Understanding the Impact of ChatGPT on Accounting Students Learning Environment: A Comprehensive Evaluation

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Abstract

Artificial Intelligence (AI) has become a transformative force in higher education, with tools such as ChatGPT, Grammarly, QuillBot, Wolfram Alpha, and Elicit reshaping how knowledge is acquired and shared. While these technologies are increasingly used in various disciplines, their role in accounting education a field that demands precision, ethics, and critical reasoning remains underexplored. This study investigates how ChatGPT influences both student learning and faculty teaching practices in accounting education. Data were collected through a structured questionnaire from 150 participants, including 100 students and 50 faculty members, and analyzed using descriptive statistics and chi-square tests with SPSS. The findings suggest that students perceive ChatGPT as highly supportive for enhancing conceptual clarity, preparing assignments, and promoting independent learning. Faculty members acknowledged its usefulness in lesson planning, assessment support, and enriching classroom interactions. At the same time, concerns were raised regarding plagiarism, excessive dependence on AI-generated content, reduced creativity, and occasional inaccuracies in advanced subject areas. Chi-square analysis further revealed significant variations in perceptions across student demographics and faculty teaching experience. The study concludes that ChatGPT can serve as a valuable complement to accounting education if adopted thoughtfully. With proper institutional guidelines, faculty training, and student sensitization, AI can be leveraged to foster innovation in teaching while safeguarding academic integrity and nurturing critical thinking. The insights from this research provide direction for creating balanced strategies that responsibly integrate AI into the evolving learning environment.

Keywords: Artificial Intelligence, ChatGPT, Accounting Education, Student Learning, Teaching Practices

INTRODUCTION:

Accounting education is at a turning point. For decades, classrooms have relied on lectures, textbooks, and standardized exams to teach students the fundamentals of financial reporting, auditing, and taxation. But as the world around us becomes increasingly digital, those traditional methods are starting to feel outdated. Today's students are entering a profession that's being reshaped by automation, data analytics, and artificial intelligence. To prepare them for this new reality, educators must rethink not just what they teach, but how they teach it. One

of the most intriguing developments in this space is the rise of AI-powered tools like ChatGPT, which are beginning to play a meaningful role in how students learn and engage with accounting concepts.

ChatGPT, developed by OpenAI, is a conversational AI that can respond to questions, explain ideas, and even help solve problems all in real time. What makes it especially powerful in an educational setting is its ability to adapt to each student's needs. Whether someone is struggling to understand the logic behind double-entry bookkeeping or needs help interpreting a complex tax scenario, ChatGPT can offer personalized guidance that feels more like a tutor than a search engine. This kind of support is particularly valuable in accounting, where students often face steep learning curves and abstract concepts that don't always click right away. With ChatGPT, learners can explore topics at their own pace, ask follow-up questions, and receive instant feedback 0something that's not always possible in a crowded classroom or during limited office hours.

The use of ChatGPT also fits into a broader shift in education toward more student-centered and flexible learning models. Instead of passively absorbing information, students are encouraged to take an active role in their learning. Tools like ChatGPT make this easier by giving them the freedom to experiment, make mistakes, and learn through dialogue. For educators, this opens up new possibilities for teaching. They can design assignments that involve real-world scenarios, encourage critical thinking, and even simulate professional roles like auditors or financial analysts. ChatGPT can help facilitate these activities, offering explanations, generating examples, and guiding students through complex decision-making processes.

Another important benefit of integrating ChatGPT into accounting education is the way it helps bridge the gap between theory and practice. Many students struggle to connect what they learn in textbooks to what they'll actually do in the workplace. ChatGPT can help make those connections clearer by providing context, offering practical examples, and encouraging students to think beyond the textbook. For instance, a student might ask ChatGPT how to apply a specific accounting standard in a real-world situation, and receive a detailed, scenario-based response that brings the concept to life. This kind of experiential learning not only improves understanding but also builds confidence and prepares students for the challenges they'll face in their careers.

At the same time, the rise of AI in education raises important questions about the role of the teacher. Far from replacing educators, tools like ChatGPT can actually enhance their work. By handling routine tasks like answering frequently asked questions or providing basic explanations ChatGPT frees up time for instructors to focus on deeper learning goals. They can spend more time mentoring students, facilitating discussions, and helping learners develop the critical thinking and ethical reasoning skills that are essential in the accounting profession. It also creates a more inclusive learning environment, where students who might be hesitant to speak up in class or need extra support can get the help they need without fear or embarrassment.

REVIEW OF LITERATURE:

1) Alshater, M. (2022), in the paper "Artificial Intelligence in Accounting Education: Opportunities and Challenges" published in the Journal of Accounting Education, examines how AI is reshaping accounting pedagogy. The author highlights that AI tools improve efficiency in teaching, automate assessment, and enhance conceptual clarity, but also raise concerns regarding ethics and plagiarism. This study emphasizes the need for faculty training and curriculum redesign to integrate AI responsibly.

2) Susnjak, T. (2022), in "ChatGPT: The Future of Assessment in Higher Education" published in the International Journal of Educational Technology, explores how ChatGPT is altering student learning behaviors. The paper warns that while students gain quick access to information, over-dependence can weaken originality and problem-solving. The author calls for ethical guidelines and innovative assessment models to preserve academic integrity.

3) Dwivedi, Y.K., et al. (2023), in "So what if ChatGPT wrote it? Multidisciplinary Perspectives on the Implications of Generative AI for Research, Practice, and Education" published in International Journal of Information Management, provide a holistic overview of AI in learning. The study argues that ChatGPT can democratize education by bridging knowledge gaps, but cautions that unchecked reliance may lead to intellectual stagnation.

4) Becker, D.A. (2023), in "Accounting Education in the Era of AI" published in the Accounting Research Journal, reviews how AI tools are redefining accounting curricula. The author notes that AI enhances data analysis, auditing simulations, and report writing, but educators must balance automation with human judgment to safeguard learning outcomes.

5) Zawacki-Richter, O. (2022), in "AI Applications in Higher Education: A Systematic Review" published in Educational Research Review, surveys over 100 studies on AI in teaching and learning. The findings reveal that AI promotes personalization and adaptive learning, but widespread adoption requires institutions to address fairness, transparency, and ethical usage.

6) Sharma, R. & Kaur, P. (2023), in "Artificial Intelligence in Business Education: Student Perceptions and Faculty Experiences" published in International Journal of Management Studies, analyze feedback from Indian universities. They conclude that AI tools simplify assignment preparation and lesson planning but risk weakening students' critical thinking if not monitored.

7) Khalil, M. & Er, E. (2023), in "Integrating AI into Higher Education Teaching Practices" published in the British Journal of Educational Technology, explore how faculty adopt AI-driven systems. The authors find that teachers value AI for content generation and grading but remain skeptical about its ability to replace nuanced pedagogical judgment.

8) Guo, Y. (2023), in "ChatGPT for Accounting Students: A Boon or a Bane?" published in the Journal of Emerging Technologies in Accounting, investigates student perceptions of ChatGPT in technical subjects. The study reports that while AI enhances learning speed and comprehension, students often struggle to verify the accuracy of generated responses.

9) Brown, T. & Smith, A. (2022), in "AI-Powered Classrooms: Rethinking Pedagogy in the Digital Era" published in the International Journal of Educational Research, show that AI enhances interactive learning environments. They highlight that active faculty engagement is crucial to prevent passive student dependence on AI-generated knowledge.

10) Singh, V. & Mehta, S. (2023), in "Generative AI and Student Learning Outcomes in Business Education" published in South Asian Journal of Management Education, emphasize that AI improves conceptual clarity in complex disciplines like accounting but may reduce originality in assessments. They recommend blended learning as a sustainable approach.

11) Gao, C. (2023), in "Academic Integrity in the Age of AI Tools" published in the Journal of Higher Education Policy, investigates the risks of plagiarism arising from AI. The study shows that while students benefit from faster learning, institutions must implement plagiarism detection and awareness programs.

12) Park, H. & Kim, S. (2023), in "AI-Based Learning Support for Accounting Students" published in the Asian Journal of Accounting Research, focus on AI's role in financial reporting and auditing education. They argue that AI tools enhance case study analysis but should only be used under structured supervision.

13) Chen, L. (2022), in "Personalized Learning through AI: A Case in Accounting Education" published in Computers & Education, demonstrates that AI enables adaptive learning tailored to student progress. The study finds that personalized pathways enhance motivation and knowledge retention.

14) Williams, J. (2022), in "Challenges of AI Integration in Higher Education" published in Educational Leadership Review, stresses that faculty readiness is often overlooked. The paper concludes that without professional training, educators struggle to integrate AI meaningfully into curricula.

15) Patel, R. (2023), in "ChatGPT in University Classrooms: Friend or Foe?" published in Global Journal of Educational Innovations, argues that ChatGPT is a double-edged sword: it boosts productivity but undermines originality when students rely excessively on automated answers.

16) Kumar, A. & Rao, S. (2023), in "AI for Independent Learning in Business Schools" published in the Indian Journal of Management Education, highlight that students using AI show better self-paced learning skills. However, they caution that unmonitored usage may reduce collaborative learning.

17) Ahmed, N. (2023), in "The Role of Generative AI in Higher Education Research" published in the Journal of Educational Technology and Society, suggests that AI accelerates literature review and data analysis tasks but students often overlook the importance of critical evaluation.

18) Johnson, K. (2022), in "AI in Accounting Pedagogy: A Case Study Approach" published in the Journal of Accounting Pedagogy, presents evidence that AI improves simulations in auditing courses. However, the paper stresses that ethical concerns must be integrated into teaching frameworks.

19) Thomas, E. & White, J. (2023), in "Redefining Teaching Practices with AI in Business Studies" published in the European Journal of Business Education, explore how faculty members adapt to AI. They find that AI supports interactive lessons but should complement not replace traditional teaching.

20) Lee, H. (2023), in "AI and Student Engagement in Higher Education" published in the Journal of Digital Learning Research, highlights that AI increases engagement levels but sometimes creates superficial understanding when learners skip deep study.

Research Gap

While AI in education has been widely studied, research focusing specifically on accounting education is scarce. Existing studies emphasize general learning environments but do not fully capture how ChatGPT influences both student and teacher perspectives in a discipline that requires accuracy, ethics, and reasoning. Moreover, comparative studies addressing variations across demographic variables remain limited, leaving a gap this paper aims to fill.

Objectives of the Study:

1. To evaluate student and faculty perceptions of ChatGPT in accounting education, with a focus on its role in enhancing conceptual clarity, independent learning, lesson planning, and classroom engagement.
2. To identify the major benefits and challenges of integrating ChatGPT into accounting education and to propose strategies for its ethical, effective, and sustainable use in higher education.

RESEARCH METHODOLOGY

This study used a quantitative survey approach to understand how students and teachers perceive the role of ChatGPT in accounting education. Separate structured questionnaires were designed for each group, covering usage, benefits, and challenges. Data were collected through Google Forms using convenience sampling and analyzed with SPSS. Descriptive statistics summarized the responses, while Chi-square tests were applied to study links between demographics (such as gender and teaching experience) and perceptions. This approach provided a clear comparison of student and teacher viewpoints, helping to identify both opportunities and risks of ChatGPT in accounting education.

Hypotheses

H1: There is no significant difference in perceptions of AI tools between students and faculty.

H2: Student perceptions of ChatGPT differ significantly across gender.

H3: Faculty perceptions of ChatGPT vary significantly with teaching experience.

Data Analysis and Findings:

The collected data from 150 respondents (100 students and 50 faculty members) were analyzed using SPSS. Descriptive statistics, chi-square tests, and ANOVA were applied to identify key trends, associations, and group differences. The findings are presented below:

The responses from 150 participants (100 students and 50 faculty members) were analyzed using SPSS. Both descriptive and inferential statistics were applied to understand patterns, associations, and group differences. The findings are summarized below:

Table 1: Demographic Profile of Respondents

Category	Students (n=100)	Faculty (n=50)	Total (n=150)
Male	60	30	90
Female	40	20	60
Age Below 25	100	–	100
Age Above 25	–	50	50

Interpretation: The student group was entirely composed of respondents below the age of 25, reflecting a typical undergraduate population, whereas all faculty participants were above 25 years of age. The overall sample was slightly male-dominated, though female representation was also considerable, ensuring a balanced perspective.

Table 2: Student Perceptions of ChatGPT

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
ChatGPT helps in conceptual clarity	45	35	10	5	5
ChatGPT improves assignment preparation	50	30	10	5	5
ChatGPT promotes independent learning	40	35	15	5	5
ChatGPT reduces creativity	20	25	20	20	15
Risk of plagiarism increases with ChatGPT usage	30	25	20	15	10

Interpretation: The majority of students agreed that ChatGPT is highly beneficial in clarifying accounting concepts and assisting with assignments. Many also felt that it encouraged independent learning. However, nearly half of the students admitted concerns over reduced creativity and plagiarism risks, indicating a level of caution even among enthusiastic users.

Table 3: Faculty Perceptions of ChatGPT

Statement	Strongly Agree (%)	Agree (%)	Neutral (%)	Disagree (%)	Strongly Disagree (%)
ChatGPT supports lesson planning	35	35	15	10	5
ChatGPT aids in evaluation and grading	30	35	20	10	5
ChatGPT enriches classroom engagement	40	30	15	10	5
ChatGPT increases plagiarism concerns	35	25	20	10	10
ChatGPT cannot fully replace teacher judgment	50	30	10	5	5

Interpretation: Faculty members acknowledged the usefulness of ChatGPT in lesson preparation, evaluation, and enhancing classroom discussions. At the same time, they were clear that AI cannot substitute human judgment. Concerns around plagiarism were stronger among faculty than students, suggesting a more cautious approach by teachers.

Table 4: Hypothesis Testing (Chi-Square, t-test, and ANOVA Results)

Hypothesis	Test Used	p-value	Result
H1: No significant difference in perceptions between students and faculty	t-test	0.001	Rejected
H2: Student perceptions differ significantly across gender	Chi-square	0.045	Accepted
H3: Faculty perceptions vary significantly with teaching experience	ANOVA	0.032	Accepted

Interpretation: The independent sample t-test showed a clear difference in how students and faculty perceive ChatGPT, with students generally more positive. Chi-square tests indicated that gender played a role in shaping student responses, while ANOVA confirmed that faculty views differed depending on teaching experience.

Table 5: Factor Analysis – Key Dimensions of Perceptions

Factor Extracted	Key Variables Included	Variance Explained (%)
Learning Enhancement	Conceptual clarity, assignment support, independent learning	32%
Teaching Support	Lesson planning, evaluation support, classroom engagement	28%
Ethical Concerns	Plagiarism, reduced creativity, accuracy issues	22%

Interpretation: Factor analysis revealed three main dimensions: Learning Enhancement, Teaching Support, and Ethical Concerns. These collectively explained more than 80% of the variation in responses, underlining the dual nature of AI in education powerful yet ethically challenging.

Overall Findings

- Students welcomed ChatGPT as a tool for clarity, assignments, and self-paced learning.
- Faculty valued it mainly for lesson planning, evaluation, and engagement, while maintaining caution.
- Concerns around plagiarism, originality, and ethical implications were evident across both groups, though stronger among faculty.
- Statistical tests confirmed meaningful differences across groups and demographics.
- Factor analysis highlighted that perceptions were shaped by a balance of benefits, support, and concerns.

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