

In Deep Trouble: Surfacing Tech-Powered Sexual Harassment in K-12 Schools

Survey Research on Student,
Teacher, and Parent Experiences

September 2024



Research Objectives

Since 2020, CDT has conducted annual or semi-annual surveys with students, teachers, and/or parents. The surveys measure and track changes in perceptions, experiences, training, engagement, and concerns about student data privacy, student activity monitoring, content filtering and blocking software, generative AI, NCII, and deepfakes in schools.

Methodology

Online surveys of **students, teachers, and parents** were fielded June to August 2024.

	Sample size	Jun-Aug 2024	Nov-Dec 2023	Jun-Aug 2023	May-Jun 2022	Jun-Jul 2021	Feb 2021	May-Jul 2020
Student survey (9-12 th grade)	1,316	✓		✓	✓	✓		Student focus groups
Teacher survey (6 th -12 th grade)	1,006	✓	✓	✓	✓	✓	✓	✓
Parent survey (6 th -12 th grade)	1,028	✓		✓	✓	✓	✓	✓

Over samples of Black students and students who identify as LGBTQ+ were collected and data were then weighted down to reflect the student population by race and LGBTQ+ status.

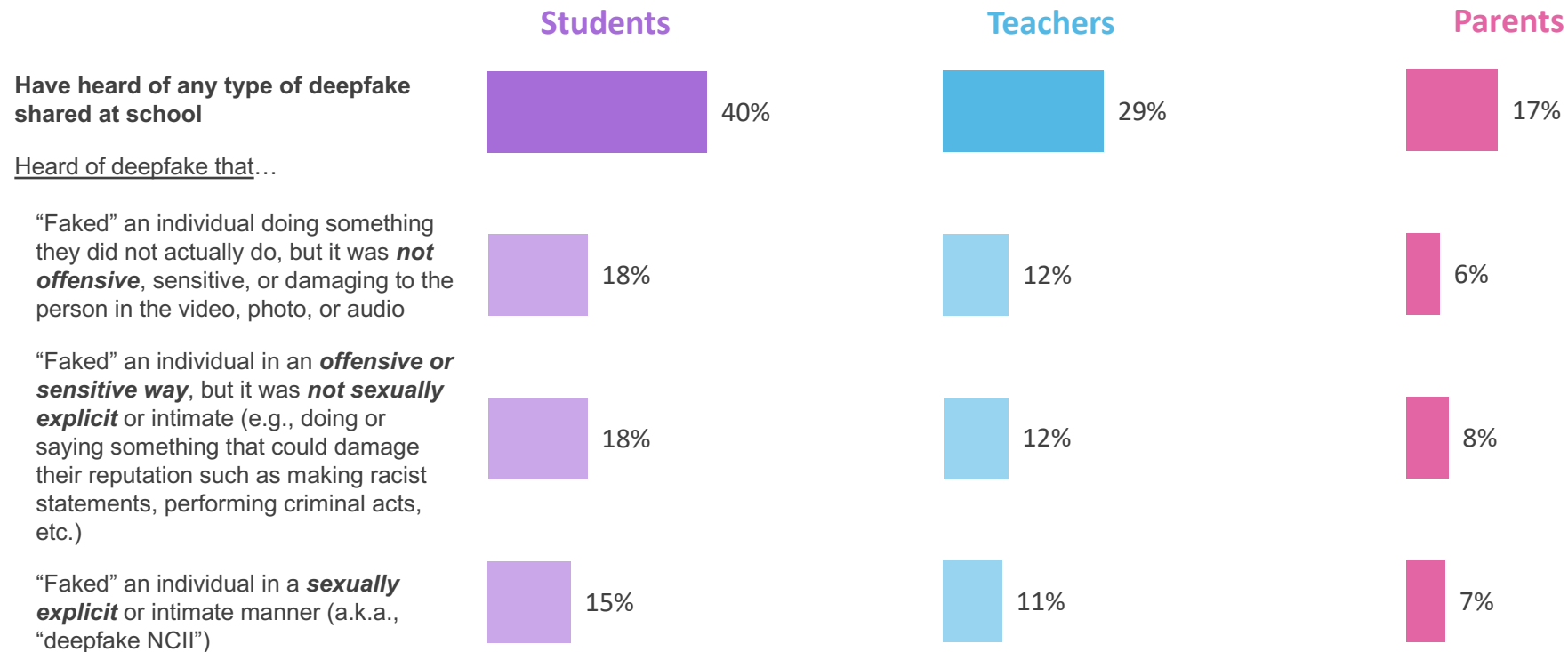
Throughout the report, ↑ ↓ or **bolding** indicates significant differences between comparison groups at the 95% confidence level.

Students, teachers, and parents have heard of deepfakes being shared

- Forty percent of students and 29 percent of teachers say they know of a deepfake being shared depicting individuals associated with their school in the past school year (2023-2024). Parents are less aware.

Reported Awareness of Deepfakes

■ Students (n=1,316) | ■ Teachers (n=1,006) | ■ Parents (n=1,028)



*note: small wording changes were made appropriate to the audience

[Teachers] Q68: In the last school year (2023-2024), have you heard about incident(s) of deepfakes being shared that depict individuals associated with your school? Select all that apply.

[Students] Q68: In the last school year (2023-2024), have you heard about “deepfakes” being shared that picture or contain fake video, photo, or audio meant to look or sound like someone associated with your school without their permission (e.g., a student, teacher, principal, sports coach, a student’s parent, etc.)?

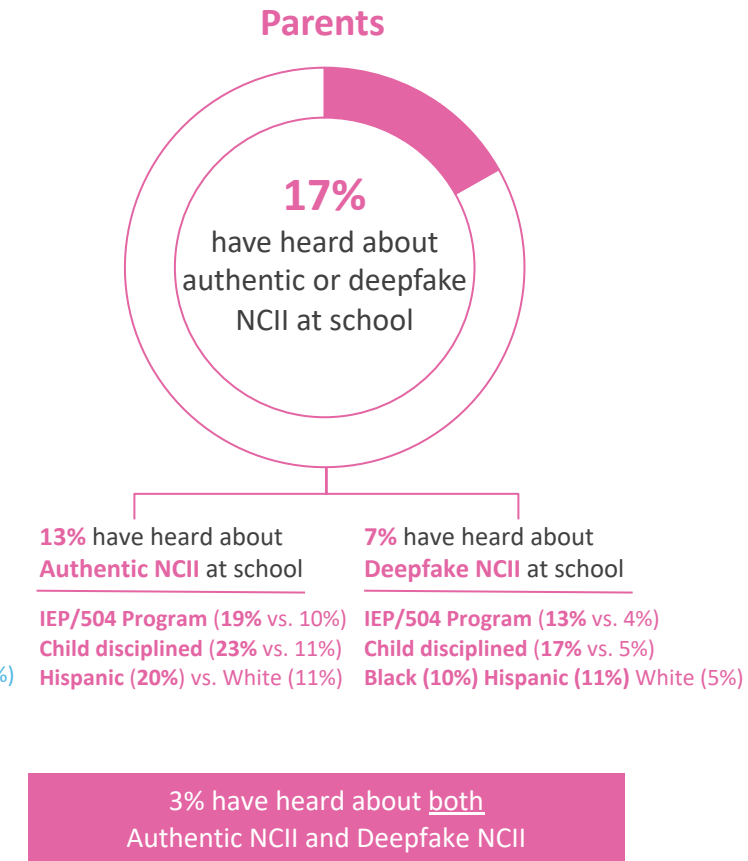
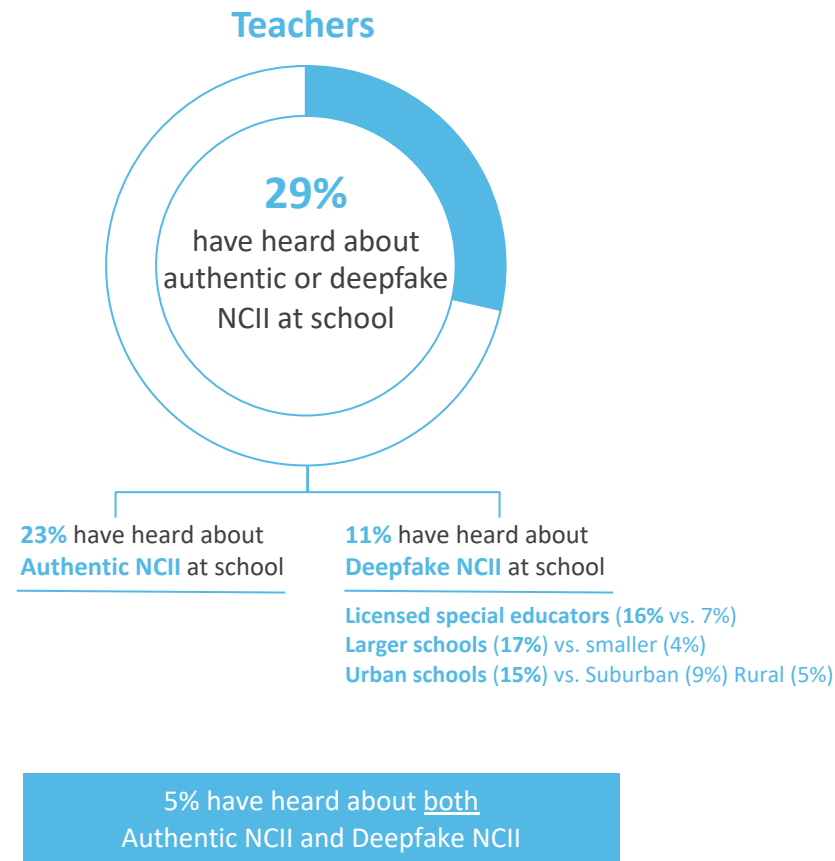
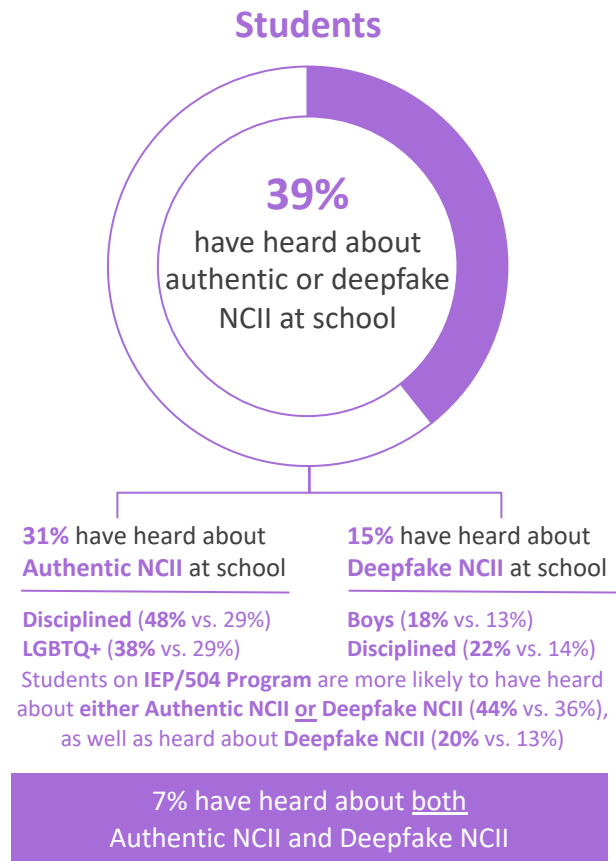
[Parents] Q68: In the last school year (2023-2024), have you heard about incident(s) of “deepfakes” being shared at your child’s school? Select all that apply.

A plurality of students and teachers have heard about an NCII incident at their school in the last school year (2023-2024)

- Although it is currently more common for students and teachers to hear about authentic NCII being shared depicting individuals associated with their school, a sizeable percentage is deepfake NCII.

Reported Awareness of Authentic or Deepfake NCII at School

■ Students (n=1,316) | ■ Teachers (n=1,006) | ■ Parents (n=1,028)



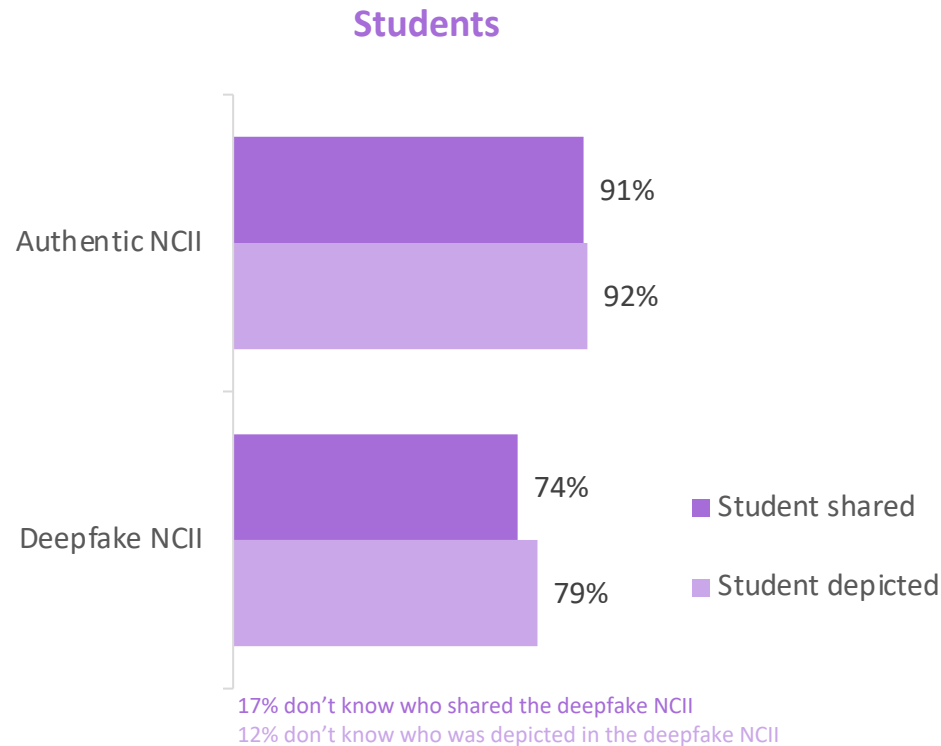
[Teachers] Q61: In the last school year (2023-2024), have you heard about incident(s) of "NCII" being shared by individual(s) at your school without the consent of the person depicted?
 [Teachers] Q68: In the last school year (2023-2024), have you heard about incident(s) of deepfakes being shared that depict individuals associated with your school? Select all that apply.
 [Students] Q61: In the last school year (2023-2024), have you heard about "NCII" being shared by anyone at your school without the permission of the person pictured or heard?
 [Students] Q68: In the last school year (2023-2024), have you heard about "deepfakes" being shared that picture or contain fake video, photo, or audio meant to look or sound like someone associated with your school without their permission (e.g., a student, teacher, principal, sports coach, a student's parent, etc.)?
 [Parents] Q61: In the last school year (2023-2024), have you heard about incident(s) of "NCII" being shared by individual(s) at your child's school without the consent of the person pictured or heard?
 [Parents] Q68: In the last school year (2023-2024), have you heard about incident(s) of "deepfakes" being shared at your child's school? Select all that apply.

Students are most aware of deepfake NCII at their school that was shared by and depicts students

- Although students are the most likely to be depicted in and to share deepfake NCII, teachers, staff, or other adults associated with the school are also affected.

Individuals Sharing or Depicted in Deepfake NCII

■ Students (n=202) | ■ Teachers (n=103) who heard about deepfake NCII being shared at their school in the last year



Deepfake NCII affects teachers in addition to students

43% of teachers say a teacher, administrator, or other school staff member was depicted compared to **58%** of teachers who say a student was depicted in deepfake NCII they heard about

[Students] Q70: Earlier, you indicated that you heard about a deepfake at your school in which an individual associated with your school was pictured or heard in fake videos, photos, or audio recordings in a sexually explicit or intimate manner and without their permission. This is referred to as "deepfake NCII." Thinking about the deepfake NCII you heard about at your school, who shared the deepfake NCII? Select all that apply.

[Students] Q71: Who was pictured or heard in the "deepfake NCII" that was shared without their permission? Select all that apply.

[Teachers] Q70: Earlier, you indicated that you heard about a deepfake at your school in which a video, photo, or audio recording falsely showed an individual associated with your school in a sexually explicit or intimate manner without their consent. This is referred to as "deepfake NCII." Who shared the deepfake NCII? Select all that apply.

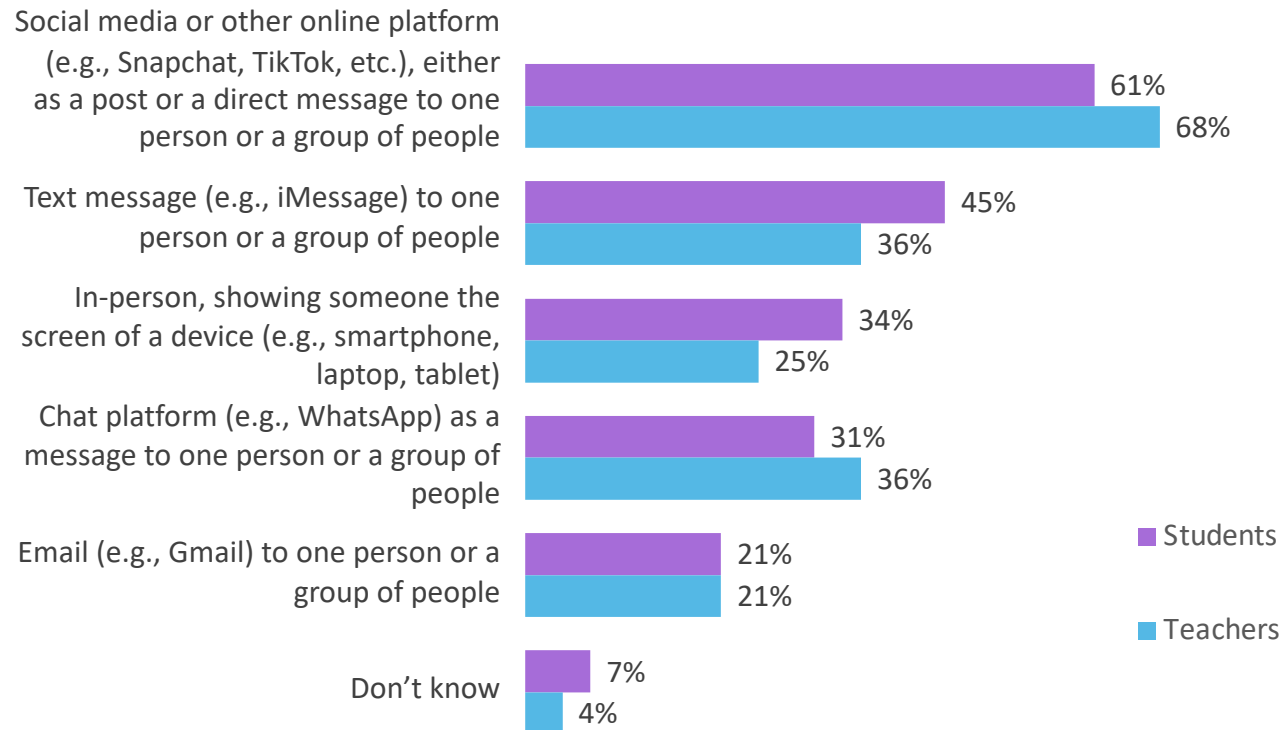
[Teachers] Q71: Who was depicted in the deepfake NCII? Select all that apply.

Deepfake NCII is primarily shared through social media

- After social media – chat applications, text message, and in-person sharing are other significant channels for sharing deepfake NCII.

Ways Deepfake NCII is Shared

■ Students (n=202) | ■ Teachers (n=103) who heard about deepfake NCII at their school in the last year



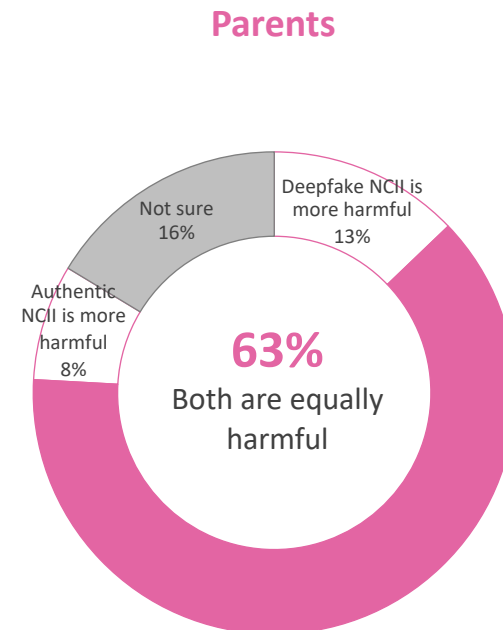
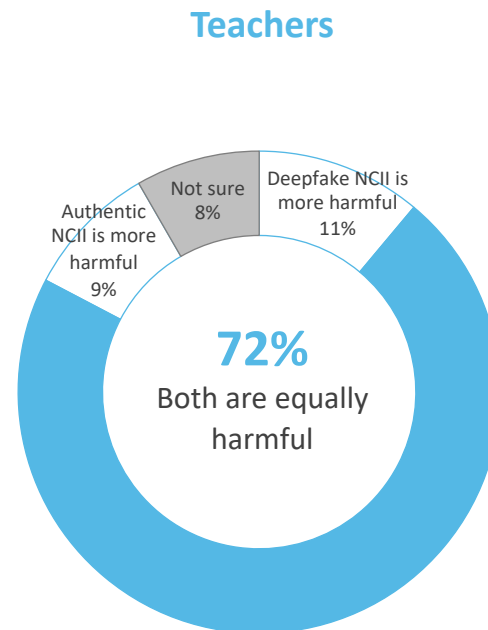
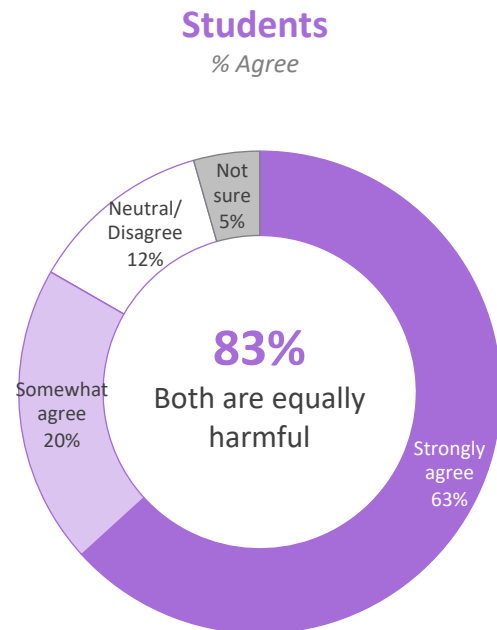
[Teachers] Q72: In what way(s) was the deepfake NCII shared? Select all that apply.

[Students] Q72: In what way(s) was the "deepfake NCII" shared without the permission of the person pictured or heard in the fake videos, photos, or audio recordings? Select all that apply.

The majority of students, teachers, and parents feel that authentic and deepfake NCII are equally harmful to the person depicted

Authentic vs. Deepfake NCII Perceptions of Harm

■ Students (n=1,316) | ■ Teachers (n=1,006) | ■ Parents (n=1,028)



I believe that sharing "deepfake NCII" is as damaging to the person pictured or heard in the fake videos, photos, or audio recordings as sharing real-life "NCII"

[Teachers] Q83: Here again are the definitions included earlier in the survey about "NCII" and "deepfake NCII." When you think about these definitions, which of the following statements comes closer to your point of view?

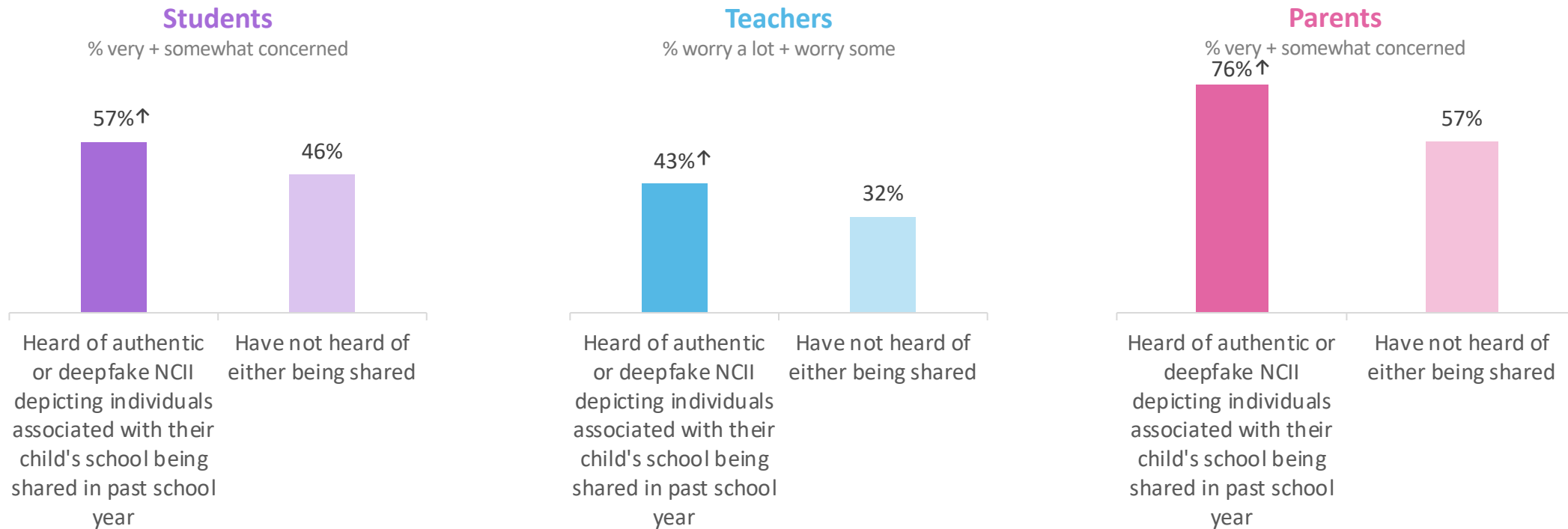
[Students] Q79: How much do you agree or disagree with each of the following statements? // 'I believe that sharing "deepfake NCII" is as damaging to the person pictured or heard in the fake videos, photos, or audio recordings as sharing real-life "NCII"'

[Parents] Q83: Here again are the definitions included earlier in the survey about "NCII" and "deepfake NCII." When you think about these definitions, which of the following statements comes closer to your point of view?

Those who have heard of either authentic or deepfake NCII being shared are more likely to express concern about data privacy

Concern/Worry about Students' Data Privacy by Familiarity with Authentic or Deepfake NCII Being Shared in the Past Year

■ Students (n=1,316) | ■ Teachers (n=1,006) | ■ Parents (n=1,028)



[Teachers] Q12: Overall, how much do you worry about the privacy and security of your students' data and information that may be collected and stored by your school?
[Students] Q10: Overall, how concerned are you about the privacy and security of your data and information that may be collected and stored by your high school?
[Parents] Q21: Overall, how concerned are you about the privacy and security of your child's data and information that may be collected and stored by your child's school?

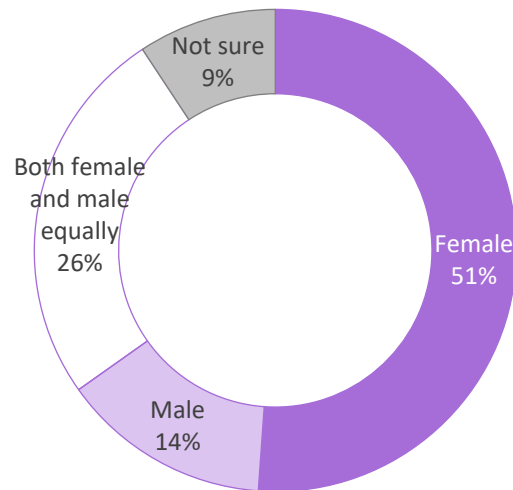
Female students are reportedly depicted in deepfake NCII more often than their peers

- Additionally, fewer female students than males agree that jail is too harsh a punishment or that first time offenders should face less serious consequences for sharing deepfake NCII.

Impact on Female Students

■ Students who have heard about deepfake NCII at their school (n=202) | ■ Teachers who have heard about deepfake NCII at their school (n=103)

Heard of More Cases of...
Females vs. Males Depicted in Deepfake NCII



70% of female students say they have heard of more cases where the person pictured or heard was female (vs. 37% of male students who say they have heard of more females depicted)

Among teachers who have heard about deepfake NCII that depicts individuals associated with their school being shared in the past school year (2023-2024), 37% heard of more cases of females being depicted than males depicted (vs. 25% who say males are depicted more often).

% of students who agree with the statement

	Female students	Male students
It is too harsh a punishment to send a student to jail if they share “deepfake NCII”	27%	34%↑
Students who have only been caught sharing deepfake NCII once should face less serious criminal consequences than someone that has done it more than once	40%	51%↑

[Students] Q81: Would you say you have heard about more cases of “deepfake NCII” at your school where the person pictured or heard in the fake videos, photos, or audio recordings was...

[Students] Q79: How much do you agree or disagree with each of the following statements? (Strongly or somewhat agree)

[Teachers] Q81: Would you say you have heard about more cases of “deepfake NCII” at your school where the person depicted was...

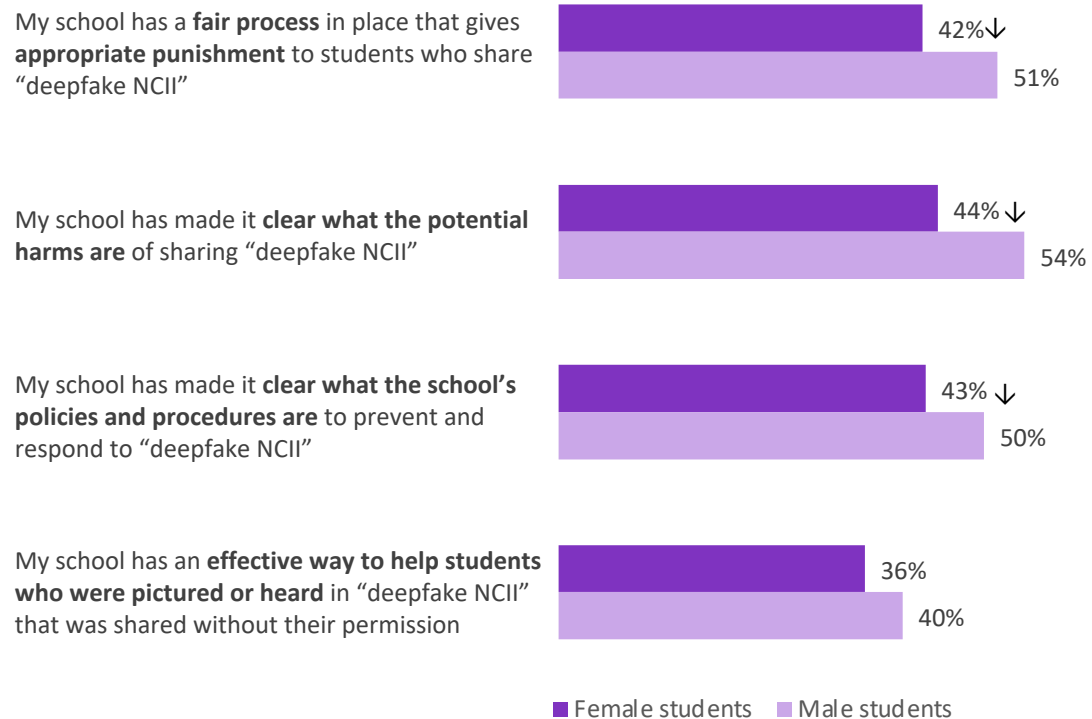
Female and LGBTQ+ students are less likely to agree that their school has an adequate and fair process for responding to incidents of deepfake NCII

- Male students and non-LGBTQ+ students have greater confidence in their school’s policies for responding to or addressing deepfake NCII incidents.

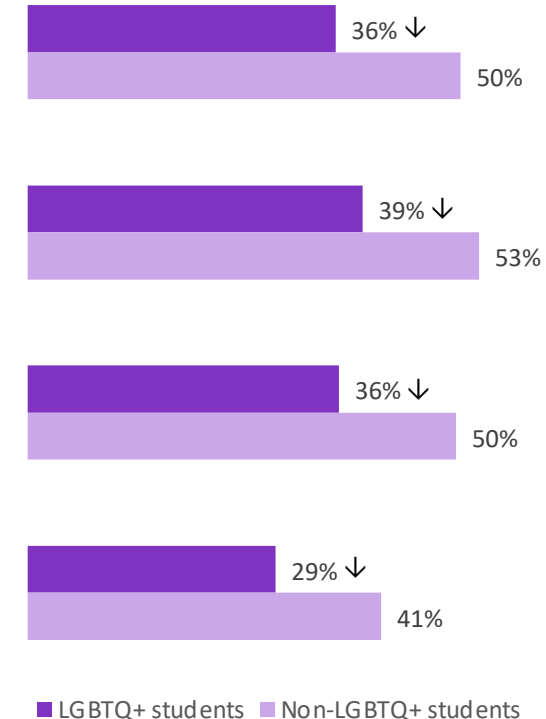
Student Perceptions of School Policies about Deepfake NCII

■ Students (n=1,316)

Female vs. Male students



LGBTQ+ vs. Non-LGBTQ+ students



% Strongly or Somewhat Agree

Few teachers report that their school has shared policies or practices that proactively address authentic or deepfake NCII

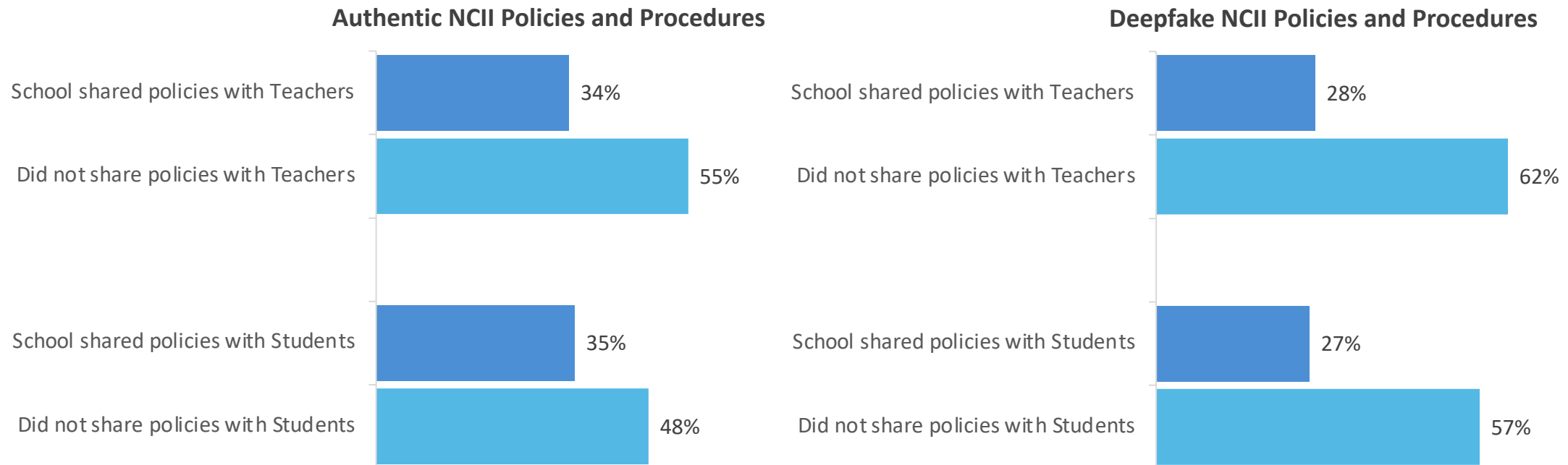
- The majority of teachers say their school has not shared NCII policies and procedures with teachers or students.

School or School District Shared Authentic and/or Deepfake NCII Policies and Information

■ Teachers (n=1,006)

Six-in-ten teachers surveyed report that they have not heard (either say their school has not provided or are not sure) of their school or school district sharing policies and procedures with teachers about how to address authentic or deepfake NCII.

% of Teachers Reporting School or School District Shared Deepfake NCII Policies and Procedures with Teachers and Students



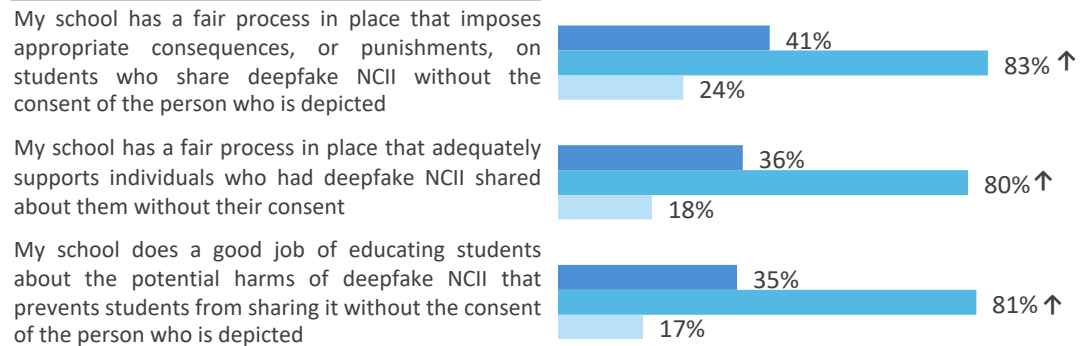
[Teachers] Q66: Has your school or school district shared policies and procedures with teachers about how to address NCII that is shared without the consent of the person depicted? Select one.
[Teachers] Q67: Has your school or school district shared policies and procedures with students about how to address NCII that is shared without the consent of the person depicted? Select one.
[Teachers] Q74: Has your school or school district shared policies and procedures with teachers about how to address deepfake NCII that is shared without the consent of the person depicted?
[Teachers] Q76: Has your school or school district shared policies and procedures with students about how to address deepfake NCII? Select one.

Awareness of school policies and procedures about deepfake NCII is low among teachers and students

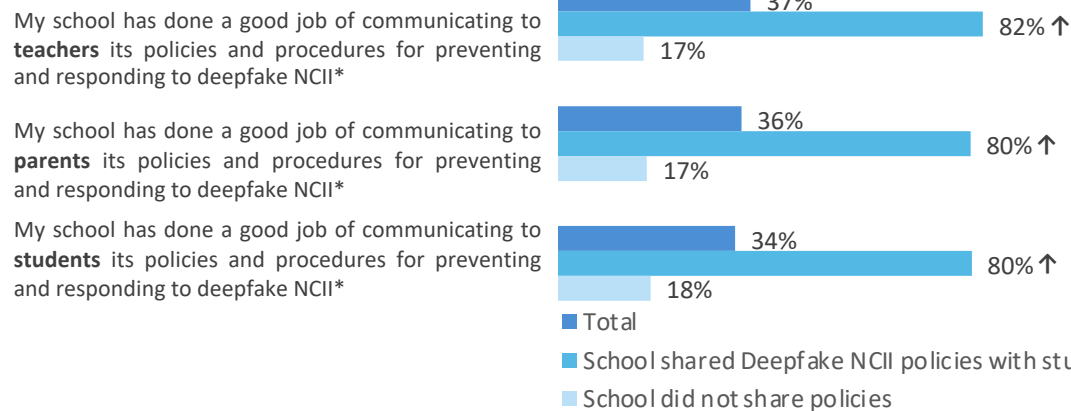
Teacher and Student Perceptions of School Policies about Deepfake NCII

■ Teachers (n=1,006) | ■ Students (n=1,316)

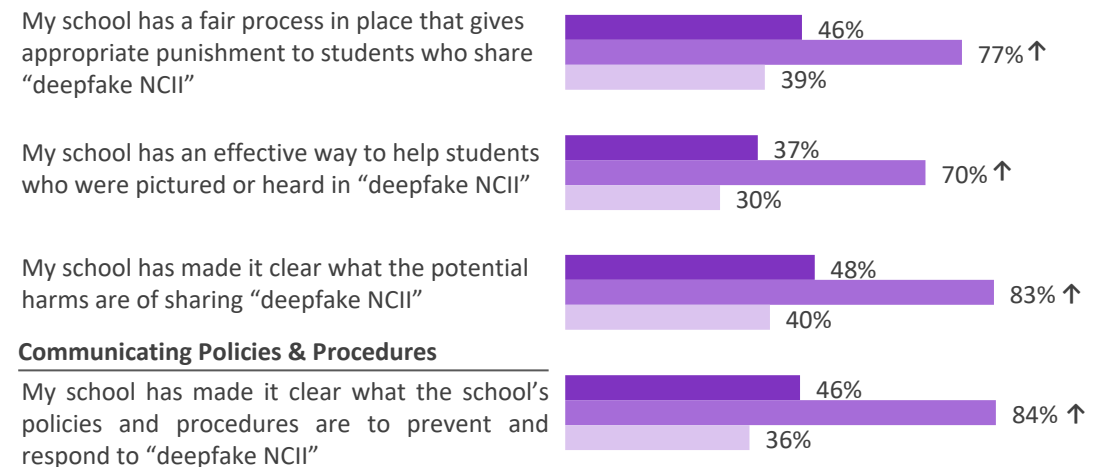
School Policies & Procedures



Communicating Policies & Procedures



School Policies & Procedures



Only 34 percent of students agree that their school does a good job of catching students who share deepfake NCII

% Strongly or Somewhat Agree

■ Total
 ■ School provided information about Deepfake NCII
 ■ School did not provide information

[Teachers and Students] Q79: How much do you agree or disagree with each of the following statements? *split sample: respondents saw one of these three statements

Most teachers report they have not received training on how to respond to deepfake NCII and their school has not updated its policies to address it

- Just 1 in 10 teachers indicate that the school provided resources to support individuals depicted in deepfake NCII.

School Training and Policies and Procedures Regarding Deepfake NCII

■ Teachers (n=1,006)

Teacher Training on School or District Deepfake NCII Policies	
How to protect the privacy of a student who was depicted in “deepfake NCII” that was shared without their consent	16%
How the school or school district’s discipline policy applies to students who share “deepfake NCII” that depicts another student without their consent	16%
How to protect the privacy of a student accused of sharing “deepfake NCII” that depicts another student without their consent	14%
Who to tell within the school or school district if a student receives or views “deepfake NCII” that depicts another student	13%
How to communicate with the students’ families who were involved in an incident that involves sharing “deepfake NCII”	9%
Resources and policies for teachers and school staff members accused of sharing “deepfake NCII” without the consent of the person depicted	7%
No answer choices selected	62%
Not sure	10%

School Response to Address Deepfake NCII (in Past School Year)	
Updated sexual harassment policies to specifically include “deepfake NCII” (e.g., through school board policies, student codes of conduct, or Title IX policies)	23%
Updated student discipline policies to address the consequences, or punishments, of sharing “deepfake NCII” without the consent of the person who is depicted	23%
Updated policies for how teachers should discipline students to address the consequences of sharing “deepfake NCII” without the consent of the person who is depicted	16%
Created policies and procedures that specifically address “deepfake NCII”	16%
Provided resources to help individuals who were depicted in “deepfake NCII” without their consent report the incident to the school	12%
Provided resources to help individuals who were depicted in “deepfake NCII” without their consent report the incident to law enforcement	8%
Provided resources for individuals who were depicted in “deepfake NCII” without their consent to have it removed from social media or other public forums where it appeared	5%
My school has not addressed “deepfake NCII” at all	42%
Not sure/Not aware of this	16%

[Teachers] Q75: Which, if any, of the following have been discussed or covered as part of your teacher training about school or school district policies and procedures about deepfake NCII? Select all that apply.

[Teachers] Q78: How, if at all, has your school responded in the last school year (2023-2024) to address deepfake NCII in your school? Select all that apply.

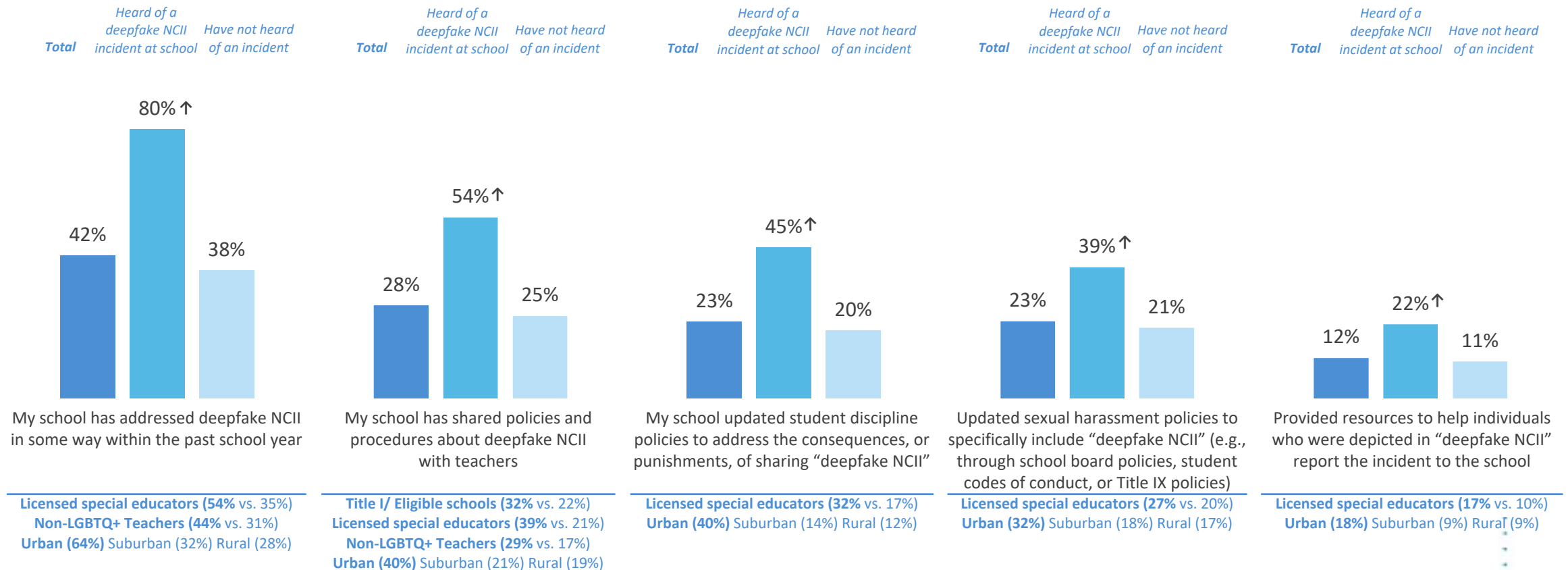
Note: Response percentages add up to more than 100% as respondents were asked to select all responses that apply.

Schools reactively address deepfake NCII once there has been an incident at their school

- Most teachers, students, and parents have not received policies about deepfake NCII from their school.
- Those at schools where deepfake NCII has been shared are twice as likely to have received school policies and procedures, suggesting that schools are reactively addressing deepfake NCII and creating policy when it happens.

School or School District Shared or Updated Deepfake NCII Policies and Information

■ Teachers (n=1,006)



[Teachers] Q74: Has your school or school district shared policies and procedures with teachers about how to address deepfake NCII that is shared without the consent of the person depicted?
 [Teachers] Q78: How, if at all, has your school responded in the last school year (2023-2024) to address deepfake NCII in your school? Select all that apply.

Many students say they have not been given guidance about deepfake NCII by their school

- Among students who have received guidance, this has primarily included explaining what deepfake NCII is and communicating the discipline policy for those that share this content.
- Students report low awareness of school resources available for victims of deepfake NCII.

School Guidance to Students Regarding Deepfake NCII

■ Students (n=1,316) | ■ Parents (n=1,028)

Student Reported Guidance on School or District Deepfake NCII Policies	
School Gave Guidance about Deepfake NCII (net)	46%
Made it clear how a student would be punished by the school if they shared “deepfake NCII”	20%
Explained to students what “deepfake NCII” is	19%
Communicated to parents (e.g., sent a notice home to parents about updated policies, discussed at PTA meeting) about “deepfake NCII,” like what its harms are and what the school is doing about it	15%
Told students who to tell at school if they see or hear about “deepfake NCII”	15%
Sharing “deepfake NCII” without the permission of the person pictured or heard in the fake videos, photos, or audio recordings can be punished severely, including civil and criminal penalties , such as going to jail or paying a fine	13%
What to do if a student hears about “deepfake NCII”, but have not seen it	13%
Sharing “deepfake NCII” without the permission of the person pictured or heard in the fake videos, photos, or audio recordings is harmful to the person	13%
Provided resources for students who were pictured or heard in “deepfake NCII” to have it removed from social media, the internet, etc.	10%
Provided resources to help students who were pictured or heard in “deepfake NCII” report the incident to the police	10%
Offered counseling to students who were pictured or heard in “deepfake NCII” without their permission	10%
Updated the student handbook to explicitly address “deepfake NCII”	9%

Parent Reported Guidance on School or District Deepfake NCII Policies	
Shared the school or school district’s discipline policy and how it applies to students who share “deepfake NCII”	14%
Explained that a student sharing “deepfake NCII” could receive civil and/or criminal penalties	13%
Shared how the school will communicate with parents if their child is involved in an incident that involves sharing “deepfake NCII”	13%
Gave guidance to parents about who students should tell within the school or school district if they receive or view “deepfake NCII”	13%
Explained to parents what “deepfake NCII” is and how it can be damaging to the person in the video, photo, or audio	12%
Explained that a parent whose child shared “deepfake NCII” could be subject to civil penalties on behalf of their child	12%
Shared how the school will communicate with students about the risks of “deepfake NCII”	4%
Shared how the school will communicate with students about the penalties associated with sharing “deepfake NCII”	4%
Shared how the school will communicate with students about how damaging “deepfake NCII” can be to the person in the video, photo, or audio	4%

[Students] Q75: Which, if any, of the following have been discussed or covered by your school as part of the guidance they gave to students about “deepfake NCII”? Select all that apply.

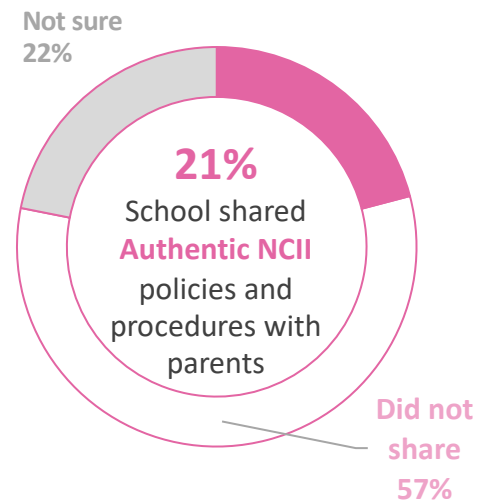
[Parents] Q75: Which, if any, of the following have been discussed or covered by your child’s school or school district as part of the guidance they gave to parents about “deepfake NCII”? [Yes/No/Not sure]

Few parents report that their school provided guidance to parents on their NCII policies and procedures

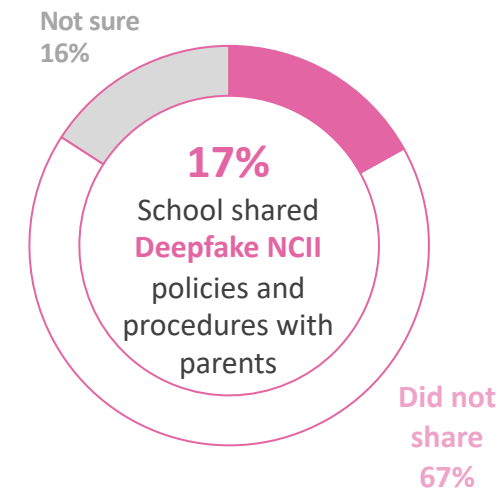
- Just as many are unsure, underscoring low parent awareness of NCII as an issue in schools compared to students and teachers.

School Shared Authentic and Deepfake NCII Policies and Procedures with Parents

■ Parents (n=1,028)



IEP/504 Program (28% vs. 18%)
Child disciplined (31% vs. 19%)
Black (30%) Hispanic (26%) vs. White (18%)
Urban (26%) vs. Rural (16%)



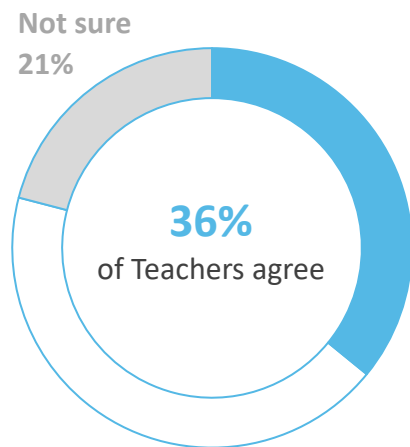
IEP/504 Program (24% vs. 14%)
Child disciplined (27% vs. 15%)
Black (23%) Hispanic (23%) vs. White (14%)
Urban (19%) vs. Rural (11%)

Most teachers and students do not think their school has the appropriate support mechanisms in place for victims of deepfake NCII

School Support for Individuals Depicted in Deepfake NCII

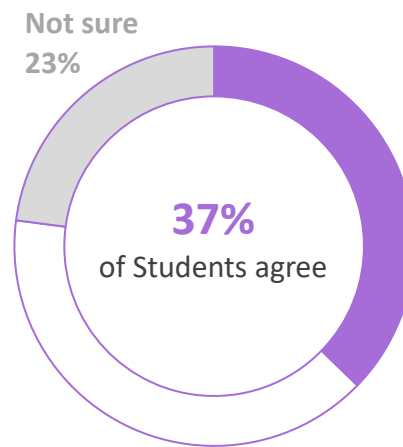
■ Students (n=1,316) | ■ Teachers (n=1,006) | ■ Parents (n=1,028)

My school has a fair process in place that adequately supports individuals who had deepfake NCII shared about them without their consent



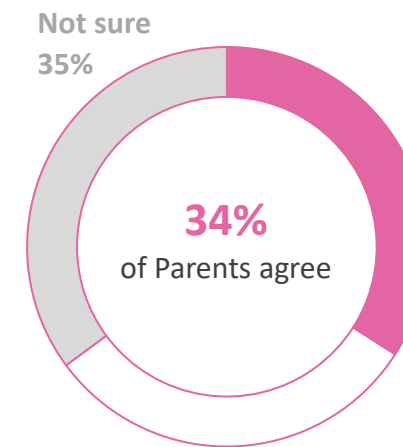
Licensed special educators (43% vs. 31%)
Urban (49%) Suburban (30%) Rural (26%)

My school has an effective way to help students who were pictured or heard in “deepfake NCII” that was shared without their permission



IEP/504 Program (48% vs. 30%)
Non-LGBTQ+ (41%) vs. LGBTQ+ (29%)
Not disciplined in last year (39%) vs. disciplined (29%)
Black (45%) Hispanic (43%) vs. White (35%)
Urban (54%) Suburban (34%) Rural (29%)

My child’s school has an effective way to help students who were pictured or heard in “deepfake NCII” that was shared without their consent



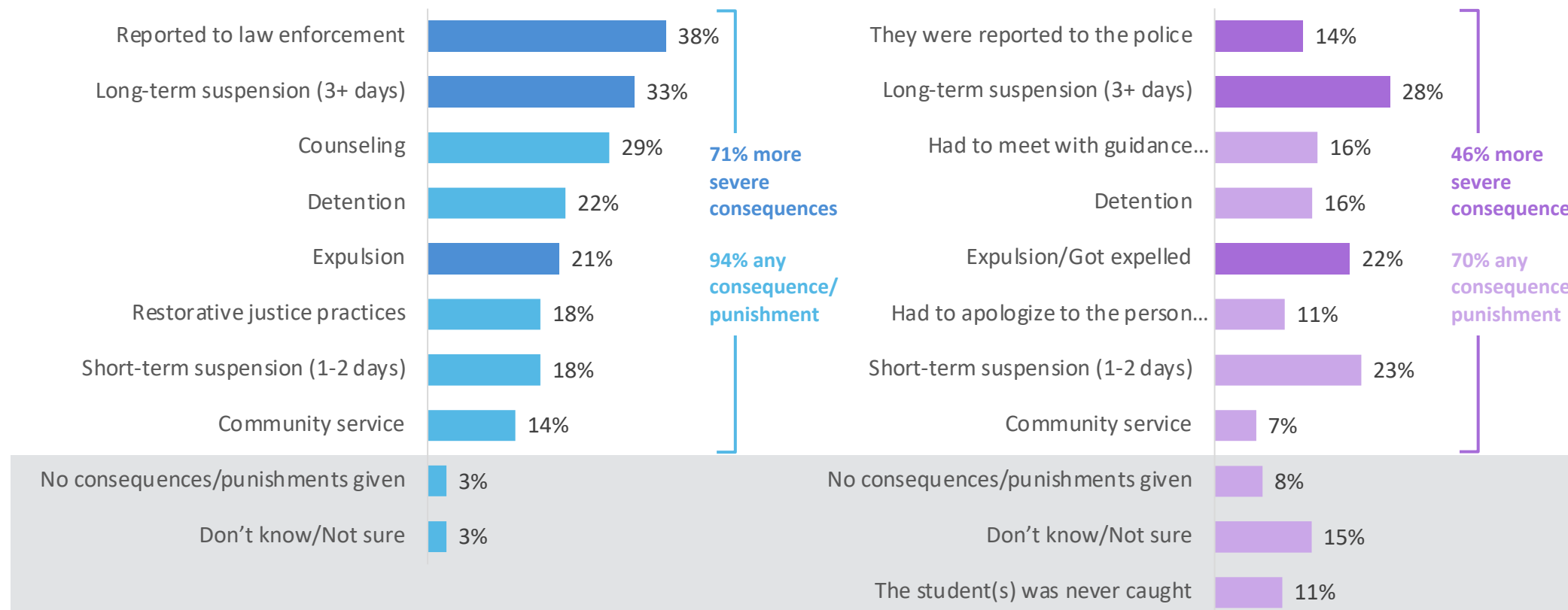
Black (51%) Hispanic (38%) vs. White (29%)
Urban (42%) Suburban (32%) Rural (30%)

Students who are caught sharing deepfake NCII can be subject to significant consequences

- Nearly all teachers report that their school took action in some way by punishing or delivering consequences to the student(s) who shared deepfake NCII.

Consequences to Individuals Sharing Deepfake NCII

■ Teachers (n=103) | ■ Students (n=202) who heard about deepfake NCII at their school in the last year



[Teachers] Q73: What consequences or punishment, if any, did the student(s) who shared the deepfake NCII without the consent of the person depicted receive from the school or school district? Select all that apply.
 [Students] Q73: What consequences or punishment, if any, did the student(s) who shared the deepfake NCII receive from the school or school district? Select all that apply.

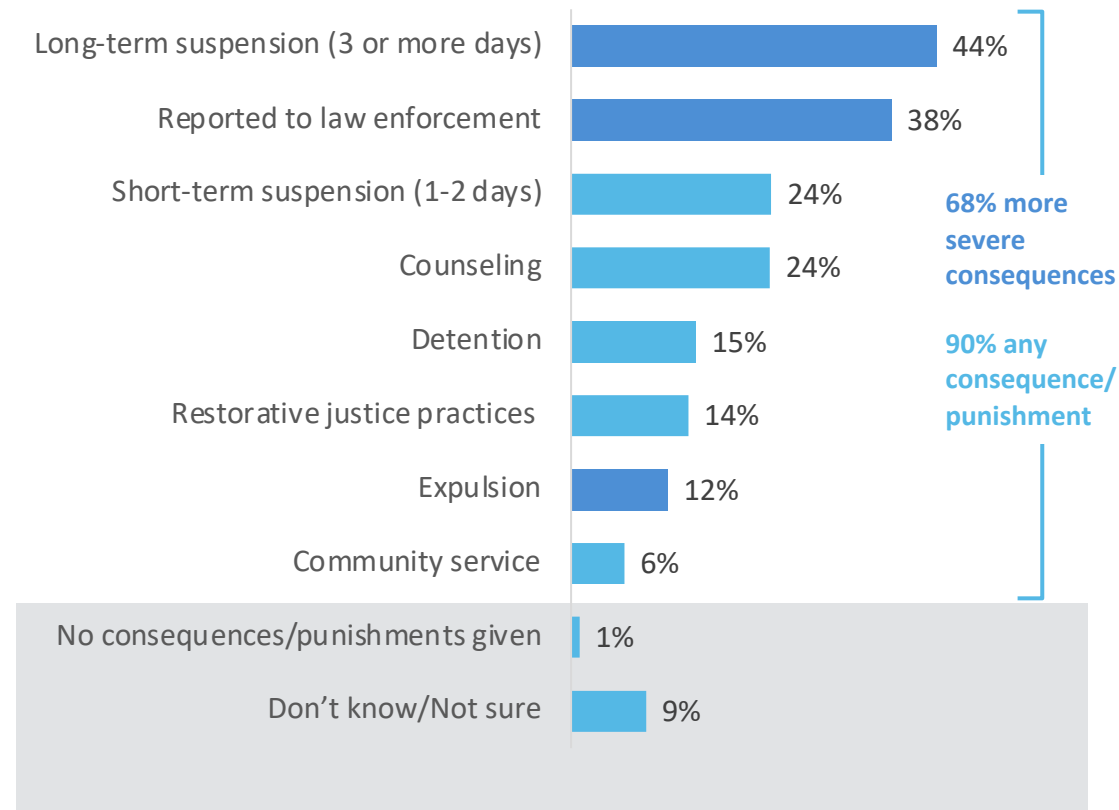
Rank ordered by Teacher %

Students who are caught sharing authentic NCII can be subject to significant consequences

- As with deepfake NCII, nearly all teachers report that their school took action in some way by punishing or delivering consequences to the student(s) who shared authentic NCII.

Consequences to Individuals Sharing Authentic NCII

■ Teachers (n=182) who heard about authentic NCII at their school in the last year



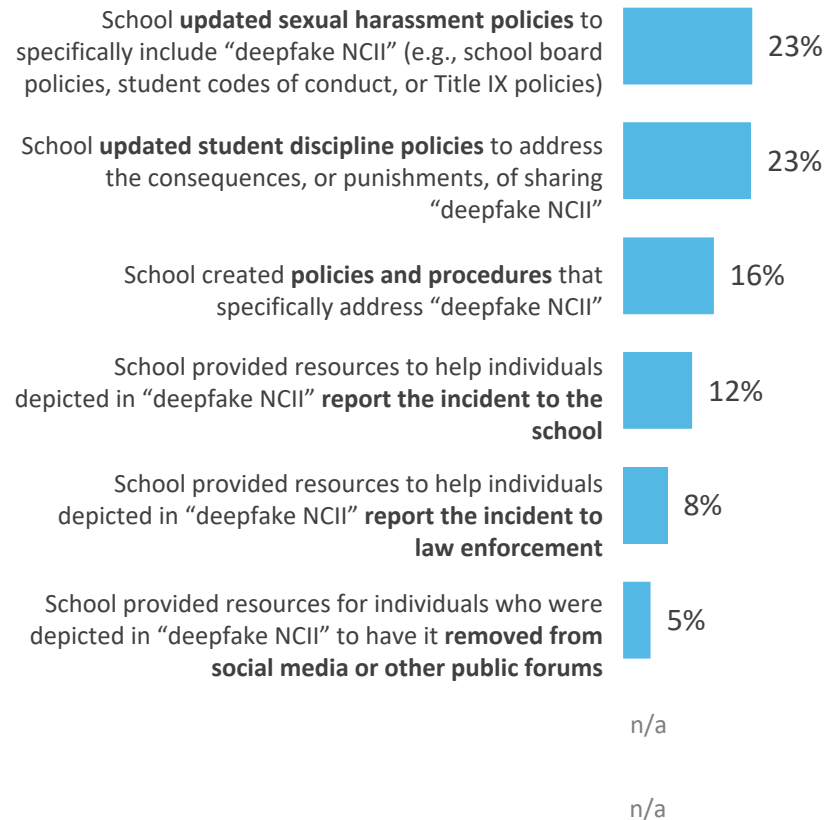
While parents indicate a strong desire for various support measures at school, teachers report very little is available

- Parents show strong support for doing more to educate students and parents to help prevent deepfake NCII from happening in the first place.

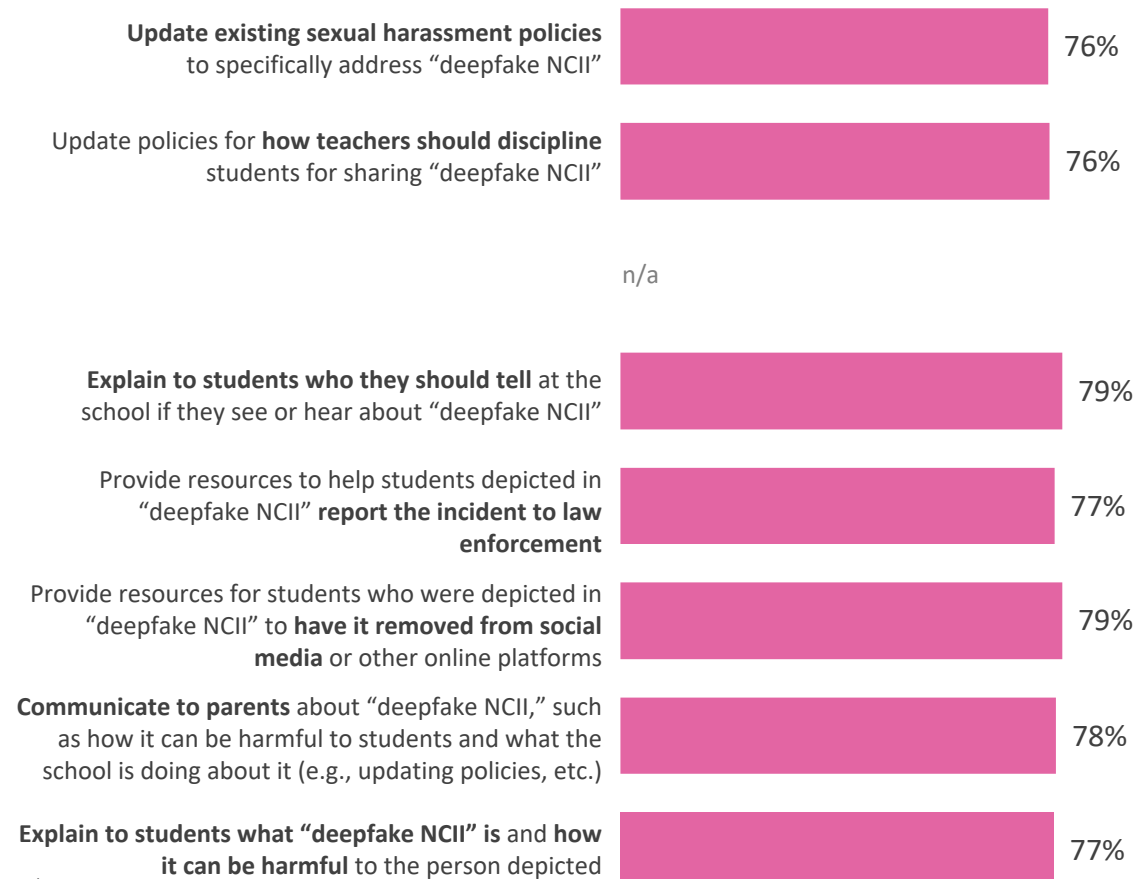
Teacher Reported and Parent Supported Measures for the School Addressing Deepfake NCII

■ Teachers (n=1,006) | ■ Parents (n=1,028)

Teachers: How School Has Responded to Address Deepfake NCII in Last School Year



Parents: Importance that Child’s School Addresses Deepfake NCII in These Ways



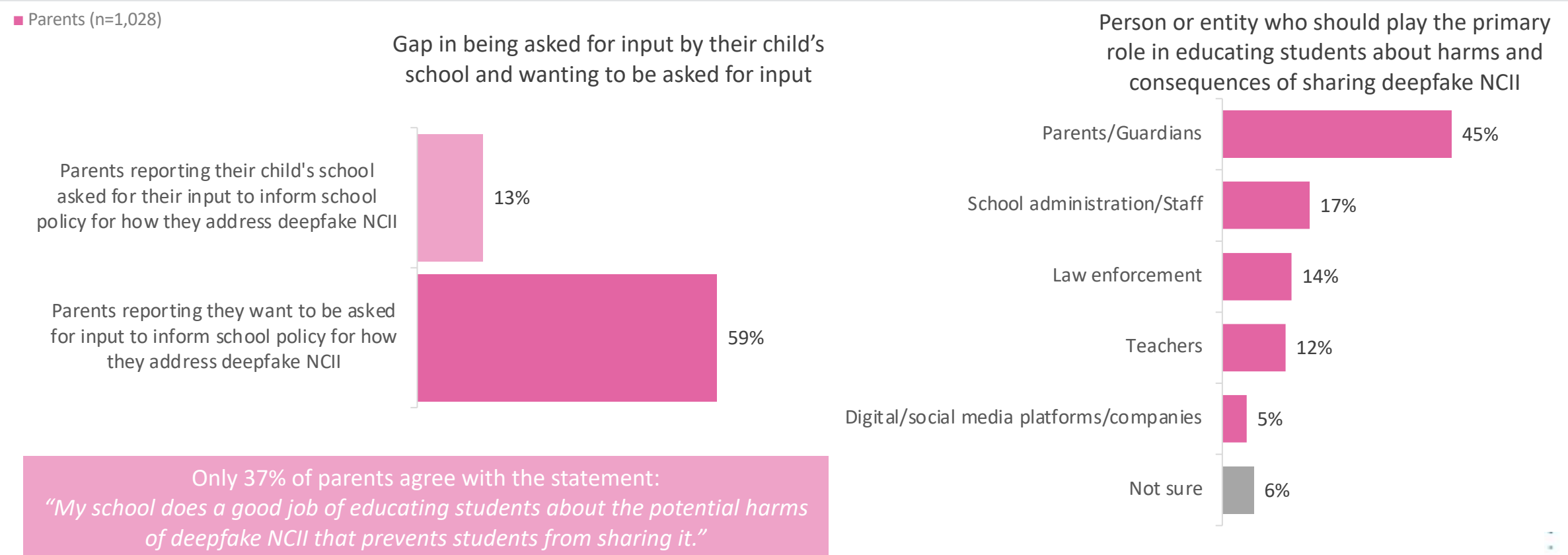
[Teachers] Q78: How, if at all, has your school responded in the last school year (2023-2024) to address deepfake NCII in your school? Select all that apply.

[Parents] Q75A: How important is it that your child’s school addresses “deepfake NCII” in each of the following ways? Select all that apply.

Parents want to be included in informing school policy for addressing authentic and deepfake NCII

- However, there is a large gap between parents saying they *are* included in the process when schools are creating policy for addressing deepfake NCII and those that want to be.
- Nearly half of parents say that they should be the primary person responsible for talking to their children about NCII, more than any other person or entity.

Parent Involvement in Schools' Deepfake and NCII Policymaking



[Parents] Q74B: Has your child's school or school district asked for your input as a parent to inform school or school district policies for how they address "deepfake NCII"?

[Parents] Q74C: Do you want to be asked for input in the school's policy making process for addressing "deepfake NCII" being shared in school?



[Parents] QXX: Who should play the primary role in educating students about the harms and potential consequences of sharing "deepfake NCII"?


Parents prefer less severe school responses than teachers report are given

- While teachers report law enforcement involvement and long-term suspension as the top consequences for students who shared deepfake NCII, parents prefer less harsh penalties – educating the student(s) about the harmful impacts of sharing deepfake NCII and counseling for the student who shared the deepfake NCII.

Teacher stated and Parent-Suggested Consequences to Individuals Sharing Deepfake NCII

■ Teachers (n=1,006) | ■ Parents (n=1,028)

<u>Top 3 reported</u>	Teacher-reported consequences that their school has imposed in the past school year	<u>Top 3 suggested</u>	Parent-suggested consequence for a student's first offense	Parent-suggested consequence for a student who has done it before
#1	 Law enforcement referral	#1	Teach student who shared deepfake NCII about its harmful impacts* 	Teach student who shared deepfake NCII about its harmful impacts*
#2	 Long-term suspension	#2	Counseling 	Counseling, Law enforcement referral (tied)  
#3	 Counseling	#3	Give the student a warning* 	Long-term suspension; Expulsion (tied) 

 Only 17 percent of parents approve of a law enforcement referral for a first offense. And 27% do so for a second offense.

*option was added to the Parent survey after the Teacher survey had already fielded without this option

[Teachers] Q73: What consequences or punishment, if any, did the student(s) who shared the deepfake NCII without the consent of the person depicted receive from the school or school district? Select all that apply.

[Parents] Q73: How should your child's school respond to an incident of "deepfake NCII" being shared by a student if it was the student's first offense? Select up to three from the list below.

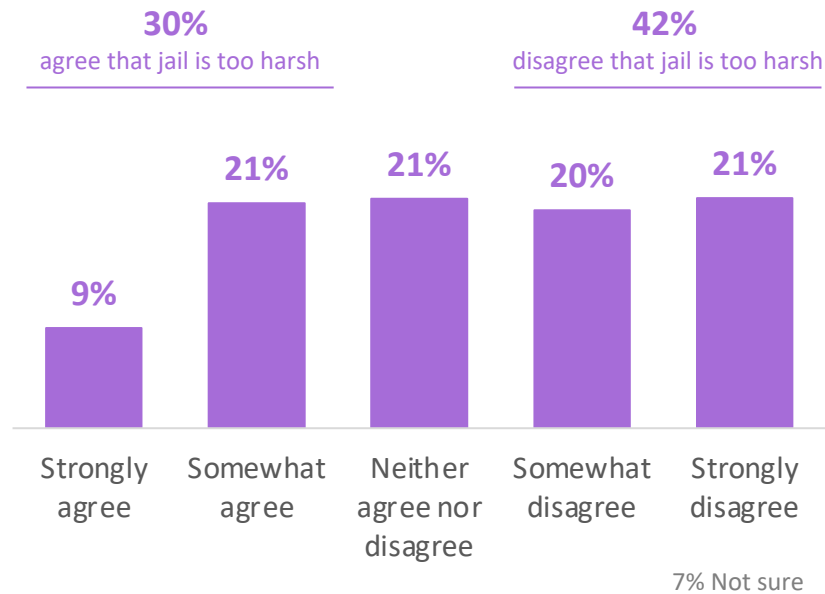
[Parents] Q73A: How should your child's school respond to an incident of "deepfake NCII" being shared by a student who has shared it before (e.g., it is not their first offense)? Select up to three from the list below.

Students are not opposed to harsh penalties for students that share deepfake NCII – however, a plurality feel there should be leniency for first time offenders

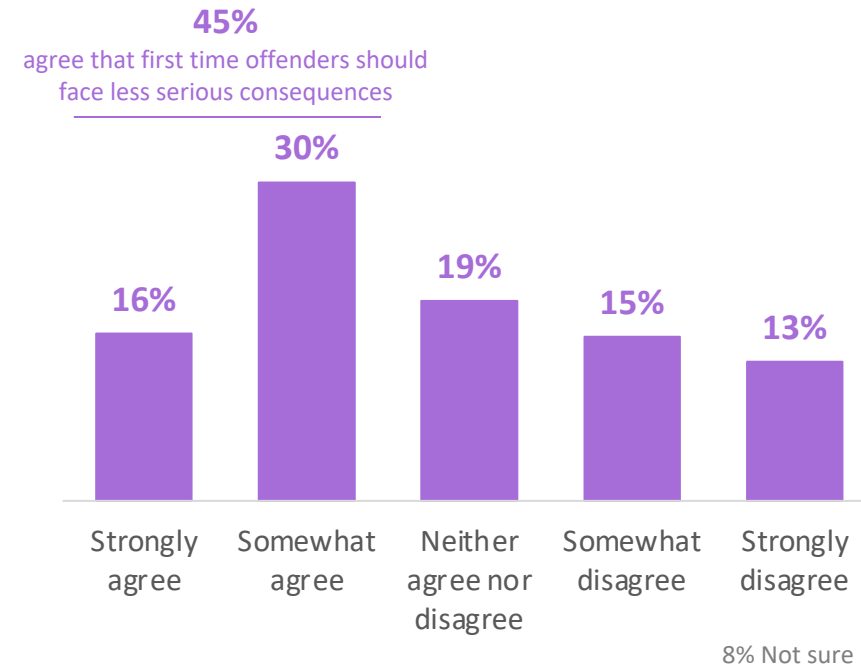
Student Perceptions of Legal/Criminal Consequences for Sharing Deepfake NCII

■ Students (n=1,316)

It is too harsh a punishment to send a student to jail if they share “deepfake NCII”



Students who have only been caught sharing deepfake NCII once should face less serious criminal consequences than someone that has done it more than once



[Students] Q79: How much do you agree or disagree with each of the following statements?

Contact Us

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The Center for Democracy & Technology is a 25-year old 501(c)(3) working to promote civil rights and civil liberties in the digital age. Based in Washington, D.C., and Brussels, Belgium, CDT works inclusively across sectors to find tangible solutions to today's most pressing technology policy challenges. Our team of experts includes lawyers, technologists, academics, and analysts, bringing diverse perspectives to all of our efforts.

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/>.