

## Pennsylvania Advisory Committee to the U.S. Commission on Civil Rights

# The Rising Use of Artificial Intelligence in K-12 Education

School districts across the U.S. are increasingly utilizing Artificial Intelligence (AI) based tools and programs to assist with a variety of tasks such as personalizing education plans and streamlining administrative responsibilities. Despite the rapid pace of AI development, concerns regarding student privacy, bias, and misinformation must be addressed before these tools can be broadly and safely implemented—especially in settings with children.

The Pennsylvania Advisory Committee to the U.S. Commission on Civil Rights recently conducted a study analyzing the impact of AI use in K-12 classrooms. The resulting report<sup>1</sup> identified several ongoing concerns, including the potential disruption of critical student-teacher relationships and children's social-emotional development; promotion and reinforcement of bias; reduced development of critical thinking skills; a widening digital divide; and increased student surveillance and data privacy concerns.

### What can schools and districts use AI for?

Among other uses, at the district level, AI-powered programs can provide administrators with enhanced data to identify patterns, predict performance, and flag student issues early on. It can also be used to expand online learning opportunities in areas where children cannot easily get to school. At the school level, AI can assist teachers with personalizing lesson plans, drafting emails, creating grading rubrics, and evaluating students' work. For students, AI can assist with summarizing text, brainstorming, outlining, and spell checking. It can also provide accommodations for students with disabilities such as reading text aloud, taking notes, or creating simulations and virtual reality lessons to make learning more accessible and engaging.

It is important to recognize that these tools must be used to supplement, rather than replace, the efforts of human teachers. For example, disability rights advocates have observed that the output of most AI-generated notetaking and transcription applications is currently insufficient to fully replace human assistance.<sup>2</sup>

#### <sup>1</sup> Report available at:

https://www.usccr.gov/reports/2024/source-income-housing-discrimination-ohio

### **Key Points:**

- While AI has many potential uses, it is an imprecise technology that requires constant critical evaluation. These tools must be rigorously tested and understood *before* being widely implemented in classrooms with children.
- The ability to proficiently understand and utilize Albased tools and programs is likely an essential skillset students must learn to navigate if they are to be competitive in the workforce of the future.
- Overreliance on AI-based programs may reinforce or promote misinformation and bias. It may also demonstrate a disparate impact on federally protected classes, diminish critical thinking, disrupt children's social-emotional development, and present serious data-privacy concerns.
- Not all uses of AI carry the same risk. AI programs designed for student surveillance, content censoring, and behavioral and performance evaluation carry particularly high risk of harm and may run afoul of existing civil-rights and privacy protections.
- Ensuring diverse stakeholder representation in the design, development, and monitoring of new Albased tools is critical to reducing risk.

# What factors should schools consider before adopting AI-based tools in their classrooms?

Schools must demand rigorous evaluation prior to implementing AI-based programs to ensure that student learning remains a primary focus.<sup>3</sup> AI-powered teaching and learning tools tend to promote rote, low-level learning and thinking skills, rather developing critical thinking.<sup>4</sup> AI is specifically designed to create the impression of thought and intelligence, so users often place undue trust in its responses even if those responses are false or based on biased data. Schools must address this by actively teaching

<sup>&</sup>lt;sup>2</sup> See Committee report, Finding 1, pp. 7-10.

<sup>&</sup>lt;sup>3</sup> See Committee report, Finding 2, pp. 13-18.

<sup>&</sup>lt;sup>4</sup> See Committee report, Finding 1, pp. 10-11.

students and staff alike to critically evaluate AI generated outputs. Particularly in the youngest classrooms, schools should also consider and evaluate the impact of AI use on children's social and emotional learning. Social and emotional learning is an important component of children's educational experience, and over-reliance on technology can undermine critical human relationships and interactions.<sup>5</sup>

# How is bias perpetuated by AI programs any different from other, already existing biases?

AI is very different from technologies of the past both in its ability to generate original content and in its ability to make predictive decisions about new or unknown data. Biases embedded in AI technology have the potential to reinforce patterns of discrimination and disparate impact faster, more efficiently, and in a way that is much less transparent than previously seen. These programs can collect highly sensitive information such as social-emotional learning metrics, behavior metrics, and even biometric data, and use this data in ways that disproportionately impact vulnerable communities. Even when data is aggregated, individuals can easily be re-identified with as few as 3-4 datapoints. Because machines do not understand the underlying meaning or concepts of the output they generate, it is not currently possible to remove bias from the algorithmic output.

# How can schools mitigate risk and ensure AI programs are used constructively?

It is important to note that not all uses of AI carry the same risk. AI based technologies designed to perform student surveillance, content filtering, evaluations of students' work, or to make predictions about students' future performance carry particularly high risk. Districts may limit or even stop implementation entirely until these tools can be properly understood, and appropriate guidance and transparency plans can be put into place.

Districts and public regulatory agencies can assist schools by establishing benchmarks on safety, privacy, data security, and equity that must be met before companies are eligible to sell to schools. States can also establish third-party audit providers to assess whether vendors meet standards, so that schools without resources to assess these products have support in doing so. Above all, experts have urged that effective implementation will require input and collaboration from all stakeholders—not just lawmakers and regulators; but also administrators, teachers, parents, students, and community groups.

### Recommendations (selected)

#### The **U.S. Department of Education** should:

- (1) Establish benchmarks on safety, privacy, data security, and equity that must be met before technology companies are eligible to sell to schools
- (2) Require that recipients of grants issued to states plan and demonstrate their capacity to mitigate potential AI risks and harms K-12 students as part of the award application process.

### The **Pennsylvania Department of Education** should:

- (1) Establish procurement policies that require products to be designed and tested specifically in educational settings, including rigorous evaluation based on contemporary data.
- (2) Establish regional AI purchasing consortia to negotiate the lowest cost and enforce acceptable procurement terms, so that smaller districts are not disadvantaged by their lesser bargaining power.
- (3) Provide districts with template procurement contracts that include effective remedies for breach of contract.

#### Pennsylvania Governor Josh Shapiro should:

(1) Create a state-level task force to support school districts in the development, implementation, and monitoring of procurement standards with AI-specific privacy, data security, and equity benchmarks.

The United States Commission on Civil Rights maintains 56 Advisory Committees, one for each state and territory, and the District of Columbia. Each committee is composed of citizen volunteers familiar with local and state civil rights issues. The members assist the Commission with its factfinding, investigative, and information dissemination functions.

This policy brief is the work of the Pennsylvania Advisory Committee to the U.S. Commission on Civil Rights. The brief may rely on testimony, studies, and data generated from third parties. Advisory reports are reviewed by Commission staff only for legal sufficiency and procedural compliance with Commission policies. The views, findings, and recommendations expressed in this report are those of a majority of the Pennsylvania Advisory Committee, and do not necessarily represent the views of the Commission, nor do they represent the policies of the U.S. Government. For more information, please contact Melissa Wojnaroski at <a href="mwojnaroski@usccr.gov">mwojnaroski@usccr.gov</a> or 202-618-4158.

<sup>&</sup>lt;sup>5</sup> See Committee report, Finding 1, pp. 10-11.

<sup>&</sup>lt;sup>6</sup> See Committee report, Finding 3, pp. 18-21.

<sup>&</sup>lt;sup>7</sup> See Committee report, Finding 4, pp. 22-26.