Learning from Books, Articles, Lectures, and... AI^*

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The use of Artificial Intelligence (AI) tools in education has raised understandable concerns among educators, especially about the potential for misuse, such as submitting AI-generated content as original work. While these concerns are valid, focusing only on the risks overlooks the potential of AI to improve learning. Instead of treating AI as a threat, institutions should explore how it can be integrated into education to support students in their academic career path.

Traditional learning methods, such as reading textbooks, academic articles, and attending lectures, are effective but limited. Because they assume that all learners can follow a clear and perfectly linear progression of ideas. If a student misses a key concept, their understanding of later material may suffer. Just as a single broken bulb can cause an entire string of Christmas lights to fail, a misunderstanding or gap in knowledge about one topic can hinder a student's ability to grasp subsequent material. This is particularly challenging for students with different learning styles or attention spans, as they may struggle to keep up with static, one-size-fits-all resources.

AI tools like ChatGPT, Claude, and NotebookLM offer an effective alternative. These systems allow students to learn interactively, tailoring explanations to their level of understanding. For example, if a student asks, "What is game theory?" the AI provides a clear response (often with references). The student can then ask follow-up questions, such as "How does game theory

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apply in business?" or "How is it used in negotiations, or in elections?" This process allows students to explore topics at their own pace and fill gaps in their knowledge.

AI tools offer several advantages over traditional methods:

- They adapt explanations to the learner's level of understanding.
- They provide immediate clarifications and examples.
- They adjust complexity and length based on user preferences.
- They allow unlimited follow-up questions without frustration or delay.

Unlike textbooks or lectures, AI systems provide on-demand learning tailored to individual needs. Students who find traditional methods difficult can use AI to gain a better understanding in less time. A focused session with AI can often lead to clearer insights than hours of reading or listening.

While AI tools can make errors or reflect biases, this is not unique to AI. Human educators and authors face similar challenges. Moreover, most Large Language Models (LLMs) come with a warning that they can make mistakes and to double-check. But what makes AI valuable is its ability to respond quickly to questions, adapt explanations, and support personalized learning in ways that traditional resources cannot.

Rather than banning or restricting AI based on the fear of "Copy & Paste" is shortsighted. Instead, educators should teach students how to use it effectively. AI can encourage deeper learning by helping students test their understanding, explore different perspectives, and connect ideas to realworld applications. When used properly, AI can enhance education rather than undermine it.

The future of education will likely combine traditional methods with AI. By using AI as a tool for learning, institutions can provide students with more flexibility and support. This approach can help students engage with material in ways that suit their learning styles, improving both understanding and outcomes.

So, while there are certain risks to using AI in education, its potential benefits are too significant to ignore and outweigh any serious concerns.

Instead of focusing solely on preventing misuse, universities should work to incorporate AI into teaching in ways that promote learning and critical thinking.