



AI and Business Education: Ethical Challenges and Practical Applications

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Abstract

Artificial intelligence (AI) is transforming industries from automating financial analysis in banking to optimizing supply chains in manufacturing and personalizing marketing strategies in e-commerce. This makes it imperative for business students to acquire proficiency in its applications and ethical considerations. Through systematic secondary research and Qualtrics surveys of business students and faculty of a northeast liberal arts university, AI's role in business education, best practices, and strategies for effective teaching will be distinguished. Students, already familiar with AI tools like ChatGPT, are entering a rapidly evolving academic landscape. Universities like Harvard and Northwestern have AI guidelines in place, primarily addressing issues such as plagiarism. However, there are many potential benefits of AI in business contexts. Educators must emphasize the ethical use of AI, teaching students how to navigate AI's limitations, such as algorithmic bias and misinformation (or "hallucinations"). This paper reviews perceptions of AI and outlines pedagogical methods to balance technical proficiency and innovation with ethical awareness to prepare students for AI-integrated roles in the workforce. By fostering critical thinking and responsible AI use, business schools can ensure their graduates are ready to succeed in a world increasingly shaped by AI.

Keywords: AI, Business Education, Ethics, Faculty, Students

1. Introduction

Artificial intelligence (AI) increasingly influences industries worldwide and it is essential for business students to understand its applications and how to use it responsibly. While many universities offer AI programs primarily within computer science, the integration of AI into business education is critical for sectors such as finance, marketing, healthcare, sports, manufacturing and human resources, as these areas rely heavily on data-driven decision-making, operational efficiency, and personalized customer interactions (Brunner, 2024). In my institution, a small liberal arts Catholic university in the Northeast, some business faculty have begun incorporating AI into courses to prepare students for the evolving job market. This paper explores the use of AI in business education through informal interviews and research on best practices, offering insights into how educators can effectively integrate AI into their teaching.

2. The Current Landscape of AI in Education

Students today are increasingly familiar with AI, particularly tools like ChatGPT, which are being utilized as early as grade school. Early exposure to such tools equips students with foundational digital literacy skills and fosters a familiarity with AI functionalities, enabling them to adapt more seamlessly to advanced applications in business contexts. As of this writing, 22 U.S. states have issued AI guidance for grades K-12 (Panthagani & Zevallos, 2024). Leading universities, such as Harvard, UCLA, and Northwestern, have developed detailed policies on AI usage, cautioning against the input of institutional data into AI tools without appropriate validation (Jenner et al., 2024). For example, Northwestern's guidelines explicitly warn faculty and students to avoid using unapproved generative AI tools with institutional data. As concerns about academic integrity grow, many universities have incorporated AI into their plagiarism policies, recognizing both its benefits and potential risks (McDermott, 2023).

The Digital Education Council Global AI Student Survey (2024) responses of 3,839 bachelor, masters, and doctoral students across 16 countries reported that 86% of students in multiple fields claim to use AI in their studies. A February 2024 white paper from the University of Baltimore reported that 67% of faculty and staff, along with 54% of students, had used ChatGPT (Graduate Business Curriculum Roundtable, 2023). Furthermore, the Graduate Management Admission Council revealed that 40% of prospective business school students expect AI to be a key topic in their education (McLaren, 2024). Schools have made investments in AI, some have AI -focused majors, and others have partnered with AI providers (Leckrone, 2025). However, despite growing interest, my university has focused more on identifying AI-related plagiarism rather than exploring its positive applications. There is a clear need to shift the conversation toward how AI can enhance business education, while also addressing the ethical challenges it presents (McDermott, 2023).

2.1. Practical Applications of AI in Business Education

Business students must be equipped with the skills to navigate an AI-powered workforce, from understanding AI's capabilities to recognizing its limitations, such as algorithmic bias and 'hallucinations'—instances of false information generated by AI tools (Werhun, 2024). ChatGPT, for example, offers several practical uses in business education:

- **Research Assistance:** AI tools can summarize the literature, clarify complex business concepts (e.g., Porter's Five Forces, SWOT analysis), and suggest reputable academic sources. However, students should verify these independently to ensure reliability.
- **Writing Support:** AI can assist with drafting reports and essays, guiding students through citation styles, and improving grammar and coherence through proofreading tools (Panthagani & Zevallos, 2024).
- **Data Analysis and Interpretation:** AI helps clarify statistical methods (e.g., regression analysis, hypothesis testing) and assists in interpreting data results, such as market research findings (Jenner et al., 2024).
- **Idea Generation and Case Studies:** AI tools can aid in brainstorming business models, marketing strategies, and providing alternative perspectives on case studies.
- **Presentation Preparation:** AI can suggest slide structures, key points, and generate Q&A practice sessions to help students refine their business presentations.
- **Ethical Considerations:** Students must understand how to avoid plagiarism when using AI tools, ensuring they add original insights and critical thinking to AI-generated content (McDermott, 2023).

2.2. Addressing Ethical Responsibility and Best Practices

Incorporating AI into business education also requires a focus on ethical decision-making. Institutions must teach students to use AI responsibly, integrating it as a supportive tool rather than a primary source. Students should be encouraged to critique AI outputs, verify the accuracy of information, and improve upon it with their research and analysis. Harvard Business School, for example, recommends exercises where students:

- Assess the output of different generative AI platforms such as content creators of ChatGPT, or Anthropic's Claude; market research of Clever X or Alphasense; design tools of Midjourney or Firefly, to foster a deeper understanding of AI's potential and limitations (Werhun, 2024).
- Critique AI's output: Students can input a business problem or essay question and assess how the bot created the result and improve it with fact verification, clarifications, adding new points, insight, and analysis. [this could be a class team project with in-class comparisons]
- Use AI as a study buddy: teach how to develop specific prompts.

Educators can create low-stakes quizzes with AI: generative AI can quickly produce practice quizzes that will enhance the topic understanding. Institutions should guide students on how to cite AI-generated content, following established formats like APA (e.g., OpenAI, 2024). Additionally, educators should encourage students to develop thoughtful prompts when using AI tools, ensuring that the technology is used as an aid in developing their skills, rather than as a substitute for critical thinking.

At MIT Sloan, the Massachusetts Institute of Technology business school, "practical strategies for teaching with AI" for transparency with students; address its limitations; guide student engagement; and develop AI literacy. Ensure students' understanding of with examples of data breaches and biased output such as the MIT computer science student, Rona Wang, who asked AI for a more professional headshot and was given lighter skin and blue eyes.

Business examples such as Uber's 'surge pricing algorithms' and the dispute of price gouging during emergencies that exploited customers depict the ethical challenges of AI in decision-making (Dunne, 2024). (Uber adjusted its algorithms and communicated to consumers about when price surging is applied). Critical thinking and cross-checking are needed for factual and ethical analysis of the AI output.

3. Purpose of the Study and Application Method

Business students and faculty at a small, private liberal arts university in New England participated in a survey designed to explore AI perceptions and usage. Qualitative interviews were conducted with faculty who used AI to ensure related items for the survey. A 15-item questionnaire for students and a 19-item questionnaire for faculty were developed using AI-generated prompts and insights from the literature, focusing on ethical considerations and practical applications of AI in business. The survey instruments, detailed in Appendices A and B, received IRB approval to ensure ethical compliance. The data were analyzed using Qualtrics software, employing descriptive statistics to quantify insights into how students perceive and use AI, spanning topics from practical applications to ethical dilemmas. Faculty responses offered complementary perspectives, highlighting their approaches to introducing AI concepts, ethical concerns, and the relevance of AI skills for future business professionals.

3.1. Survey Results

The study surveyed 587 business students and 57 faculty members using the Qualtrics survey link in an email, yielding response rates of 15% and 26%, respectively. Key findings include:

- Student AI Usage: 62% of students used AI tools like ChatGPT, Excel, or Grammarly regularly. Most saw AI as a productivity tool, though 63% expressed concerns about ethical issues such as plagiarism and bias.

- Faculty AI Integration: 67% of faculty introduced AI concepts in their courses, primarily through lectures and case studies. Challenges cited included students' overreliance on AI and difficulties in verifying AI's contributions.
- Ethical Concerns: Both groups emphasized the need for clear guidelines on ethical AI use and expressed concerns (see Table 2) and gave informative points (see Table 3) on ethical issues. Students desired more hands-on practice with AI tools, while faculty called for workshops and training on AI pedagogy.

3.2. Student Responses

Many students, 71%, had been introduced to AI concepts or tools by teachers in business courses and 75% had been informed about ethical issues regarding AI. Only 58% responded that AI was effectively or somewhat effectively integrated into business education. Their usage, however, was more prolific (see Table 1).

Table 1: How often do you use AI tools (e.g., ChatGPT, data analysis tools, automation software) in your coursework?

Daily	33%
Weekly	30%
Monthly	7%
Rarely	21%
Never	9%

Source: (Student Survey)

Students expressed thoughtful ethical considerations regarding AI in business (see Table 2).

Table 2: Which ethical concerns do you find most relevant to AI in business?

Job displacement	63%
Data privacy and security	48%
Bias in algorithms	35%
Decision transparency	22%
Accountability in AI-driven decisions	48%
Other (plagiarism, cheating or dishonesty noted)	5%

Source: (Student Survey)

For the item, "What additional AI-related skills or knowledge would you like to learn to prepare for your future career?" Data analysis was the highest with 66%, followed by AI strategy and implementation, 62%; Automation and productivity tools, 47% Ethical considerations/ regulations, 31%. Open responses included "show us how to use it effectively rather than deterring us from using it at all. more so see this in other departments than business"; "Finding ways to incorporate AI into our learning while still using our actual knowledge. Not cheating, but rather working side-by-side with AI." ; "Teach us how AI can effectively bring us to our goals."

3.3. Faculty Comments

Some concerns noted by business faculty were: "AI hallucinations in student descriptions of their experience--ex. ten years of management experience"; "Lack of comprehension of material due to dependence on AI"; "Students do not know how to use it to enhance their work, as opposed to doing the work for them"; "When they don't disclose AI use but Turnitin has a high AI match."

More positive responses were "The students using it are producing better work" and "I can usually tell when a student is copying and pasting from AI - even without the originality checkers. I always include prompts that require critical thinking and analytic skills - students

can use AI to help with their research but need to conduct further research and verify the information they pull from AI via scholarly literature.”

Faculty discussed ethical implications with students (see Table 3) that support the Mercy mission of social justice.

Table 3: Which ethical issues do you address when discussion AI with students?

Job displacement	25%
Data privacy and security	17%
Bias and discriminations in algorithms	42%
Accountability and transparency in AI decisions	83%
Environmental impact of AI technologies	8%
Other (<i>honesty and authenticity in use of AI; work needs to be their own thoughts noted</i>)	25%

Source: (Faculty Survey)

As to the importance of AI skills for the future careers of business students, faculty responders noted – 67% very important; 27% somewhat important; 7% neutral. Answers to “Do you feel that your current curriculum adequately prepares students for a future where AI plays a significant” – Yes 13%, Somewhat 33%, Neutral 47%, and No 7%. The results depict the need and desire for clearer understanding of AI’s ability to further responsible business methods.

4. Conclusion and Recommendations

Students are using AI and teachers need to be able to show the proper methods of implementing it as supported by the survey. Workshops and other learning options on AI should be available for teachers as it is a critical tool to enhance classroom management, personalize teaching methods and advance learning results (Zhang & Zhang, 2024). Faculty can benefit from ChatGPT’s generation of quizzes, team project ideas, or worksheets that will allow for more time to engage in ‘high-value’ interactions. It is imperative that faculty are well-informed on how to integrate these tools so the technology “complements rather than replaces human connection” (International day, 2025). Educating students on how to use their own analysis and the significance of independent thinking could be communicated through lessons that incorporate assistance from AI that is verified and complemented with original supportive research. Starting with learning brainstorming methods, prompting techniques, and on to analyzing data can advance their critical thinking and problem-solving skills. Students must understand AI’s capabilities and ethical challenges (Contreras, 2025).

Recommendations on ethical and cognitive principles from the University of North Carolina Charlotte Center for Teaching and Learning – Professional Studies (2024) include:

- Get comfortable talking about A.I. tools with students; encourage them to be honest about their usage at school or work.
- Be direct and transparent about what tools students are permitted to use.
- Focus on how these tools allow achieving intended outcomes differently and better.
- Publish university and course policies about academic integrity.
- Structure learning to reduce the potential for issues of academic integrity:
 - Use authentic assignments and assessments that students feel connected to.
 - Scaffold writing assignments and projects.
 - Change the format of writing assignments.
 - Incorporate the use of A.I. tools to support assignments/projects and regular feedback.

- Use alternative ways for students to represent their knowledge beyond text.
- Require heavy citation and resources that are not accessible to A.I. tools (recent references, classroom discussions) (Classroom strategies, 2024).

The potential of AI in business education extends far beyond plagiarism detection. Faculty must embrace AI as a tool for fostering innovation and preparing students for the realities of an AI-integrated workforce. Andrew Ng, an AI expert, notes that AI won't replace human workers but people who "use AI will replace people" who don't (Varanasi, 2024). It is our responsibility as educators to ensure that students understand how to use AI and also recognize the ethical implications of its application in business.

This paper reviews successful pedagogical approaches for incorporating AI into the business curriculum, offering a framework for educators to guide students in using AI as a tool for innovation and ethical decision-making. By fostering a balance between technical proficiency and ethical responsibility, we can ensure that the next generation of business leaders is equipped to thrive in an AI-driven world.

References

- Brunner, R. (2024, May 6). Implementing AI technology in business education. University of Illinois Urbana-Champaign. [Online]. Available: <https://giesbusiness.illinois.edu/news/2024/05/06/implementing-ai-technology-in-business-education>
- Contreras, J. (2025, March 3). Transforming business education with AI. AACSB. [Online]. Available: <https://www.aacsb.edu/insights/articles/2025/03/transforming-business-education-with-ai>
- Classroom Strategies to Promote Responsible Use of A.I. (2024). Charlotte. [Online]. Available: <https://teaching.charlotte.edu/teaching-support/teaching-guides/general-principles-teaching-age-ai/>
- Digital Education Council Global AI Student Survey (2024, August 4). [Online]. Available: <https://www.digitaleducationcouncil.com/post/digital-education-council-global-ai-student-survey-2024>
- Dunne, J. (2024, October 14). Uber started using 'algorithmic pricing' in Canada. Is that a good or bad thing? CBC. Available: <https://www.cbc.ca/news/business/uber-algorithmic-pricing-canada-1.7350399>
- Graduate Business Curriculum Roundtable. (2023). Generative Artificial Intelligence (AI): A survey of business school faculty and professionals. [Online]. Available: <https://gbcroundtable.org/genai>
- International day of education 2025: Business education in the age of AI – a new frontier. (2025, January 1). ESCP. [Online]. Available: <https://escp.eu/news/international-day-education-2025-business-education-age-ai-new-frontier>
- Jenner, C., Schmedlen, G., Turkington, L., & Vithalani, B. (2024, February 6). Teaching students to embrace AI responsibly. Ed Tech Digest. [Online]. Available: <https://www.edtechdigest.com/2024/02/26/teaching-students-to-embrace-ai-responsibly/>
- Leckrone, B. (2020, April 17). AI now widespread in business school curriculum: Report. BestColleges. [Online]. Available: <https://www.bestcolleges.com/news/business-school-ai-curriculum/>

- McDermott, J. (2023, May 15). ChatGPT is not “artificial intelligence.” It’s theft. *America Magazine*. [Online]. Available: <https://www.americamagazine.org/faith/2023/05/15/chatgpt-artificial-intelligence-theft-245283>
- McLaren, K. W. (2024, February 27). Preparing future leaders: The impact of AI on business education. *Forbes*. [Online]. Available: <https://www.forbes.com/sites/forbesbooksauthors/2024/02/27/preparing-future-leaders-the-impact-of-ai-on-business-education/>
- Panthagani, A., & Zevallos, B. (2024, March 25). 4 steps academic leaders must take to integrate AI tools into pedagogy. [Online]. Available: <https://eab.com/resources/blog/strategy-blog/integrate-ai-tools-into-pedagogy/>
- Varanasi, L. (2024, July 28). AI won't replace human workers, but 'people that use it will replace people that don't,' AI expert Andrew Ng says. *Business Insider*. [Online]. Available: <https://www.yahoo.com/tech/ai-wont-replace-human-workers-202300190.html>
- Werhun, C. (2024, March 21). In the age of AI, students need to develop their self-intelligence: 5 ways educators can help cultivate these uniquely human skills. *Harvard Publishing*. [Online]. Available: <https://hbsp.harvard.edu/inspiring-minds/in-the-age-of-ai-students-need-to-develop-their-self-intelligence>
- Yongpradit, P. (2024, May 15). AI is here. Let’s teach students how to use it responsibly and effectively. *Ed Tech Digest*. <https://www.edtechdigest.com/2024/05/15/ai-is-here-lets-teach-students-how-to-use-it-responsibly-and-effectively>
- Zhang, J., & Zhang, Z. (2024). AI in teacher education: Unlocking new dimensions in teaching support, inclusive learning, and digital literacy. *Journal of Computer Assisted Learning*, 40(4), 1871–1885. <https://doi-org.ez-salve.idm.oclc.org/10.1111/jcal.12988>

Appendix A

Student Survey

Section 1: Demographics

1. **What is your major?**
 - ☐ Accounting
 - ☐ Business Administration
 - ☐ Economics
 - ☐ Finance
 - ☐ Healthcare
 - ☐ Marketing
 - ☐ Other: _____
 2. **What year of study are you in?**
 - ☐ Freshman
 - ☐ Sophomore
 - ☐ Junior
 - ☐ Senior
-

Section 2: Frequency of AI Use

3. **How often do you use AI tools (e.g., ChatGPT, data analysis tools, automation software) in your coursework?**
 - ☐ Daily
 - ☐ Weekly
 - ☐ Monthly
 - ☐ Rarely
 - ☐ Never
 4. **Which AI tools or applications do you use most frequently in your studies? (Check all that apply)**
 - ☐ ChatGPT or other language models
 - ☐ Machine learning tools (e.g., TensorFlow, Scikit-learn)
 - ☐ Automation tools (e.g., RPA software)
 - ☐ Data analysis platforms (e.g., Excel, Tableau, Power BI)
 - ☐ Others: _____
-

Section 3: AI Integration in Coursework

5. **Have your professors introduced AI concepts or tools in any of your business courses?**
 - ☐ Yes
 - ☐ No
 6. **If yes, in which courses have AI tools or concepts been introduced?**
 - ☐ Management
 - ☐ Finance
 - ☐ Marketing
 - ☐ Operations
 - ☐ Other: _____
 7. **How effectively do you think AI is being integrated into your business education?**
 - ☐ Very effectively
 - ☐ Somewhat effectively
 - ☐ Neutral
 - ☐ Not very effectively
 - ☐ Not at all effectively
-

Section 4: Ethical Implications of AI

8. **Have you discussed ethical issues related to AI in any of your business courses?**
 - ☐ Yes
 - ☐ No
9. **Which ethical concerns do you find most relevant to AI in business? (Check all that apply)**
 - ☐ Job displacement
 - ☐ Data privacy and security
 - ☐ Bias in algorithms
 - ☐ Decision transparency
 - ☐ Accountability in AI-driven decisions

- Other: _____
 - 10. **How concerned are you about the ethical implications of AI in business?**
 - Very concerned
 - Somewhat concerned
 - Neutral
 - Not concerned
-

Section 5: AI and Future Business Needs

- 11. **How important do you think AI skills will be for your future career in business?**
 - Very important
 - Somewhat important
 - Neutral
 - Not very important
 - Not important at all
 - 12. **Do you feel that your current business education is adequately preparing you for a future where AI plays a key role in business?**
 - Yes, I feel well-prepared
 - Somewhat prepared
 - Neutral
 - Not very well-prepared
 - Not prepared at all
 - 13. **What additional AI-related skills or knowledge would you like to learn to prepare for your future career?**
 - AI strategy and implementation
 - Data analysis and interpretation
 - Ethical considerations and regulations
 - Automation and productivity tools
 - Other: _____
-

Section 6: Open-Ended Feedback

- 14. **In your opinion, how should business education evolve to incorporate AI effectively?**
(Open-ended response)
- 15. **Do you have any other comments or suggestions regarding the use of AI in your business courses?**
(Open-ended response)

Appendix B

Faculty Survey

Section 1: Demographics

1. **What subjects do you primarily teach?**
 - ☐ Accounting
 - ☐ Economics
 - ☐ Finance
 - ☐ Healthcare
 - ☐ Management
 - ☐ Marketing
 - ☐ Other: _____
 2. **How many years of teaching experience do you have?**
 - ☐ 1-5 years
 - ☐ 6-10 years
 - ☐ 11-20 years
 - ☐ 20+ years
-

Section 2: Frequency of AI Use

3. **How often do you use AI tools in your teaching practice?**
 - ☐ Daily
 - ☐ Weekly
 - ☐ Monthly
 - ☐ Rarely
 - ☐ Never
 4. **For which purposes do you use AI in your teaching?** *(Check all that apply)*
 - ☐ Creating lesson plans or presentations
 - ☐ Generating quiz/exam questions
 - ☐ Automating grading or assessment
 - ☐ Student feedback or personalized learning
 - ☐ Research or data analysis
 - ☐ None of the above
 - ☐ Other: _____
 5. **Which AI tools or platforms do you use most frequently in your teaching?** *(Check all that apply)*
 - ☐ ChatGPT or other language models
 - ☐ Grading tools (e.g., Gradescope, Turnitin AI features)
 - ☐ Data analysis platforms (e.g., Excel, Tableau, Power BI)
 - ☐ Learning management systems (e.g., Blackboard, Moodle) with AI capabilities
 - ☐ Other: _____
-

Section 3: AI Introduction to Students

6. **Do you introduce AI concepts or tools to your students in your business courses?**
 - ☐ Yes
 - ☐ No
 7. **If yes, how do you introduce AI to students?** *(Check all that apply)*
 - ☐ In class lectures/discussions
 - ☐ Assignments requiring the use of AI tools
 - ☐ Case studies or real-world examples of AI applications
 - ☐ Group projects involving AI
 - ☐ Workshops or seminars
 - ☐ Other: _____
 8. **Do you encourage or require students to use AI tools in their assignments or projects?**
 - ☐ Encourage
 - ☐ Require
 - ☐ Allow, but do not encourage
 - ☐ Do not allow
-

Section 4: Ethical Implications of AI

9. **Do you discuss the ethical implications of AI in your courses?**

- Yes
 - No
 - 10. **Which ethical issues do you address when discussing AI with students?** *(Check all that apply)*
 - Job displacement
 - Data privacy and security
 - Bias and discrimination in AI algorithms
 - Accountability and transparency in AI decisions
 - Environmental impact of AI technologies
 - Other: _____
 - 11. **How concerned are you about the ethical implications of AI in business education and practice?**
 - Very concerned
 - Somewhat concerned
 - Neutral
 - Not concerned
-

Section 5: AI Use by Students

- 12. **Do you allow students to use AI tools (e.g., ChatGPT, AI-based research tools) to complete assignments, exams, or projects?**
 - Yes
 - No
 - In some cases (please specify): _____
 - 13. **If you allow AI use, how do you evaluate the originality or integrity of student work when AI tools are involved?** *(Check all that apply)*
 - Require students to disclose AI use
 - Use plagiarism or originality checkers
 - Grade based on the quality of final output regardless of AI use
 - Other: _____
 - 14. **What challenges have you encountered (if any) with students using AI tools in their coursework?** *(Open-ended response)*
-

Section 6: AI and Future Business Needs

- 15. **How important do you believe AI skills will be for the future careers of your business students?**
 - Very important
 - Somewhat important
 - Neutral
 - Not very important
 - Not important at all
 - 16. **Do you feel that your current curriculum adequately prepares students for a future where AI plays a significant role in business?**
 - Yes
 - Somewhat
 - Neutral
 - No
 - 17. **What additional AI-related topics or skills do you believe should be incorporated into business education to meet future needs?**
 - AI strategy and implementation in business
 - Data science and analytics
 - AI ethics and governance
 - Automation in business processes
 - AI in marketing and consumer behavior
 - Other: _____
-

Section 7: Open-Ended Feedback

- 18. **In your opinion, how should business education evolve to better integrate AI into the curriculum?** *(Open-ended response)*
- 19. **Do you have any other comments or suggestions regarding the use of AI in business education?** *(Open-ended response)*