Center for Technology and the Human Person The Heritage Foundation 214 Massachusetts Ave, NE Washington, DC 20002

August 20, 2025

The Honorable Linda E. McMahon Secretary United States Department of Education 400 Maryland Avenue, SW Washington, DC 20002

Re: Proposed Priority and Definitions—Secretary's Supplemental Priority and Definitions on Advancing Artificial Intelligence in Education, Docket ID ED-2025-OS-0118

Dear Secretary McMahon,

The Heritage Foundation's Center for Technology and the Human Person commends the Department of Education for its proactive, forward-thinking proposal to consider artificial intelligence (AI) for discretionary grant programs. I write on behalf of the center to draw your attention to research findings on the impact of screen use and the effects that addictive online platforms have on children's health and development. Heritage urges the department to apply these findings to its final proposal and corresponding rules and regulations.

This comment also addresses concerns about particular aspects of the proposal and provides recommendations for improvement. AI is an emerging technology with transformative applications and implications across society, work, and daily life. Innovation brings new opportunities and solutions, but it can also present new problems and harm. The department must discern the threats of using AI tools in education and weigh them against the benefits when finalizing its proposal. It must establish commonsense and forward-thinking safeguards and limitations on the deployment of AI in education before any money is handed out. Ultimately, the proposal affects the most vulnerable in society: children.

Lessons from the Failed Social Media Experiment and Adoption of Ed Tech

The social media experiment has failed children. The consequences of that failure are undeniable: rising rates of anxiety, depression, and social isolation among youth directly correlate with social media and screen time adoption. Social media today is based on recommendation-based algorithms tailored to consume users attention for as long as possible. More time on the platforms leads to more profit for the companies. Children are particularly vulnerable to these addictive properties. Teens who spend more than three hours a day on social media face twice the risk of poor mental health outcomes. The average amount of time that teens

¹ Annie Chestnut Tutor and Autumn Dorsey, "AI Companions Are Harming Your Children," The Daily Signal, August 18, 2025, https://www.dailysignal.com/2025/08/18/ai-companions-are-harming-your-children/.

spend on social media exceeds four hours per day.² The interactive and engaging design of consumer AI platforms mirror consuming and addictive design features of social media. These findings provide a cautionary tale for how AI platforms can harm children.

Education technology has many drawbacks as well as benefits. Perhaps the most known adoption of ed tech is the broad adoption of Google Chromebooks in schools. Google provides its laptops called Chromebooks at a discount to schools and offers free classroom apps, which have led to the widespread adoption of its products. Google began pursuing public schools in 2011. By 2017, more than half the country's K-12 student population (more than 30 million children) used Google apps, such as Google Classroom, Google Docs, and Gmail. As a for-profit entity, the company not only provided a service to schools nationwide, but it expanded and captured a customer base from a young age. Google collects personal data from users for targeted advertising, which generates revenue and allows it to provide apps without a user fee.³ The introduction of Chromebooks has also increased children's screentime and online access, often entertainment focused and unrelated to education, which distracts from instruction and assignments, and may allow access to inappropriate content. Schools that adopt Chromebooks and other ed tech often require their students to use the products and services and may not allow parents to install external filters or blocking software. Discounted or free ed tech products may seem like too good of a deal to pass up to school administrators, but they entail compromises that must be evaluated.

Many schools and states are responding to the social-media and phone-use problem by banning the use of personal phones and devices in schools. At least 14 states have laws or executive orders that ban or restrict cell phone use in schools. These policies help, but their impact is limited as long as schools provide devices for use throughout the school day. The drawbacks of broadly introducing more ed tech and allowing children to engage on social media must be greatly considered by the Department of Education, state agencies, and schools in their adoption of AI. The Center for Technology and the Human Person urges caution in the use of AI to "increase classroom engagement," as stated in the proposal. Addictive algorithms and tools should not be the source of classroom engagement. Schools should be a place where students learn and build an attention span that is independent from entertainment or gamified educational media.

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² Annie Chestnut Tutor, "Age Verification: What It Is, Why It's Necessary, and How to Achieve It," Heritage Foundation *Backgrounder* No. 3895, March 6, 2025, https://www.heritage.org/big-tech/report/age-verification-what-it-why-its-necessary-and-how-achieve-it.

³ Natasha Singer, "How Google Took Over the Classroom, *The New York Times*, May 13, 2017, https://www.nytimes.com/2017/05/13/technology/google-education-chromebooks-schools.html.

⁴ Caroline Beck, "Washington Township parents push back on Chromebook policy for middle schools," Indianapolis Star, August 7, 2025. https://www.indystar.com/story/news/education/2025/08/07/washington-township-chromebook-policy-11-virtual-learning-northview-middle-school/85538874007/.

[&]quot;Understanding School-Issued Chromebook Content Filters: What Parents Need to Know," *The White Hatter*, updated May 8, 2025, https://www.thewhitehatter.ca/post/understanding-school-issued-chromebook-content-filters-what-parents-need-to-know.

These 14 states are Alabama, Florida, Georgia, Indiana, Kentucky, Louisiana, New York, North Dakota, Oklahoma, South Carolina, Tennessee, Utah, Virginia, and West Virginia. Aliss Higham, "Map Shows US States With School Phone Bans," *Newsweek*, June 27, 2025, https://www.newsweek.com/map-shows-us-states-school-phone-bans-2090411#:~:text=What%20To%20Know,West%20Virginia.

Impact on Child and Teen Development

Children and teens need stricter screen time limits than adults due to their stage of psychological and mental development. This means that students cannot and should not spend most of the school day behind screens—AI-related or not. "Several studies have indicated that increased screen time duration could be associated with lagged development, psychosocial symptoms, obesity, sleep disorders, and cardiovascular disease." Children and teenagers ages 10 to 19 undergo a highly sensitive period of brain development. According to the U.S. Surgeon General, "this is a period when risk-taking behaviors reach their peak, when well-being experiences the greatest fluctuations, and when mental health challenges such as depression typically emerge." Brain development is vulnerable to social pressures, peer opinions, and peer comparison. Teens may experience more emotional sensitivity to the communicative and interactive nature of many online platforms. While the Surgeon General wrote about these concerns in the context of social media, they must be considered with other interactive and addictive online platforms, including gamified and interactive AI education tools.⁷

MIT Comparative Study on the Use of AI vs. Non-Use of AI in Essay Writing

The Massachusetts Institute of Technology (MIT) conducted a study that divided 54 students into three groups instructed to write essays and observed their neural brain activity during multiple essay-writing sessions. The first group was directed to only use ChatGPT, the second group was allowed to use a search engine without AI functionality, and the third group was prohibited from using any tools and had to rely entirely on their own brain power. MIT researchers found that brain connectivity decreased for students who used online tools, with the greatest decrease observed among the students who used ChatGPT.

The researchers then found that students who were first tasked with using only their brain for essay writing performed better the second time when using ChatGPT. This finding reveals the power of performing tasks without AI or online tools as a foundation for learning and development. It raises the question of whether students would be better prepared for higher education or an AI-related workforce if their education omits early adoption of AI tools. The study results also suggest a correlation between the reliance on AI and a reduction in critical thinking skills. A lack of critical thinking, reasoning, and retention would reversely make students less equipped for the workforce. The goal of school assignments is not mere completion, but the aptitude and depth of knowledge obtained. Students are more likely to obtain that aptitude and depth when they employ personal hard work and effort.8

Funding for the Proposal

⁶ Liqing Li et al., "Screen time and depression risk: A meta-analysis of cohort studies," Frontiers in Psychiatry, Vol. 13 (December 2022), https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2022.1058572/full.

⁷ U.S. Department of Health and Human Services, "Social Media and Youth Mental Health: The U.S. Surgeon General's Advisory," 2023, p. 5, https://www.hhs.gov/sites/default/files/sg-youth-mental-health-social-media-

⁸ Andrew R. Chow, "ChatGPT May Be Eroding Critical Thinking Skills, According to a New MIT Study," Time, June 3, 2025, https://time.com/7295195/ai-chatgpt-google-learning-school/.

While the Department of Education is expanding the use of existing discretionary grant programs without additional funds, the Center for Technology and the Human Person is concerned that this expansion will lead to higher appropriation requests and authorization levels. This would further strain government borrowing and the taxpayer dollar and increase the national debt. Tech companies will seize any opportunity to profit from this proposal, so it is critical that the department vet all companies, their products, and associated claims in order to prevent waste, fraud, and abuse.

Recommendations

The Secretary of the Department of Education has broad statutory authority to write rules and regulations as it determines necessary for its programs, including the discretionary grant programs amended in this proposal. The Secretary should wield its authority to include safeguards, limitations, and restrictions on the use of grant money to mitigate wasteful use of grant dollars and abuse and fraud from tech companies, and to protect children, especially the youngest and most vulnerable. Below are specific recommendations.

Advance Tech Ed over Ed Tech

The Center for Technology and the Human Person recommends advancing technology education (tech ed) over education technology (ed tech). AI literacy can be achieved through tech ed, which focuses on teaching fundamentals of the technology and the skills needed to use it. AI is an emerging technology that is rapidly advancing and changing society, and tech ed plays an important role in preparing students for dealing with those changes. Ed tech on the other hand, is a form of pedagogy that relies on technology to teach, and forces adoption of the technology. Tech ed courses, such as computer science, deepen students' knowledge and understanding of technical subject areas and exposes them to skills required for certain career paths. Tech ed focuses on curriculum and is independent of technology adoption. It is exempt from industry's profit-driven motives.

Ed tech is driven by tech companies whose values and goals are not necessarily in alignment with parents and schools. Tech ed shares end goals of other disciplines taught in schools: to educate and build competence in a subject matter. Ed tech is a pervasive technological means of education that fosters dependence on certain technology to learn and do any given task. Tech ed rightly acknowledges and accepts the emergence of technology like AI and encourages modernizing course curricula accordingly without surrendering the important role of teachers and parents in overseeing instruction. Nor does it handicap students' ability to think critically, concentrate, and learn independently of tech tools.

As suggested in the Department of Education's proposal, AI-powered platforms that analyze student progress, identify learning gaps, and tailor support to individual needs may enhance teaching and learning. Allowing teachers to use AI tools for administrative work would allow them to focus more of their time, attention, and energy on their students and deepen their own expertise of the subject matter so that they can become even better teachers. Proposed objective (a) (vi) to provide professional development in foundational computer science and AI and prepare educators to teach AI in stand-alone computer science courses is a perfect example

of tech ed. Proposed objective (a) (v) to provide professional development for educators on the integration of AI into their subjective areas, which translates to integration of AI into all areas, is an example of ed tech that the center cautions against.

Protect Parents' Rights

Parents must be informed and their consent must be obtained before schools introduce sweeping changes in the use of technology by their children. Of note: this proposed rule is for discretionary grants, not mandatory implementation. The Department of Education should add safeguards and stipulations for parents' rights to the grant awards. Parents must be allowed to opt out of tech tools, applications, and data collection. They should be permitted to add additional layers of protection such as screen time limits, internet filters, and content blocking software to devices that their children use, including for education. Transparency in tech ed curricula and ed tech tool uses and capabilities is critical for parents to understand what their children are learning and how they may be affected. Parents who are more restrictive of their children's use of technology and screens must be respected and considered.

Eliminate Proposals for Virtual Teaching Assistants and Tutors

The Center for Technology and the Human Person urges the department to remove proposals for providing grant funding for virtual teaching assistants and tutors. See paragraph (b)(iv). Children need in-person human connection and relationships. The interactions and conversational abilities of AI assistants with children need to be greatly restricted and monitored. Recent research has illuminated the harm that chatbots can cause children. Chatbots have been found to consistently steer conversations towards sex unprompted—even when the user has indicated he or she is a minor. ⁹ Chatbots have encouraged self-harm and suicide, with perhaps the most infamous case of a Character.ai chatbot compelling a 14-year-old boy to commit suicide in order to unite with the chatbot. ¹⁰ In April 2025, Stanford University and Common Sense Media released research findings on AI companions and concluded that they should not be used by minors. The research found that terms of service—based restrictions, such as age restrictions, were easily circumvented, that harmful and sexual exchanges were easily elicited, that self-harm advice proliferated in conversations, and that AI companions regularly purported to be real, conscious, and experience emotions. OpenAI and MIT Media Lab conducted a study in 2025 that found that high daily usage of AI chatbots increased feelings of loneliness and dependence on the bot. The study revealed that those with stronger emotional attachment tendencies and higher trust in the chatbot experienced greater loneliness and emotional dependence. 11

These findings cement the need for eliminating the use of engaging and interactive chatbots, including teaching assistants and tutors from the grant proposals. If virtual assistants and tutors are permitted in some capacity, they must be non-interactive and unable to initiate or

⁹ Jeff Horwitz, "Meta's 'Digital Companions' Will Talk Sex with Users—Even Children," *The Wall Street Journal*, April 26, 2025, https://www.wsj.com/tech/ai/meta-ai-chatbots-sex-a25311bf.

¹⁰ Clare Duffy, "There are no guardrails.' This mom believes an AI chatbot is responsible for her son's suicide," CNN, October 30, 2024, https://www.cnn.com/2024/10/30/tech/teen-suicide-character-ai-lawsuit.

¹¹ Global Wellness Institute, "AI Initiative: 2025 Trends," April 2, 2025, https://globalwellnessinstitute.org/global-wellness-institute-blog/2025/04/02/ai-initiative-trends-for-2025/.

continue conversations. Their training data should be limited to input that is necessary for a particular subject or grade level that subsequently limits the extent of their output. For example, a chatbot that is only able to provide information and sources to a search query or assist a user in website navigation may be permissible in certain classroom or library settings. A chatbot that was only trained on algebraic data and can only prompt questions for or respond with answers to algebraic problems may also be permissible. It must not be an entity with which a child can reasonably form an emotional bond or a pseudo relationship. But even these examples should be last resort to in-person, face-to-face instruction and problem solving. Students who are struggling in a subject, behind developmentally, or disabled need more support from their parents and teachers. These are children who are likely most in need of in-person, face-to-face instruction and should not be relegated to an AI program even if it is "tailored to their needs." *See paragraph (b), ii and iii.*

Distinguish Proposals for Primary Schools from Those for Secondary Schools

The Center for Technology and the Human Person cautions the agency against "fostering early exposure to AI concepts and technology to develop an AI-read workforce and the next generation of American AI innovators." Preparing students for the AI workforce should not be the primary goal of K–12 education, particularly elementary education. Building the foundations of education across all disciplines and teaching children how to think critically, reason, and retain knowledge is far more important than teaching them how to get things done quickly with AI. The workforce may reward efficiency but that is not the basis of education. Alternatively, proposals in paragraph (a), (vii) and (viii), which encourage dual-enrollment course opportunities for high schoolers to earn postsecondary credentials in AI and "career-relevant, in-demand certification programs," are prudent measures for advanced high schoolers who take higher-education-level courses in other subjects. Additionally, high schoolers are closer to the age of working full time.

Conclusion

The culmination of research findings on the harmful effects on children from addictive design features that permeate online platforms must be considered throughout any adoption of AI in education, and should be used to establish commonsense limitations and restrictions. Grant awards must not be giveaways to the tech industry, which is all too eager to secure customers for life—starting with the most vulnerable and impressionable in society. The adoption of AI in education should form through the advancement of tech ed over ed tech. The rights of parents and needs of children must be at the forefront of any decisions. Evidence-based safeguards and appropriate limitations on AI deployment in education must precede any funding distributions. The department must balance the opportunities of AI and innovation with the threats and unintended consequences through responsible and informed integration.

Sincerely,

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