How AI dependency is eroding critical thinking of youths

Hisham Khan | Sunday, 23 November 2025



Since late 2023, the way young people interact with the internet has changed drastically. The shift has moved from seeking information to demanding instant answers. LLM-based AI applications like ChatGPT, Claude, DeepSeek, and Gemini have transformed user behaviou—today's youths no longer want to visit multiple websites or sift through search results. Instead, they expect perfect, summarised answers to their questions, whether it's completing homework or drafting an

email reply.

The rise of artificial intelligence has brought with it an uncomfortable truth that educators, parents and policymakers in Bangladesh must confront: students risk losing the ability to think independently. Emerging studies report a growing negative association between frequent use of AI (artificial intelligence) tools and diminished critical thinking capabilities, with one international study of 666 participants finding that high AI-tool use was significantly correlated with lower critical thinking scores, mediated by the phenomenon of cognitive offloading. Although Bangladesh-specific data remain limited, the implication is clear: younger learners appear more accustomed to outsourcing tasks to AI and less confident in reasoning through complex problems without technological assistance.

The phenomenon at work is the cognitive offloading of mental effort to external devices rather than engaging with the struggle of independent reasoning. Overreliance on AI-driven dialogue systems may undermine decision-making and analytical skills by reducing students' inclination to interrogate or verify information themselves. For Bangladeshi students, who already operate within an education system that privileges memorisation over inquiry, this shortcut represents a particularly risky development that threatens to compound existing pedagogical weaknesses rather than address them. Bangladesh's education landscape reveals baseline vulnerabilities that make this AI dependency crisis especially acute. According to UNICEF, only about 43 per cent of 10-year-old students in Bangladesh were proficient in reading before the pandemic, and merely 25 per cent of secondary-school graduates met basic competency thresholds. When foundational skills remain underdeveloped, the lure of AI tools that promise instant answers becomes not merely convenient but potentially devastating for long-term cognitive growth. Students who have not built strong analytical habits may skip

the struggle entirely, outsourcing their thinking to algorithms that produce polished answers whilst leaving their intellectual muscles idle.

The issue extends beyond convenience into academic integrity and genuine learning. Several reviews of AI integration in academic writing show that whilst such tools can increase efficiency and clarity, they also raise serious concerns about creativity, critical thinking and ethics. This dynamic plays out especially problematically in Bangladesh, where an examination-centric culture encourages students to treat education as a means to secure high grades rather than as a chance for intellectual growth and the development of transferable skills that define professional competence and informed citizenship.

The grade-focused mentality prevalent in Bangladeshi institutions creates fertile ground for AI overreliance. Standardised exams such as the SSC and HSC continue to dominate the system, with classroom performance, homework and assignments often contributing minimally to a student's certification. This structure incentivises students to seek the fastest route to correct answers rather than engage in the slow, oftentimes messy work of developing original ideas and wrestling with complexity. When AI can generate competent essays, solve mathematical problems and synthesise research in seconds, why would students invest hours developing these capabilities themselves? The answer lies in understanding that true learning cannot be automated, and that the struggle to comprehend and articulate ideas independently constitutes the very essence of education.

Parents and teachers must recognise their crucial roles in addressing this emerging crisis. For parents, this means guiding rather than banning AI use at home by encouraging children to attempt problems independently before consulting AI tools. Open dialogues about when and how AI should be used can help young people develop a critical awareness of technology's proper place in their learning journey. Parents should monitor not only how often their children use AI, but whether they genuinely understand the content they submit and could reproduce or explain it without technological assistance. This form of engaged oversight requires time and patience, but it represents an essential investment in children's cognitive development that cannot be delegated to schools alone.

Teachers face an equally significant challenge in reshaping classroom practices to counteract AI dependency whilst acknowledging the technology's permanence in students' lives. Research suggests that university students using large language models for writing or research experience reduced cognitive load but poorer reasoning and argumentation than those using more traditional methods. Educators must, therefore, design assessments and learning tasks that cannot be easily outsourced to AI, focusing instead on live demonstrations of understanding, real-time problem-solving exercises and collaborative tasks that require genuine engagement rather than passive content generation.

Universities and schools across Bangladesh must undertake a wholesale rethink of their assessment and learning systems. The current examination-based model now risks becoming obsolete in an age of AI assistance that can effortlessly replicate what students were once expected to memorise. Institutions should pivot towards evaluation methods that prioritise creativity, originality of thought and the ability to defend ideas under scrutiny. This means incorporating more debates, where students must think spontaneously and respond to challenges in real time; more group problem-solving projects that require collaborative negotiation and synthesis of diverse perspectives; more oral presentations where students must demonstrate command of their subject matter without prepared scripts; and more practical applications where theoretical knowledge must be translated into tangible outcomes.

The emphasis must shift from mere content recall, something AI handles effortlessly, to higher-order cognitive skills that remain distinctly human: the ability to ask meaningful questions, to recognise connections between disparate ideas, to evaluate the quality and reliability of information sources, to construct persuasive arguments and to think creatively about ill-defined problems. Critical thinking involves synthesis, evaluation and judgement based on structured criteria, ensuring that analyses are reasoned rather than arbitrary. These capabilities cannot be developed through passive consumption of AI-generated content but only through active, often uncomfortable engagement with challenging ideas.

For Bangladeshi students, this shift requires a fundamental reorientation of values. The current obsession with grades and certificates must give way to a deeper appreciation of education as a transformative process that develops not merely employability but the capacity for independent thought. Students must understand that whilst high marks may open doors in the short term, the ability to analyse, synthesise and create knowledge represents the foundation for sustained professional success and personal fulfilment.

For Bangladesh to navigate this transition successfully, all stakeholders must recognise that artificial intelligence is both an opportunity and a threat, depending entirely on how it is integrated into educational practice. Used wisely, as a tool for exploration and a starting point for deeper investigation, AI can enhance learning. Used thoughtlessly, as a substitute for genuine intellectual effort, it may produce a generation of students who possess impressive transcripts but lack the fundamental capacity for independent thought that defines educated minds. The choice before us is clear: we can continue down the path of algorithmic dependency, producing graduates adept at prompting chatbots but struggling with original analysis, or we can reimagine our educational institutions to prioritise the irreplaceable human capacities that no technology can replicate. The future of Bangladesh's intellectual development depends on choosing wisely now.