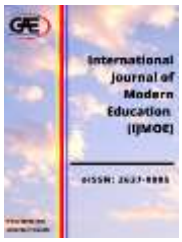
International Journal of Modern Education
EISSN: 2637-0905
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016



INTERNATIONAL JOURNAL OF MODERN EDUCATION (IJMOE)
www.ijmoe.com

EXPLORING ACCOUNTING STUDENTS' PERCEPTIONS AND ETHICAL CONCERNS ON THE USE OF AI (LLMS) IN COURSEWORK

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Article Info:

Article history:
Received date: 30.06.2025
Revised date: 20.07.2025
Accepted date: 17.08.2025
Published date: 01.10.2025

To cite this document:

Nik Kamarudin, N. N. A., Mohd Shaari, S. N., Alias, A. Z., Abdul Raman, S, Che Hasan, H. (2025). Exploring Accounting Students' Perceptions and Ethical Concerns on The Use of Ai (LLs) in Coursework.

Abstract:

This study examines accounting students' perceptions and ethical concerns regarding the use of large language models (LLMs) in academic coursework. Specifically, it explores patterns of AI tool usage, perceived educational benefits and risks, and students' views on acceptable practices in accounting education. A cross-sectional survey was conducted with 160 undergraduate accounting students from a Malaysian public university using a structured online questionnaire that included both closed- and open-ended items. The findings indicate widespread use of AI tools, particularly for drafting assignments, clarifying concepts, and solving tutorial questions, with most students viewing them as effective learning aids. Despite this, concerns about academic dishonesty, overdependence on AI, and a lack of clear ethical guidelines were common. Students emphasized the need for institutional policies, AI literacy training, and responsible integration strategies. These insights have important implications for educators and policymakers seeking

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EISSN: 2637-0905
IJMOE
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International Journal of Modern Education, 7 (27), 234-254.

DOI: 10.35631/IJMOE.727016

to support ethical AI adoption while upholding academic integrity in accounting education.

Keywords:

Artificial Intelligence (AI), Large Language Model (LLM), Ethical, Accounting Students

Introduction

Background and Context

The development of Large Language Models (LLMs) such as ChatGPT and DeepSeek is increasingly transforming education. These AI-powered tools assist students in generating research questions, solving problems, and drafting academic documents. In accounting, LLMs offer particular value by providing quick explanations, automated reporting, and support in tackling complex accounting problems (Kasneci et al., 2023). In professional practice, AI applications have also enhanced accounting by streamlining data analysis, automating reporting, and reducing task completion times by up to 50% (Anders, 2023). Additionally, AI's ability to personalise learning experiences holds great promise for students, although it also raises serious concerns regarding privacy and data security (García-López et al., 2025).

Despite these benefits, the use of AI tools in education brings notable ethical considerations, particularly surrounding academic integrity and fairness (Cotton et al., 2023). The ease of accessing LLMs has sparked debates about whether students' reliance on these tools undermines their learning and whether such use constitutes academic misconduct. This is especially relevant in accounting education, where professional competence and ethical conduct are core expectations (ACCA, n.d.).

As AI becomes more embedded in accounting education, several ethical challenges emerge. These include data privacy risks, the potential for algorithmic bias, and the "black box" problem, where AI decision-making processes are not easily understood (Murikah et al., 2024; Lehner et al., 2022). Without transparency, accountability becomes difficult. Moreover, the lack of clear ethical guidelines specific to AI use in accounting education leaves students uncertain about appropriate practices (Abbas, 2025). Tandiono (2023) highlights that accounting education faces challenges in keeping pace with rapid technological advancement, particularly AI, resulting in outdated curricula that risk leaving graduates unprepared for the evolving industry. It also points to limited empirical research, ethical concerns, and a lack of practical integration strategies as key barriers to effective adoption.

The growing capabilities of AI present further risks. Mienye and Swart (2025) warns that students may become overly dependent on AI tools like ChatGPT, potentially undermining their autonomy and ability to develop independent thinking, which raises ethical concerns about fairness, accountability, and responsible use in education. Misuse of AI could impede critical thinking, skill development, and students' ability to independently apply accounting principles (Kasneci et al., 2023). This underscores the need to examine students' perceptions of the ethical boundaries for using AI in their coursework.

International Journal of Modern Education
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IJMOE
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Meanwhile, higher education institutions are still developing policies to govern responsible AI use. In the absence of clear and consistent guidelines, students and educators may hold different views on acceptable AI practices, leading to confusion and inconsistent standards across courses and faculties (Cotton et al., 2023).

Problem Statement

Although AI tools such as large language models (LLMs) are becoming increasingly prevalent in higher education, limited research has examined their ethical implications within specific disciplines, particularly accounting. Lampropoulos and Papadakis (2024) emphasise that AI-powered educational tools — including social robots — present additional ethical challenges, such as the collection and storage of sensitive learner data, algorithmic bias, lack of transparency in AI decision-making, and risks to emotional safety through over-attachment or manipulation. These issues are parallel to those raised by Koralage et al. (2024) about ethical concerns surrounding data privacy, algorithmic bias, limited transparency in AI systems, and the diminishing role of human educators. It highlights the need to integrate ethical reasoning and responsible AI use into accounting curricula. The absence of clear ethical guidelines further exacerbates uncertainty regarding appropriate AI use in accounting education. As accounting students are expected to demonstrate professional judgment, integrity, and analytical competence, understanding their perceptions of AI use in academic work is essential. Growing concerns suggest that students may misuse AI by over-relying on it to complete assignments, potentially undermining their ability to apply accounting standards and solve problems independently (Kasneci et al., 2023).

Research Questions

This study seeks to address the following questions:

1. How do accounting students use AI tools such as large language models (LLMs) in their academic coursework?
2. What are accounting students' perceptions of the benefits, risks, and ethical concerns associated with the use of AI in education?
3. How do students define the ethical boundaries of AI usage in accounting-related tasks?
4. What recommendations do students have for the responsible use and management of AI tools within academic settings

Research Objectives

The objectives of this study are to:

5. To explore how accounting students use AI tools, particularly large language models (LLMs), in their academic coursework.
6. To examine students' perceptions of the educational benefits, challenges, and ethical concerns associated with AI use.
7. To investigate students' views on ethical boundaries and acceptable practices for AI usage in accounting education.
8. To gather student suggestions for institutional policies and guidelines on responsible AI use in coursework.

Significance of the Study

This study provides insights that can inform the development of ethical guidelines for AI use in higher education, particularly within accounting programs. The findings may help educators

International Journal of Modern Education
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design assessments that uphold academic integrity while supporting AI-assisted learning, contributing to the formulation of responsible AI adoption policies. This is especially important in disciplines such as accounting, where ethical conduct is foundational to professional success (ACCA, n.d.).

Scope and Limitations

This research focuses on accounting students from a Malaysian public university. It relies on self-reported survey data, which may introduce response bias. Additionally, the rapidly evolving nature of AI technologies may limit the long-term applicability of some findings. Nonetheless, the study offers timely insights into current student perceptions and ethical considerations surrounding AI use in accounting education. (TNR, 12, single spacing, justify)

Literature Review

General Use of LLMs in Education

Large Language Models (LLMs), such as GPT series, Gemini, Claude, Llama, and BERT, have been widely applied across educational settings, including medical content generation, English learning support, academic research, and assessment of test quality (Dong et al., 2024). In language education, LLMs assist with automated assessments, task selection, and personalized content creation (Caines et al., 2025). The primary benefits of LLM integration in education include enhanced personalized learning experiences, improved student engagement, and instant feedback mechanisms (Koralage et al., 2024). Additionally, LLMs contribute to better language understanding and generation skills (Shahzad et al., 2025). Recent research by Lavidas et al. (2024) further illuminates the behavioral factors influencing students' adoption of AI tools in academic contexts. Their study, focusing on Humanities and Social Sciences students, found that performance expectancy, habit, and enjoyment were the strongest predictors of intention to use AI applications. Moreover, behavioral intention and facilitating conditions were significantly associated with actual usage. It is interesting to note that demographic factors such as age and gender did not significantly moderate these relationships, suggesting a broadly consistent pattern of AI adoption across diverse student groups. However, there are notable challenges accompanying these benefits. Ethical concerns such as data privacy, information bias, lack of transparency, and the potential to undermine academic integrity are critical issues in AI adoption (Dong et al., 2024; Close et al., 2024). Furthermore, disparities exist between student and teacher adoption rates, with educators showing relatively lower awareness and use of AI tools in classroom settings (Saraev, 2024).

Role of LLMs in Accounting Education

In the accounting discipline, LLMs are used to facilitate domain-specific knowledge acquisition, improve students' writing proficiency, and develop technological literacy (Wutzler, 2024). They also contribute to optimizing accounting processes, enhancing data analysis, and supporting updates in accounting measurements (Li & Vasarhelyi, 2024). Despite these advancements, accounting education faces notable barriers to AI integration, including technological skill gaps, perceived complexity, and cost-related challenges (Li & Vasarhelyi, 2024). Ethical issues in this field encompass concerns over data privacy, confidentiality, and fears of potential job displacement (Abbas, 2025; Shi, 2020; Zhang et al., 2023). A systematic literature review by Koralage et al. (2024) highlights AI's transformative potential in reshaping accounting pedagogy, moving from static, rules-based instruction to dynamic and adaptive learning. Their findings emphasize the integration of intelligent tutoring systems, virtual

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teaching assistants, and AI-supported assessment tools such as ChatGPT, AWE, and AES to enhance engagement and personalize learning. They further note that technologies like Robotic Process Automation (RPA), Natural Language Processing (NLP), and Optical Character Recognition (OCR) are being increasingly adopted by major accounting firms, urging academia to reform curricula to embed interdisciplinary competencies. Challenges such as algorithmic bias, faculty readiness, and career displacement are underscored, reinforcing the need for innovative pedagogical approaches, experiential learning, and ongoing curriculum updates. Recent literature emphasizes the urgent need for accounting curricula to evolve by incorporating AI-related competencies such as digital literacy, critical thinking, and problem-solving skills (Arise & Moloi, 2025). The study by Abdo-Salloum and Al-Mousawi (2025) reinforces the importance of continuous professional development and curriculum reform, emphasizing that traditional accounting programs must evolve to integrate AI-centered content to equip students with the digital competence required by modern industry standards.

Ethical Concerns of LLMs Use in Education

The integration of AI, particularly Large Language Models (LLMs), in accounting education offers remarkable benefits but also introduces profound ethical concerns that require careful consideration. Key issues include algorithmic bias, data privacy, lack of transparency, academic integrity, and digital inequality. AI systems can perpetuate existing biases, potentially leading to unfair outcomes in assessments and learning opportunities (Sarker, 2024; Murikah et al., 2024). In accounting, where impartiality and accuracy are critical, such biases can have serious implications. Compounding this issue is the "black box" nature of many AI models, which refers to systems where the internal decision-making processes are opaque or too complex for users to understand (Zhui et al., 2024). The lack of interpretability in AI systems, particularly in auditing contexts, undermines trust, accountability, and fairness, as users, including auditors and stakeholders, are often unable to trace or understand how AI-generated outputs such as risk scores, anomaly flags, or recommendations are produced (Murikah et al., 2024). Data privacy is another important concern, particularly when AI tools handle sensitive financial or personal information (Koralage et al., 2024; Abbas, 2025; Sgantzos et al., 2025). Compliance with data protection regulations, particularly the GDPR, is essential for educational institutions to mitigate ethical risks and avoid significant financial penalties associated with mishandling sensitive student data (Sgantzos et al., 2025). Additionally, the excessive use of AI tools, such as large language models, may lead to intellectual laziness and diminish students' creativity, critical thinking, and independent problem-solving abilities, posing risks to academic integrity and the development of professional competencies (Mondal, 2025). Ethical challenges remain central to the broader discourse on AI adoption in education. Critical concerns such as AI hallucinations, misinformation, job displacement, and reinforcement of social stereotypes have been widely discussed (Zhui et al., 2024). Within educational contexts, scholars emphasize ethical dimensions like fairness, accountability, transparency, inclusion, and student autonomy (Holmes et al., 2022). The risk of digital inequality is particularly concerning, as unequal access to AI tools may exacerbate socioeconomic and geographic disparities. To ethically integrate AI into accounting education, researchers recommend clear institutional guidelines, ongoing monitoring of AI systems, and ethics training embedded in curricula (Mondal, 2025; Bahammam et al., 2023). There is also a growing call for a unified, community-driven ethical framework to govern the use of LLMs and AI in educational settings (Zhui et al., 2024; Giovanola & Granata, 2024). Ultimately, addressing these ethical challenges is crucial to

International Journal of Modern Education
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ensuring that AI enhances, rather than undermines, the integrity, fairness, and inclusivity of accounting education.

Key Trends and Future Directions

Recent literature highlights several key trends and future directions regarding the use of artificial intelligence, particularly large language models (LLMs), in education. LLMs are increasingly adopted to personalize learning experiences, automate content creation and assessment tasks, enhance tutoring systems, and improve access for diverse learners, including those with disabilities or from remote communities (Kasneci et al., 2023; Mienye & Swart, 2025). The rising popularity of AI usage is emphasized by Lavidas et al. (2024), where their findings suggest that future AI tools should prioritize user enjoyment and habitual engagement to foster deeper integration into academic routines. While educators leverage these tools for lesson planning, adaptive feedback, and language instruction, students benefit from real-time support, domain-specific writing guidance, and improved critical thinking. As such, there is a need for pedagogical frameworks that integrate ethical governance, explainable AI mechanisms, privacy safeguards, and inclusive design (Shahzad et al., 2025). Future research is encouraged to assess learning outcomes, address societal biases in training data, and position LLMs as collaborative tools that augment, rather than replace, human instruction. These insights signal a transformative shift toward AI-embedded educational ecosystems that are equitable, transparent, and human-centric.

In conclusion, while the integration of LLMs and AI in education presents substantial opportunities for enhancing learning and professional competencies, it also raises complex ethical, pedagogical, and policy challenges. Addressing these issues requires a concerted effort from educational institutions, policymakers, and researchers to ensure responsible and equitable AI adoption in education.

Research Methodology

This study adopted a cross-sectional survey design to examine accounting students' patterns of AI tool usage, their perceptions of AI's benefits and risks, ethical concerns, and their views on ethical boundaries and institutional responsibilities regarding AI use. Data were collected through a self-administered online questionnaire developed using Google Forms. The survey instrument was carefully designed to align with the study's objectives and combined both closed- and open-ended items to enable a balanced exploration of students' experiences and views. The questionnaire consisted of five key sections:

- Demographic Information: Includes study level, age, gender, residential area, household income, GPA/CGPA, device used for accounting coursework, type of internet connection, and prior AI tool usage.
- Experience and Frequency of AI Tool Use: Measures frequency of AI use and types of academic tasks for which AI is used.
- Perceived Benefits and Concerns: Assesses students' perceptions of AI's usefulness and their concerns, including ethical risks.
- Ethical Boundaries: Gathers students' perspectives on acceptable AI usage
- Open Opinions: Suggestions for institutional policy.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
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The survey employed a mix of Likert-scale items, checkboxes, and open-ended responses, allowing for both quantitative analysis and thematic interpretation. This mixed-item approach supported a comprehensive understanding of students' behaviours, beliefs, and ethical reasoning within the context of AI in accounting education.

The target population comprised 1,143 undergraduate accounting students enrolled at a Malaysian public university. Based on standard sampling guidelines, a minimum of 289 responses would be required to achieve a 95% confidence level with a 5% margin of error. However, because of time constraints, data collection was conducted over one week using convenience sampling, resulting in 160 valid responses, or approximately 14% of the population. While this falls below the ideal sample size, it is acceptable for exploratory research, and comparable sample sizes have been used in similar behavioural and educational studies (Gupta et al., 2024; Crisol Moya & Caurcel Cara, 2021). Still, the use of non-probability sampling and the reduced sample size limit the generalizability of the findings, which should be interpreted with caution, especially beyond the context of the sampled institution. The patterns and perceptions identified in this study should be viewed as indicative of the specific respondent group and may not fully represent the broader student population. Accordingly, the findings serve as an exploratory basis for future research involving larger, randomly selected samples and more comprehensive statistical analyses to validate and expand upon these results.

In line with established ethical research standards, this study adhered to rigorous protocols for research involving human participants. Ethical clearance was secured from the Research Ethics Committee of Universiti Teknologi MARA (UiTM) prior to data collection. The conduct of the study was guided by the principles outlined in the Declaration of Helsinki and the Malaysian Code of Responsible Conduct in Research (MCRCR).

Participation was entirely voluntary. Students were clearly informed about the purpose of the study, the type of data collected, and how their responses would be used. Written informed consent was obtained prior to participation. No personally identifiable information was gathered, and all data were securely stored, accessible only to the principal researcher and designated research assistants. No incentives or coercive measures were used to encourage participation. The study posed minimal risk, as it focused solely on educational and ethical considerations without addressing sensitive or psychological issues. Throughout the process, students were treated with respect and encouraged to respond honestly in a safe and supportive environment.

Qualitative Data Analysis

The two open-ended questions in the survey ("What concerns do you have (if any) about other students using AI tools?" and "Do you have any suggestions for how UiTM should manage AI usage among students?") were analyzed using inductive thematic analysis following Braun and Clarke's (2006) six-phase framework. This approach was selected because it allows patterns to emerge directly from the data rather than being constrained by pre-existing coding categories.

The analysis process involved the following steps:

1. *Familiarisation with the data*: All responses were read multiple times to gain an overall sense of the content and context.
2. *Generating initial codes*: Short descriptive codes were assigned to meaningful segments of text (e.g., "over-reliance on AI," "copy-paste without understanding,"

International Journal of Modern Education
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IJMOE
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"ethical ambiguity"). Coding was done manually in Microsoft Excel to allow easy sorting and grouping of responses. Furthermore, the dataset also was relatively small and nuanced. Many responses used informal or indirect language, so manual interpretation was more accurate than relying solely on keyword matching. Some responses contained multiple themes, which required judgment calls.

3. *Searching for themes*: Related codes were grouped into broader themes that captured underlying patterns (e.g., codes "over-reliance on AI" and "laziness" were grouped under "Overdependence on AI").
4. *Reviewing themes*: Themes were checked against the coded extracts and the full dataset to ensure they were internally coherent and distinct from one another.
5. *Defining and naming themes*: Each theme was clearly defined and named to capture its core meaning. For example, "Misuse / Copy-Paste Without Understanding" was defined as "Using AI-generated answers without understanding or reviewing the content."
6. *Producing the report*: The final themes were described in the findings section with supporting example quotes from participants to illustrate each category.

To enhance rigor, the coding was first conducted by the principal researcher and then independently reviewed by a research assistant familiar with qualitative methods. Differences in interpretation were discussed until consensus was reached, supporting intercoder reliability. No qualitative analysis software (e.g., NVivo) was used; the decision to use Excel was based on the relatively short length of responses and the manageable dataset size.

Example of coding process:

- *Raw data:* "They fully copy answers from AI without understanding"
- *Code:* Copy-paste without understanding
- *Theme:* Misuse / Copy-Paste Without Understanding

This process was repeated for both open-ended questions, resulting in the theme sets presented in the results section.

Data Analysis and Discussion of Findings

Data Analysis

This section outlines the demographic characteristics of the respondents, their experiences and frequency of AI tool use, their perceived benefits and concerns, their ethical boundaries and acceptable practices, and finally, student recommendations for institutional policies on ethical AI use.

Respondent Demographic

This section provides a detailed overview of the demographic characteristics of the 160 student respondents, which offers essential context for interpreting their views and experiences with AI tools.

1. Study Part Distribution

Most respondents were in the core stages of their accounting program, with 49.4% in Part 2 and 45.6% in Part 4. Only a small number were in Part 1 (3.8%), Part 5 (0.6%), or Part 6 and above (0.6%). This indicates that the majority of participants were actively engaged in the core

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016
curriculum, suggesting that their experiences may be broadly relevant to mainstream accounting education, although perspectives from students in earlier or more advanced stages may differ.

2. Gender Distribution

There was a strong female majority in the sample, with 74.4% female and 25.6% male respondents. While this reflects the common gender distribution in accounting programs,the findings may disproportionately reflect the perspectives and learning experiences of female students.

3. Residential Area

A majority of students (65.6%) lived in urban areas, while 34.4% came from rural areas. Students from urban areas may have comparatively better access to digital tools and internet connectivity, which could influence their frequency and manner of AI usage compared to their rural counterparts.

4. Monthly Household Income

About 59.4% of respondents reported a household income below RM4,850, while 32.5% fell in the RM4,850–RM10,959 range, and only 8.1% were in the highest income bracket. These figures point to a huge portion of students coming from lower-income households, which could affect access to reliable devices and internet, which is a potential factor influencing students' ability to engage with AI tools.

5. Gadget Used for Accounting Coursework

Most students (61.25%) reported using both a smartphone and laptop for accounting work. Some relied solely on laptops (16.25%) or a combination of devices including tablets (12.5%). Notably, 5% used only a smartphone, which could limit their access to more complex AI features. Laptops offer better functionality for software use and multitasking, which are important in accounting coursework.

6. Internet Connection Used for Accounting Coursework

Internet access was primarily through prepaid phone plans and public WiFi, reported by 39.4% of students. Only 3.1% used dedicated fibre broadband. This indicates that many students may face inconsistent or slow connections, which could affect their ability to fully utilize AI tools, particularly for resource-intensive tasks. These limitations are likely connected to lower household incomes and rural residency.

7. Academic Performance (Latest GPA and CGPA)

Many respondents were high achievers: 33.8% had a GPA between 3.50–3.74, and 28.1% had a GPA of 3.75 and above. Similarly, CGPA data showed 38.1% in the 3.50–3.74 range and 30% at 3.75 and above. This raises the possibility that AI use may be more common among academically strong students, either as a strategy for maintaining performance or as a reflection of their willingness to adopt new tools.

Experience and Frequency of AI Tool Use

The first objective of this study is to explore how accounting students use AI tools, particularly large language models (LLMs), in their academic coursework. Table 1 summarises the extent

International Journal of Modern Education
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IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
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to which participants in this sample reported adopting AI tools, the frequency of their use, the academic activities for which they are applied, and students' perceptions of their helpfulness.

Table 1: Experience and Frequency of AI Tool Use (n=160)

		Frequency	%
Have you used AI tools like ChatGPT, DeepSeek, or similar in your accounting studies?	Yes	149	93.10
	No	11	6.90
	Total	160	100.00
How frequently do you use AI tools (e.g., ChatGPT) in your academic tasks?	Often	66	41.30
	Sometimes	61	38.10
	Rarely	18	11.30
	Always	12	7.50
	Never	3	1.90
	Total	160	100.00
Which academic activities do you most commonly use AI tools for? (Top 5 most frequent responses)	Referencing or citation help	94	
	Drafting reports or essays	85	
	Preparing presentations	79	
	Solving tutorial questions	76	
	Clarifying accounting concepts	69	
How helpful do you find AI tools in completing accounting coursework?	Moderately helpful	60	37.50
	Very helpful	58	36.25
	Extremely helpful	23	14.38
	Slightly helpful	16	10.00
	Not helpful at all	3	1.88
	Total	160	100.00

1. Extent of AI Tool Adoption

The data in Table 1 reveals an exceptionally high adoption rate of AI tools among accounting students within this sample. A majority of 149 out of 160 respondents (93.1%) reported having used AI tools such as ChatGPT, DeepSeek, or similar in their accounting studies. Only a small minority of 11 students (6.9%) indicated no prior usage. This high level of adoption indicates that, within this sample, AI tools are widely used and form a notable part of many students' academic activities. This high level of integration suggests that educational institutions may benefit from acknowledging and proactively addressing AI use, focusing on comprehensive guidance and policy development rather than attempting to ignore or prohibit its presence.

2. Frequency of AI Tool Usage in Academic Tasks

While adoption is nearly universal, the frequency of AI tool usage provides a more nuanced understanding of their role. Among those who use AI tools, the most common frequency was "Often," reported by 41.3% (n=66) of students. This was followed closely by "Sometimes," indicated by 38.1% (n=61) of respondents. "Rarely" accounted for 11.3% (n=18), "Always" for 7.5% (n=12), and "Never" for 1.9% (n=3). The combined 79.4% of students who use AI "Often" or "Sometimes" suggests regular but not necessarily constant reliance. This pattern indicates that AI serves as a supplementary tool integrated into specific workflows rather than

International Journal of Modern Education
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IJMOE
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a primary, continuous mode of operation for most students. The relatively small "Always" category may indicate that many students use AI selectively, applying it in contexts where they perceive clear benefits.

3. Common Academic Activities for AI Tool Use

Students primarily utilize AI tools for tasks that streamline their work or enhance their understanding. The five most frequent academic activities for which AI tools are used include: "Referencing or citation help" (94 mentions), "Drafting reports or essays" (85 mentions), "Preparing presentations" (79 mentions), "Solving tutorial questions" (76 mentions), and "Clarifying accounting concepts" (69 mentions). This pattern indicates that many students in the sample use AI primarily as an assistive tool that simplifies tedious or complex tasks, such as managing references, structuring written assignments, and preparing visual aids. Additionally, AI is valued as a learning aid for comprehension and problem-solving, evident in its use for clarifying concepts and assisting with tutorial questions. This dual role, enhancing efficiency and supporting understanding, is consistent with the observed "Often" and "Sometimes" usage frequencies, indicating that students are strategically integrating AI into their workflows to improve both productivity and learning outcomes.

4. Perceived Helpfulness of AI Tools

The majority of students hold a positive perception of AI tools' helpfulness in completing their accounting coursework. Specifically, 37.5% of the students reported AI tools as "Moderately helpful," 36.25% as "Very helpful," and 14.38% as "Extremely helpful." Only 10% of the students found them "Slightly helpful," and a minimal 1.88% of the students considered them "Not helpful at all". The overwhelmingly positive perception of helpfulness, with 141 out of 160 students finding AI at least moderately helpful, appears to be associated with the high adoption and frequent usage rates observed in this sample. Students are evidently using AI because they find it genuinely beneficial, which reinforces its integration into their academic routines. The low response rate for "Not helpful at all" further reflects the perceived practical utility of these tools within an accounting education context.

Perceived Benefits and Concerns

The second objective of this study is to examine students' perceptions of the educational benefits, ethical concerns and confidence associated with AI use. Table 3 shows the perceptions on AI benefits, AI ethical concerns and confidence (Likert Scale).

Table 2: Perceptions on AI Benefits, AI Ethical Concerns and Confidence

	Likert Scale (1–5) *	Frequency	%
AI tools help me understand complex accounting topics better.	5	28	17.50
	4	61	38.13
	3	55	34.38
	2	13	8.13
	1	3	1.88
	Total	160	100.00
Using AI tools allows me to complete assignments more efficiently.	5	30	18.75
	4	74	46.25
	3	40	25.00
	2	11	6.88

International Journal of Modern Education
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Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

	1	5	3.13
	Total	160	100.00
I worry that using AI might be considered academic dishonesty.	5	45	28.13
	4	56	35.00
	3	44	27.50
	2	10	6.25
	1	5	3.13
	Total	160	100.00
I feel confident that I can use AI tools ethically and responsibly.	5	42	26.25
	4	60	37.50
	3	45	28.13
	2	11	6.88
	1	2	1.25
	Total	160	100.00

**1 (Strongly Disagree) – 5 (Strongly agree)*

1. Perception on AI tools helping to understand complex accounting topics better ("AI tools help me understand complex accounting topics better.")

Over half of the students surveyed believe that AI tools assist them in better understanding complex accounting topics. A combined 55.625% (n=89) of students either agreed or strongly agreed (Likert 4 or 5) with the statement that AI tools help them understand complex accounting topics better. 34.375% (n=55) maintained a neutral stance (Likert 3), while a small minority, 10% (n=16), expressed disagreement. This suggests that, in this sample, many students view AI as a valuable cognitive aid for navigating the intricacies of accounting concepts. Given the inherent complexity of accounting principles and standards, AI's ability to provide personalized explanations or alternative perspectives can serve as a powerful supplementary teaching resource, particularly for challenging subject matter.

2. Perception on AI tools allowing for more efficient assignment completion ("Using AI tools allows me to complete assignments more efficiently.")

Students show an even stronger agreement regarding AI tools' capacity to enhance assignment efficiency. A larger proportion, 65% (n=104), agreed or strongly agreed (Likert 4 or 5) that AI tools enable them to complete assignments more efficiently. 25% (n=40) remained neutral, and 10% (n=16) disagreed. The stronger agreement on efficiency, compared to understanding complex topics (65% versus 55.625%), suggests that students primarily value AI for its practical, time-saving benefits in coursework completion. In an academic environment where students face multiple assignments and deadlines, AI's ability to expedite tasks such as drafting, structuring, and referencing directly addresses a critical need for time management. This perception of efficiency may be one possible factor contributing to the frequent AI use reported by respondents, as it offers a tangible return on investment in terms of time and effort.

3. Concerns about Academic Dishonesty ("I worry that using AI might be considered academic dishonesty.")

Despite the widespread adoption and perceived helpfulness of AI tools, a significant level of apprehension exists among students regarding the ethical implications and institutional perception of AI use. A substantial majority, 63.125% (n=101), either agreed or strongly agreed (Likert 4 or 5) that they worry about AI use being considered academic dishonesty. 27.5%

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

(n=44) remained neutral, and only 9.375% (n=15) expressed disagreement. This may reflect uncertainty about existing guidelines or a perceived lack of clarity from academic institutions, leading students to fear misinterpretation of their AI-assisted work. This concern is not trivial; it suggests that students are aware of the potential for misuse within existing academic integrity frameworks.

4. Confidence in Ethical and Responsible AI Use ("I feel confident that I can use AI tools ethically and responsibly.")

Almost an identical proportion of students, 63.75% (n=102), agreed or strongly agreed (Likert 4 or 5) that they are confident in their ability to use AI tools ethically and responsibly. 28.125% (n=45) held a neutral position, and only 8.125% (n=13) disagreed. The striking similarity between the percentage of students expressing worry about academic dishonesty (63.125%) and those confident in their ethical use (63.75%) presents a notable observation. This suggests that while students personally believe they are using AI responsibly and have an internal ethical compass, they simultaneously fear that their actions might be perceived as dishonest by others or by the institution. These results point to a potential need for clearer institutional policies and educational initiatives to bridge this perception gap and alleviate student anxiety. The situation points to a systemic issue where the rules of engagement for AI in academia are not clearly defined or communicated, leaving students in a state of uncertainty despite their best intentions.

5. Concerns about other students using AI tools (What concerns do you have (if any) about other students using AI tools?)

Table 4: Emerging Themes for AI concerns

Theme	Description	Example Quotes
1. Overdependence on AI	Concern that students rely too much on AI without making their own effort	"They depend too much on AI…", "Don't want to study anymore cuz everything want to depend on AI"
2. Decline in Critical Thinking / Creativity	AI use may weaken students' ability to think, analyse, or be original	"AI is limiting students' critical thinking skills", "lead to brain's development stagnation"
3. Misuse / Copy-Paste Without Understanding	Using AI-generated answers without understanding or reviewing the content	"They fully copy answers from AI without understanding", "Copy and paste without thinking"
4. Academic Dishonesty / Ethical Concerns	Concerns about cheating, dishonesty, or plagiarism	"Cheating", "Misused of AI and plagiarism", "Dishonest about their work"
5. Quality / Accuracy of AI-generated content	Mistrust in AI answers or concern about false information	"Sometimes AI doesn't have the right answer", "Generating the whole without checking for mistakes"
6. Lack of Effort / Motivation to Learn	AI use may discourage self-study or hard work	"No effort", "Students didn't answer on their own"
7. Ethical ambiguity / Uncertainty about what is allowed	Uncertainty about what counts as ethical AI use or plagiarism	"Is it considered plagiarism if a student uses AI and rewrites?", "Should know their limits on using AI"

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

8. No Concern / Neutral	Respondents explicitly said "no", “none”, or “not sure”	“No”, “None”, “Neutral”

Table 4 presents the analysis of students' open-ended responses. The thematic analysis of responses suggested a mix of concerns and indifference regarding the use of AI tools by their peers. A large proportion of respondents expressed no concern, with many simply stating "no" or "none," suggesting either a neutral stance or normalization of AI use in academic contexts. Among those who did express concerns, the most prominent theme was overdependence on AI, with students fearing that excessive reliance on such tools could undermine genuine learning efforts. Other common concerns included the potential erosion of critical thinking and creativity, as students believed AI could hinder independent thought and problem-solving skills. Several respondents also highlighted issues related to misuse, such as copying and pasting AI-generated content without proper understanding or evaluation. Others expressed worry about academic dishonesty and ethical misconduct, particularly when students used AI to complete assignments with minimal effort or understanding. A smaller group raised concerns about the accuracy and reliability of AI-generated responses, warning that students might unknowingly submit incorrect or misleading information. Notably, a few responses also reflected uncertainty about what constitutes ethical AI use, underscoring the need for clearer institutional guidelines. These findings illustrate the range of perspectives expressed by respondents and may support initiatives aimed at promoting responsible, informed, and critically engaged use of AI in accounting education.

Ethical Boundaries and Acceptable Practices

The third objective of this study is to investigate students’ views on ethical boundaries and acceptable practices for AI usage in accounting education.

1. Do you think using AI to generate entire assignments should be allowed?

In this sample, more than half of respondents (51.875%, n=83) stated “No” when asked if AI should be allowed to generate entire assignments. A further 29.375% (n=47) were “Not sure,” and 18.75% (n=30) believed it should be permitted. These results suggest that many respondents view the complete outsourcing of an assignment to AI as inconsistent with academic integrity, though the substantial “Not sure” group indicates that some students may still be weighing the ethical and practical implications.

2. In your opinion, what kind of AI usage should be permitted in accounting coursework?

Many respondents indicated support for AI in roles that assist rather than replace student work. The most frequently selected options were: “Grammar, structure, feedback on written reports” (127 responses, 30.75%), “Understand accounting concepts, standards, and terminology” (120 responses, 29.06%), “Generate practice questions/quizzes” (94 responses, 22.76%), and “Assist with Excel formulas, financial modeling, trends” (72 responses, 17.43%). It is important to note that the total number of responses (413) exceeds the number of respondents (160), as this was a multiple-choice question allowing for multiple selections. These preferences appear to align with the perceived benefits reported earlier, suggesting that respondents tend to endorse AI for learning enhancement and productivity support, while generally drawing ethical boundaries at replacing original student work.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

Student Recommendations for Institutional Policies on Ethical AI Use

The fourth and final objective of this study is to gather student suggestions for institutional policies and guidelines that promote the responsible use of AI in coursework. To achieve this, students were invited to voluntarily respond to the open-ended question: “Do you have any suggestions for how UiTM should manage AI usage among students?” While a notable proportion of responses indicated "No comment," "No," or "Not sure," the actionable feedback coalesced into the following prominent themes:

1. The Imperative for Clear Guidelines and Policies

The most frequently mentioned theme related to the need for clear, accessible guidelines and policies on AI use. Respondents noted that ambiguity can create confusion or misuse. Students expressed a desire for:

- Explicit rules: *"Set clear rules for using AI in assignments."*
- Definition of plagiarism: *"Define for students what counts as plagiarism when using AI."*
- Lecturer training and communication: Students expect lecturers to clearly articulate *"when and how AI tools can be used"* and to be equipped with the knowledge to enforce these guidelines effectively.

This feedback may indicate that students perceive gaps in current institutional guidance and educator preparedness.

2. AI as a Learning Aid, Not a Substitute for Critical Thought

A notable number of respondents advocated for AI's role as a supplementary learning tool rather than a primary method for completing assignments. This theme underscores a desire for a balanced approach where AI assists but does not replace human intellectual effort. Suggestions within this theme included:

- Idea generation and research assistance: Students view AI as beneficial for "*generating ideas,*" "*researching more information*," or "*checking answers*" for tutorials.
- Emphasis on understanding: Responses highlighted the importance of using AI for "*understanding*" concepts, cautioning against simply "*copying the whole*" content. There was a clear sentiment that over-reliance on AI could hinder critical thinking, with one respondent noting, "*Relying too much on AI makes u lose ur ability to think outside the box."*

3. Strengthening Academic Integrity and Misuse Detection

Concerns regarding academic integrity were prominent, with students suggesting various methods to prevent and detect AI misuse. This indicates an awareness among students of the potential for cheating and a desire for fair academic practices. Key suggestions included:

- Technological solutions: Proposals ranged from *"upgrading the system to detect AI"* to *"blocking certain AI platforms when the institution wifi is being used."*
- Strong plagiarism policies: There were calls for *"strict plagiarism policy"* and *"considering the usage of AI in assignments as plagiarism."*
- Lecturer vigilance: The importance of *"training lecturers to detect misuse"* was also mentioned, indicating a perceived need for educators to be more adept at identifying AI-generated content.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

4. Fostering AI Literacy and Ethical Awareness

Beyond just rules, some respondents highlighted the necessity of educating students on AI literacy and ethical considerations. This theme points towards a proactive approach to integrating AI responsibly into the curriculum. Suggestions included:

- Curriculum integration: "*Integrate AI literacy into the curriculum*."
- Awareness campaigns: Promoting "*awareness campaigns so students understand both the benefits and risks*" associated with AI usage.
- Ethical discussions: Establishing platforms like "*a forum about ethics in using AI.*"

5. Adaptations in Assessment Methodologies

A smaller, yet insightful, theme emerged regarding the need to re-evaluate current assessment methods in light of AI advancements. These suggestions aimed to design assessments that are less susceptible to AI exploitation. Examples included:

- Increased physical tests: "D*o a lot of physical test that doesn't require any electrical devices AND make the duration of the test LONGER.*"
- Consistent student check-ups: "*Always check up on students.*"
- Assessment redesign: A broader call for "*Promote Responsible Use through Assessment Design*" was also made.

6. Acceptance and Controlled Integration of AI

A minority of respondents expressed a pragmatic view, suggesting that the institution should accept AI's inevitability in education and focus on controlled integration rather than outright prohibition. This perspective acknowledges AI as a tool that can "help a lot" and emphasizes smart, moderate use.

The qualitative data from this sample suggests that students are actively considering the opportunities and challenges of AI in their learning. While many view AI as a valuable support tool, there is also a strong interest in clear institutional guidance, ethical safeguards, and assessment adaptations. These exploratory findings may inform future policy discussions and curriculum development aimed at balancing AI's potential with academic integrity.

Discussion of the Findings

The findings of this study provide insights into the growing prevalence and ethical complexity of AI use, particularly large language models (LLMs), within accounting education. A striking majority of students reported using tools such as ChatGPT and DeepSeek to assist with tasks like referencing, drafting essays, solving tutorial questions, and understanding complex accounting topics. These results mirror trends reported by Koralage et al. (2024) and Wutzler (2024), who noted that LLMs have increasingly become embedded in academic practices because of their ability to improve productivity and enhance conceptual clarity.

Students largely perceived AI tools as useful and efficient, particularly in helping them complete assignments and clarify difficult topics. This supports findings by Kasneci et al. (2023) and Li & Vasarhelyi (2024), who emphasized AI's role in streamlining learning and enhancing domain-specific understanding in accounting. At the same time, ethical concerns featured prominently. Many students expressed anxiety over whether their use of AI might be considered academic dishonesty, even though they also reported confidence in their ability to use AI tools responsibly. This reflects the ethical ambiguity observed by Cotton et al. (2023)

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

and Zhui et al. (2024), where the absence of institutional clarity contributes to uncertainty around acceptable AI practices.

Qualitative responses highlighted six recurring themes: the need for clearer institutional guidelines on AI use, concern about excessive dependence on AI tools, support for usage focused on learning rather than task outsourcing, proposals for adapting assessments to reduce misuse, suggestions to incorporate AI ethics and literacy into the curriculum, and pragmatic acceptance of AI as an educational tool when used responsibly. These themes align with ethical debates in the literature, particularly regarding the risks of overreliance, the erosion of critical thinking, and blurred boundaries between assistance and authorship (Mondal, 2025; Holmes et al., 2022).

While most students embraced AI as a learning aid, they also acknowledged its limitations and potential misuse. Concerns about copying AI-generated responses without understanding and the possible decline in creativity were common, echoing warnings by Mienye & Swart (2025) and García-López et al. (2025). This suggests that students are negotiating its ethical implications rather than accepting AI uncritically.

Students' strong rejection of AI-generated full assignments, alongside their preference for AI in improving writing structure, generating quiz questions, or clarifying technical content, reinforces the view that they see AI as a support tool rather than a substitute for intellectual effort. These boundaries are consistent with ethical frameworks proposed by Holmes et al. (2022) and Giovanola & Granata (2024), which advocate for human-centered, ethically aligned AI use in education.

Overall, the findings emphasize the need for institutions to adopt a proactive and balanced approach. There is a clear demand for transparent AI usage policies, ongoing faculty and student training, and curriculum reforms that integrate ethical reasoning and digital competence. Rather than relying solely on restrictive or punitive measures, universities should foster a culture of informed, responsible AI use that supports both innovation and academic integrity, as recommended by Tandiono (2023) and Shahzad et al. (2025).

Conclusion

This study provides timely and relevant insights into accounting students' experiences, perceptions, and ethical concerns surrounding the use of AI tools in academic coursework. The findings reveal that AI has been widely adopted and is perceived as beneficial for enhancing both learning efficiency and understanding. At the same time, students remain deeply aware of its ethical implications, particularly in relation to academic integrity and responsible usage.

Students demonstrate a balanced and reflective stance. They value AI for its utility in assisting with assignments, learning support, and conceptual understanding, yet they are equally concerned about overreliance, misuse, and the erosion of independent thinking. Their hesitation around using AI to generate full assignments, paired with their strong demand for clear institutional policies, highlights an emerging ethical awareness. These insights challenge the notion of students as passive adopters of technology; instead, they appear to be active participants navigating new digital learning landscapes with caution and responsibility.

International Journal of Modern Education
EISSN: 2637-0905
IJMOE
Volume 7 Issue 27 (October 2025) PP. 234-254
DOI: 10.35631/IJMOE.727016

As an exploratory study, these findings underscore the urgent need for universities to respond constructively to the growing presence of AI in education. Rather than adopting restrictive measures, institutions should focus on developing transparent AI use guidelines, integrating AI literacy into accounting curricula, training educators to effectively guide and monitor usage, and rethinking assessment design to support academic integrity in the AI era.

By embracing a supportive, inclusive, and ethically grounded approach to AI adoption, educational institutions can help students harness the full potential of AI tools while safeguarding the values of academic honesty, critical thinking, and professional accountability. Such an approach will not only enhance the quality of learning in the short term but also prepare accounting graduates for a future where ethical decision-making and digital competence are essential professional attributes.

However, this study is not without limitations. The sample was limited to accounting students from a single Malaysian public university, and responses were self-reported, which may introduce bias. Furthermore, the cross-sectional design captures perceptions at a single point in time, while attitudes toward AI may evolve rapidly with technological changes.

Future research could expand to include multiple institutions, track changes over time, and explore the perspectives of educators, policymakers, and employers on AI ethics in accounting education.

Acknowledgements
The authors would like to acknowledge and extend special gratitude to Universiti Teknologi MARA (UiTM), Perak Branch, Tapah Campus, and the Faculty of Accountancy, whose lecturers facilitated the distribution of survey questionnaires. Sincere appreciation is extended to the 160 student participants for their valuable responses. Gratitude is also expressed to peers and colleagues for their consistent encouragement throughout the study.

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