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The Lived Experiences of Teachers in Detecting AI Generated Content in Students' Written Outputs in Private Schools of Bislig City

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ABSTRACT

Introduction: The proliferation of AI writing tools such as ChatGPT and Grammarly undermines the maintenance of academic integrity, particularly in underfunded private institutions.

Objectives: This study seeks to understand the experiences of SHS English teachers in private schools of Bislig City while evaluating AI generated outputs from students.

Methods: A qualitative phenomenological approach was used through in depth interviews and focus group discussions involving ten teachers. A thematic analysis was employed to bring to light common themes and personal realities.

Results: Teachers described noticing red flags of AI generated writing, such as rapid progression in grammar, vocabulary, sentence structure, and coherence that didn't align with students' typical work. Among the key barriers were technological and institutional barriers, including low digital literacy, poor internet access, and insufficient AI detection tools. Teachers also reported the difficulty of combating AI humanizing platforms, such as Quillbot, which obscure traces of AI. Several instructors relied on rubric based evaluations of the authenticity of responses to help discourage AI exploitation. Still, they also expressed concern about grading bias given the subjective nature of validation and the lack of official detection procedures or institutional support.

Conclusion: These findings underscore the urgency for campus AI use policies, professional development around ethics in AI use, and investment in digital tools to aid in promoting fair assessment in the age of generative AI.

Keywords: AI detection tools, academic integrity, student writing, education technology

INTRODUCTION

The birth of AI tools in education has certainly shaken off conventional academic integrity and the norms of student evaluation. Formerly based on students' provable competencies and thinking skills in what they wrote, the situation among educators is evolving: ensuring that submitted work is already a learner's independent contribution, or whether AI backed platforms have had far too much input. It is particularly an issue in secondary education, where basic skills are developed, and writing is a powerful indicator of understanding, imagination, and critical thinking.

The study will be conducted in private senior high schools in the city of Bislig, Surigao del Sur. It presents a broad spectrum of institutional practices, administrative schemes, and resource pools, making it interesting to consider and understand how AI challenges are encountered within actual school settings. Compared to Department Education administered public schools, private schools have more flexibility in the way they do things. Their responses depend on internal leadership, financial resources, and local decision making contexts. This diversity of institutions allowed us to investigate nuanced and context dependent reactions to the proliferation of AI based technologies in education.

Journal of Information Systems Engineering and Management
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Research Article

Writing tools powered by artificial intelligence, such as ChatGPT, Grammarly, Quillbot, and a number of other similar platforms, enable students to access highly polished writing assistance instantaneously. Such tools are capable of producing coherent essays, paraphrasing text , and even correcting grammar to a remarkable extent. Useful for Writing Support, its misuse in academia, where students claim to have written papers with the AI, is unethical. In Bislig City, teachers say it's harder and harder to tell what's been written by a student and what's been polished or written entirely by AI. Specifically, they point to swift changes in the level of writing and sophistication, use of sophisticated language, and well ordered arguments that are beyond what students are known to be capable of doing. Such conflicts are generally suspicious but seldom prove beyond a reasonable doubt the involvement of AI.

The English teacher in the study described this submission as a text that used a high level of language, well developed ideas, fine organization, and qualities that were not particularly present in what he knew of the student's work. Although the instructor was convinced the student had used AI tools, there was no definite means of verifying it. This story demonstrates a more widespread problem: teachers have few tools to use other than their gut and their judgment because there are no reliable AI detection tools and clear policies within institutions.

It is not a local problem, but a global one. As Williams et al. (2023) note, many faculty members are not prepared to handle AI ethical missteps , given that they lack adequate training and access to such detection tools. In the absence of institutional evidence, writing assessment tends to lean on intuition. Lee and Brown (2022) argue that relying on such subjective judgment is prone to inaccuracy and can result in grading inconsistencies and unintended biases, negatively impacting the validity of academic evaluation. Dawson and Sclater (2022) additionally mention the lack of institutional consistency that impedes teachers' capacity to enforce academic integrity, particularly given the rise and evolution of AI based solutions for academic integrity.

In the Philippines, the challenge is exacerbated by the lack of infrastructure and uneven formulation of policy. While CHED and DepEd had started consultations on ethical AI incorporation in teaching and learning, no national policy provides for the use or detection of AI in the classroom. Education Secretary Sonny Angara has accepted that there is a need for legislation on the matter. And yet, teachers in many under resourced areas, including in Bislig City, still encounter systemic barriers — from unreliable internet connections to schools' inability to pay for institutional subscriptions to AI detection software. These issues represent the pressing need for localized and context specific mechanisms to protect assessment integrity in Philippine schools.

This research explores the ways by which English teachers in private senior high schools in Bislig City identify AI created student writing. It is informed by an emerging literature that highlights the under preparation of educators, the absence of formal procedures, and over reliance on intuition. More particularly, the research is organized around the following central research questions:

RQ1: How can teachers detect AIgenerated written work?

RQ2: What challenges do teachers face while detecting AIgenerated students' written outputs?

RQ3: What impact do AI detection practices have on teachers' assessment and grading decisions?

These questions seek to understand the lived experiences of teachers in grappling with AI related concerns to gain inductive insights into day today classroom practices. Through analysis of these emerging patterns and practices in local contexts, the paper contributes to a broader debate about how systems of education can most responsibly and strategically respond to the inclusion of AI.

The implications for this study are broad, based on its relevance to various stakeholders. For practitioners, the results contribute pedagogical tips and experiential cues, which might contribute to validating the authenticity of the student outputs. These are essential findings in situations in which technological detection equipment is scarce or nonexistent. School leaders could use evidence based guidance to inform internal policy development, resourcing, and faculty development planning. The studies also arm them with a clearer vision of institutional lacunae that must be addressed for the maintenance of academic standards.

For policymakers, the work provides a body of empirical evidence on which to base national and regional policies regarding the ethical use of AI in education. The absence of standardized protocols creates challenges for

Journal of Information Systems Engineering and Management
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Research Article

schools to apply consistent protocols; thus, the results of this study may inform practical guidelines and reflect the realities of the classroom. Professional developers can leverage the findings to develop customized training modules to increase teachers' digital literacy and ability to identify AI generated materials.

Students are also indirect recipients of this research. With better evaluation and teachers who are better educated, learners receive feedback that is more valid with respect to what they have learned and what is helpful to them. "A focus on originality and academic honesty promotes a culture for learning where actual effort is acknowledged and celebrated. Parents and guardians also receive assurance that their children's academic assessments are valid, thereby upholding the value of educational results.

Finally, the presented research provides a basis for other researchers to be engaged in the AI and education field.

LITERATURE REVIEW

The rapid expansion of artificial intelligence (AI) into academic spaces has fundamentally impacted student writing and decision making. With tools like ChatGPT, Grammarly, and others of the sort increasingly available to students, educators are becoming increasingly concerned about the authenticity of student work and whether students are completing academic tasks with integrity. These developments have elicited profound pedagogical, ethical, and institutional concerns regarding the ways in which student outputs are to be regulated and assessed at a time when AI mediation is not only widespread but also, in many instances, virtually indistinguishable from human production. New research also highlights several dimensions of concern, from the linguistic environments of AI outputs to the constraints schools face in detecting and managing these outputs.

Copy AI authors are getting caught crossing the uncanny valley; linguistic tells reveal

A linguistic clue is often a teacher's first line of defense when identifying AI written student responses. AI produced texts usually display excessive formality of language, rigid sentence format, and impeccable grammar, which may not be consistent with a known writing profile of a student. Fleckenstein et al. (2024) stressed the formulaic, mechanical, and impersonal quality of many such products, which often do not bear the imprint of the youngster's own original or spontaneous use of language. Similarly, Pan et al. (2024) observed that texts generated by AI are characterized by such features as the overuse of transitional phrases, overuse of conjunctive adverbs (e.g., moreover, consequently), as well as the formulaic structuring of paragraphs. These qualities can create a veneer of fluency over an absence of understanding or engagement with material.

This gap between AI gleaned Polish and student track records is often a red flag. Teachers know this anyway They compare present submissions to previous submissions made by individual students. Chaka et al. (2023) Note that unexpected, rapid increases in specific attributes of writing — fluency, coherence, vocabulary sophistication — are often greeted with suspicion if there are no explanations for them or defenses of ideas in the papers in followup exchanges with students. Moreover, Cingillioglu (2023) highlights the necessity of content level analysis when discriminating between AI generated and human authored texts because AI systems do not usually have experiences or personalized insights relevant to a particular situation, and their responses are not contextual.

Manual Scoring and Educator Approach

Although there are linguistic red markers, some teachers continue to rely on visual processing when they mark compositions. It is a laborious process of close reading, cross reference of style, and even sometimes interrogating orally. Manual review can provide a thoughtful interpretation, but it is time consuming and does not easily scale, especially in classes of many students or on short notice. Vaskov et al. (2021) highlighted the fact that digital literacy divides further compound the problem, as many students are now skilled at using AI creatively and illicitly, 1 using tools such as Quillbot or Wordtune to rephrase (or more precisely, "humanize") AI generated text, for example, and so subvert superficial detection.

Some teachers try to address this issue by incorporating AI aware prompts into their assessment design. These might entail the use of drafts or of writing journals or compositions written in class to which to compare. Still others modify their rubrics so that originality, personal engagement, or critical insight becomes a particular criterion used for

Journal of Information Systems Engineering and Management
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Research Article

evaluation. But, in the absence of regular organizational support, such measures can differ between teachers and lead to subjective or unfair grading.

Institutional constraints and policy vacuums

Institutional constraints also hamper the capacity to detect content that AI has generated. Alexander et al. (2023) reported that, especially in under resourced or disadvantaged schools (e.g., rural schools, developing schools), advanced high quality detection tools using AI systems like Turnitin's AI Module, GPTZero, and Winston AI have not often been readily available. When such tools are available, their adoption is also challenged by the existence of subscription fees, technological needs, and the digital divide.

In addition, Garib & Coffelt (2024) claimed that faculty's lack of professional skills may also undermine the effectiveness of these tools, not even to speak of more ()equipped institutions. In fact, teachers may also lack experience in interpreting AI detection scores and may not know how to place these into an existing academic assessment process. Such institutional training is nonexistent, and as a result, the suspected AI usage is addressed in an inconsistent way across the community, which could degrade the fairness of the academic evaluation.

The policy void around AI use in education compounds the challenge. Miao et al. (2021) found that most schools (especially in the Global South) apparently had yet to articulate explicit ethical norms or formal policies on student application of AI writing tools. There are no formal structures in place, meaning it is left almost entirely to the independent judgment of individual teachers to interpret and enforce how they each see fit. That might lead to inconsistent practices between, or even inside, departments, challenging the fairness and transparency of academic assessments.

This problem is particularly relevant in the Philippine setting. Schools in underprivileged and rural areas often do not have a policy structure or technical help to deal with school based AI wrongdoing. In such schools, teachers are coping with these emerging demands not institutionalized, facing issues of ethical conflicts and professional burnout.

Technologies in Transformation and Human Like AI Output

As technology for AI writing models develops, it consistently keeps the existing detection methods on its toes. Amirjalili et al. (2024) note that newer AI models do a good job of sounding like a human, using idioms and narrative structures, and can produce text that would be hard to differentiate from student writing. Students will often consciously "humanize" AI generated content by sharing personal anecdotes, using idiomatic language, or editing the text to match their voice or context better.

Zheng (2024) cautioned that the authoring jostling also complicated the moral terrain not just of 'detection' but of education more generally. Yet when content produced by AI is deftly mixed with real student work, the issues of authorship, originality, and responsibility become more challenging to sort out. It calls for the development of more advanced and multi staged detection models that are not simply limited to linguistic analysis but rather utilize behavior and process based metrics (E.g., keystroke logging, revision history, or writing process documentation).

Theoretical Background: TAM and AIED

The study is informed by two theoretical approaches to the problem at hand: The Technology Acceptance Model (TAM) and frameworks from the Artificial Intelligence in Education (AIED) literature. Based on Davis (1989), TAM states that an individual's intention to use technology relies on perceived usefulness and perceived ease of use. Venkatesh and Davis (2000) extended this model to the context of education, and they aimed to explore the ways that teachers and students get accustomed to new technologies in classrooms. When it comes to AI detection, the readiness to adopt existing tools (i.e., AI detectors) or to utilize existing technologies (i.e., plagiarism checkers) is highly dependent on whether or not teachers believe in the tool's accuracy and feel competent in working with the user interface.

Parallel to this, AIED frameworks emphasize the pedagogical and ethical integration of AI in educational contexts. Holmes et al. (2019) contended that educators must do better than simplistic uses of AI and should think more broadly about learning goals, equity issues, and professional learning. From this point of view, it is essential not only

Journal of Information Systems Engineering and Management
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Research Article

to provide teachers with detection instruments but also pedagogical means and ethical considerations on how to use them responsibly.

These model inputs provide a frame of reference for understanding how institutional support, teacher preparedness, and perceived tool usability impact the effectiveness of AI detection in schools. They also guide much of what is described in this paper, including teacher practices, contextual barriers, and the use of professional development when considering detection strategies.

Context of local context and emerging research gaps

Though there is ample literature on the challenges of AI in education worldwide, studies addressing such in the local context, particularly region specific rural or semi urban regions, were found to be lacking. In a context like the Philippines, where the inequalities of digital access and readiness of institutions are pronounced, a nuanced appreciation of teachers' lived experiences may appear increasingly relevant. Sibug et al. (2024) found that Filipino teachers have favorable attitudes toward using AI in schools, specifically around enhancing efficiency and teaching kids. However, they are kept in check by concerns about ethical limits, the absence of clear school policy, and inadequate training.

Alejandro et al. (2024) realized a significant impact of perceived usefulness, ease of use, and attitude on the acceptance of technology by pre service teachers in India, which highlights the importance of focused AI literacy in teacher education in the country. For their part, Lumandas and Ylarde (2025) underscored the immediate necessity to integrate AI based competencies in teacher training programs, given the fast pace of development exhibited by digital learning tools.

Despite such a burgeoning interest in this area, little empirical work has been done to date on how teachers in secondary institutions, especially in private schools in provincial or marginalized areas, see and react to the challenges AI presents. This research fills that gap by understanding how Senior High School English teachers of private schools in Bislig City are living the experiences. These understandings are intended to inform policies, institution based driving programs, and subsequent research about AI induced educational practice in the Philippines and similar contexts.

METHODS

A Software Assisted Content Detection Tool Contributors and ABSTRACT The authors used a qualitative research design to investigate the lived experiences of Senior High School English teachers in detecting AI generated content in student written assignments. Credit Usage (Qualitative Analysis) The research questions were exploratory and vague, addressing complex practices and views that can not be easily quantified, and its qualitative analysis would be more suitable for the dual case study. In particular, a phenomenological method was adopted to express the essence of the lived experience of the participants. This approach allowed the researcher to gain a rich understanding of how teachers identified, assessed and reacted in relation to AI produced content in students written work.

Phenomenology, as an approach to research, emphasizes the understanding of phenomena just as people experience them in their day to day lives. In these circumstances, the phenomenon of interest was the process of determining AI-produced student responses—an aspect of assessment decision making that is relatively novel. In so doing, the study sought to learn not only what teachers do but how they interpret the significance of their actions and choices in the face of this new issue. This approach facilitated the gathering of thick, in depth data through semi structured interviews and focus group discussions. It provided a holistic understanding of teachers' tactics, ethical struggles, and contextual floors.

To direct the collection of the data, the In Depth Interview (IDI) Guide and Focus Group Discussion (FGD) Guide were developed by the researchers and followed. These dimensions of experience were probed more in depth through the use of core open ended questions within the IDI Guide (eight in total). It included how they go about practically working out how to identify AI generated answers, the cues they look for, the student behaviors, the support they get from their institution, and the ethical considerations guiding their choices. Sample questions were: "Can you explain how you typically determine whether a student's written output is likely to be AI generated?" and "What moral

Journal of Information Systems Engineering and Management
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https://www.jisem-journal.com/

Research Article

challenges do you take into account when inspecting alleged AI outputs?" The open ended questioning enabled respondents to expand on their comments and express their experiences in their own words.

The FGD Guide also consisted of core questions, which were presented in a manner that would encourage interaction and group reflection. Interactions became opportunities for participants to stretch each other's utterances, negotiate their stances, and share commonalities or differences. The exchange introduced the data to the comparability of common threads and variations between school settings. Both instruments were content validated by two postgraduate teacher educators who were experts in qualitative research, teacher education, and educational assessment. The experts evaluated the instruments for clarity, relevance, logical sequence, and fit with the phenomenological design of the study. It includes modifications to their suggested questions to improve question wording and thematic consistency and to keep the way of asking the questions neutral.

Ethical considerations were prime rules while conducting this study. To protect the rights, quality of life and welfare of the subjects, a set of ethical safeguards were employed. Informed consent was obtained from all participants before the data was collected. The researcher furnished participants with a written description of the purpose of the study, procedures of the study, risks and benefits, confidentiality, and their right to refuse participating in the study at anytime without penalty. This was further bolstered by an oral briefing which allowed members to ask questions and seek clarification. Only the patients who agreed in writing were recruited in the study.

Anonymity and confidentiality were ensured at all levels of the study. For the purpose of anonymity, pseudonyms were used for transcribing and reporting. All interview/FGD audio files, transcriptions and notes were saved in an encrypted password protected format that was only accessible to the researcher. In addition, the teachers' professional affiliations were anonymize in such a way that no particular school or teacher could be identified.

Before the fieldwork, the researcher applied for an ethical clearance, and permission were granted by the (Institutional Ethics Review Committee) of the university. This consent form meant that the study complied with all ethical guidelines for work on human subjects. All interviews and focus group discussions were conducted with participant emotional comfort and psychological well being in mind. This was a respectful, non forcing tone, and participants were able to omit questions they found offensive. Participants were also informed that they had the right to discontinue the session at any time.

In order to maintain the rigor and trustworthiness of the study, it adhered to the methodological criteria set by Lincoln and Guba (1985); in other words, credibility, transferability, dependability and confirmability. Face validity was established via member checking. Following the transcription of the interviews and FGDs, participants were given a chance to verify their statements and add/correct where necessary. This, in turn, helped to guarantee that the results could be relied on to accurately represent the intents and meanings of the participants.

Transferability was demonstrated by in depth descriptions of the research context as well as the participants' profiles, and by descriptions of the educational setting. This level of detail enables the reader and other investigators to judge the relevance of the findings to their setting or population. Reliability was tackled by the use of an audit trail in which research decisions, changes in methodology, and data analysis were recorded. This transparency allows other researchers to duplicate or review the study's procedures.

Reflexivity supported confirmability. The researcher kept a reflexive journal over the duration of the study to document personal reflections, methodological issues, insights that arose and any potential biases. This approach helped the author to notice his own preunderstandings and decrease the risk of influencing negatively to interpretation of data. Furthermore, we used triangulation of sources of data such as interviews and FGDs to verify themes and enhance a richer understanding of the phenomenon of interest.

To sum up, the methodological choices in this study—the phenomenological approach embedded in method, the use of validated instruments, the conscientious adherence to ethical considerations, and the measures taken to secure trustworthiness—were carefully tailored to the research objective of probing the lived experiences of teachers detecting AI generated content in student writing. This methodology allowed the researcher to document the complex contexts and issues confronted by academics and to offer valued reflections to the emerging academic integrity agenda for AI times.

Journal of Information Systems Engineering and Management
2025, 10(47s)
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https://www.jisem-journal.com/

Research Article

Signs of AI Created Student Uploads

The teachers in the five private schools of Bislig City noticed commonalities that left them suspicious that the students' work might have been AI produced. A common remark also was that the enhancement in the writing quality was striking, but was qualitatively so different from what students had written earlier. However, these oddities raised red flags, especially when they were not consistent with a student's known level of ability or use of language. Two sub themes were identified concerning these cues.

The good manner and like method of writing', are "the use of high words, the leaving out nothing of slubbered over thrust, long sentences, and short paragraphs." These characteristics were frequently in stark contrast to the students' usual style of writing. As Teacher A said, "There are times I get outputs that are too good, too high level for the student's known capacity. It's like a college essay from someone who's a pretty bad writer and makes odd, boring choices in terms of what to discuss. Other teachers, from smaller schools, expressed similar feelings, but this happened less frequently as one might expect because the student populations and outputs were smaller.

In a second sub theme, we observed content analysis (in depth) and poetic presentation. This ranged from discussions at a high conceptual level, to well structured cohesive argument and well thought out answers that were beyond what students had shown to be capable of in lessons. Untrustworthy were indications such as these, from the students accustomed to struggle for coherence or lack analytical depth and then turn around and magically come up with articulate, insightful essays. Teacher F, for example, said, "When it's a kid who doesn't have connected thoughts and all of a sudden they come up with an amazing essay with well calculated argument, I start to doubt."

These results support the assertions made by Lee and Brown (2022) that rapid escalation of linguistic complexity and depth signify possible AI support. Fleckenstein et al. (2024) also pointed out that, generated texts appear to exhibit mechanical fluency, which is grammatically correct; yet is devoid of a personal voice or imperfections, that is seen in student generated texts. In many cases, teachers grew suspicious when the writing showed no personal insight or emotional depth — characteristics that are frequently absent in algorithmic output. A student who, earlier in the course, turned in simple sentences may suddenly produce an essay containing flawless grammar, an elevated vocabulary, and yet with no reflection and no deeply personal material. These types of inconsistencies raised red flags for educators looking to catch AI created content.

Together, these observations suggest a significant emergent theme: excessive excellence in writing that does not correlate with the student history. This disconnect between expected and actual performance is a main clue for teachers to suspect an AI was at work.

Difficult to Detect AI Generated Submissions

Teachers also mentioned contextual and systemic challenges that limited their capacity to accurately identify AI made submissions. These challenges differed from one school to another, mostly in terms of institutional resources, digital infrastructure and administrative support.

A major focus was on the shortage of technical and human resources. In smaller or less resourced schools, teachers often did not have access to AI detection tools such as Turnitin or GPTZero, and had unstable internet connections, making digital verification difficult or impossible. "Teacher B from a poorly housed school said: "We don't have the tools or internet connection to check each paper. The frustrating part is we don't know or we're just playing the guessing." In schools with access to AI detection tools, there remained challenges around restricted user access, time constraints and inadequate guidance on how to utilize the platforms effectively.

Apart from resource limitations, another barrier was discovered: students using tools that humanize AI created content. It was found that students were more and more turning to applications such as Quillbot, Grammarly and Rewordify to fix up AI outputs—the refusal to fix automatic output appears to have led students to find a way around their teachers, which created a scenario where teachers couldn't easily distinguish algorithm and human text. They're getting clever," observed Teacher E. They employ paraphrasing tools to cover up AI fingerprints. It's not merely a matter of identifying ChatGPT, in other words; it's identifying patterns that are 'off.' "

Journal of Information Systems Engineering and Management
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https://www.jisem-journal.com/

Research Article

These concerns are also corroborated by Dawson and Sclater (2022), who found that students' tactics with rephrasing and editing applications make AI detection much more challenging. In the absence of institutional criteria or scientific training, instructors are typically forced to rely on personal judgment, which though sagacious does not posses the objectivity necessary for formal academic validation.

...supplemented by inconsistent school based policy implementation. In other places, the support ranged anywhere between slight — organizing workshops on the issue, and offering tools for detection — to utterly lacking, leaving teachers on their own to tackle the matter and increasing their stress and uncertainty around fair assessment.

Impact on Testing and Grading practices

Suspected use of AI has also impacted evaluation and grading. Educators shared the customization of rubrics and assessment tools to more accurately reflect the realities of AI supported writing and to encourage originality and critical thinking.

The first emerging theme in this respect was AI related categories on grading rubrics. Some teachers added certain features to assess originality, voice and reflective thought — characteristics less likely to show up in AI produced work. As Teacher C, from a high enrollment school, noted: I've even created a very clear rubric category about originality, which allows me to combat what I believe to be AI usage. "If a book lacks personal insight or sounds robot like, it will lose points." This loosening corresponds to a departure from ascribing authorship by grammar or content alone to a holistic concept of student authorship.

And yet, teachers understood that manual scoring would inevitably introduce bias. And even with better rubrics, determining whether A.I. had been used on an essay was for the most part a subjective process. Teacher G opined: "Despite the rubrics, we are fallible, we base our assessment on the judgment of the outputs. It's not foolproof, but it's the best we can do within the constraints of our own shortcomings."

This paradox is consistent with those reported by Kooli and Yusuf (2025), who highlighted that increasing use of AI tools among students led to significant changes in grading system but also to ethical dilemmas. Similarly, Chaka et al. (2024) found that the demand for verifying student authorship is hindered by teachers' lack of professional time and technical competence, and because the school is not ready.

With the evolution of grading in the face of AI, tension remains between fairness and feasibility (of detection) and the prevailing wisdom that in many contexts it is the same teachers who have to play the role of the detective without a clear policy direction.

DISCUSSIONS

The findings of this study shed light on the complex and dynamic field of AI in education and writing assessments among students in this case. Teachers' ability to identify AI generated material is, for the most part, dependent on how well they know their students and their gut instincts. This dependence on non systematic detection is consistent with the findings of Fleckenstein et al. (2024), which have been the anomaly detection due to the tonality, fluency, and abrupt change in the writing performance that the educators have constantly reported.

Teachers, however, are not the source of the problem; systemic issues hamper them. The reported challenges—limited access to reliable internet, a lack of institutional subscriptions to detection platforms, and gaps in digital literacy—indicate a lack of technological readiness and policy infrastructure. These conditions resemble the observations of Alexander and colleagues. (2023), who emphasized that low resource schools are particularly at risk of academic integrity compromise in the era of AI.

The growing savviness of students in hiding their use of AI with the help of paraphrasing and humanizing software creates an additional challenge to detecting it. As Zheng (2024) noted, the distinction between human and machine writing text lines is growing more and more ambiguous, augmenting the danger of the issues for ethical evaluation and leaving troubles for the credibility of written appraisal.

Further, changes in grading, including the involvement of originality related factors, reflect teachers' reactions to the challenge posed by the AI. But such advancements come with risks. With subjective interpretation, the potential for

Journal of Information Systems Engineering and Management
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https://www.jisem-journal.com/

Research Article

inconsistencies, grading disputes, and even unfairness is greater—especially with no structured recommendations or support.

These observations reinforce the fact that dealing with AI in education means far more than just a technical problem; it is also a pedagogical and ethical one. It requires a coordinated response that includes teachers, administrators, and policymakers. Institutions need to work on well developed guidance for AI use, professional development around ethical detection strategies, and investment in digital tools that will help educators. Without such institutional support, the responsibility will remain unfair to individual teachers, compromising both the fairness of evaluation and the legitimacy of educational results.

CONCLUSIONS

This research investigated how Senior High School Teachers in English struggled to detect AI generated output from the written papers submitted by students in private schools in Bislig City. A number of important observations were drawn from the data.

Educators are best detecting AI generated writing based on discrepancies in the level of performance in the current dash established from the students' known readiness for coursework. Indicators of this suspicious material include more advanced vocabulary, grammar, and structure of arguments, as well as a level of coherence that the student has previously not achieved. These are judgments that are informed by the teachers' knowledge of students' writing practices, rendering the detection of such practices context dependent and highly subjective. As a result, in large or less familiar classes, there is potential for bias in the assessment process.

Identifying AI generated content is also confounded by organizational and technical limitations. Teachers also indicated a lack of access to AI detection technologies and varied degrees of digital proficiency, such as the availability of Turnitin with AI scoring capabilities. There are no uniform policies or established protocols, leaving teachers to make ad hoc decisions, resulting in spotty practices from school to school." This lack of standardization mirrors larger systemic shortcomings in the readiness of educational institutions to deal with the emergence of generative AI in student work.

One of the emerging challenges is the use of AI humanizing platforms, like Quillbot, by students to paraphrase or refine AI produced content to illegibility. These findings mirror the findings of Dawson and Sclater (2022), who found that as AI tools evolve, so too do the ways in which authorship can be obscured, contributing to ethical and evaluative challenges for educators.

Some teachers have responded by changing grading rubrics to focus more on originality, in class alignment, and critical thinking. However, such detection and prevention activity lacks institutional approval, and standardized conditions for AI detection erode them to be fragmented and somewhat subjective. It detracts from professors' grading reliability and students' sense of equity (Lee & Brown, 2022).

In consideration of these findings, the study points to the pressing need for private schools to establish and enforce policies that formally articulate appropriate AI use in an academic setting. Such measures should be implemented together with targeted programs for faculty development in AI recognition, digital ethics, and technological competencies. Doing so will provide teachers with the skill set and confidence to address the ever-changing academic challenges facing our children responsibly.

This study highlights the importance of an ethical and pedagogically valid balance to technological progress. As it continues to advance its hold within the educational system, schools—particularly those in disadvantaged areas—must prepare through policy, training, and more research. Potential topics for future research include student perspectives on AI use in addition to institutional preparedness and the relative effectiveness of automated detection tools. By tackling both instructional and systemic shortfalls, educational institutions can continue to protect academic integrity while simultaneously providing innovative advances.

Journal of Information Systems Engineering and Management
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Research Article

REFERENCES

[1] Alejandro, I. M. V., Sanchez, J. M. P., Sumalinog, G. G., Mananay, J. A., Goles, C. E., & Fernandez, C. B. (2024). Preservice teachers' technology acceptance of artificial intelligence (AI) applications in education. *STEM Education, 4*(4), 445–465. https://doi.org/10.3934/steme.2024024

[2] Alexander, M., Torres, R., & Liu, P. (2023). Challenges in detecting AIgenerated academic content: A case study in secondary education. *Journal of Educational Technology and Ethics, 15*(2), 112–125.

[3] Alexander, R., Bautista, J., & Kim, H. (2023). Barriers to AI detection in underresourced educational institutions. *Journal of Educational Technology and Ethics, 18*(2), 45–59.

[4] Amirjalili, F., Rezaei, S., & Tan, M. (2024). Challenges of humanized AI writing in academic contexts. *International Review of Educational Technology, 20*(1), 89–104.

[5] Amirjalili, M., Wang, S., & Li, H. (2024). The evolution of AI in student writing: Detection limitations and pedagogical implications. *AI and Learning, 19*(1), 55–70.

[6] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

[7] Chaka, C., & Mhlongo, T. (2024). AI tools and educational integrity: South African perspectives. *International Review of Education Technology, 14*(3), 88–102.

[8] Chaka, C., Mhlanga, D., & Madzinga, R. (2023). Teachers' perceptions of AI in student writing assessment. *Journal of Educational Technology Studies, 19*(2), 34–48.

[9] Chaka, C., Mphahlele, M., & Mhlongo, T. (2023). Teachers' strategies for authenticating student work in the age of AI. *South African Journal of Education, 43*(1), 22–34.

[10] Cingillioglu, N. (2023). Detecting AI in the classroom: A practical guide for educators. *Teaching and Learning Review, 11*(1), 55–67.

[11] Cingillioglu, N. (2023). Human or machine? The ethics and limitations of AI content detection in higher education. *Journal of Academic Integrity, 9*(4), 67–79.

[12] Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). SAGE Publications.

[13] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

[14] Dawson, S., & Sclater, N. (2022). Artificial intelligence and academic integrity: Emerging threats and institutional responses. *Educational Technology Research and Development, 70*(1), 45–63. https://doi.org/10.1007/s11423021100459

[15] Fleckenstein, M., Patel, K., & Santos, L. (2024). Teachers' perceptions of AIgenerated writing: Indicators and classroom responses. *Computers and Composition Studies, 40*(2), 144–160.

[16] Fleckenstein, M., Perez, J., & Liu, H. (2024). Language patterns and detection of AIgenerated student writing. *Journal of Applied Linguistics in Education, 22*(1), 12–29.

[17] Garib, G., & Coffelt, T. (2024). Teacher readiness in the age of generative AI: The training gap in digital assessment tools. *Education Leadership and Policy Journal, 27*(1), 22–39.

[18] Garib, G., & Coffelt, T. (2024). Training educators to detect AIgenerated texts: Institutional responsibilities and gaps. *Educational Research and Practice, 28*(1), 33–49.

[19] Holmes, W., Bialik, M., & Fadel, C. (2019). *Artificial intelligence in education: Promises and implications for teaching and learning*. Center for Curriculum Redesign. http://curriculumredesign.org/wpcontent/uploads/AIinEducationPromisesandImplications.pdf

[20] Kooli, C., & Yusuf, M. (2025). Revisiting assessment design in the AI era: Implications for grading and evaluation. *Contemporary Educational Policy Review, 21*(1), 1–16.

[21] Lee, H., & Brown, T. (2022). Teacher perspectives on the impact of AI in student writing: Detection and ethical implications. *Journal of Educational Technology and Ethics, 15*(3), 110–125.

[22] Lumandas, L. A., & Ylarde, C. M. L. (2025). AI literacy among preservice teachers: Inputs towards a relevant teacher education curriculum. *International Journal of Multidisciplinary Educational Research and Innovation, 3*(1), 242–253.

[23] Miao, F., Holmes, W., & Huang, R. (2021). *AI and education: Guidance for policymakers*. UNESCO Publishing.

Research Article

[24] Miao, F., Mishra, S., & McGreal, R. (2021). *Guidance for generative AI in education and research*. UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000385451
[25] Pan, Y., Zhao, X., & Ng, M. (2024). Stylistic anomalies in AIgenerated academic texts: Teacher perspectives and detection strategies. *International Journal of Educational Integrity, 18*(3), 101–118.
[26] Reyes, M. C. (2021). Challenges of AI integration in rural education settings in the Philippines. *Philippine Journal of Educational Policy and Innovation, 6*(1), 42–56.
[27] Sibug, V. B., Vital, V. P., Miranda, J. P. P., Fernando, E. Q., Gamboa, A. B., Hernandez, H. E., Bansil, J. A., & Penecilla, E. (2024). Teachers' perspectives on integrating AI tools in classrooms: Insights from the Philippines. *Philippine Journal of Educational Research and Development, 25*(2), 123–142.
[28] Van Manen, M. (1990). *Researching lived experience: Human science for an action sensitive pedagogy*. State University of New York Press.
[29] Vaskov, B., Liu, Y., & Hernandez, J. (2021). Digital literacy divide among educators and learners in AIenhanced classrooms. *Journal of Educational Innovation, 10*(2), 60–78.
[30] Vaskov, Y., Demir, A., & Rojas, L. (2021). Digital literacy gaps between students and teachers in secondary education. *Journal of Digital Education Research, 15*(2), 64–78.
[31] Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management Science, 46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926
[32] Williams, A., Ramos, L., & Chen, D. (2023). The preparedness of educators in the age of AIgenerated writing: A national survey. *Journal of Digital Education and Ethics, 18*(2), 25–39.
[33] Zheng, L. (2024). When AI writes like us: Humanized generative text and academic authenticity. *AI & Education Studies, 9*(1), 77–92.
[34] Zheng, Y. (2024). The humanization of AIwritten texts: Implications for detection and academic standards. *Journal of Learning and Artificial Intelligence, 5*(1), 25–39.