Arabian Journal of Science

ISSN:2308-5703

Impact factor:13.5 *International Multidisciplinary Online Journal* November, 2026

THE VALUE OF INDEPENDENT THINKING IN THE AGE OF READY-MADE ANSWERS

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Doi: https://doi.org/10.5281/zenodo.24246578

Abstract; This article examines the personal, educational, and social significance of independent thinking in an era when artificial intelligence is widely used. It argues that the ability to obtain an instant answer is not the same as acquiring a deep understanding of knowledge, and that excessive reliance on ready-made texts may weaken the skills of asking questions, verifying evidence, and drawing conclusions. At the same time, the proper use of artificial intelligence can enhance research, the comparison of ideas, and creative work. The article puts forward practical recommendations for students, teachers, and educational institutions, including the principle: “First, think for myself — then use AI — and finally verify.”

Keywords: independent thinking, artificial intelligence, AI, critical thinking, education, information literacy, academic integrity.

Today, humanity is facing the problem of information overload more than that of information scarcity. Artificial intelligence tools that can generate texts in seconds, simplify complex topics, translate, and answer questions have become part of everyday life. In these circumstances, the outward form of learning is changing: whereas students once turned the pages of books to find an answer, today they can type their questions into a digital assistant. But the important question is this: does reaching an answer quickly actually make a person knowledgeable?

In my view, the greatest danger of the modern age is not that artificial intelligence can answer questions faster than humans, but that people may become accustomed to accepting answers without understanding them. The true purpose of education is not merely to find the correct answer; it is to understand a problem, clarify a question, compare evidence, identify errors, and reach an independent decision. A ready-made answer may shorten part of this process, but it cannot replace thinking.

That is why the topic “The Value of Independent Thinking in the Age of Ready-Made Answers” is not merely about the use of technology. It concerns human intellectual independence, responsibility, and future competitiveness.

1. Obtaining an Answer and Acquiring Knowledge Are Two Different Processes

Obtaining an answer means gaining access to information; acquiring knowledge means understanding that information, connecting it with what one already knows, and being able to apply it in a new situation. For example, artificial intelligence can show the solution to a mathematics problem. However, if a student does not understand why each step in the solution was taken, they may be unable to solve a similar problem independently. In other words, a ready-made solution provides a result, but the learning process requires the student's active participation.

The OECD’s 2026 report, “Digital Education Outlook,” emphasizes that the high quality of an assignment completed with generative AI does not, in itself, mean that genuine learning has taken place. According to the report, general-purpose chatbots used without a pedagogical purpose may improve task performance, but this does not guarantee long-term growth in knowledge. Some studies have noted that students who perform well with the help of AI may lose their advantage in

examinations taken without the technology; in some cases, the opposite effect has even been observed [1].

This conclusion does not mean that artificial intelligence should be abandoned. On the contrary, it shows how important the way it is used can be. If a student tells AI, "Write my essay for me," they receive a finished product. But if they ask, "Present three different perspectives on this topic, identify the evidence supporting each one, and ask me questions that will help me assess which argument is stronger," the technology can stimulate thinking. The difference lies not in the tool itself, but in the purpose for which it is used.

2. Why Is Independent Thinking Necessary?

Independent thinking does not mean immediately rejecting every idea or assuming that one's own opinion is absolutely correct. It is the ability to verify information, distinguish causes from consequences, assess the reliability of evidence, listen to opposing viewpoints, and draw well-founded conclusions. Such thinking turns a person from a mere consumer of information into an individual capable of making informed decisions.

First, independent thinking protects people from false or misleading information. Generative AI can provide information that is written fluently and sounds convincing but is nevertheless incorrect. Therefore, the fluency of a text cannot serve as proof of its accuracy. For every important claim, the source, date, author, and supporting evidence should be checked. Second, independent thinking fosters creativity. New ideas often emerge not from repeating ready-made answers, but from questioning existing views. Third, it develops a sense of responsibility: people cannot shift the consequences of their decisions onto others or onto technology.

The value of independent thinking is particularly increasing in relation to future professions. Some repetitive tasks may be automated, but the abilities to define a problem correctly, make decisions in uncertain situations, communicate with people, and take ethical consequences into account will remain relevant. AI can generate answers, but human judgement is needed to assess which problems matter, which goals are fair, and whom the outcomes will affect.

3. The Opportunities and Risks of Artificial Intelligence

One advantage of artificial intelligence is that it can explain complex concepts in different ways, reduce language barriers, create additional exercises for students, and provide immediate feedback. For example, a student learning a foreign language can practise conversing with AI and identify their mistakes; in history, they can ask it to examine an event from different historical perspectives. Teachers can also use it to prepare an initial draft of a lesson plan or find additional examples for a complex topic.

However, risks also exist. The first is outsourcing intellectual work. If students ask AI to write their plans, analyses, and conclusions every time, they reduce their own opportunities to practise these skills. The second risk is trusting inaccurate information. In some cases, AI may cite books, articles, or statistics that do not actually exist. The third risk is falling into uniform patterns of thought: if many people obtain ready-made answers from the same tool, their texts and viewpoints may become increasingly similar. The fourth risk concerns the security of personal data. Students should not enter confidential documents, passwords, or personal information belonging to themselves or others into unknown services.

UNESCO's 2023 guidance on generative AI in education identifies human-centred interests, data privacy, equity, and the protection of human agency as key principles for the use of technology. It emphasizes that AI should not replace human intelligence; rather, it should encourage us to reconsider our views on knowledge and learning [2].

Thus, the benefits or harms of technology are not predetermined by the technology itself. The outcome depends on the user's purpose, level of literacy, habit of verification, and educational environment. The OECD also notes that devices and software alone are not sufficient for effective digitalisation; a pedagogical approach is also essential [3].

4. Ways to Preserve and Develop Independent Thinking

The first recommendation is to make the method "First, think for myself; then use AI; and finally verify" a daily study habit. After receiving an assignment, students should not immediately turn to a chatbot. Instead, they should first write down their own ideas, assumptions, or plan. They can then use AI's response as an additional source or an alternative perspective. Finally, they should verify the answer using a textbook, academic source, or reliable official website. This approach preserves the individual's initial thinking and makes it possible to compare it with AI-generated output.

The second recommendation is to learn to ask questions rather than simply request answers. For example, instead of asking, "What is photosynthesis?", a student could ask, "How does light energy change during photosynthesis? Explain this using an example from everyday life and give me three questions to check my understanding." An even more effective approach is to ask AI not to provide a ready-made conclusion, but to guide the student with questions step by step. In this way, the student tries to find the answer independently.

The third recommendation is to require the use of sources for every important assignment. The original source of a fact provided by AI should be accessed, and its author and publication date should be checked. If no source can be found, the claim should not be accepted as reliable. If students make a habit of comparing at least two independent sources, their information literacy will also improve.

The fourth recommendation is to assess the learning process as well. Instead of grading only the final essay or answer, teachers can ask students to present their initial plan, the sources they used, the ideas they revised, and their final conclusion. This allows the teacher to see how the student has thought through the task. Oral presentations, classroom discussions, experiments, and practical exercises completed by hand can also help assess independent knowledge.

The fifth recommendation is to foster a culture of constructive debate with AI. Students can ask it, "Identify the weak points in my reasoning," "Give an argument against this conclusion," or "Which of my assumptions have not been verified?" In this context, AI acts not as a judge, but as a discussion partner that puts ideas to the test. Nevertheless, the final judgement and responsibility remain with the human being.

5. A New Approach: The "Thinking Trail" and a Personal Learning Journal

As a simple but effective innovation for developing independent thinking, I propose the "thinking trail" method. For each major assignment, students record four brief stages: their own assumption before starting the task; two important pieces of evidence encountered during their research; an idea obtained from AI or another source and subsequently verified; and their final conclusion, including why their opinion changed or remained the same. This journal makes the student's thinking process visible.

Another advantage of this method is that it encourages learning from mistakes rather than punishing them. Even if a student makes an incorrect assumption, they can demonstrate that they checked the evidence and revised their view on a sound basis. This is an important characteristic of scientific thinking: a scientist's strength lies not in never making mistakes, but in being able to correct them on the basis of evidence.

At the school level, it is also possible to introduce a combination of assignments completed "with AI and without AI." For example, on a particular topic, a student first writes a short explanation independently, then obtains additional examples with the help of AI, and finally explains the topic orally without using the technology. In this way, the difference between instant assistance and personal knowledge becomes clear. This approach does not prohibit technology, but keeps the student's intellectual effort at the centre of learning.

Conclusion

In the age of ready-made answers, the most valuable resource is not merely access to information, but the ability to understand and evaluate it. Artificial intelligence can save people time, explain complex topics, and provide a starting point for new ideas. However, it cannot take the place of human curiosity, doubt, responsibility, or independent decision-making. The easier it becomes to find an answer, the more important it becomes to ask the right question and verify the answer.

Therefore, the task of future education is not to teach students to compete with AI, but to use it consciously. To achieve this, students must think for themselves first, critically analyse AI-generated responses, and draw their final conclusions on the basis of evidence. Teachers, in turn, should not merely deliver ready-made knowledge; they should guide students towards asking questions, conducting research, and justifying their ideas.

In my opinion, the strongest person in the future will not be the one who has memorised the most answers or used AI the fastest. The strongest person will be the one who knows which questions to ask, can question the answers they receive, seeks evidence, and is able to take responsibility for their decisions. No matter how far technology advances, independent thinking will remain one of the most important intellectual foundations of human beings.

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