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# Up in the Air

Educators Juggling the Potential of Generative AI with Detection, Discipline, and Distrust





The **Center for Democracy & Technology (CDT)** is the leading nonpartisan, nonprofit organization fighting to advance civil rights and civil liberties in the digital age. We shape technology policy, governance, and design with a focus on equity and democratic values. Established in 1994, CDT has been a trusted advocate for digital rights since the earliest days of the internet. The organization is headquartered in Washington, D.C. and has a Europe Office in Brussels, Belgium.

As governments expand their use of technology and data, it is critical that they do so in ways that affirm individual privacy, respect civil rights, foster inclusive participatory systems, promote transparent and accountable oversight, and advance just social structures within the broader community. **CDT's Equity in Civic Technology Project** furthers these goals by providing balanced advocacy that promotes the responsible use of data and technology while protecting the privacy and civil rights of individuals. We engage with these issues from both technical and policyminded perspectives, creating solutions-oriented policy resources and actionable technical guidance.



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**Educators Juggling the Potential  
of Generative AI with Detection,  
Discipline, and Distrust**

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# Executive Summary

**Educators are having a very different experience with generative artificial intelligence (AI) since the 2022-23 school year came to a close.** K-12 schools have now had the opportunity to take a breath and regroup to determine how to get a grip on the explosion of generative AI in the classroom – after the education sector was caught off guard when ChatGPT burst abruptly onto the scene during the last school year.

To understand how teachers are currently interacting with and receiving support on this technology, the Center for Democracy & Technology (CDT) conducted a nationally representative survey of middle and high school teachers in November and December 2023. This research builds on previous CDT findings that highlighted how schools were failing to enact and/or share policies and procedures on generative AI and how, as a result, teachers lacked clarity and guidance, were more distrustful of students, and reported that students were getting in trouble due to this technology.<sup>1</sup>

1 Elizabeth Laird, Maddy Dwyer & Hugh Grant-Chapman, *Off Task: EdTech Threats to Student Privacy and Equity in the Age of AI*, The Center for Democracy & Technology (Sep. 20, 2023), [perma.cc/8Q9A-NNNV](https://perma.cc/8Q9A-NNNV).

This school year, teachers report some welcome movement towards more guidance and training around generative AI – but also areas that are cause for concern:

- **Familiarity, training, and school policymaking on generative AI in schools has increased, but the biggest risks remain largely unaddressed.** Teachers report that both they and students have made increasing use of generative AI, and a majority indicate their schools now have a policy in place and provide training to teachers on generative AI. However, schools are providing teachers with little guidance on what responsible student use looks like, how to respond if they suspect a student is using generative AI in ways that are not allowed, and how to detect AI-generated work.
- **Teachers are becoming heavily reliant on school-sanctioned AI content detection tools.** A majority of teachers report using school-endorsed AI content detection tools, despite research showing that these tools are ineffective.<sup>2</sup> The proliferation of AI content detection tools could lead to negative consequences for students – given their known efficacy issues and teachers reporting low levels of school guidance on how to respond if they suspect a student has used generative AI in ways they should not.
- **Student discipline due to generative AI use has increased.** Although schools are still in the process of setting generative AI policies, and the technology has been in use longer, more teachers report students experiencing disciplinary consequences than last school year. Historically marginalized students, like students with disabilities and English learners, are at particular risk for disciplinary action.<sup>3</sup>
- **Teacher distrust in their students' academic integrity remains an issue and is more pronounced in schools that ban generative AI.** A majority of teachers still report that generative AI has made them more distrustful of whether their students' work is actually theirs, and teachers at schools who ban the technology say they are even more distrustful. This is especially concerning because teachers from schools who ban generative AI are more likely to report student(s) at their school experiencing disciplinary action.

2 Ahmed M. Elkhart, Khaled Elsaid & Saeed Almeer, *Evaluating the Efficacy of AI Content Detection Tools in Differentiating Between Human and AI-generated Text*, *International Journal for Educational Integrity* (Sep. 1, 2023), [perma.cc/HS8H-7RL6](https://perma.cc/HS8H-7RL6).

3 Kristin Woelfel, *Late Applications: Disproportionate Effects of Generative AI-Detectors on English Learners*, *The Center for Democracy & Technology* (Dec. 18, 2023), [perma.cc/3YWU-DQ2S](https://perma.cc/3YWU-DQ2S).

## 01

# Introduction

**Perhaps unsurprisingly, generative AI has captivated and mobilized schools in ways that other highly-used educational technology tools have not.** Since CDT surveyed teachers, parents, and students about generative AI use during the 2022-23 school year, familiarity, training, and school policy setting on this technology has significantly increased.<sup>4</sup>

In terms of student use and familiarity, **59 percent** of teachers report that they are certain one or more of their students have used generative AI for school purposes, up **17 percentage points** since last school year. Teachers are also becoming more familiar with generative AI as a technological tool for their own use. **Eighty three percent** of teachers report having used ChatGPT or another generative AI tool for personal or school use, a **32 percentage point** increase from last school year.

4 Laird, Dwyer & Grant-Chapman, *supra* note 1.

Though there has been positive movement, schools are still grappling with how to effectively implement generative AI in the classroom – making this a critical moment for school officials to put appropriate guardrails in place to ensure that irresponsible use of this technology by teachers and students does not become entrenched. Schools should push beyond general permission and banning policies, and invest in educating teachers on the risks of generative AI, how to manage disciplinary action, and how to teach and promote responsible student use.





## 02

# Schools Make Progress on Training and Guidance, but the Biggest Risks Remain Largely Unaddressed

CDT research reveals that since last school year, schools have made significant progress towards more policymaking and guidance on generative AI; however, they are falling short of providing tailored teacher training on critical topics related to responsible, safe student generative AI use.

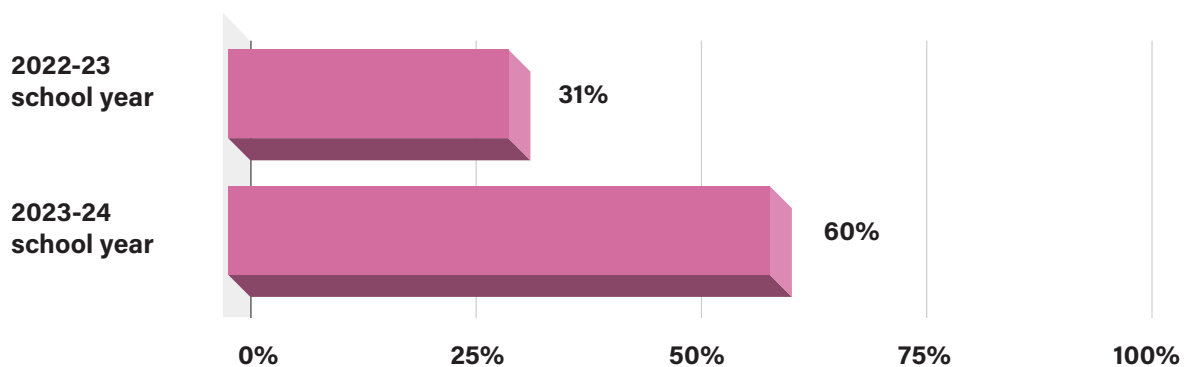
**Schools have made significant progress in setting policies and providing teachers with guidance in a short period of time.**

Last school year, our survey showed that schools were still largely bewildered and behind on providing guardrails on generative AI, with many teachers reporting their schools had no policies on

generative AI, or no policies that they knew of.<sup>5</sup> Now, more teachers report that their schools have adopted policies and procedures, and are providing more guidance, training, and support about generative AI use.

**Eighty five percent** of teachers say that their school has a policy that either generally permits (subject to some conditions or limits) or bans the use of ChatGPT, or other generative AI tools, for schoolwork. And **71 percent** of those teachers say that the current policy is the first their school has implemented.

## Policies that generally permit the use of generative AI for schoolwork, have nearly doubled since last school year...



**Figure 1.** Percent of teachers who say that their school permits the use of generative AI for schoolwork.

On the training front, **80 percent** of teachers report receiving formal training about generative AI use policies and procedures, up **37 percentage points** since last school year.

5 Laird, Dwyer & Grant-Chapman, *supra* note 1.

Schools are also engaging teachers to provide input on generative AI in the classroom more than they were – **72 percent** of teachers say that their school has asked them for input about policies and procedures regarding student use of generative AI.

This exceeds engagement on other technologies that are commonly used by schools. As of last school year, only **56 percent** of teachers whose school blocks or filters content say their school has asked them for input about the specific types of content or websites that should be filtered or blocked, and **57 percent** of teachers whose school conducts student activity monitoring report their school asking for their input about the specific types of online content that are monitored.<sup>6</sup>

### **Licensed Special Education Teachers Continue to Lead, but Greatest Strides Made Among General Education Teachers**

Licensed special education teachers continue to report higher levels of training and engagement on generative AI than their peers. However, general education teachers say their schools are making strides to close this gap. Last school year, **65 percent** of licensed special education teachers reported receiving formal training about generative AI use policies and procedures, versus **24 percent** of teachers not licensed in special education. That gap has closed by **27 percentage points** – now **87 percent** of licensed special education teachers report receiving this formal training, versus **73 percent** of teachers not licensed in special education. The gap between licensed special education teachers and teachers not licensed in special education on the topic of schools asking teachers for input on generative AI has also closed by **34 percentage points** (**63 percent** vs. **20 percent** last school year, and **77 percent** vs. **68 percent** this school year).

6 Laird, Dwyer & Grant-Chapman, *supra* note 1.

## Schools still fall short in addressing the biggest generative AI risks.

Schools have made significant progress on supporting teachers, resulting in increased confidence among teachers. **Seventy three percent** of teachers agree that their school and district do a good job responding to changes in technology like generative AI, a jump from just **51 percent** last school year.

However, the guidance and training provided to teachers lack critical elements that promote responsible student use of generative AI in ways that protect student privacy, safety, and civil rights. This is leaving teachers to navigate practical management of generative AI use in the classroom on their own.

Only **28 percent** of teachers say that they have received guidance about how to respond if they suspect a student has used generative AI in ways that are not allowed, such as plagiarism. Similarly, just **37 percent** of teachers say that they have received guidance about what responsible student use looks like, and **37 percent** report receiving guidance about how to detect student use of generative AI in school assignments.



## 03

# Teachers Are Heavily Reliant on School-Sanctioned Generative AI Content Detection Tools

Teachers are becoming reliant on AI content detection tools, which is problematic given that research shows these tools are not consistently effective<sup>7</sup> at differentiating between AI-generated and human-written text.<sup>8</sup> And the majority of teachers have not received guidance on how to respond if they suspect a student has used generative AI in ways they should not. This is especially concerning given the concurrent increase in student disciplinary action, which is discussed in the next section.

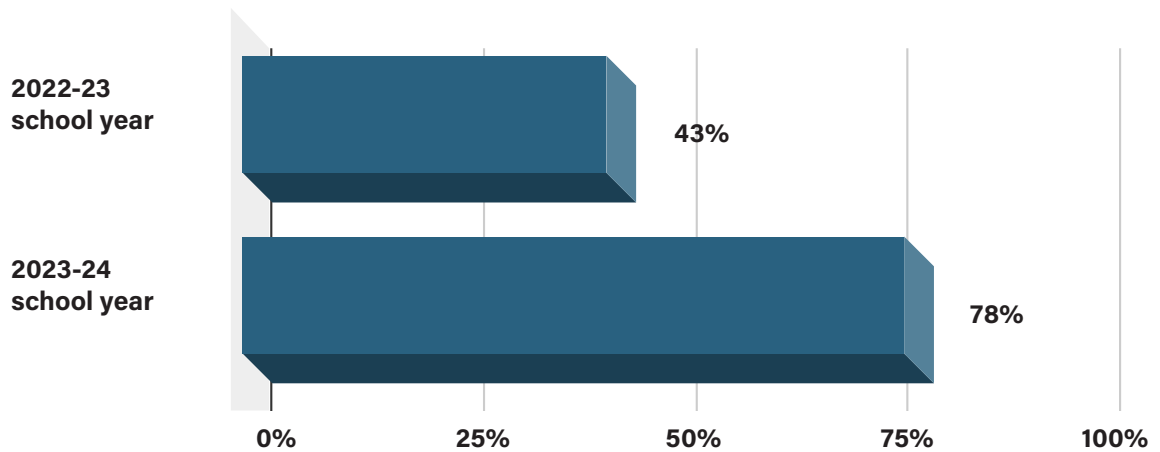
**Sixty eight percent** of teachers report using an AI content detection tool regularly, a **30 percentage point** increase since last school year. This may be explained by the fact that teachers lack confidence in their ability to discern between content generated by

7 Elkhart, Elsaid & Almeer, *supra* note 2.

8 *Teacher Center Doesn't Endorse Any Generative AI Detection Tools*, University of Pittsburgh (Jun. 22, 2023), [perma.cc/QW9P-9C6J](https://perma.cc/QW9P-9C6J).

AI versus content created by students. Only **25 percent** of teachers say that they are very effective at detecting whether their students' assignments were written or created with generative AI or by the student themselves.

## And schools' endorsement of content detection tools has increased as well...



**Figure 2.** Percent of teachers who say their school sanctions an AI content detection tool (either provides an AI content detection tool as part of its larger technology platform, or recommends the use of AI content detection tools but leaves it up to the teacher to choose one and implement it).



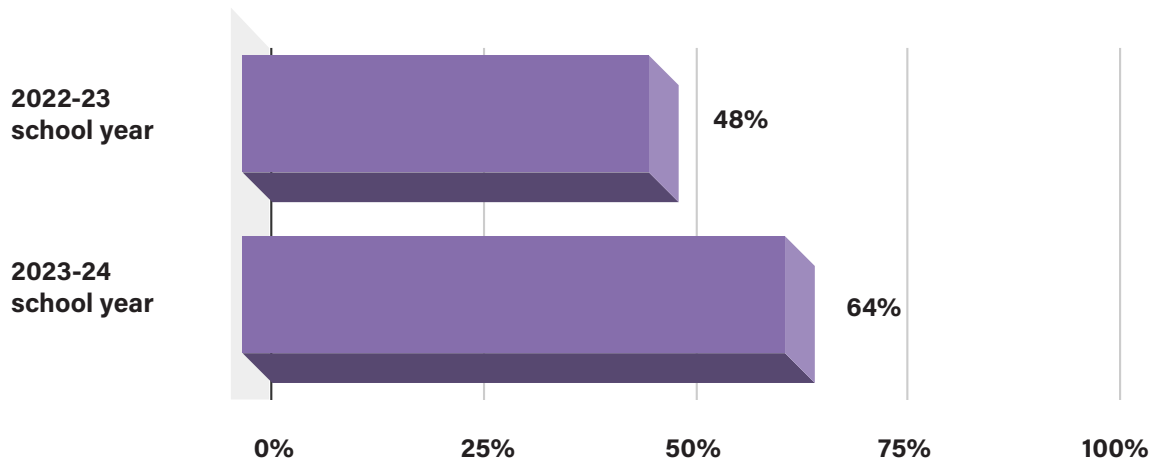
## 04

# Student Discipline Due to Generative AI Use Has Increased

The lack of training on how to respond to prohibited generative AI use and the surge in reliance on detection tools pose a serious threat to students' educational experience, particularly within the context of students experiencing increased discipline due to generative AI. As schools are trending towards generally permitting student use of generative AI, it is hard to pinpoint a singular cause of this increase in discipline, but some of the dimensions at play are the low levels of teacher training on how to manage student use and the increase in the use of school-sanctioned detection tools.

This technology has also been in use by teachers and students for a longer period of time, which can impact discipline in potentially different ways. On the one hand, this might leave more opportunity for students to be disciplined. But on the other hand, schools have developed more permissive policies on the use of generative AI over this time, so one might expect student discipline to actually decline.

## Since last school year, student discipline as a result of generative AI use has increased 16 percentage points...



**Figure 3.** Percent of teachers that say student(s) at their school have gotten in trouble or experienced negative consequences for using or being accused of using generative AI on a school assignment.

Not only are students getting in trouble for their suspected use of generative AI, but accusations alone can become a catalyst to disciplinary action. **Forty percent** of teachers report that they agree that a student got in trouble for how they reacted when a teacher, principal, or other adult at the school confronted them about alleged misuse of generative AI.

These consequences also present greater risks to certain groups of students. **Nearly half** of teachers agree that students that use school-provided devices are more likely to get in trouble or face negative consequences for using generative AI. And previous CDT research has shown that Black, Hispanic, rural, and low-income students rely more heavily on school-issued devices.<sup>9</sup>

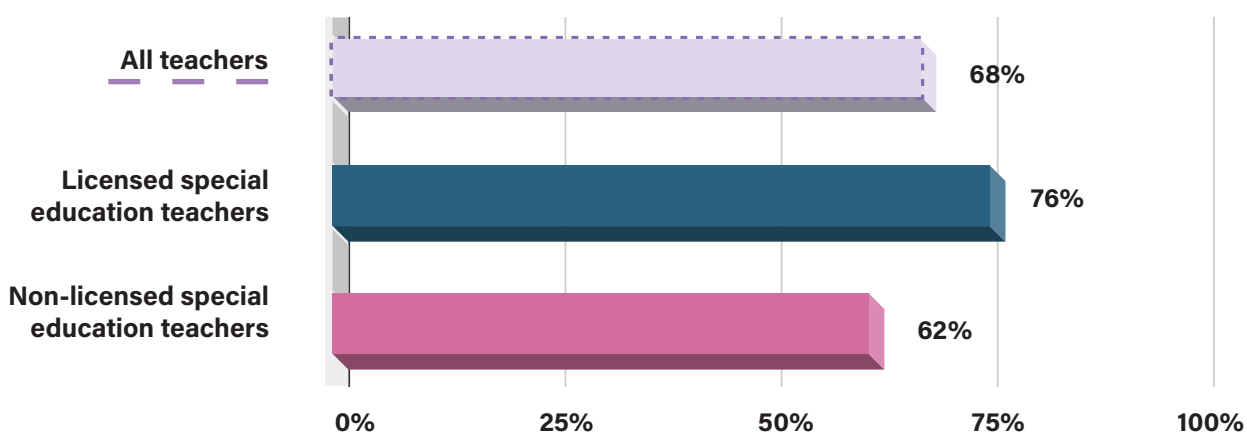
<sup>9</sup> Elizabeth Laird, Hugh Grant-Chapman, Cody Venzke & Hannah Quay-de la Vallee, *Hidden Harms: The Misleading Promise of Monitoring Students Online*, The Center for Democracy & Technology (Aug. 3, 2022), [perma.cc/E3E2-CE2Q](https://perma.cc/E3E2-CE2Q).



Additionally, teachers who say they regularly use an AI content detection tool are more likely to report that student(s) at their school have gotten in trouble or experienced negative consequences for using or being accused of using generative AI on a school assignment (**72 percent** vs. **48 percent** that do not use a detection tool).

This additional risk of disciplinary action, happening at the same time as increased teacher reliance on AI detection tools (discussed in the previous section), is more acutely felt by marginalized populations of students. For example, shortcomings in detection tools have been documented to negatively affect English learners,<sup>10</sup> and our research shows important differences among students with disabilities. Last school year, students with an IEP and/or a 504 plan reported higher levels of generative AI use compared to their peers.<sup>11</sup> This, paired with the below finding of licensed special education teachers being more likely to use an AI content detection tool regularly, creates a potentially ripe environment for increased disciplinary action.

## Licensed special education teachers say that they are more likely to use an AI content detection tool regularly...



**Figure 4.** Percent of teachers who report using an AI content detection tool regularly, in the 2023-2024 school year.

<sup>10</sup> Woelfel, *supra* note 3.

<sup>11</sup> Laird, Dwyer & Grant-Chapman, *supra* note 1.

## 05

# Teacher Distrust in Student Academic Integrity Remains an Issue, and is More Pronounced at Schools Where Generative AI is Banned

Though levels of distrust among teachers about their students' academic integrity have gone down, more than half of teachers still report eroded trust – **52 percent** of teachers agree that generative AI has made them more distrustful of whether their students' work is actually theirs. Previous CDT work outlines the connection between teacher mistrust in students and disciplinary action, which is concerning since strong relationships between educators and their students are imperative in providing a safe, quality learning environment.<sup>12</sup>

12 Hannah Quay-de la Vallee & Maddy Dwyer, *The Shortcomings of Generative AI Detection: How Schools Should Approach Declining Teacher Trust In Students*, Center for Democracy & Technology (Dec. 18, 2023), [perma.cc/3RUZ-NYD6](https://perma.cc/3RUZ-NYD6).

Student disciplinary actions for generative AI use increase at schools that ban the technology in classrooms. Teachers from schools that ban generative AI in the classroom report students experiencing more disciplinary action for generative AI use (**76 percent** vs. **68 percent** of teachers from schools that permit generative AI).<sup>13</sup> Additionally, **69 percent** of teachers at schools that ban generative AI say that they are distrustful that student work is actually theirs, as compared to **48 percent** of teachers at schools that permit the technology. And **42 percent** of teachers at schools that ban generative AI report students using it to write and submit a paper, while only **30 percent** of teachers at schools that permit it report this happening.

13 The eight percentage point difference between teachers from schools that permit generative AI and teachers from schools that ban generative AI when responding to the question “Have student(s) at your school gotten in trouble or experienced negative consequences for using or being accused of using generative AI on a school assignment?” is directional and not statistically significant.

## 06

# Conclusion

The increase in schools placing appropriate guardrails and providing teachers with guidance on generative AI is a welcome development. However, a still rapidly evolving technology like generative AI, which has significant implications for students' educational experience, privacy, and civil rights, cannot be responsibly and safely implemented without schools equipping teachers with the foundational skills needed to manage student use (and misuse) on a day to day basis.<sup>14</sup>

To effectively integrate generative AI in a way that balances its benefits with its risks, schools must go beyond general permission or banning policies by educating teachers on the shortcomings of generative AI and detection tools<sup>15</sup> and how to fairly respond to potential academic integrity violations.

<sup>14</sup> Woelfel, Aboulaflia & Laird, *supra* note 7.

<sup>15</sup> Hannah Quay-de la Vallee & Maddy Dwyer, *Students' Use of Generative AI: The Threat of Hallucinations*, Center for Democracy & Technology (Dec. 18, 2023), [perma.cc/AG59-B5ZU](https://perma.cc/AG59-B5ZU).

## 07

# Methodology

An online survey of a nationally representative sample of 460 6th- to 12th-grade public school teachers was fielded November – December 2023 by Edge Research. Quotas were set to ensure that the data collected among teachers were representative, and the data were weighted as needed to align nationally with key demographics. The survey measures and tracks changes in reported generative AI use and levels of support and guidance that teachers are getting about generative AI from their schools or districts in the 2023-24 school year.

This survey is compared to CDT's survey of teachers on generative AI policies, practices, and use during the 2022-23 school year.<sup>16</sup> An online survey of nationally representative samples of 1,005 6th- to 12th-grade teachers was fielded August 2023.

16 Laird, Dwyer & Grant-Chapman, *supra* note 1.


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