational Policy, and Future Directions for Education Assessments

Currently, it's clear that the use of AI in education has sparked policymakers worldwide to create policies focusing on maximizing its benefits while addressing social concerns. Developed countries and academic institutions have started crafting AI strategies and guidelines to govern its application in education. For example, nations like the US and UK are promoting AI literacy among academicians and students stressing growth and responsible use of AI in settings. Nevertheless, Malaysia's Ministry of Education is facing challenges in

implementing the Malaysia Education Blueprint 2015-2025 post-COVID-19 despite having strategies for integrating technology into the education system. In education, in Malaysia successful integration of AI relies not on policy structures but also on recognizing emerging trends, research areas and future directions.

While it hasn't been officially outlined there is a shift, towards leveraging AI driven advancements in practices within Malaysian universities. This shift encompasses learning, adaptive assessments and educational data analytics as highlighted by researchers like Dilmurod and Fazliddin (2021) and Tarisayi (2023). The rise of Industry 4.0 and the escalating demand for competencies have spurred an interest in integrating AI into professional education programs to equip students for the evolving workforce as discussed by Suparyati et al. (2023) and Wu (2021). Numerous studies advocate for inclusive approaches that encompass digital literacy, critical thinking and lifelong learning skills. However, the challenge lies in determining how to evaluate student performance amidst AI interventions according to Jokhan et al. (2022). Therefore, the convergence of AI with education policies in Malaysia emphasizes the importance of collaboration among policymakers, academicians and stakeholders to establish an inclusive AI education system. By aligning policy goals with emerging trends and research priorities, Malaysia can lead in fostering innovation, in AI education while ensuring access and ethical standard. This study will explore how well academicians are equipped to deal with the rise of AI as well, as how students can be effectively evaluated in educational assignments.

3. Problem Statement

The integration of Artificial Intelligence (AI) technology in the education sector has led to advancements, such as learning experiences enhanced teaching methods and the potential to transform assessment processes. This aligns with the trend of leveraging AI to enhance settings and outcomes. However, the growing use of AI tools like ChatGPT raises questions about their impact on assessments especially when it comes to evaluating students understanding and proficiency through educational tasks. The core issue for this study revolves around the role of AI in education; while it can revolutionize learning and teaching by offering learning experiences and streamlining administrative duties it also presents challenges in ensuring the validity, accuracy and fairness of student evaluations. These concerns encompass the risk of AI hindering thinking skills development introducing biases in assessments and contributing to educational disparities due to varying levels of access and proficiency in AI technology among students and academicians. Additionally ethical considerations regarding data privacy, algorithm transparency and reliance on AI, for content and assessments warrant examination.

4. Purpose of Study

Based on the problem discussed earlier, this study aims to explore educators' viewpoints regarding the impact of GenAI, on tasks. It aims to identify challenges and methods to enhance assessment precision and feedback as evaluate the preparedness for integrating GenAI into educational assignments. These objectives address the overarching issue of ethically integrating GenAI into education systems to enhance learning outcomes without compromising quality or exacerbating existing disparities. This research holds significance in shaping policies and procedures that leverage the benefits of AI while mitigating its risks ensuring that AI serves as a tool for enhancing equity, quality, and efficacy. Three research objectives and their corresponding research questions are listed as follows:

Research Objectives

i. Analyze academicians' viewpoints on AI's impact in education-based assignments, focusing on students' accuracy of education-based assignments.
ii. Identify academicians' challenges and strategies used to improve accuracy of assessments and feedback of students in education-based assignments.
iii. Evaluate academicians' readiness for AI adoption in education-based assignments.

Research Questions

i. What are academicians' viewpoints on AI's impact in education-based assignments, focusing on students' accuracy of education-based assignments?
ii. What are academicians' challenges and strategies used to improve accuracy of assessments and feedback of students in education-based assignments?
iii. What is the extent of academicians' readiness for AI adoption in education-based assignments?

5. Methodology

To thoroughly investigate the research objectives this study adopted a mixed method approach blending both quantitative and qualitative data findings to gain an understanding of the issue at hand. Experts from the field of Education were contacted through their email addresses. With a focus on three Public Universities, an average of 8 education experts from each university were ultimately selected. The quantitative phase commenced with a survey featuring a 5-point Likert scale to assess educators' perceptions of how Artificial Intelligence (AI) impacts assessments. They were asked about the accuracy of assignments when students use GenAi challenges faced, strategies for enhancing assessment precision and readiness for AI integration. Descriptive statistical techniques were utilized to delve into their viewpoints on these aspects. In terms of reliability and validity the instrument was meticulously crafted by the researchers for this study. Prior to its distribution it underwent validation by three experts who ensured its alignment, with research goals and its ability to effectively capture intended information.

The instrument's reliability was evaluated using Cronbach's alpha, a metric of consistency in a study involving 30 academics from various universities who are not actual respondents in this study. This assessment gauges how interconnected a group of items is. Cronbach's alpha score of 0.76 suggests a level of reliability indicating that the questionnaire items yield outcomes across the surveyed population. In the realm of sciences an alpha value exceeding 0.7 generally signifies internal consistency. Consequently, the questionnaire serves as a tool for assessing the intended construct with responses, to items displaying coherence with one another. Alternatively, Table 1 shows the sample of the completed instrument.

Table 1: Created instrument for evaluating Education-based Assessments Strategies with Generative AI

1=Strongly Disagree/2=Disagree/3=Neutral/4=Agree/5=Strongly Agree	1	2	3	4	5
Dimension 1: Impact of AI on Assignment Accuracy					
Using AI greatly enhances the precision of students' academic tasks.					
Incorporating AI into assignments aids in minimizing mistakes students make.					
AI software enables students to grasp course material					
AI systems, for grading ensure consistent assessment of student assignments.					
Integrating AI motivates students to think critically and solve problems by offering feedback.					
Dimension 2: Challenges and Strategies in AI Implementation					
I face difficulties when incorporating AI tools into assessment procedures.					
I know of methods that can aptly tackle inaccuracies, in assignments aided by AI.					
Consistent training with AI tools is crucial, for enhancing the accuracy of assessments.					
AI technologies used in grading ensure impartial evaluation of students work.					
The utilization of AI prompts students to participate in thinking and problem solving through feedback.					
Dimension 3: Readiness for AI Adoption					
I am ready to use AI tools to evaluate student assignments					
My university's system fully backs the use of AI, in tasks.					
Ongoing training in AI is key for improving educator's readiness for AI integration.					
We have funding to procure and upkeep AI technologies, for use.					
Our institution has a vision and strong leadership backing for integrating AI into the curriculum.					

In the Qualitative Phase, the open-ended questions from the survey forms collected data from these selected group of academics known on their perceptions incorporating AI into education-based assignments. To enrich the qualitative insights from the survey on AI's role in educational assignments, the three expert reviewers helped improved the quality of the questions to dive deeper into the experiences, perceptions, and innovative practices of academicians regarding AI in education:

i. How do you envision the future role of AI in shaping the educational landscape, particularly in assessments and assignments?
ii. Can you discuss any ethical considerations or concerns you have regarding the use of AI in education? How do you address these in your practice?
iii. What are your thoughts on student engagement and motivation in assignments with AI components? Have you noticed any changes?
iv. In what ways have AI tools influenced the design and delivery of your course content?
v. Share an instance where AI significantly impacted the learning outcomes of your students. What did you learn from this experience?

Similar to the quantitative phase, the major goal of these interviews was to learn about their personal experiences, challenges encountered, strategies used, and preparedness for AI adoption within an educational context. As a result, the descriptive statistics (from quantitative data) and Thematic analysis (from the qualitative data) revealed corroborative facts, and recurring themes to eventually improving our comprehension of the subject matter.

6. Findings

The study resulted in an amalgamation of quantitative and qualitative results. This integrated approach allowed for a thorough analysis of the academics' viewpoints on the implications, problems, and strategic planning for incorporating AI into educational activities. The combination of quantitative and qualitative approaches resulted in a synergistic impact, increasing the study's overall credibility and validity. The study expertly handled the difficulties of the research aims by using a mixed-methods methodology that balanced quantitative breadth and qualitative depth, capturing both statistical trends and academics' nuanced perspectives on the application of AI in education.

6.1 What are academicians' viewpoints on AI's impact in education-based assignments, focusing on students' accuracy of education-based assignments?

The first research question delves into how academicians perceive the increasing impact of AI on the accuracy of assignments. Its goal is to shed light on how this technological advancement's being integrated into the landscape and its implications for student academic performance. The chart displayed in Figure 1 below showcases academics responses to statements regarding AI's influence on assignment accuracy. Each statement presents a benefit of utilizing AI in tasks rated from 'Strongly Disagree' (1) to 'Strongly Agree' (5). The majority of responses for each statement cluster around 'Agree' (4) and 'Strongly Agree' (5) indicating that academics generally view AI positively in education. Notably the statement "AI significantly enhances precision" garnered the most 'Agree' responses illustrating academicians' recognition of AI's ability to enhance task accuracy. The assertion "Reduces errors" received a significant number of 'Agree' responses, underscoring AI's role in minimizing student mistakes.

As interpretation, AI's ability to process data sets and identify patterns that human scholars might overlook could be the reason behind precise evaluations and feedback. According to Figure 1 academicians believe that AI enhances understanding and promotes thinking skills. This could be attributed to the nature of AI teaching systems offering personalized learning experiences and feedback for enhanced engagement with the subject matter. The responses also highlight academics appreciation for AI's capability to provide grading potentially reducing biases in assessments for fairer and more consistent grading practices. In essence these comments suggest a recognition of AI's impact on processes enhancing both the effectiveness and quality of academic evaluations.

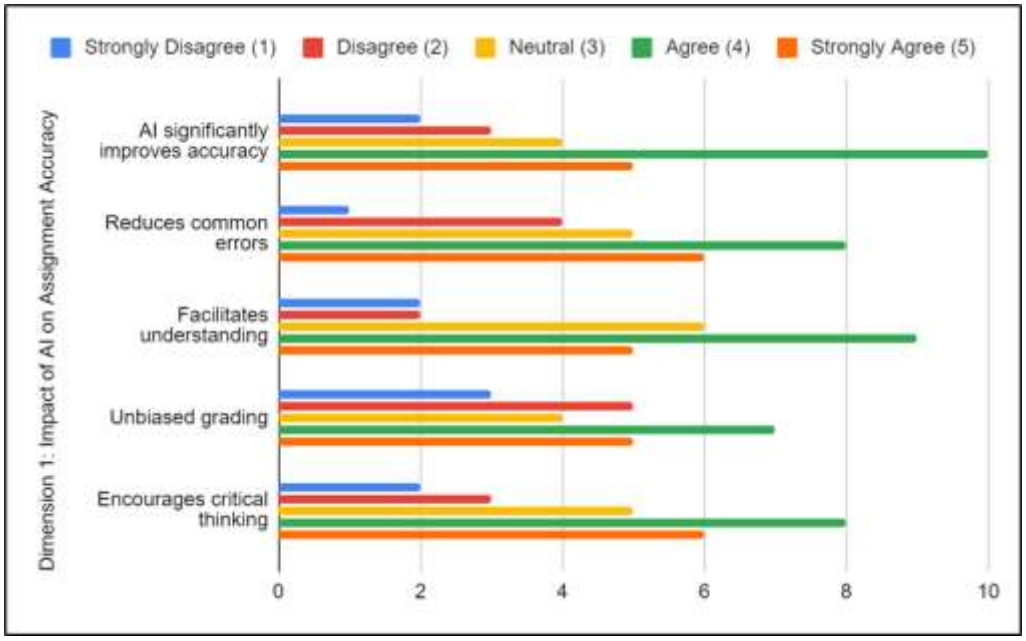

Figure 1: Academic Views on AI's Accuracy in Student Assignments

Table 2 below shows that the study results demonstrate the complex and diverse influence of GenAI on education-based assignments, emphasizing both the potential advantages and the constraints. While GenAI may considerably improve the learning experience and provide tailored educational paths, it also requires careful consideration of ethical norms and academic integrity.

Table 2: Participants response on the influence of GenAI on education-based assignments

Theme	Sub-theme	Code	Quotations
Impact of AI on Education-Based Assignments	Accuracy in education-based assignments	Accuracy-Improvement	"AI has changed the way we evaluate work more accurately." - P7
			"The feedback from students is now very clear." - P14
			"We are seeing an increase in the objective assessment of student work." - P21
	Ethical considerations	Ethical-Challenges	"We cannot ignore the issue of data privacy in AI applications."- P4
			"The line between helping and automating student work is becoming more blurred." - P19
			"We need to be careful with the ethical issues of AI." - P12

This research discovered that academicians in universities have explored the impact of generative AI (GenAI) technologies like ChatGPT on educational tasks particularly focusing on student accuracy. The detailed analysis from 25 participants sheds light on how GenAI's being integrated and its effects in education settings. One key point agreed upon by academicians is the acknowledgment of GenAI's role in enhancing the learning process. Tools such as ChatGPT offer students feedback and a wide range of resources encouraging comprehension of subjects and ultimately improving assignment accuracy. Enhancing the learning environment could potentially lead to changes in teaching methods fostering an educational experience.

Despite these aspects concerns have been raised within the community regarding the reliance on GenAI systems for completing assignments. There are worries that excessive dependence

may hinder student's engagement with course material, hindering the development of thinking skills and undermining the learning journey. The integration of GenAI in settings also sparks debates about the authenticity and originality of students' work. Generally, these participants appreciate GenAI for its capacity to facilitate personalized learning experiences.

According to them, GenAI holds the potential to enhance the accuracy of assignments by customizing them based on each student's needs and learning preferences. This personalized approach could lead to outcomes by catering to individual learning styles effectively. However, the integration of GenAI into activities raises questions regarding academic honesty. Academicians stress the importance of ensuring that students use of GenAI tools does not compromise the authenticity of their knowledge and academic skills. It is crucial to establish guidelines for the use of GenAI technologies in education to uphold standards and integrity. In summary, Figure 1 and Table 2 serve as reference points providing data on academic viewpoints and qualitative insights into the diverse role of AI in education. The results indicate a consensus among academicians regarding the benefits of AI in enhancing assignment accuracy and facilitating student engagement with subjects. While this positive trend is acknowledged there are concerns raised by some voices highlighting the necessity for protections in an AI driven setting.

6.2 What are academicians' challenges and strategies used to improve accuracy of assessments and feedback of students in education-based assignments?

The second research query delved into the difficulties faced by academicians and their approaches to improve the precision of evaluations and feedback in tasks. The bar chart shown in Figure 2 illustrates the responses from academicians regarding challenges and strategies related to implementing AI. The responses across the Likert scale questions are evenly distributed, with a tendency towards agreement in areas. This spectrum of reactions may reflect the landscape of AI integration in settings, where enthusiasm for its potential is counterbalanced by an understanding of its challenges. Regarding challenges, some participants acknowledge hurdles. The results indicate that a considerable number agree or strongly agree that they are familiar with solutions to address inaccuracies associated with AI. This indicates that despite recognizing the challenges posed by AI many academicians are also ready or optimistic about finding solutions. Additionally, there is consensus on the necessity for training on AI tools underscoring a proactive approach to enhancing skills and staying abreast of advancements in AI to minimize implementation challenges. The widespread agreement on AI's ability to provide grading and its role, in fostering problem-solving points toward an appreciation of the positive aspects of AI use despite potential issues that may arise. Generally, the Academics are showing a willingness to engage with AI technology using ideas to enhance their teaching methods and evaluation processes ultimately creating a learning environment.

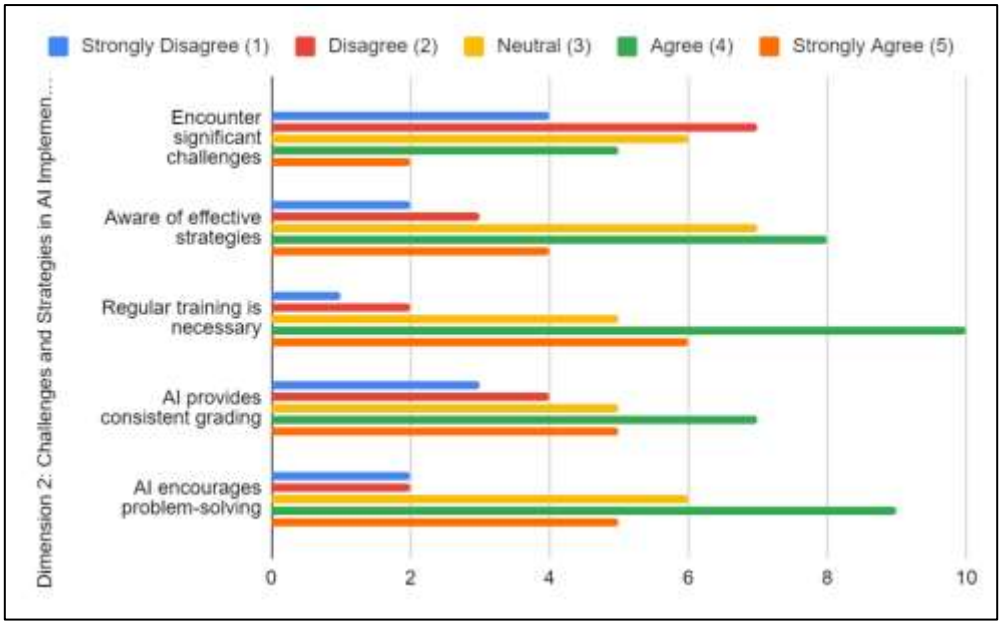

Figure 2: Academic's diverse answers to assertions concerning AI deployment challenges and strategies

According to table 3 below, the academics encounter a number of challenges, including technical constraints, pedagogical adaptability, and the availability of faculty preparation and training in GenAI. These challenges also included a lack of access to sophisticated AI technologies, inadequate infrastructure for AI integration, and the requirement for large upgrades to current systems to accommodate AI. Pedagogically, incorporating AI into the curriculum and adapting teaching approaches to harness AI technology need considerable modifications, signaling a potential but hard pedagogical transition. As mentioned, faculty preparation and training emerge as major problems, with faculty facing a steep learning curve with AI tools and a compelling need for ongoing professional development in AI to ensure faculty are as adept with AI as they are with conventional teaching approaches. These participants' quotes highlight the multifaceted challenges of integrating AI into educational practices, emphasizing the importance of strategic approaches to overcome these challenges, thereby improving the accuracy of student assessments and feedback through the responsible and effective use of AI in education.

Table 3: Academicians' challenges and strategies to improve accuracy of assessments and feedback of students in education-based assignments.

Theme	Sub-theme	Code	Quotations
Challenges and Strategies	Technological barriers	Tech-Barriers	"Not being able to access advanced AI tools is indeed a major barrier."- P3
			"Our infrastructure isn't ready for widespread use of AI." – P16
			"The biggest challenge is updating our system to support AI." – P9
	Pedagogical adaptation	Pedagogy-Adapt	"Incorporating AI into the syllabus requires significant changes." – P22
			"Changing teaching methods to use AI is a continuous process." – P11
			"The shift in teaching methods towards AI is fun but challenging. – P5
	Faculty readiness and training	Faculty-Prep	"Lecturers need to learn a lot about AI tools." – P8
			"Continuous professional development in AI is essential for lecturers."- P17
			"Lecturers must become as proficient with AI as they are with traditional teaching tools." – P2

In essence, the issues of delivering accurate evaluations and feedback are addressed by proactive initiatives that prioritize instructor professional development and the use of technology solutions. These activities demonstrate Malaysian public university academicians' dedication to creating an educational climate that emphasizes the accuracy of assessment and the usefulness of feedback, ultimately improving student results.

6.3 What is the extent of academicians' readiness for AI adoption in education-based assignments?

There were several findings that mentioned how prepared academics are for using Artificial Intelligence (AI) in educational tasks. The last research question on this topic reveals a myriad of responses. Some academicians were excited, some were cautious, and others felt the need for preparation. A bar chart (Figure 3) shows the responses from academics regarding their readiness for AI adoption. It's clear that many agree or strongly agree on aspects like being open to using AI technologies and the importance of development. This consensus indicates a shared belief in the importance of being well informed about AI to use it effectively. It also reflects an understanding that adapting to advancements requires learning and growth.

However, there are quite a few 'Neutral' responses when it comes to aspects suggesting uncertainty or reluctance due to concerns about resource availability. This highlights a gap between the existing talent and knowledge readiness and the financial challenges associated with adopting AI technology. The financial aspect could pose a challenge as the creation and upkeep of AI systems come with costs. Financial worries might indicate budget constraints or a lack of financial planning, for AI advancement. The level of backing, from institutions though positive differs among groups suggesting that while some academicians feel well supported by their organization's others may see a need for more robust support structures to fully incorporate AI into their work.

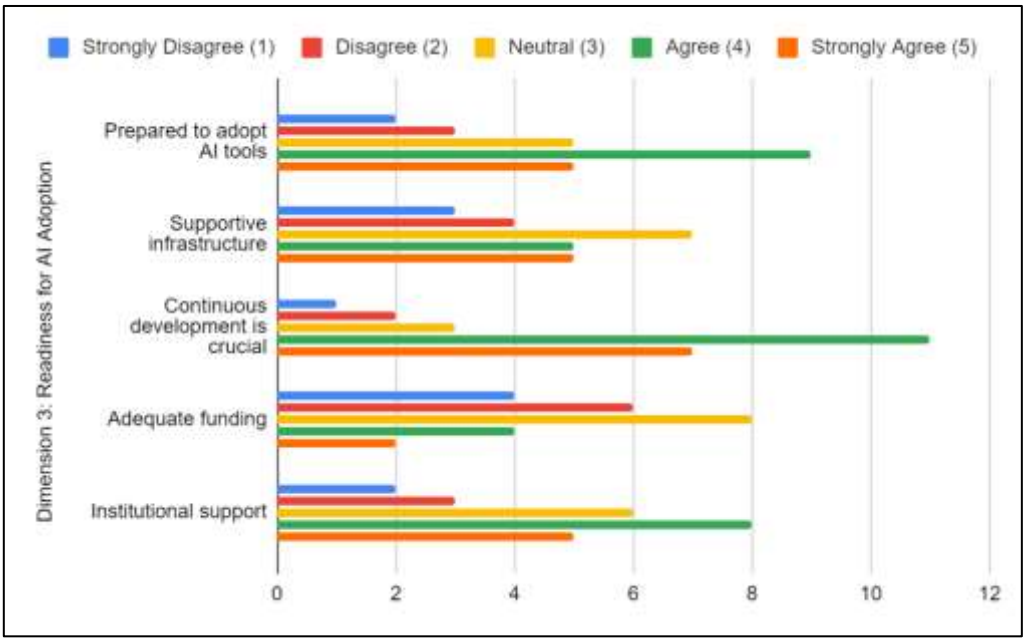

Figure 3: Academics' diverse answers to assertions concerning AI deployment challenges and strategies

Subsequently, Table 4 is the qualitative report that summarizes the academicians' AI adoption preparedness, highlighting institutional support, student involvement, and AI's ethical and societal impacts. Participants P15, P6, and P24 agree that strong university support is essential for AI efforts, emphasizing that leadership commitment must permeate the environment to

enable AI integration. P10, P20, and P18 mentioned that students are willing to use AI for a more personalized educational experience, but they emphasize the significance of proving AI's practical usefulness to interest them. According to P23, P1, and P13, ethical issues are a non-negotiable part of implementing AI, requiring a responsible strategy that assures fair advantages for all students and tackles larger social problems. In short, this table shows the rising academic understanding of AI's promise and the need for rigorous preparation to manage its hurdles and maximize its educational advantages.

Table 4: Qualitative report that summarizes the academicians' AI adoption preparedness

Readiness for AI Adoption	Institutional support	Institutional-Support	"Universities really need to support AI to make it work well."- P15
			"AI projects won't do well without strong support from the institution." - P6
			"It's important that everyone from the top down is on board for AI to succeed."- P24
	Student engagement with AI	Student-Engagement	"Students really want to use AI to get a learning experience that's tailored for them." - P10
			"Students are really excited about using AI tools." - P20
			"To get students interested in AI, we need to show them how it's used in real life." - P18
	Ethical and social implications of AI	Ethics-Social	"The way AI affects society and education needs to be right and fair." - P23
			"It's our job to make sure AI helps all students fairly."" - P1
			"It's important to think about how AI affects society to use it right."- P13

As a summary, the level of academic preparation for AI adoption in Malaysian public institutions is increasing, with clear excitement and recognition of AI's potential advantages. However, it is accompanied by a clear acknowledgment of the limitations, notably the need for more training and institutional support, in order to fully achieve the revolutionary potential of AI in education.

7. Discussions

Artificial intelligence (AI) is on the brink of transforming educational evaluation and assignments. The future promises that AI will streamline grading procedures and provide insights into student performance, opening the door for a more customized and adaptable educational environment. This study has shown that AI-powered teaching tools have the ability to provide individualized feedback and suggestions, encouraging students to go deeper into their studies and eventually improving their understanding levels. This research demonstrates how the use of AI in assignments is changing the accuracy and fairness of student ratings. Participants P7, P14, and P21 reported that AI technology improved assessment accuracy, feedback quality, and assignment fairness. Relating to other studies, Malik et al. (2023) found that students prefer to get feedback from AI systems before submitting their work. Furthermore, research on the influence of AI in education emphasize its ability to tailor feedback depending on strengths and shortcomings, creating a learning environment favourable to development and success (Hooda et al., 2022). Nonetheless, introducing AI into evaluations poses questions that must be carefully considered.

On the other hand, the concerns highlighted by participants P4, P19, and P12 are consistent with the challenges addressed in the area of AI, such as data privacy issues and the possible

overreliance on AI in the learning process, which blurs the boundary between support and replacement of student efforts. Karadağ (2023) emphasizes the need of navigating ethical difficulties while discussing AI in education. The emphasis on protecting data privacy and reducing automation in student work reinforces the need for AI tools that value integrity and human participation in educational experiences. These opinions are reinforced by previous research that investigates the influence of AI in settings, highlighting the significance of balancing AI advantages with risk mitigation, as highlighted by Owan et al. (2023). The use of AI into education creates challenges, such as data protection, bias mitigation, and sustaining a learning approach that necessitates proactive responses. By integrating AI concerns into curriculum and maintaining openness in algorithms used for AI applications, educators may maintain trustworthiness and integrity throughout their activities. Furthermore, institutional norms should control the use of AI to protect student privacy while fostering equal access to technology for all persons.

According to the findings of this research, academicians at Malaysian institutions confront challenges in improving the accuracy of task assessments and feedback. Previous research in this area has also highlighted the complexities of delivering feedback. Sulaiman et al. (2020) argue that exact evaluation promotes teaching and learning in educational contexts. One key concern noted is the quality of professor feedback and its direct impact on student learning results. Singh (2019) discovered that teacher comments had a substantial influence on both undergraduate and diploma students, underlining the relevance of feedback throughout the learning process. Meerah and Halim (2011) emphasized the importance of action research in improving student feedback quality, which leads to better teaching and learning outcomes (Sulaiman et al., 2020). Additionally, student engagement and motivation serve as metrics for evaluating AI's success in education. Integrating AI components into assignments may increase student interest and motivation throughout learning situations. However, it is critical to apply AI technologies in such a manner that they complement rather than replace traditional student learning techniques.

Academicians must find a balance between using AI technologies and encouraging students to develop their thinking abilities. Scholars have investigated solutions for addressing these difficulties. One way entails training educators to enhance their feedback procedures, ensuring that input is not only timely but also consistent with the course's learning goals. Another study strategy is to use technology, such as Learning Management Systems (LMS), to expedite feedback operations. Mansor et al. (2019) found that digital tools give feedback, helping students to interact with it and take appropriate action based on it.

In essence, AI technologies have changed course design and delivery by providing data-driven insights into students' learning preferences and styles. This development allows educators to quickly alter course materials and instructional methodologies, creating a dynamic and responsive learning environment. The difficulty is to integrate new technologies into current frameworks while keeping the integrity of experiences. For example, results from a research on preparing students for AI recommend taking an active role in incorporating AI into educational systems (Xuan et al., 2023). A new research on student preparation in the area of AI reveals that students' readiness is increasing, which may have an influence on instructors' preparedness (Lazanyi, 2018). Another research suggests extending AI-related courses at institutions as part of an effort to incorporate AI into academic curriculum (Ayanwale et al., 2022). Recent research has also shown that educators' preparedness to teach AI is related to their confidence in its relevance, self-assurance, and institutional support (Zulnaidi et al.,

2024). This study focuses on the elements that impact educators' preparation to embrace AI, highlighting the need of believing in its relevance and having mechanisms in place.

As implications from this study, the participants' feedback reveals that artificial intelligence has the potential to greatly enhance learning outcomes. For example, using AI into language learning has resulted in language acquisition methodologies personalized to individual learners' competence levels. These examples show how AI may adapt to different learning paths, improving educational accessibility and efficacy. Such examples show how technology, such as artificial intelligence, may improve the learning process while also indicating opportunities for further investigation and development. However, planning for the incorporation of AI raises a number of challenges. Bacevich (1996) emphasizes the significance of having training and assistance in order to properly use the potential of AI technology in settings. While educators are excited about employing AI to improve education, they must understand the need of training programs to provide them with the necessary experience and knowledge.

8. Conclusion

As a conclusion, the findings of this research shed light on how AI could enhance learning experiences beyond just grading. The results indicate that AI enhances the efficiency of grading and boosts student performance through its combination of speed and accuracy, in evaluations. The academicians envision a future where AI serves as both an evaluator and a perceptive educator facilitating more precise learning opportunities. However ethical concerns loom over the growing integration of AI in education. Issues such as data privacy and reliance on automated processes pose challenges reflecting the dilemmas surrounding AI's role in educational settings. The ongoing debate centers around the balance between leveraging AI's capabilities and upholding integrity. The incorporation of AI into education raises questions that call for careful consideration and well-informed decision making. Recent research highlights academicians call for an approach to implementing AI technologies that enhance practices. Essentially, incorporating AI into education necessitates a framework to preserve the human centered essence of learning experiences. The introduction of AI into education represents an influence that promises enhanced learning outcomes and streamlined operations. As evidenced by researchers, from institutions while the potential benefits of utilizing AI in education are enticing maintaining personalized educational approaches remains crucial emphasizing the complexities ahead in navigating the age of artificial intelligence.

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