Response to United States Government Request for Information on the Development of an Artificial Intelligence (AI) Action Plan.

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Introduction

In response to the call for comment regarding the United States Government's new Al Action Plan, we are reminded of the assertion that with great power comes great responsibility. As the world grapples with the potential of Al to transform all aspects of our lives, we call for the government to carefully navigate the critical balance between innovation and responsibility.

The design and development of thoughtful guidelines will ensure AI is beneficial for all in driving progress and national advancement.

Any policies arising from this call must address both the transformative potential of Al and its limitations/potential for misuse across all disciplines and at all stages of a citizen's life.

AlEOU is an interdisciplinary research hub at the University of Oxford which is comprised of more than 1000 academics, educators, technologists, governments and students from around the world. Our community of practice aims to promote a research-informed, ethical, human-centered approach to Al in Education through collaboration and knowledge exchange. Working across the four pillars of design, regulation, implementation and impact, we collaborate with stakeholders from around the world to co-create a use case for Al in Education that represents the best interests of all learners, everywhere.

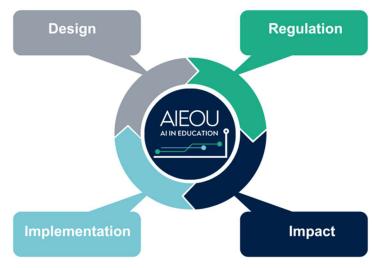


Figure 1. AIEOU Research Streams

Accordingly, our contribution to this call for comment (led by some of our U.S. based members) will be structured under these headings.

Design

We recommend that the government incentivizes the design of Al models and tools which augment rather than seek to replace human experience.

Well-designed AI has the potential to be transformative. Especially if made accessible, engaging, and effective for all. But what constitutes well-designed AI?

To our understanding, a well-designed Al system is:

- User-centric designed with the end-user in mind
- Reliable and robust capable of performing consistently and accurately
- Transparent and explainable allowing users to understand how the AI makes decisions
- Secure and private protection of user data and the prevention of misuse as a priority
- Scalable and adaptable able to grow with the user and as the technology evolves

The potential benefits of leveraging Al are numerous, but first the Al models must meet these foundational requirements.

Our collective work has highlighted the key challenges and opportunities in leveraging Al in educational contexts as demonstrated in the scenarios below.

The potential exists for Al-powered learning analytics that can assess student performance data to identify gaps and recommend personalized learning paths but only if we first implement Al systems that comply with FERPA, ADA, COPPA and define clear policies on data ownership and consent for Al-based education tools.

Natural Language Processing (NLP) can augment the creation of course materials, summarize key concepts, and automate content updates while Al-driven tools like Virtual Assistants and Chatbots can provide real-time content support to both instructors and students. However, first we must ensure Al models are trained on diverse, representative datasets to minimize bias and establish transparent Al decision-making processes for educational applications.

Al-driven platforms could personalize and adapt learning to match pace, prior knowledge and predictive analytics may be used to provide timely interventions for students who are potentially at risk. Yet, to do this well, professional learning programs must be aligned to empower educators with Al literacy skills, and we must ensure that Al enhances, rather than replaces, human-led instruction.

Striking a careful balance between innovation and responsibility is key.

Pertaining to the design of AI, specifically for use in educational contexts, we recommend the U.S. Government consider the following as part of the AI Action Plan:

- 1. **Investment** research is needed to establish best practice in designing and developing user-centric AI models.
- 2. **Regulation** the establishment of clear guidelines for the use of AI in educational contexts including, but not limited to, ethical AI use, bias mitigation, and security.
- 3. **Collaboration** foster partnerships between government agencies, educational institutions, and ed-tech companies to drive Al innovation responsibly.
- 4. **Transparency** we need visibility of the detailed approaches that have been built into content for it to be usable and worthy of trust.

Regulation

We recommend that the government develops national guidelines for Al that promote a humancentred approach to the responsible use of Al to meets the agreed needs of the society.

We call upon the U.S. government to:

- Establish a robust and consistent digital infrastructure to provide fair access to Al that addresses the existing digital divide.
- Craft an agenda that addresses Al inclusion and data sovereignty that provides for useragency and autonomy from birth and that follows the citizen for life with an emphasis on a human centred approach at the implementation stages.
- Provide all citizens, beginning in the early years of schooling with an awareness about what constitutes responsible Al and ways it can be incorporated within the community and beyond.
- Clear safeguarding practices and legal procedures to ensure privacy and data protection for all citizens from birth.

Implementation

We recommend that the government embraces a collaborative approach to the implementation of AI tools that makes technology companies accountable to the end user in a manner that promotes transparency, accessibility and responsibility.

Drawing from the European Tech Alliance's Strategic Vision (2024), we call on the U.S. government to consider developing a national strategy that:

- Emphasizes cohesion and cooperation between federal, state, and local actors
- Communicates agreed timelines for implementation that provide for an assessment of efficacy and a willingness (and process) to shed policies and practices that are ineffective
- Includes a non-partisan, independent accountability partner

For the national implementation of AI tools to be effective, citizens of America must be able to interact with them competently. Referencing UNESCO's (2024) Competency Frameworks for Teacher and Students, the development of skills and understanding pertaining to the implementation of AI tools at scale is essential. Global education systems have the ability to prepare our young people for their future if we provide schools and educators with the tools to competently do so.

Building on the envisaged increase in the Al competency of its citizens, we propose the U.S. Government establish interdisciplinary innovation hubs across the USA that serve to match the potential of the technology to the needs and challenges of the community.

These interdisciplinary innovation hubs will prioritize collaborative research, regional problem solving, representative voices, resource sharing and idea exchange. They will inspire a national conversation and feedback loop that gives citizens a voice regarding career pathways, workforce deployment, human purpose and policy.

Impact

We recommend that the government map and measure the implementation of Al models and tools at all levels is essential to better understand the impact as part of their national strategy.

When examining the impact of AI, particularly on Education, it is important to think about policy in relation to what we learn (both within and across domains), how we learn and what it means for the wider ecosystem. As part of this call for comment, these are important considerations at all levels of education including early childhood, elementary, secondary, higher education and vocational education.

To achieve the stated goal of global AI leadership, the U.S. must invest in education, workforce development, and governance frameworks that ensure AI innovation enhances, rather than disrupts, economic and societal stability.

However, any national AI strategy must also account for the special needs of children, individuals under 18, and vulnerable populations who may struggle to provide informed consent in AI-driven environments.

Policies must include measures to:

- Ensure children interact with AI in a manner that protects their legal, civil, and human rights, particularly their rights to privacy, data protection, and promote their ability to make informed choices in digital spaces.
- Embed Al literacy as a standard in all teacher education programs, ensuring educators are equipped to guide students in responsible Al use from the start.
- Prioritize equitable access to Al-related technologies and education to prevent a fractured workforce and worsening digital divides.
- Recognize the unique role parents and guardians play in guiding their children's Al
 interactions, providing them with the necessary resources and understanding to support
 safe and ethical engagement with Al.

A national AI strategy cannot solely focus on removing barriers to private sector innovation; it must simultaneously ensure an AI-literate educational ecosystem, future workforce, uphold democratic values, and establish safeguards that protect vulnerable populations from AI-driven harms.

Al adoption in education, from K-12 through to workforce reskilling, must be a national priority.

Supporting Evidence:

- The Parliament of Australia (2024) Inquiry into the Digital Transformation of Workplaces
 calls for education and training designed around augmentation, accelerated pathways to
 skill development through micro credentials, information campaigns to support scaled
 communication about AI, and continued research on digital transformation.
- UNESCO's Recommendation on the Ethics of Artificial Intelligence (2021) emphasizes the
 protection of human rights and dignity in Al development. It advocates for transparency,
 fairness, and human oversight, ensuring Al systems do not infringe upon individual rights.
 Notably, it underscores the importance of privacy and data protection, which are crucial
 for safeguarding children and vulnerable groups.

- OECD AI Principles (2019, updated 2024) promote innovative and trustworthy AI that respects human rights and democratic values. These principles call for AI systems to be robust, safe, and fair, with particular attention to transparency and accountability.
- G7 Hiroshima Al Process (2023) (including the USA). These principles aim to promote safe, secure, and trustworthy Al worldwide. They emphasize the protection of human rights, democratic values, and the importance of human-centric Al development. The process also advocates for multi-stakeholder collaboration, ensuring diverse voices contribute to Al governance.
- European Union Al Act (2024), the world's first comprehensive Al regulation, establishes a
 risk-based framework to ensure Al development aligns with human rights, transparency,
 and accountability.

Positioning America as a leader in Al

To sustain America's desired leadership in AI, the U.S. must invest in AI literacy as a core competency for all its citizens. This requires immediate action to ensure the next generation of educators is equipped to educate students on AI, not just as users but as critical thinkers, ethical decision-makers, and future innovators.

We recommend that the U.S. Government make Al literacy training mandatory in teacher education. Al literacy must be a core requirement in all accredited teacher preparation programs. Just as literacy and numeracy are fundamental teaching competencies, Al fluency must become a baseline qualification for educators, ensuring they can integrate Al tools effectively while safeguarding students' rights.

We recommend that the U.S. Government implement a national program for upskilling. Federal investment in professional development will ensure schools remain centers of Al innovation rather than passive adopters.

We recommend that the U.S. Government provide equitable access to Al infrastructure. A failure to provide equal access to Al education and resources could lead to deepening socioeconomic divides and a fractured workforce, threatening both national economic stability and America's ability to compete globally. Targeted federal funding must support Al integration in underresourced schools, rural districts, and historically marginalized communities to ensure Al opportunity is not dictated by zip code.

Supporting Evidence:

- Fullan et al. (2024) found that Educators had to make swift transitions to distance
 learning during the COVID pandemic, with the success of these efforts being questioned.
 Now, Al is causing a similar type of disruption. It requires school leaders to ask important
 questions about how they need to be equipped to lead schools as Al become more
 sophisticated and infused in our daily lives.
- Integrating AI literacy into accredited teacher preparation programs is essential. Meylani (2024) completed a qualitative synthesis of current literature, revealing that AI-driven tools support ongoing professional growth, enabling educators to effectively integrate AI into their teaching practices.
- Luckin et al. (2022) elucidates the concept of Al Readiness along with a framework for Al readiness training for organisations.
- Schellekens and Skilling (2024) highlight that without targeted policy interventions, Al may deepen existing inequalities. Federal funding must support Al integration in underresourced schools, rural districts, and historically marginalized communities to provide all students with equal opportunities in Al education.

AI Literacy as a National Priority

We recommend positioning Al literacy as a national priority.

Trump's American Al Initiative (White House, 2020) recognized the importance of building an Already workforce to sustain U.S. technological and economic leadership.

The National AI Initiative Act of 2020 recognized AI education as a pillar of national strategy, yet AI literacy has not been systematically embedded in K-12 education or teacher training.

To realize AI for American Innovation, AI for American Industry, and AI for the American Worker, federal action must accelerate AI literacy efforts in schools today.

America cannot afford to leave AI education to voluntary adoption.

Al literacy must be treated as a national strategic investment, ensuring future workers are not just consumers of Al but leaders in its development and governance.

Accordingly, sustained investment is essential to maintain the sought after leadership role in Al. This includes not only funding research and development for safety-oriented technologies and novel Al methodologies but also expanding educational and training programs.

By aligning workforce development with the technical demands of AI, such as courses in machine learning, ethics, and cybersecurity, the proposed national action plan can help create a pipeline of skilled professionals capable of advancing and monitoring AI systems. To achieve this, U.S. citizens and their workforce must be AI literate.

Closing Comments

The 2025 Executive Order aims to remove barriers to Al innovation and therefore, it is imperative that young people, indeed all citizens, are educated to use Al responsibly and competently to achieve that goal.

Citizens must be taught to think critically.

Aler Tubella et al. (2023) found that most students and teachers don't know how to tell if Algenerated content is accurate or biased.

The 2025 Executive Order (White House, 2025) highlights the importance of keeping AI free from bias and engineered agendas, reinforcing the need for transparency and critical thinking when it comes to the use of AI.

Everyone must know how to fact-check Al outputs, protect their data, and recognize Al bias (Oyeyipo et al., 2024). Misinformation and cybersecurity are real concerns.

We must balance the need for innovation with the responsibility it brings.

Al can make humans more efficient but shouldn't make decisions for us (Vincent-Lancrin & van der Vlies, 2020).

The 2025 Executive Order (White House, 2025) focuses on driving forward U.S. Al innovation, but it must not come at a cost to accuracy, democracy, and human oversight.

Al innovation at pace demands a system of regular checks and balances that are best served through transparency and clear guidelines to ensure Al is augmenting the human experience, not harming it.

With great power comes great responsibility.

As the 2025 Executive Order (White House, 2025) aims to removes barriers to Al growth and innovation, we submit that this can only be achieved by first ensuring that its citizens are competent and capable users of the technology.

This means providing robust and reliable tools that are transparent, secure and used responsibly.

For U.S. citizens to be innovators and leaders in AI, they must first be educated to do so as literate, competent users of AI and critical thinkers.

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