

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

Survey Research on Teacher Experiences

March 2024



Background and Research Objectives

In August 2023, CDT conducted a survey that took a comprehensive look at teacher, student, and parent experiences and views of several aspects of technology, including generative AI, during the 2022-23 school year. In November-December 2023, CDT sponsored a spot poll of teachers to understand changes in reported generative AI use and track levels of support and guidance that teachers are getting about generative AI from their schools or districts in the 2023-24 school year.

Methodology

Online surveys of **460 6th-12th grade teachers** fielded **November-December 2023**

	<i>Sample size</i>	<i>Median Survey Length</i>	<i>2023 Field dates</i>
Teacher survey (6-12 th grades)	460	11 min	Nov 28 to Dec 14
Teacher survey (6-12 th grades)	1,005	16 min	August 1-16

Throughout the report, ▲ ▼ Indicates significantly higher/lower than August 2023 survey at the 95% confidence level.
↑ ↓ indicates significant differences between comparison groups at the 95% confidence level.

- There has been an **explosion in awareness, familiarity, and school policymaking on generative AI in schools**. More teachers report their schools are adopting policies and procedures regarding generative AI and that their schools are expanding guidance and training about the technology to both teachers and students.
- But despite overwhelming movement on generative AI in schools, **the biggest risks of generative AI remain unaddressed**. Schools are providing teachers with little guidance on key topics – namely, what responsible 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 generative AI detection tools** to determine whether student work is AI-generated. This is made even more problematic given their unproven efficacy and that teachers report low levels of guidance on how to respond if they suspect a student has used generative AI in ways they should not.
- At the same time, **student disciplinary action as a result of generative AI use is increasing**.
- **Teacher distrust in students' academic integrity remains an issue**. And teachers at schools that *ban* student use of generative AI—compared to schools who permit it—are less trusting that student work is actually theirs and are more likely to suspect students are using generative AI to cheat.

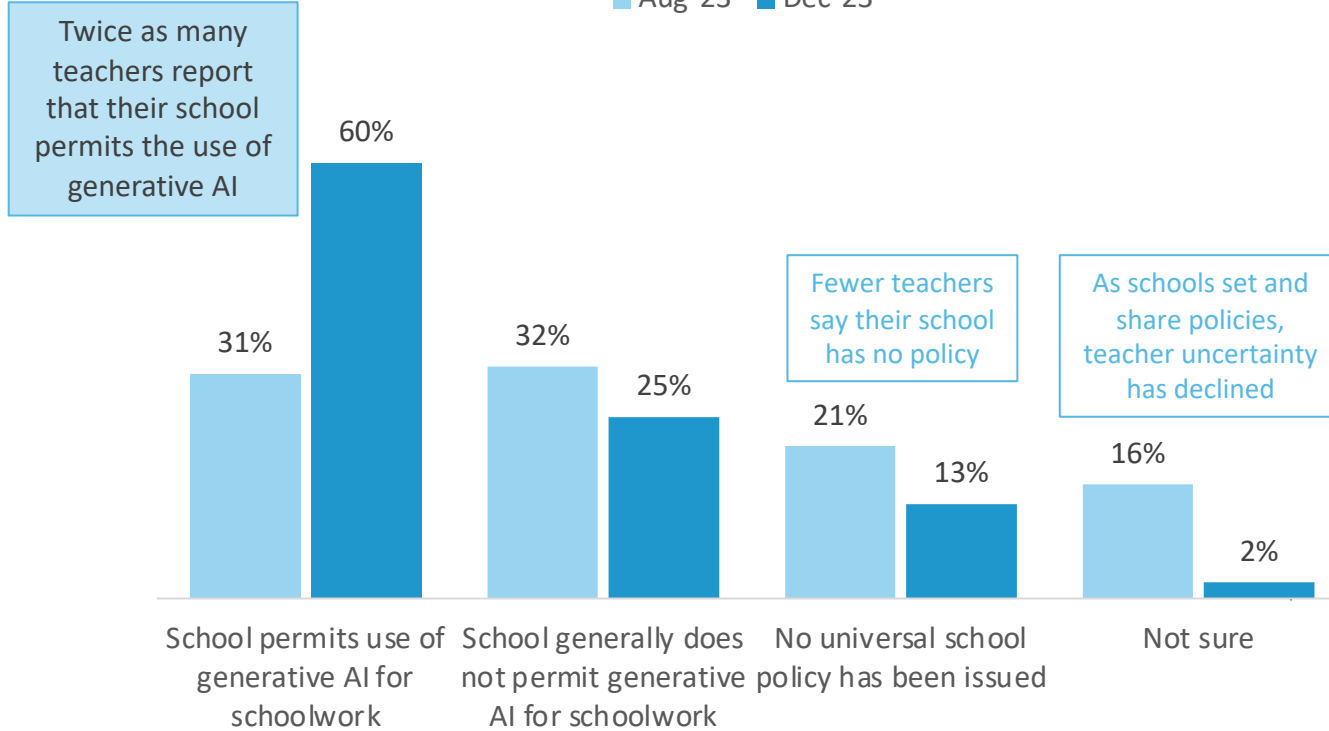
More schools are setting policies about generative AI use than in the summer

- The policies generally allow some student use of generative AI for schoolwork and most represent relatively new guidance put in place just prior to the 2023-24 school year.

School Policy on Use of Generative AI

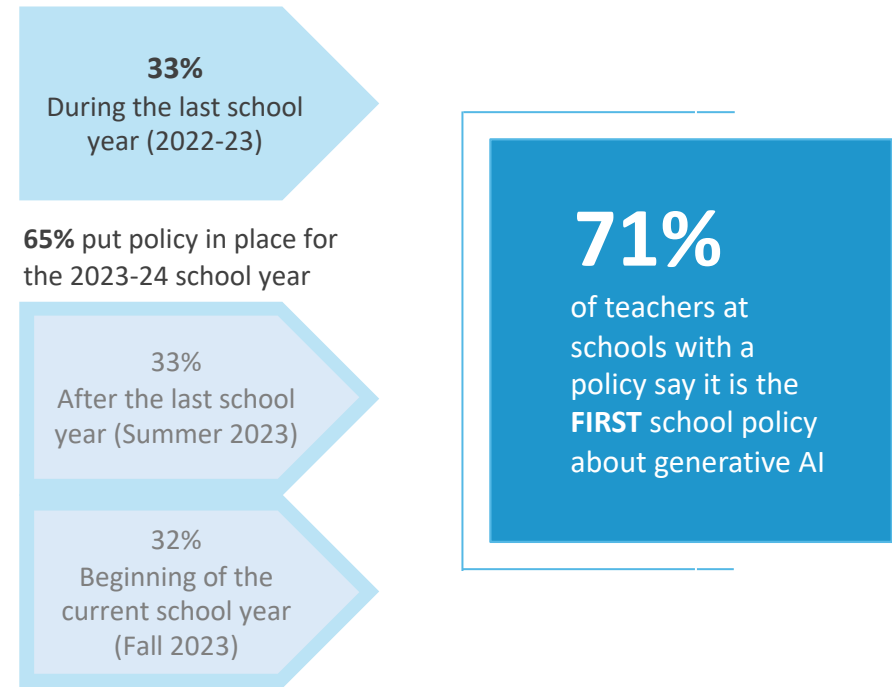
School Policy on Use of Generative AI

■ Aug-23 ■ Dec-23



Among those at schools with a policy about the use of generative AI, (n=392)

Policy was Implemented...



No differences by grade bands

Q22 [Q43]: Which best describes your school's policy on the use of ChatGPT or other generative AI for schoolwork? Select one.

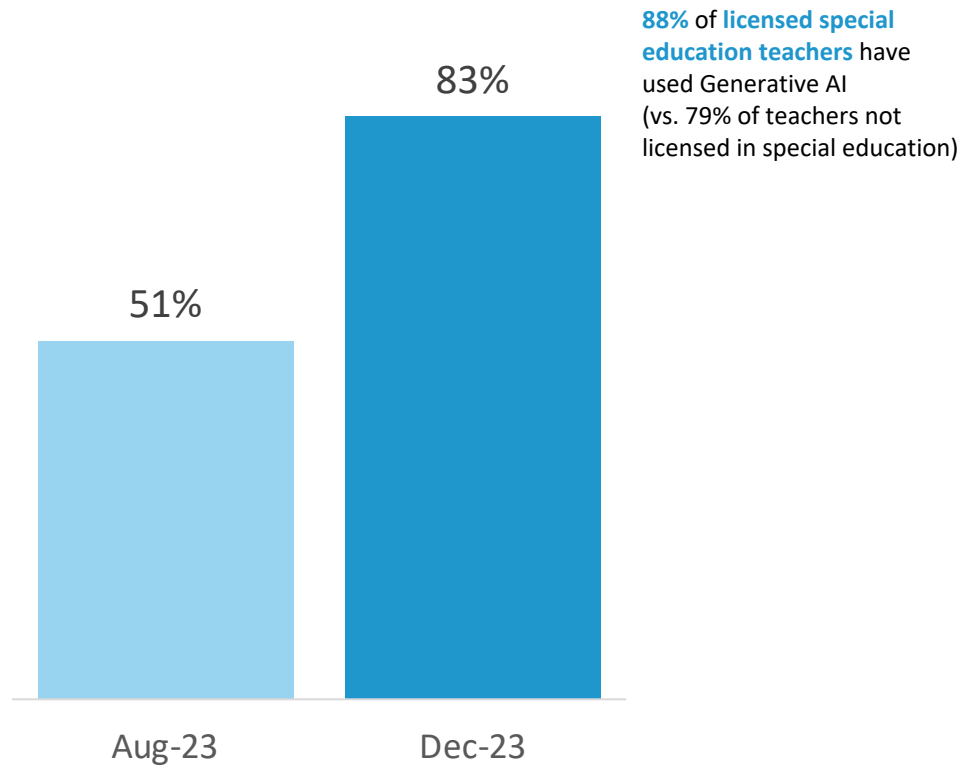
Q24: When did your school implement this policy?

Q25: Was this the first policy about generative AI from the school or an update/change to a policy about generative AI that was already in place?

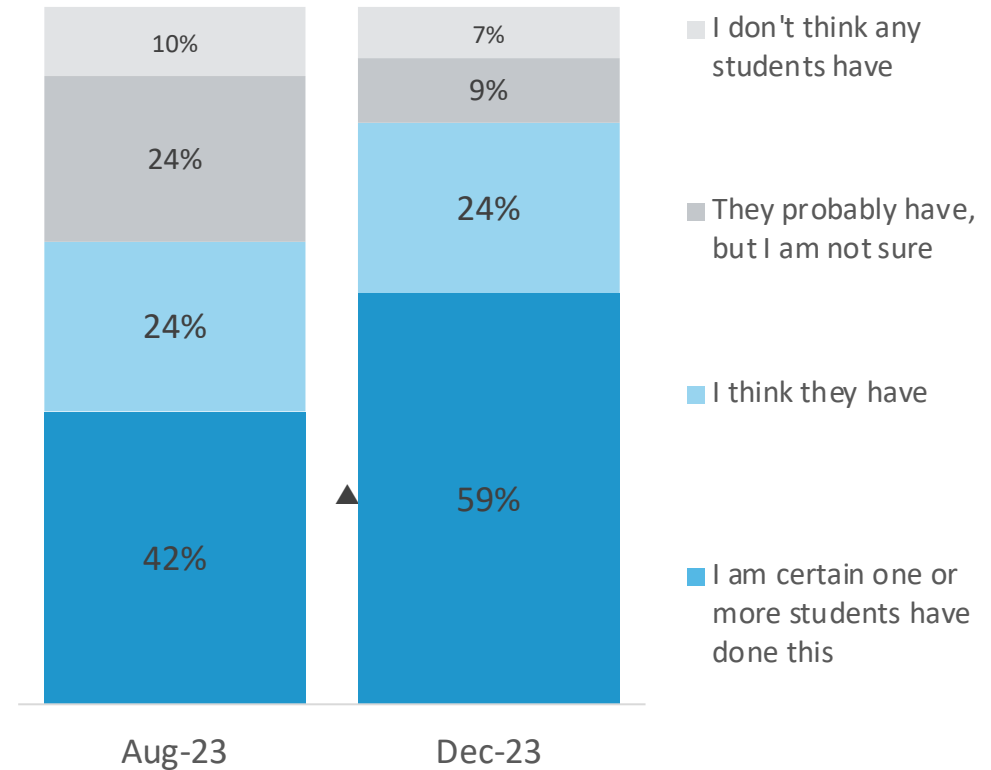
Since last school year (2022-23), teacher use—and teacher reports of student use—of generative AI have grown significantly

Generative AI Use

Teacher Use of Generative AI (Personal or School Use)



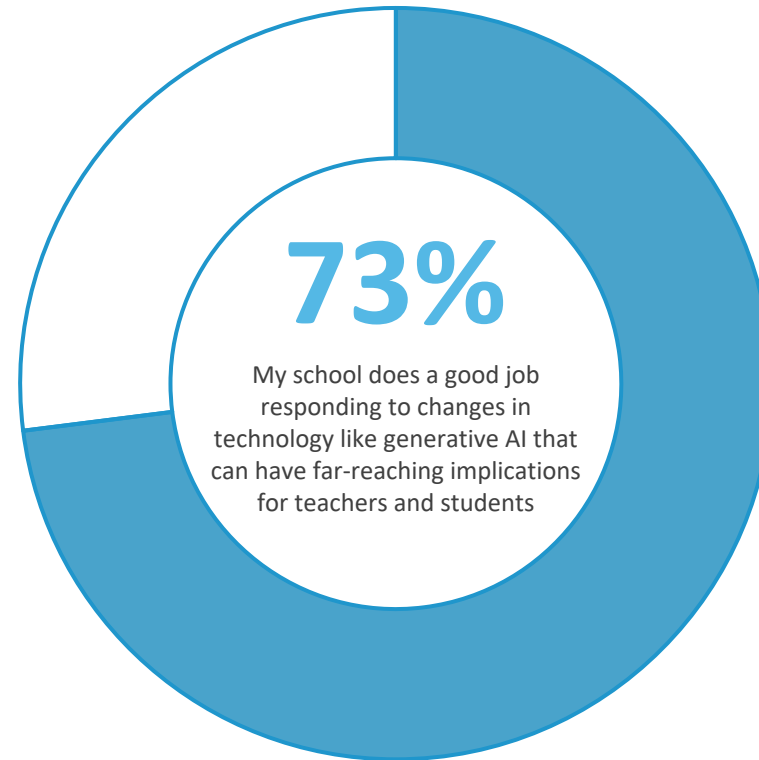
Student Use of Generative AI for School (as reported by Teachers)



Q18 [Q40]: Have you used ChatGPT or another generative AI platform, either for personal or school use?
Q19 [Q41]: To your knowledge, have your students ever used ChatGPT or another generative AI platform for school use? Select one.

This school year (2023-24), teachers are more likely to feel that their school is doing a good job responding to technology changes like generative AI

School Responsiveness to Technology Changes that Impact Teachers and Students (e.g., Generative AI)



51% in August 2023

% Strongly or Somewhat Agree with the Statement

No differences observed among Title I/Eligible schools vs. non-Title I or Licensed special education teachers vs. teachers not licensed in special education

Q33 [Q49]: How much do you agree or disagree with each of the following statements about ChatGPT or other generative AI platforms?

More teachers report their schools included them in the process for shaping policies about student use of generative AI

Schools' Engagement of Teachers Regarding Generative AI Policies and Procedures

7 in 10 teachers (72%) say their school has asked for their input on policies and procedures regarding student use of generative AI
(up from 40% in August)

83% among **teachers at schools that generally permit** generative AI
(vs. 67% at schools that ban its use)

80% among **teachers who use/have used generative AI** themselves
(vs. 29% of those who have not)

77% of **licensed special education teachers** recall being asked for their input
(vs. 68% of teachers not licensed in special education)

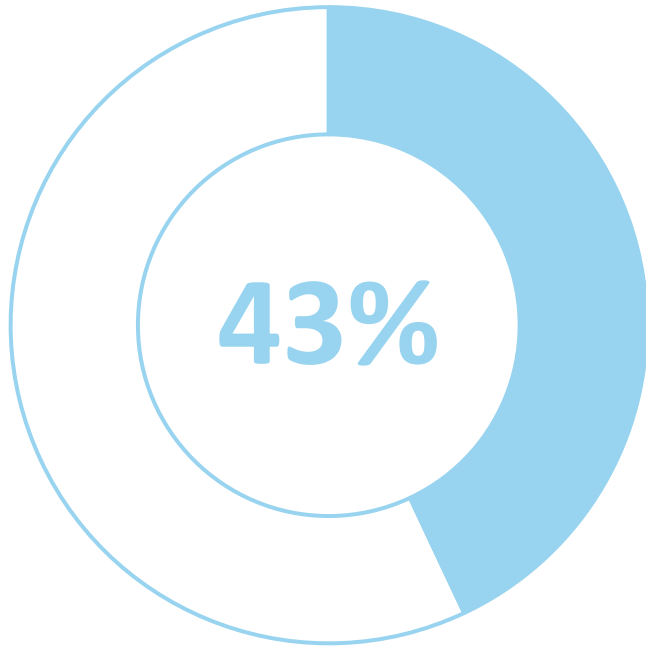


Formal teacher training that includes generative AI policies and procedures has increased since the end of last school year

- Licensed special education teachers are more likely to say they receive this training than general education teachers (both in August and in December) but that gap has narrowed.

Teachers Receiving Training on School Policies and Procedures about the Use of Generative AI

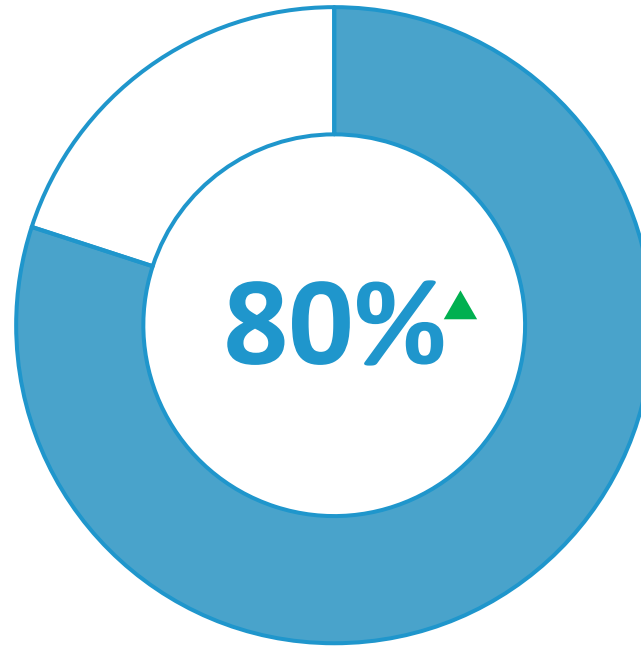
August 2023



■ Formal training □ No formal training

65% of licensed special education teachers received formal training (vs. 24% of teachers not licensed in special education)

December 2023



■ Formal training □ No formal training

87% of licensed special education teachers received formal training (vs. 73% of teachers not licensed in special education)

Aug	Dec	
43%	80%	Formal Training (any of these - net)
32%	55% ▲	Training that includes generative AI policies and procedures and other topics
20%	35% ▲	One training that focuses only on generative AI policies and procedures
12%	35% ▲	Multiple trainings that focus on generative AI policies and procedures

More teachers indicate they have received guidance about many aspects of generative AI since last school year, but there is a lot of room for growth

- 7 in 10 teachers say that students are also receiving guidance in the use of generative AI.

Types of Guidance and Support Provided by Schools

Teachers reporting receiving guidance about...

38% incorporating generative AI into student assignments
(up from 17%)

38% adapting classwork and homework assignments to reduce cheating using generative AI

37% detecting student use of ChatGPT or another generative AI when submitting school assignments
(up from 23%)

37% responsible student use of generative AI

36% incorporating generative AI into classroom instruction
(up from 18%)

28% how to respond if you suspect a student has used generative AI in ways that are not allowed (e.g., plagiarism)
(unchanged since August: 24%)

Teachers reporting *students* received guidance about...

72% how to spot false or inaccurate information online

71% the school's process for dealing with students who break rules about generative AI

70% responsible student use of generative AI

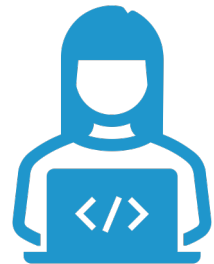
63% how to know if online content is created by generative AI or by a person

The number of teachers and schools using generative AI content detection tools has nearly doubled

- Licensed special education teachers were three times more likely to be using an AI content detection tool last school year (compared to general education teachers), but that gap has narrowed significantly.
- Teachers feel somewhat more effective at spotting AI-generated schoolwork since August, but those feeling “very effective” could be stronger.

Detection of Generative AI

Teacher Regularly Uses a Generative AI Content Detection Tool to Determine whether Students’ Work is AI-generated



38%

August 2023

59% of licensed special education teachers
19% teachers not licensed in special education

68%▲

December 2023

76%▲ of licensed special education teachers
62%▲ teachers not licensed in special education

School Provides a Tool or Recommends AI Content Detection Tools to Teachers

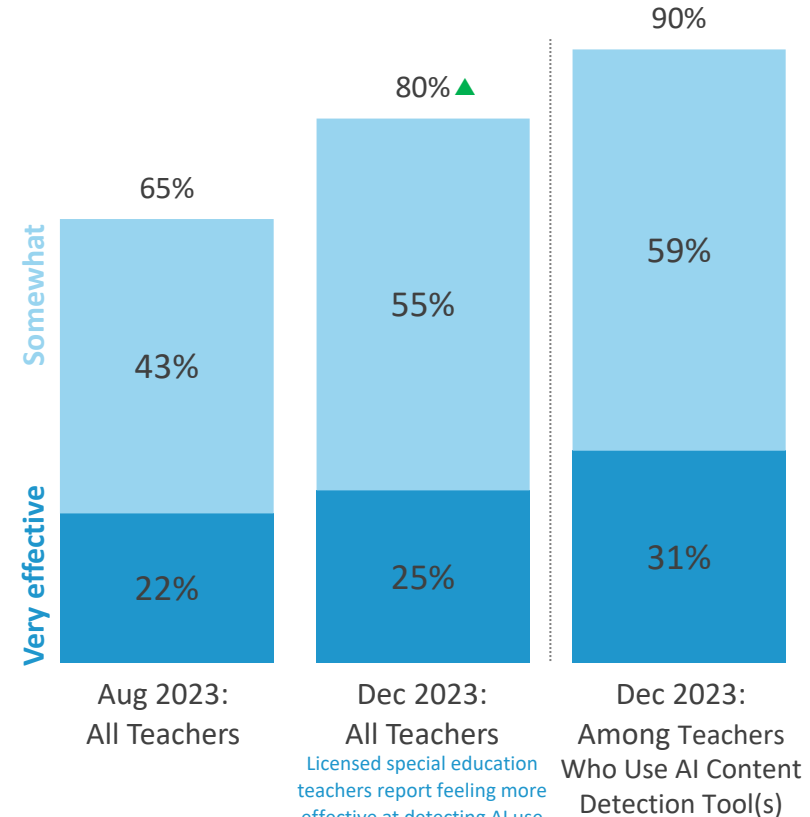
43%

August 2023

78%▲

December 2023

Teacher Self-reported Effectiveness at Detecting Student Assignments Created with Generative AI



26%▲ of teachers strongly agree that AI content detection tools are an accurate and effective way to determine whether a student is using AI-generated content (vs. 18% in August 2023)

Licensed special education teachers report feeling more effective at detecting AI use than teachers not licensed in special education (85% vs. 76%)

Q32 [Q48]: In your view, how effective are you at detecting whether your students' assignments were written or created with generative AI or by the student themselves?

Q34 [Q50]: Do you use a generative AI content detection tool to determine whether students' work is AI-generated? Select one.

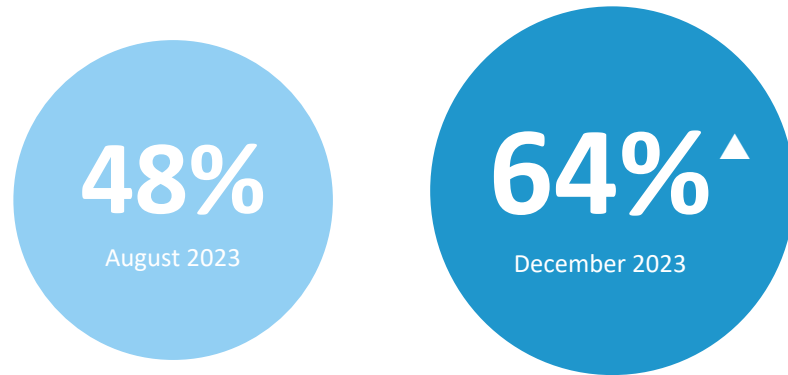
Q35 [Q51]: Does your school have an official policy or guidance on teachers' use of AI content detection tools? Select one.

As schools put policies and procedures in place, more students are being disciplined for use of generative AI

- Negative consequences are higher among teachers who use a generative AI content detection tool.

Negative consequences for using generative AI

Student got in trouble or experienced negative consequences for using generative AI on a school assignment



58% of licensed special education teachers
40% teachers not licensed in special education

66%▲ of licensed special education teachers
63%▲ teachers not licensed in special education

More teachers report negative consequences...

If they themselves use/have used generative AI (69% vs. 39% that have not used it)

If the teacher regularly uses a detection tool (72% vs. 48% that do not use a detection tool)

Not receiving credit for an assignment is the #1 consequence (42%)

No differences observed among Title I/Eligible schools vs. non-Title I

Agree strongly or somewhat with the statements	Aug 2023	Dec 2023	Title I	Not Title I
Students that use school-provided devices are more likely to get in trouble or face negative consequences for using generative AI	50%	48%	45%	54%
The use of generative AI has led to more students getting into trouble or experiencing negative consequences at school	41%	43%	37%↓	53%↑
A student got in trouble for how they reacted when a teacher, principal, or other adult at the school confronted them about using generative AI	37%	40%	37%↓	48%↑

Schools that permit generative AI use are more open to positive uses of the technology and provide teachers more guidance

- At schools where the technology is banned, teachers are less trusting that student work is their own and more likely to say students are using generative AI to complete and submit school papers or assignments.

Teachers at schools that generally permit the use of generative AI:



are more plugged into its use and the school's policies than teachers at schools that ban its use

- **94%** of teachers at schools where it is permitted use/ have used it themselves (vs. 73% at schools where it is banned)
- **83%** of teachers have been asked by the school for input on policies related to student use of generative AI (vs. 67% at schools where it is banned)

receive more guidance and training about the technology than teachers at schools that ban its use



- **52%** and **49%** of teachers, respectively, have received guidance on ways to incorporate generative AI into student assignments or instruction (vs. 34% and 33% at schools where it is banned)
- **41%** of teachers are required to participate in multiple trainings or PD focused on generative AI policies and procedures (vs. 29% at schools where it is banned)

are more likely to have incorporated the technology into their lessons and teaching



- **79%** of teachers have incorporated generative AI into how or what they teach (vs. 53% at schools that generally ban its use)

Teachers at schools that generally ban generative AI:

are less trusting that student work is actually theirs



- **69%** of teachers at schools where generative AI is generally banned are distrustful of whether student work is actually theirs (vs. 48% distrustful at AI permitted schools)

report higher rates of students using the technology to cheat



- **42%** of teachers at schools where AI is generally banned report students using it to write and submit a paper (vs. 30% at schools that permit AI use)

report students experiencing higher rates of disciplinary action



- **76%** of teachers at schools where AI is generally banned report a student got in trouble or experienced negative consequences for using or being accused of using generative AI on a school assignment (vs. 68% at schools that permit generative AI)*

are less likely to be using generative AI detection tools and less confident in their ability to detect student use of the technology



- **62%** of teachers use a generative AI detection tool regularly (vs. 80% at schools where generative AI is permitted)
- **69%** feel confident that they can detect student use of generative AI (vs. 89% at schools where it is permitted)

*Directional difference between schools that ban and schools that permit generative AI use

Q21: To your knowledge, have your student(s) used ChatGPT or another generative AI platform in any of these ways? Select all that apply.

Q34: Do you use a generative AI content detection tool to determine whether students' work is AI-generated? Select one.

Q31: 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? Select all that apply.

Q32: In your view, how effective are you at detecting whether your students' assignments were written or created with generative AI or by the student themselves?

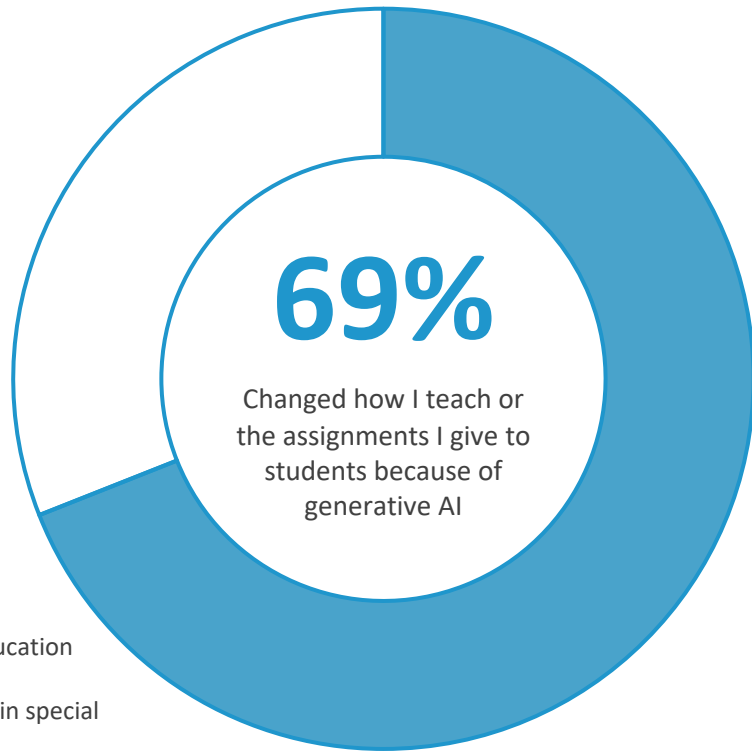
Q18: Have you used ChatGPT or another generative AI platform, either for personal or school use?

Q29: Has the school asked teachers for input about policies and procedures regarding students' use of generative AI?

Q27: Which, if any, of the following have been discussed or covered as part of your teacher training about school policies and procedures regarding generative AI? Select all that apply.

Q33: How much do you agree or disagree with each of the following statements about ChatGPT or other generative AI platforms?

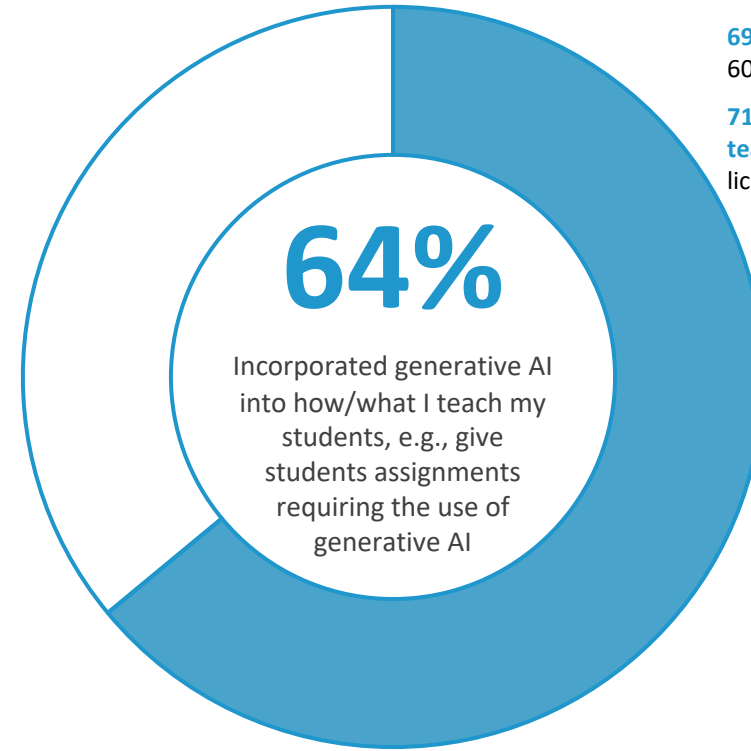
Impact of Generative AI on Teaching



December
72%▲ of licensed special education teachers
67%▲ teachers not licensed in special education

August
58% of licensed special education teachers
41% teachers not licensed in special education

49% in August 2023



69% of **middle school teachers** (vs. 60% of high school teachers)
71% of **licensed special education teachers** (vs. 58% of teachers not licensed in special education)

% Strongly or Somewhat Agree with the Statement

As teachers incorporate generative AI into lessons and assignments, more report appropriate student uses of AI and fewer report students using it to cheat

- Teachers at schools where generative AI is banned are more likely to say students are using it for cheating (e.g., writing and submitting a paper).
- Teachers perceive a rise in many *personal uses* of generative AI among students.
- Licensed special education teachers are more likely to say students are using generative AI for social media content and/or to help with conversation skills.

Student Generative AI Use Cases

	Aug 2023	Dec 2023
Base: Teachers who say students have or probably have used generative AI for school or personal use	(n=905)	(n=438)
<u>School Uses</u>		
To research or learn about a topic for a school project	31%	47% ▲
During class as part of a teacher's lesson or instruction	17%	35% ▲
To write a complete paper and submit it for a school assignment	40%	33% ▼
To write a first draft of a paper for a school assignment	31%	30%
To create footnotes or citations for a paper	17%	20%
<u>Personal Uses</u>		
To create content for the student to post online or share via social media	20%	41% ▲
To have a conversation with the AI platform itself	27%	39% ▲
To research or learn about a topic for personal reasons or of interest to my student(s)	29%	38% ▲
To get help with what to say or how to have a conversation with a person in real life	19%	29% ▲
Have just played around with it/experimented with it so far	29%	18% ▼
To write computer programming code	11%	17% ▲

Teachers at schools banning generative AI use are more likely to say that students are using it for completing school assignments, while those at schools that permit AI use are less likely to report that students use it to complete and submit school papers or assignments

- More teachers at schools where AI is **generally banned** report students using it to write and submit a paper (**42%** vs. 30% at schools that permit AI use)
- **41%** of teachers at schools where the use of AI is **generally permitted** say students have used it as part of a lesson (vs. 24% at schools where AI is generally banned)

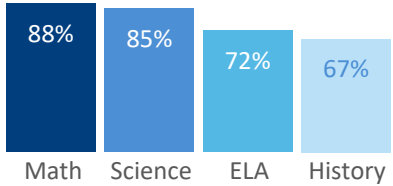
Licensed special education teachers report greater use of generative AI by students for social media or to help with social interactions

- **Licensed special education teachers** are more likely to say students have used generative AI to create social media content (**47%** vs. 35%)
- **Licensed special education teachers** report that students have used generative AI to get help with conversational skills (**34%** vs. 24%)

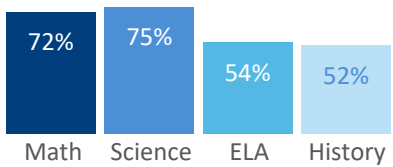
More Math and Science teachers are embracing generative AI for both instructive use and to detect school prohibited uses of the technology, than are ELA and History Teachers

- ELA and History teachers are less familiar with generative AI.

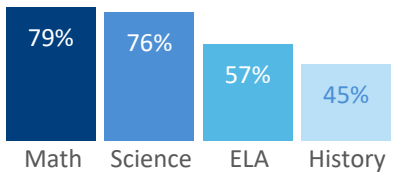
Teacher Use of Generative AI



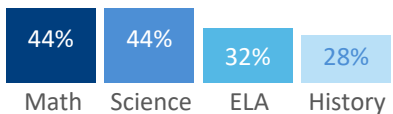
Incorporated AI into Teaching



Use an AI Detection Tool



Student Got in Trouble for How they Reacted



Generative AI Use and Involvement with School AI Policies

- ◀ Math and Science teachers are more likely than ELA and History teachers to have used generative AI themselves (88% and 85% vs. 72% and 67%)

Math and Science teachers report being asked for input into policies around student use of generative AI, more than ELA and History teachers (81% and 76% vs. 51% and 61%)

Embracing Generative AI in Teaching and Assignments

Math and Science teachers are more likely to say they have changed how they teach or the assignments they give (75% and 72% vs. 63% and 60%)

- ◀ More Math and Science teachers have incorporated generative AI into what they teach students (72% and 75% vs. 54% and 52%)

Generative AI Detection

Math and Science teachers feel they are more effective at detecting whether student assignments were created using generative AI, than do History teachers (86% and 84% vs. 69%)

- ◀ Math and Science teachers are more likely to be using a generative AI detection tool to determine whether student work is AI-generated (79% and 76% vs. 57% and 45%)

Negative Consequences

- ◀ Math and Science teachers more likely to say that a student got in trouble for how they reacted when confronted about using generative AI (44% and 44% vs. 32% and 28%)

Math (n=226)
Science (n=122)
ELA (n=89)
Social Studies/History (n=67)

Contact Us

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The Equity in Civic Technology Project works to advance responsible civic technology use and strong privacy practices that protect the rights of individuals and families. If you want to learn more about CDT and our work, please visit our website: <https://cdt.org/>.