



StaySafeOnline.org
National Cyber Security Alliance

**The State of K-12
Cyberethics, Cybersafety and
Cybersecurity
Curriculum in the United States**

**National Cyber Security Alliance
Microsoft Corporation
Zogby/463**

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Methodology

Zogby/463 surveyed a statistically relevant sample of administrators (principals and superintendents), teachers and technology coordinators at K-12 private and public schools across the United States.

The National Cyber Security Alliance has tested the attitudes of K-12 schools on digital safety, security and ethics since 2008. *The State of Cyberethics, Cybersafety and Cybersecurity Curriculum in the U.S. Survey* is now in its third year of publication.

As an annual study, we ask each year a set of core questions to the survey population to measure changes in perceptions and attitudes as well as practices in schools and classrooms. Year over year results are provided for comparison purposes and should not be relied upon as trending data since each year some of the questions are expanded or modified to address topics relevant to national current events.

For the study, Zogby/463 surveyed 1,012 teachers, 200 technology coordinators, and 402 school administrators (325 principals and 77 superintendents) in January and February 2011, using a research design of online surveys and telephone interviews.

The teachers group subsample had a margin of error of +/- 3.1 percentage points, technology coordinators subsample a margin of error of +/- 7.1 percentage points, and school administrators subsample had a margin of error of +/- 5.0 percentage points.

Narrative Summary

**Note: Due to rounding, the percentages may not total 100.*

Questions 1-7 are asked of all respondents.

- 1) Level of agreement - Cyberethics, Cybersafety, and Cybersecurity curriculum should be taught in schools.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Teachers	55%	36%	91%	4%	1%	5%	4%
Administrators	82%	15%	97%	1%	1%	2%	2%
Technology Coordinators	85%	14%	99%	1%	0%	1%	1%

- 2) Level of agreement - My school/school district does an adequate job of preparing students regarding Cyberethics, online safety, and computer security issues.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Teachers	11%	40%	51%	25%	16%	41%	9%
Administrators	38%	43%	81%	12%	4%	16%	3%
Technology Coordinators	36%	45%	81%	10%	6%	16%	4%

- 3) Level of agreement - My school/school district requires cyberethics curriculum be taught in the classroom setting.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Teachers	9%	20%	29%	23%	29%	52%	19%
Administrators	42%	26%	68%	17%	11%	28%	5%
Technology Coordinators	31%	28%	59%	15%	17%	32%	10%

4) Level of agreement - My school/school district requires cybersafety curriculum be taught in the classroom setting.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Teachers	11%	22%	33%	21%	28%	49%	17%
Administrators	43%	26%	69%	14%	13%	27%	5%
Technology Coordinators	37%	27%	64%	15%	16%	31%	6%

5) Level of agreement - My school/school district requires cybersecurity curriculum be taught in the classroom setting.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Teachers	10%	20%	30%	22%	30%	52%	18%
Administrators	41%	29%	70%	13%	13%	26%	4%
Technology Coordinators	29%	29%	58%	16%	17%	33%	10%

6) Which of the following describes the policies and/or procedures your school/school district uses to ensure appropriate use of technology and the Internet? *(Choose all that apply)*

	Teachers	Administrators	Technology Coordinators
Students must sign a 'contract' agreeing to use computers responsibly and for appropriate purposes	75%	86%	95%
Teachers and librarians/media specialists are required to use classroom management techniques to monitor use and instruct students on responsible and appropriate use	74%	86%	83%
Filters (i.e., a mechanism to limit Internet access to certain forms of information) are installed on computers	87%	92%	92%
Social networking sites are blocked	82%	89%	86%
Students and parents are required to read the school's/school district's Acceptable Use Policy and Student Code of Conduct	75%	84%	92%

Students are not allowed to use mobile devices in schools	57%	50%	73%
Students have limited use of mobile devices	37%	25%	33%
Other	3%	<1%	2%
Not sure	3%	<1%	0%

7) Which of the following way describes how your school/school district informs student and educators about technology and online policies? (Choose all that apply)

	Teachers	Administrators	Technology Coordinators
Group Assemblies	31%	53%	50%
Faculty Meetings	63%	73%	84%
Dedicated classroom time specifically for that purpose	30%	56%	62%
Policies delineated in handbooks	73%	74%	90%
Modeling good behavior	39%	60%	84%
PTA Meetings	20%	38%	43%
Signage in break rooms	9%	28%	35%
Signage in classrooms	25%	36%	58%
Newsletters	30%	46%	63%
Structured training	25%	45%	65%
Other	6%	3%	5%
Not sure	6%	2%	<1%

Questions 8-13 are asked of teachers and administrators.

8) Please tell me how prepared you are to talk about the following - Strategies to protect personal information in online environments

	Not Prepared			3	Prepared			Not sure
	1 Not at all	2	Overall (1+2)		4	5 Very well prepared	Overall (4+5)	
Teachers	6%	12%	18%	24%	30%	24%	54%	3%
Administrators	5%	7%	12%	23%	26%	37%	63%	2%

9) Please tell me how prepared you are to talk about the following – Cyberbullying

	Not Prepared			3	Prepared			Not sure
	1 Not at all	2	Overall (1+2)		4	5 Very well prepared	Overall (4+5)	

Teachers	6%	11%	17%	24%	34%	23%	57%	2%
Administrators	4%	6%	10%	20%	27%	40%	67%	3%

10) Please tell me how prepared you are to talk about the following - Online posts that include 'hate speech'

	Not Prepared				Prepared			
	1 Not at all	2	Overall (1+2)	3	4	5 Very well prepared	Overall (4+5)	Not sure
Teachers	6%	12%	18%	22%	32%	23%	55%	4%
Administrators	4%	9%	13%	19%	30%	35%	65%	4%

11) Please tell me how prepared you are to talk about the following - Sexting or sending sexually explicit messages or photos

	Not Prepared				Prepared			
	1 Not at all	2	Overall (1+2)	3	4	5 Very well prepared	Overall (4+5)	Not sure
Teachers	8%	12%	20%	18%	30%	28%	58%	3%
Administrators	7%	6%	13%	16%	22%	47%	69%	3%

12) Please tell me how prepared you are to talk about the following - Basic computer security such as the need for security software, passwords and backing up data

	Not Prepared				Prepared			
	1 Not at all	2	Overall (1+2)	3	4	5 Very well prepared	Overall (4+5)	Not sure
Teachers	4%	9%	13%	19%	34%	33%	67%	2%
Administrators	4%	3%	7%	10%	20%	61%	81%	2%

13) Which of the following best describes whom you deem to be primarily responsible for conveying information to students about the ethical, safe, secure, responsible and acceptable use of technology? (*Choose only ONE*)

	Not Prepared			3	Prepared			Not sure
	1 Not at all	2	Overall (1+2)		4	5 Very well prepared	Overall (4+5)	
Teachers	38%	4%	42%	12%	26%	6%	32%	14%
Administrators	48%	3%	51%	14%	22%	12%	34%	2%

Questions 14-19 are asked of teachers only.

14) Which of the following topics have you taught in the last 12 months related to cyberethics? (*Choose all that apply*)

	Teachers
Dealing with posts, videos, or other web content that scares you	18%
How to send an email	20%
Respecting the privacy of others	33%
Exercising proper 'netiquette,' or knowing how to conduct one's self while online that is appropriate and courteous to others	28%
Hacking, or gaining access to a computer file or network without authorization	8%
Plagiarism	47%
Downloading (legally or illegally) music and video files	21%
Dealing with posts, videos or other Web content that contain 'hate speech'	15%
Other	4%
None	32%
Not sure	2%

15) Which, if any, of the following topics related to cybersafety have you taught in the last 12 months? (*Choose all that apply*)

	Teachers
Warning signs to let your parents know about	17%
The risks tied to social networking sites	33%
How to make decisions about sharing personal information on the Internet	34%
Watching out for online predators	27%
What to do if you or someone you know receives inappropriate or harassing messages	25%
What to do if someone posts unwanted or inappropriate material (i.e., within a social networking site)	19%

The value of privacy and personal information and your responsibility for protecting the information and reputations of friends, family, and others online	30%
Scams, fraud, and social engineering	18%
The safe use of geo-location services	6%
Sexting or the inappropriate sharing of sexually suggestive images	17%
Other	2%
None	41%
Not sure	2%

16) Which of the following topics related to cybersecurity have you taught in the last 12 months?
(Choose all that apply)

	Teachers
Using strong passwords	23%
Changing passwords often	19%
Knowing when it is safe to download a file	20%
Risks associated with peer-to-peer networks	19%
How to identify a secure Web site	18%
Identity theft	17%
Protecting computers from malicious software	15%
The role of a more secure Internet in our economy	7%
The role of a more secure Internet in our national security	6%
Protecting a mobile device	6%
Careers in cybersecurity	4%
Other	1%
None	50%
Not sure	2%

17) On a scale of 1 to 4, with 1 being low priority and 4 being high priority, how much of a priority do you think Cyberethics, Cybersafety, and Cybersecurity training is to your personal career development needs?

	Teachers
1 Low Priority	14%
2	22%
Overall low priority (1+2)	36%
3	36%
4 High Priority	26%
Overall high priority (3+4)	62%
Not sure	3%

18) Within the last 12 months, about how much total time have you spent on Cyberethics, Cybersafety, and Cybersecurity training provided by your school/school district?

	Teachers
0 hours	36%
1-3 hours	40%
4-6 hours	10%
6-15 hours	5%
16-35 hours	2%
More than 35 hours	1%
Other/Not sure	5%

19) Within the last 12 months, about how much time have you spent on training and/or continuing education for Cyberethics, Cybersafety, and Cybersecurity either on your own time, including attendance at professional meetings, workshops, and conferences, or college courses?

	Teachers
0 hours	44%
1-3 hours	32%
4-6 hours	10%
6-15 hours	5%
16-35 hours	3%
More than 35 hours	1%
Other/Not sure	5%

Question 20 is asked of technology coordinators only.

20) What type of professional development training would you like to provide teachers over the next 12 months:

	Technology Coordinators
Online training that could be completed via computer at any time	30%
In-School/School District Workshops	21%
All of the above	45%
Not sure	5%

Questions 21-23 are asked of all respondents.

21) Level of interest in training in or receiving materials about the following - Cyber ethical issues (e.g., promoting academic integrity, combating and detecting plagiarism, rules for respecting copyright and downloading, helping students evaluate online)

	Interested			Not Interested			Not sure
	Very	Somewhat	Overall	Not very	Not at all	Overall	
Teachers	28%	45%	73%	14%	11%	25%	3%
Administrators	25%	38%	63%	11%	26%	37%	<1%
Technology Coordinators	32%	38%	70%	8%	22%	30%	<1%

22) Level of interest in training in or receiving materials about the following - Cybersafety issues (e.g., safer and best practices for social networking sites, dealing with inappropriate content, the telltale signs of possible suicide, reporting suspect)

	Interested			Not Interested			Not sure
	Very	Somewhat	Overall	Not very	Not at all	Overall	
Teachers	33%	45%	78%	13%	8%	21%	2%
Administrators	32%	36%	68%	8%	24%	32%	1%
Technology Coordinators	45%	30%	75%	7%	18%	25%	2%

23) Level of interest in training in or receiving materials about the following - Cybersecurity issues (e.g., Phishing, hacking, malware, identity theft, strategies to secure your computer, etc.)

	Interested			Not Interested			Not sure
	Very	Somewhat	Overall	Not very	Not at all	Overall	
Teachers	35%	43%	78%	13%	8%	21%	2%
Administrators	29%	34%	63%	11%	25%	36%	2%
Technology Coordinators	41%	32%	73%	7%	20%	27%	1%

Question 24 is asked of administrators and technology coordinators.

24) In which of the following ways do most educators within your school/school district learn about Cyberethics, Cybersafety, and Cybersecurity issues? (Choose up to TWO)

	Administrators	Technology Coordinators
School/school district sponsored workshops or seminars	49%	45%
Mandatory professional development days dedicated to such issues	33%	41%
One-to-one or group trainings dedicated to such issues with technology coordinators or aides	25%	28%
Flyers, newsletters, or Web sites	23%	22%
Mentioned within other professional development activities	12%	20%
Workshops, seminars, and/or courses paid for by participants	14%	10%
Other	3%	11%
Not Sure	4%	3%

Question 25 is asked of all respondents.

25) Who do you primarily deem responsible for teaching children to use computers safely and securely? (Choose only ONE)

	Teachers	School Administrators	Technology Coordinators
Parents	79%	60%	45%
Teachers/schools	18%	34%	52%
Government	<1%	<1%	0%
Law enforcement	<1%	0%	<1%
Other	<1%	4%	3%
Not sure	2%	1%	<1%

Questions 26-27 are asked of administrators and technology coordinators.

26) Which of the following is the primary provider of Internet safety course work/curriculum that your school/school district uses? (*Choose only ONE*)

	Administrators	Technology Coordinators
A sole external source	6%	9%
A combination of two or more external sources	5%	6%
A combination of external sources and in-house materials	38%	46%
Internal, in-house course work/curriculum only	40%	30%
Other	2%	2%
Not sure	8%	9%

27) Which of the following is the primary external Internet safety course work/curriculum your school/school district uses? (*Choose only ONE*)

	Administrators	Technology Coordinators
CyberSmart!	7%	6%
iKeepSafe	1%	2%
i-SAFE	10%	12%
NetSmartz	8%	11%
Common Sense Media	3%	5%
Other	32%	37%
Not sure	38%	30%

Question 28 is asked of technology coordinators only.

28) About how much total time have you spent providing in-service education for Cyberethics, Cybersafety, and Cybersecurity issues for your school/school district?

	Technology Coordinators
None	17%
1-3 hours	40%
4- 6 hours	21%
6-15 hours	10%
16-35 hours	3%
More than 35 hours	4%
Other/Not sure	7%

Questions 29-31 are asked of teachers only.

29) I give assignments that require students to use the Internet at home. . . ?

	Teachers
Daily	5%
Weekly	22%
Monthly	17%
Quarterly	11%
Never	41%
Not sure	4%

30) Our school has a dedicated computer lab.

	Teachers
Yes	89%
No	9%
Not Sure	1%

31) Approximately, how often do your students use computers during the school day?

	Teachers
Daily	32%
2-4 times per week	26%
Weekly	22%
Monthly	7%
Quarterly	3%
Never	4%
Not sure	5%

Questions 32-35 are asked of administrators only.

32) Level of agreement - Schools should have curriculum throughout k-12 that prepares young people for careers in cybersecurity.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Administrators	48%	34%	82%	14%	4%	18%	1%

33) Level of agreement - My school/school district does an adequate job of preparing students to pursue college level (2 or 4 year) education in cybersecurity.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Administrators	35%	33%	68%	18%	10%	28%	4%

34) Level of agreement - Schools should have curriculum throughout k-12 that prepares young people to enter the workforce as 'cyber capable' employees, meaning they are able to use basic technology in a safer and more secure way).

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Administrators	74%	23%	97%	2%	1%	3%	1%

35) Level of agreement - My school/school district does an adequate job of preparing as 'cyber capable' employees.

	Agree			Disagree			Not sure
	Strongly	Somewhat	Overall	Somewhat	Strongly	Overall	
Administrators	47%	37%	84%	9%	5%	14%	2%

Questions 36-37 are asked of all respondents.

36) What type of school are you involved in or employed by? (*Choose all that apply*)

	Teachers	Administrators	Technology Coordinators
Pre-Kindergarten	8%	19%	30%
K-5th grade	39%	45%	69%
6th-8th grade	30%	41%	64%
9th-12th grade	43%	43%	46%
Other/Not sure	6%	22%	3%

37) Which of the following best describes your location? (*Choose only ONE*)

	Teachers	Administrators	Technology Coordinators
Rural or farming community	15%	23%	35%
Small town	19%	23%	21%
Large town	9%	6%	9%
Mid-size city	17%	18%	11%
Suburb of a mid-size city	13%	7%	3%
Large city	13%	16%	13%
Suburb of a large city	13%	7%	9%
Other/Not sure	<1%	<1%	0%

Question 38 is asked of teachers only.

38) Which of the following titles best describes you?

	Teachers
Content teacher	68%
Technology teacher	4%
Media specialist	2%
Other	25%
Not sure	1%