



SWOT Analysis on ChatGPT: Implications for Educational Practice

1. WHY IT MATTERS

- The influence of ChatGPT and similar GenAI technologies on teaching and learning in higher education continues to grow.
- ChatGPT offers several potential benefits for teaching and learning; however, its use also raises concerns about academic integrity, bias, and overreliance.
- Understanding both the opportunities and risks associated with ChatGPT is essential for making informed decisions about how to effectively integrate AI technologies into pedagogy.

2. PURPOSE & CONTEXT

Aim of the study:

- To examine and provide a comprehensive overview of ChatGPT's strengths and weaknesses, as well as the opportunities and threats associated with its use in higher education.
- To provide stakeholders with evidence-informed recommendations for leveraging AI technologies to enhance teaching and learning practices in higher education.

The study applies the SWOT (Strengths, Weaknesses, Opportunities, and Threats) framework to the existing literature on ChatGPT in higher education. The framework distinguishes between internal factors (strengths and weaknesses) and external factors (opportunities and threats).

3. KEY FINDINGS

Strengths and Opportunities for Education

- Generates plausible and relevant responses in real time through its conversational capabilities, allowing it to respond iteratively to users' prompts and instructions.
- Increases access to information and facilitates complex and adaptive learning.
- Reduces workload for educators, supporting them with tasks such as creating lesson plans, test items, rubrics, and feedback.

Weaknesses and Threats to Education

- Can produce inaccurate information because it does not truly understand the concepts it generates and cannot independently verify the accuracy of its responses.
- May reproduce or amplify bias and discrimination due to biases embedded in training data, algorithmic design, and societal contexts.
- Can facilitate plagiarism and, when students become overly dependent on it, may undermine the development of higher-order thinking skills.

4. RECOMMENDATIONS FOR PRACTICE

- Design curricula and learning tasks to foster higher-order thinking, for instance, by asking students to critique and evaluate AI-generated essays rather than writing from scratch.
- Shift from mainly summative assessment toward formative and authentic assessment practices, such as self-assessment, portfolios, peer feedback, with greater emphasis on monitoring the learning process rather than evaluating only the finished product.
- Integrate AI, digital and media literacy into curricula to improve students' capability to evaluate and make informed decisions on how to use these new technologies.
- Create opportunities for students and instructors to reflect on when AI supports meaningful learning and when it may interfere with meaningful cognitive engagement, fostering a cautious relationship with technology.

5. REFERENCES

- Farrokhnia, M., Banihashem, S. K., Noroozi, O., & Wals, A. (2023). A SWOT analysis of ChatGPT: Implications for educational practice and research. *Innovations in Education and Teaching International*, 61(3), 1–15.
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