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Assessment Practices of the Selected Senior High School Teachers in the Age of Artificial Intelligence: Reference for Development Plan

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Abstract

The rapid emergence of Artificial Intelligence (AI) has significantly transformed educational assessment practices, posing both opportunities and challenges for educators. This qualitative phenomenological study explores the experiences and perceptions of ten senior high school teachers at Tanza National Trade School (TNTS) regarding assessment in the age of AI. Through purposive sampling and thematic analysis of interview data, the study highlights the current assessment methods used, including performance-based and oral assessments, and the growing concerns surrounding academic integrity. Teachers expressed mixed views on AI's influence—acknowledging its benefits in information access and efficiency, while also warning against its potential to hinder critical thinking and promote dependency. The study identifies pressing challenges such as the difficulty in detecting AI-generated work, the ineffectiveness of traditional assessment tools, and the lack of institutional policies addressing AI misuse. In response, participants proposed development plans centered on designing AI-aware assessments that prioritize creativity, critical thinking, and human-centered skills. The findings underscore the need for proactive, innovative strategies to ensure authentic learning in an increasingly digital academic environment.

Keywords: Artificial Intelligence, assessment practices, academic integrity, secondary education, critical thinking, teacher perceptions

Introduction

The transformation of the educational system is quite profound with the emergence of Artificial Intelligence (AI), especially concerning the administration and structure of assessments. Nowadays, students can easily obtain AI solutions that offer answers, explanations, and even ready-made assignments in no time. Such technologies do have their merits as far as learning is concerned. They also present added difficulties for many educators, especially regarding the control and security of evaluations.

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Teachers at Tanza National Trade School (TNTS) are grappling with the challenge of incorporating technology into assessments at the secondary school level. The availability of information via AI applications raises severe questions concerning academic integrity, creating genuine frameworks for critical thinking, and the measurement of learning outcomes. Further shifting the goals towards authentic, unassisted, and self-directed processes is increasingly capturing students' imaginations

Methodology

Sampling

Ten (10) participants were selected through a purposive sampling method. Participants have three (3) years of residency at Tanza National Trade School. These criteria were cascaded to the Master teachers in helping possible respondents for the study.The interview questionnaire was the main data-gathering instrument. Thematic analysis was applied in getting the emerging themes.

Plan for Data Analysis

This study utilized the qualitative phenomenological method of research to determine the assessment practices of selected teachers of Tanza National Trade School.

Results & Findings

I. Types of assessment methods used by the teachers.

Several participants shared their experiences with Performance-Based Assessment. Participant 1 pointed out, "These are really popular now because they require students to actually 'do' something, like present, create, or perform, which AI can't completely replicate." Participant 8 explained that he utilized higher-order thinking skills, open-ended questions, and problem-solving as key assessment tools to evaluate his students' learning. Participant 5 highlighted that oral defense is a valuable method for assessing his students' understanding. Meanwhile, Participant 2 noted that timed, in-person assessments were effective in measuring her students' learning in the subject she taught.

II. Teachers' perception of the impact of AI accessibility on student performance and learning behavior.

Teachers have mixed feelings about how accessible AI is affecting student performance and learning behaviors. While five of them pointed out that it helps with efficiency and gathering information, Participant 4 raised some red flags about students becoming overly reliant on AI tools, which could lead to a decline in critical thinking and engagement in their learning.

One teacher noted that students "easily copy answers without true understanding," highlighting a worrying trend towards superficial learning. Nine teachers stressed that without proper guidance, the use of AI could hinder independent thinking and genuine learning experiences.

III. Challenges that teachers encounter in maintaining academic integrity during assessments in the age of AI.

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When it comes to maintaining academic integrity during assessments in this AI-driven age, six teachers shared that they face numerous challenges. Eight of them voiced serious concerns about how tough it is to spot AI-generated work. One teacher mentioned, “It's harder now to distinguish between a student's real work and something generated by AI because the responses look very natural.” Participant 2 pointed out that students are increasingly tempted to use AI tools to quickly finish their assessments, often without grasping the material.

Another hurdle is that traditional assessment methods are becoming less effective. Teachers observed that multiple-choice and essay-based tests are now more susceptible to AI misuse. As one participant put it, “Even essays are no longer reliable indicators of student understanding because they can be generated in seconds.” Three teachers also mentioned the lack of effective monitoring tools during both online and in-person assessments. Two teachers expressed their frustration over the absence of clear institutional policies addressing AI-related misconduct. One teacher emphasized, “We were trained to check for plagiarism, but now we’re not sure what to look for.”

IV. Proposed development plan that can be formulated by the teachers in terms of assessment practices in the age of Artificial Intelligence.

A suggested development plan for assessment teachers can concentrate on fostering a more sophisticated understanding of AI's role in education, according to five of the teachers. According to three educators, a development plan would give top priority to creating tests that recognize the potential advantages and drawbacks of AI-generated content while simultaneously valuing critical thinking, creativity, and human-centered skills. Another teacher mentioned that instead of just depending on AI tools to generate answers, teachers can design assessments that inspire students to think critically and creatively.

Conclusion

Selected senior high school teacher's assessment practices in the era of Artificial Intelligence, a study which underscores the urgency for educational practitioners to respond with sensitive avidity and creativity. When answers to questions can be looked up and produced so readily, it means that teachers now need to start thinking about assessing skills like critical thinking, creativity, and problem solving -- all skills that can't be measured by simply memorizing the facts. With AI-powered assessments, educators can design more authentic and impactful assessments that can help prepare students to successfully navigate the ever-developing and increasingly digital world.

The findings from this study have important implications for the creation of a more extensive program to enable teachers to have adequate and the skills and knowledge to leverage the power of AI in assessment to enhance deeper learning and increased.

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