

SMART MACHINES, SHARPER MINDS: AI AND THE CHALLENGE OF CRITICAL THINKING

by:

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The emergence of the artificial intelligence (AI) is the critical moment in the development of the human society. Be it voice assistants, automated writing tools, predictive analytics AI application, and smart tutoring systems, AI has become a perfect fit to life in general and education in particular. AI offers fascinating hopes to improve the learning process; on the other hand, there arise significant concerns especially about the effect of using AI on the critical thinking process among students. With AI transforming the educational arena, it would be necessary to have a balanced viewpoint so that the advancement of technology is pursued without the sacrifice of intellectual sounding.

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The advantages of using AI tools among students are undeniable. An example of such platforms is adaptive learning, which tailors the instruction to the performance of individual students so that they can study at their own rates. Language models give the immediate response to writing whereas search algorithms can retrieve large amount of information in a short period of time. These inventions make learning easier and eliminate the obstacles to learning. But convenience may be turned into a two-edged sword. With more and more endeavors that previously needed careful consideration, like problem-solving, writing, or research also being automated, there may arise a problem of students becoming the impassive consumers of information, as opposed to the active and critical thinkers.

There is also an imminent danger of over-reliance. Students could be learning to avoid this mental initiative when using AI to provide the best answers. As an illustration, the ability to employ AI to instantly summarize text, solve math problems, or write an essay can demoralize students learning to analyze, interpret and synthesize ideas on their own. Such dependence can prevent the growth of important cognitive skills including inference, evaluation and logical thinking capabilities- which are the key to academic success and lifelong learning.

Besides, critical thinking is not all about the ability to find correct solutions; it means to question assumptions evaluating arguments, sources, and reflecting on various opinions. This technology, the use of AI tools, can be very powerful but usually lacks human sensitivity and ethical judgement necessary in instilling these habits of mind. In case students start to accept AI answers blindly, they might fail to identify between correct knowledge and inaccurate or biased results. It puts pressure on an educator in terms of teaching students not only about how to use AI but also how to engage with it critically and ethically.

Still, AI does not need to destroy critical thinking, in fact, with a purposeful application, it can facilitate it. As an example, AI has the capacity to produce several perspectives on a subject; this may be compared and examined by students. It may be used as a springboard to knowledge as it may lead to further investigation and debate. The kind of instruction instills curiosity and reflection in place of substitution of tools powered by meaningful control flow AI.

In order to guarantee that AI is used to boost the ability of the students and not reduce it, there should be a delicate balance struck by educators. This would entail the creation of learning experiences focused on inquiry, discussion, and problem-solving and incorporation of AI as an aid rather than a replacement tool. The training of students by introducing them to the AI tools should also aim at teaching students to question the results produced by the tools, identify their constraints, and use their own reasoning. This

way, there would still be a chance that critical thinking will be at the center of education even in the era of smart machines.

To conclude, the emergence of the AI is a challenge and opportunity. However, it can contribute to education, whereas, it can result in the loss of intellectual rigor required to make critical decisions. It falls on educators, policymakers and learners to do this responsibly in what is a constantly changing landscape. With artificial intelligence growing in the world around us, it has become more critical to expand human intelligence that thrives on reflections, analysis, and deep thinking.

References:

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