Educational Technology in Public School Districts: Fall 2008

First Look

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First Look

DECEMBER 2009

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FRSS
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December 2009

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First Look Summary

Introduction

This report provides national data on the availability and use of educational technology in public school districts during fall 2008. The data are the results of a national district-level survey that is one of a set that includes district, school, and teacher surveys on educational technology. Every year between 1994 and 2005 (with the exception of 2004), the Office of Educational Technology (OET) in the U.S. Department of Education asked the National Center for Education Statistics (NCES) to conduct a survey of public schools to track access to information technology in schools and classrooms. NCES used its Fast Response Survey System (FRSS) to conduct these surveys. For fall 2008, this OET-sponsored technology study was redesigned and expanded to incorporate surveys at the district, school, and teacher levels. These three surveys provide complementary information and together cover a broader range of topics than would be possible with one survey alone. Prior to 2008, the surveys focused on computer and Internet access and use, as well as procedures to prevent student access to inappropriate material on the Internet and teacher professional development on technology use.[1] The set of 2008 surveys collected data on availability and use for a range of educational technology resources, such as district and school networks, computers, devices that enhance the capabilities of computers for instruction, and computer software. They also collected information on leadership and staff support for educational technology within districts and schools.

During the design phase for the 2008 study, research was conducted to determine how specific topics and survey questions should be distributed across the three surveys. The surveys were developed to reflect how information on educational technology is kept within most public school systems. This report presents results from the district-level survey, including information on networks and Internet capacity, technology policies, district-provided resources, teacher professional development, and district-level leadership for technology. The district survey covers the following specific topics:

- Number of schools in the district with a local area network connecting computers within the school;

- District networks connecting schools to the district and the number of schools with each type of district network connection;

- Types of connections from districts to Internet service providers and backup connections to the Internet;

- Formal computer replacement plans, asset recovery programs (i.e., third-party disposal services) for computers, and treatment of older computers that can no longer serve their original purposes;

- Types of technology resources that districts offer to elementary and secondary teachers and students;

- Written policies on acceptable student use of various technologies;

- Types of student data kept in an electronic data system;

- Employment of an individual responsible for educational technology leadership;

- Teacher professional development offered or required by districts in various educational technology topics; and

- Opinions of district respondents about statements related to the use of educational technology in the instructional program in the district.

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[1] A list of related reports from the 1994 through 2005 FRSS technology surveys of public schools may be found on page 21.

The questionnaire instructed districts to answer the survey using fall 2008 information and provided the following definitions to be used when answering the survey.

Technology: Information technology such as computers, devices that can be attached to computers (e.g., LCD projector, interactive whiteboard, digital camera), networks (e.g., Internet, local networks), and computer software. We specifically are not including non-computer technologies such as overhead projectors and VCRs.

Asset recovery program: Asset recovery programs provide third-party disposal services for owned or leased computers, which are then usually refurbished or recycled.

Blogs: Websites where an individual or group creates a running log of entries that can be read by other users, such as in a journal.

Wikis: Collaborative websites that allow users to freely create and edit web page content (e.g., Wikipedia).

Social networking websites: Online social networks for communities of people who share interests and activities or who are interested in exploring the interests and activities of others (e.g., Facebook, MySpace).

NCES in the Institute of Education Sciences conducted this FRSS survey in fall 2008. FRSS is a survey system designed to collect small amounts of issue-oriented data from a nationally representative sample of districts, schools, or teachers with minimal burden on respondents and within a relatively short period of time. Questionnaires were mailed to approximately 1,600 public school districts in the 50 states and the District of Columbia. The unweighted survey response rate was 92 percent and the weighted response rate was 90 percent. The survey weights were adjusted for questionnaire nonresponse and the data were then weighted to yield national estimates that represent all public school districts in the United States.

Because the purpose of this report is to introduce new NCES data through the presentation of tables containing descriptive information, only selected findings are presented. These findings have been chosen to demonstrate the range of information available from the FRSS study rather than to discuss all of the observed differences; they are not meant to emphasize any particular issue. The findings are based on self-reported data from public school districts.

All specific statements of comparisons made in the bullets have been tested for statistical significance at the .05 level using Student's *t*-statistics to ensure that the differences are larger than those that might be expected due to sampling variation. Adjustments for multiple comparisons were not included. Many of the variables examined are related to one another, and complex interactions and relationships have not been explored. Tables of standard error estimates are provided in appendix A. Detailed information about the survey methodology is provided in appendix B, and the questionnaire can be found in appendix C.

Selected Findings

This section presents key findings on educational technology in public school districts in fall 2008.

- Districts reported information on local area networks connecting computers within a school, district networks connecting schools to the district, and connections to the Internet. Ninety-seven percent of districts had a local area network in all schools and 2 percent had it in some schools (table 1). Eighty-one percent of districts provided a district network to all schools and 3 percent provided it to some schools. Of the districts surveyed, 100 percent of those with a district network were connected to the Internet.[2]

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[2] Data on Internet connections were collected only from districts with district networks.

- Districts reported that 92 percent of public schools were connected to a district network (table 2). Among these schools, the types of connections from schools to districts included direct fiber (55 percent), T1 or DS1 lines (26 percent), and wireless connections (16 percent).[3]

- Among the 84 percent of districts with a district network, the types of connections from districts to Internet service provider(s) included T1 or DS1 lines (42 percent), direct fiber (37 percent), wireless connections (18 percent), broadband cable (13 percent), and T3 or DS3 lines (12 percent) (table 3). Direct fiber connections were reported by a larger percentage of city districts than by suburban, town, or rural districts (62 percent versus 49 percent, 46 percent, and 24 percent, respectively). Relatively more rural districts than city districts reported T1 or DS1 connections (51 percent versus 18 percent).

- Sixty-seven percent of districts had a formal computer replacement plan reflected in long-term budget planning (table 4). An asset recovery program for computers was used by 37 percent of districts for all computers and by 22 percent for some computers. Districts treated older computers that could no longer serve their original purpose by recycling or disposing (91 percent), re-purposing for less demanding tasks (85 percent), and upgrading memory or components to extend useful life (83 percent) (table 5).

- The percentage of districts that offered access to online district resources to all elementary or all secondary teachers was 92 percent (table 6). The percentage that offered access to electronic administrative tools to all teachers was 87 percent for elementary and 95 percent for secondary. The percentage that offered server space for posting web pages or class materials to all teachers was 82 percent for elementary and 83 percent for secondary.

- The percentage of districts that offered online access to the library catalogue to all students was 72 percent for elementary and 82 percent for secondary (table 7). The percentage that offered electronic storage space on a server to all students was 62 percent for elementary and 83 percent for secondary.

- Districts had written policies on acceptable student use of email (84 percent), social networking websites (76 percent), wikis and/or blogs (52 percent), and other Internet use (92 percent) (table 8).

- Of the districts surveyed, 100 percent kept student data in an electronic data system (table 9). The percentage of districts that used an electronic system to keep each type of student data asked about in the survey ranged from 80 percent for transportation data to 100 percent for attendance data. Eighty-nine percent of districts reported keeping state standardized assessment scores, and 85 percent reported keeping district-wide assessment results in their electronic data systems.

- Districts reported employing an individual responsible for educational technology leadership who was devoted to this role full time (51 percent) or part time (32 percent) (table 10). Seventeen percent of districts reported no one in this role; more small districts than large districts reported no one with this function (21 percent of districts with an enrollment size less than 2,500 compared to 5 percent of districts with an enrollment size of 10,000 or more).

- Districts reported offering teacher professional development in topics such as integrating technology into instruction (95 percent), using Internet resources and communication tools for instruction (91 percent), and Internet safety (89 percent) (table 11). Fifty-five percent of districts required teachers to take professional development in Internet safety.

- Eighty-three percent of district respondents agreed with the statement "teachers are interested in using technology in classroom instruction," while 58 percent agreed that "teachers are sufficiently trained to integrate technology into classroom instruction" (table 12). Forty-two percent of respondents agreed that "funding for educational technology is adequate," and 83 percent agreed that "funding for educational technology is being spent in the most appropriate ways."

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[3] For definitions of network connections, see the technical notes, page B-11.

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Table 1. Percent of public school districts with local area (school-level) network(s), percent with a district network, and of those with a district network, percent connected to the Internet, by district characteristics: Fall 2008

District characteristic	Local area network in:[1]		District network in:[1]		Connected to the Internet[2]
	All schools	Some schools	All schools	Some schools	
All public school districts	97	2	81	3	100
District enrollment size					
Less than 2,500	98	2	75	3	100
2,500 to 9,999	97	3	94	3	100
10,000 or more	97	2	96	4	100
Community type					
City	97	3	89	3	100
Suburban	98	1	92	1	100
Town..	97	3	88	5	100
Rural	97	3	73	3	100
Region					
Northeast	99	1!	81	2	100
Southeast	98	2	86	2	100
Central	97	2	78	4	100
West	96	4	83	3	100
Poverty concentration					
Less than 10 percent	99	1	85	1	100
10 to 19 percent	98	2	78	5	100
20 percent or more	95	5	80	3	100

! Interpret data with caution; the coefficient of variation is greater than 50 percent.
[1] The base for these percentages is the total population of public school districts.
[2] The base for this column is the 84 percent of public school districts with a district network.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 2. Percent of public schools with a local area (school-level) network, percent connected to the district network, and of those with a district network, percent with each type of connection to the district, by district characteristics: Fall 2008

District characteristic	Schools with a local area network[1]	Schools connected to the district network[1]	Type of connection from school to district[2]							
			Dial-up or ISDN[3]	DSL[4]	Broad-band cable	T1 or DS1	T3 or DS3	Direct fiber	Wireless	Other
All public schools ..	99	92	#	2	5	26	4	55	16	8
District enrollment size										
Less than 2,500	98	80	1!	5	7	35	4	48	21	2
2,500 to 9,999	99	96	#	1	5	22	4	60	16	7
10,000 or more	99	99	#	1	5	23	4	57	13	12
Community type										
City	99	98	#	1	4	25	6	57	11	9
Suburban	99	98	#	1	7	25	4	58	13	11
Town	99	92	#	2	3	20	5	67	18	4
Rural	98	81	1!	5	7	33	3	44	24	5
Region										
Northeast	100[5]	88	#	2	9	23	6	57	15	6
Southeast	99	94	#	#	7	19	3	57	14	14
Central	98	90	1!	2	5	26	4	59	19	5
West	98	95	#	3	2	33	4	51	16	8
Poverty concentration										
Less than 10 percent	99	91	#	1	7	26	3	60	16	6
10 to 19 percent	99	93	#	2	6	24	5	55	18	9
20 percent or more	98	92	#	2	4	30	4	52	15	9

Rounds to zero.
! Interpret data with caution; the coefficient of variation is greater than 50 percent.
[1] Percents are based on the total population of public schools.
[2] Percents are based on the 92 percent of public schools connected to the district network. A school may have more than one type of connection to the district.
[3] Integrated Services Digital Network.
[4] Digital Subscriber Line.
[5] Rounds to 100 percent.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 3.   Percent of public school districts with a district network, and of those districts, percent with each type of connection to the Internet service provider(s), by district characteristics: Fall 2008

District characteristic	With district network[1]	Type of connection from district to Internet service provider(s)[2]							
		Dial-up or ISDN[3]	DSL[4]	Broad-band cable	T1 or DS1	T3 or DS3	Direct fiber	Wireless	Other
All public school districts	84	2	6	13	42	12	37	18	6
District enrollment size									
Less than 2,500	78	2	7	15	51	8	27	20	3
2,500 to 9,999	97	1	3	11	29	18	54	13	10
10,000 or more	100[5]	1	3	6	19	26	60	14	13
Community type									
City	93	1!	4	10	18	21	62	14	11
Suburban	94	2!	2	19	33	14	49	9	11
Town	93	2	6	9	42	16	46	17	6
Rural	76	2!	8	12	51	9	24	23	3
Region									
Northeast	83	1!	3	22	34	12	42	16	7
Southeast	88	2!	3	5	30	16	44	14	11
Central	82	2	6	15	43	12	36	22	5
West	87	2!	9	6	54	11	31	16	4
Poverty concentration									
Less than 10 percent	86	2	4	18	39	10	44	17	6
10 to 19 percent	83	1	8	11	39	13	38	19	6
20 percent or more	83	2	5	10	52	13	28	18	6

! Interpret data with caution; the coefficient of variation is greater than 50 percent.
[1] Percents are based on the total population of public school districts.
[2] Percents are based on the 84 percent of public school districts with a district network. A district may have more than one type of connection to the Internet service provider(s).
[3] Integrated Services Digital Network.
[4] Digital Subscriber Line.
[5] Rounds to 100 percent.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 4. Percent of public school districts with a backup connection to the Internet, percent with a formal computer replacement plan reflected in long-term budget planning, and percent with an asset recovery program for all or some computers, by district characteristics: Fall 2008

District characteristic	Backup connection to the Internet	Formal computer replacement plan	Asset recovery program for:[1]	
			All computers	Some computers
All public school districts	20	67	37	22
District enrollment size				
Less than 2,500	16	68	33	20
2,500 to 9,999	27	67	44	27
10,000 or more	36	61	46	26
Community type				
City	28	63	42	23
Suburban	31	71	47	27
Town	25	63	53	16
Rural	12	67	26	22
Region				
Northeast	26	77	53	24
Southeast	21	58	30	22
Central	19	63	35	21
West	15	67	29	23
Poverty concentration				
Less than 10 percent	26	70	49	25
10 to 19 percent	18	67	32	22
20 percent or more	16	63	30	19

[1] For this survey, asset recovery programs were defined as programs that provide third-party disposal services for owned or leased computers, which are then usually refurbished or recycled.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 5.   Percent of public school districts reporting various treatments of older computers that can no longer serve their original purpose, by district characteristics: Fall 2008

District characteristic	Continue to use until nonfunc-tional	Upgrade memory or components to extend useful life	Re-purpose for less demanding tasks	Donate to other school districts, nonprofits, families, etc.	Sell/ auction	Recycle/ dispose	Other
All public school districts	76	83	85	46	36	91	3
District enrollment size							
Less than 2,500	76	83	84	51	35	92	3
2,500 to 9,999	77	81	89	36	37	92	3
10,000 or more	73	81	86	26	51	87	3
Community type							
City	78	86	86	40	39	88	3
Suburban	75	78	88	38	26	94	3
Town	69	80	82	50	38	93	2!
Rural	79	85	85	48	39	90	3
Region							
Northeast	76	82	88	44	19	95	3
Southeast	79	81	84	34	35	88	2!
Central	76	82	85	51	42	92	2
West	76	84	85	45	44	88	3
Poverty concentration							
Less than 10 percent	75	82	86	49	26	95	2
10 to 19 percent	77	83	87	47	38	95	1
20 percent or more	78	83	82	41	45	83	5

! Interpret data with caution; the coefficient of variation is greater than 50 percent.
NOTE: A district may report more than one treatment of older computers.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 6. Percent of public school districts offering various technology resources to all or some elementary school or secondary school teachers, by district characteristics: Fall 2008

District characteristic	Offered to all or some elementary or secondary teachers															
	Server space for posting their own web pages or class materials				Access to online district resources				Remote access to school or district software				Access to course management and delivery software			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts .	82	5	83	5	92	3	92	3	44	11	46	11	57	12	57	13
District enrollment size																
Less than 2,500	81	3	83	3	92	3	91	3	43	11	45	10	58	10	58	11
2,500 to 9,999	83	8	85	7	92	3	93	2	46	11	47	12	52	17	55	18
10,000 or more	81	9	82	9	96	2	95	4	49	15	51	17	54	18	56	20
Community type																
City	84	7	88	6	96	2	95	4	46	16	49	18	48	17	53	18
Suburban	81	9	84	8	89	5	89	5	47	14	52	11	48	16	51	17
Town	91	3	88	4	93	3	93	3	50	12	51	11	56	13	56	15
Rural	78	3	81	4	93	3!	92	1	41	9	42	11	61	9	61	11
Region																
Northeast	89	5	90	6	93	4	93	5	48	13	49	13	49	18	51	18
Southeast	84	5	84	5	92	2!	91	1!	46	10	47	8	59	10	59	12
Central	80	3	83	3	91	4!	92	2	42	9	48	11	65	9	65	12
West	77	5	77	6	93	2	91	2	44	12	41	12	50	11	52	13
Poverty concentration																
Less than 10 percent	90	5	92	5	91	4!	94	3!	46	12	50	12	56	12	59	13
10 to 19 percent	81	5	84	5	93	3	92	2	45	10	48	11	54	14	56	15
20 percent or more	74	4	74	4	92	2	90	3	41	11	40	11	60	9	58	11

See notes at end of table.

Table 6. **Percent of public school districts offering various technology resources to all or some elementary school or secondary school teachers, by district characteristics: Fall 2008—Continued**

District characteristic	Offered to all or some elementary or secondary teachers															
	Access to electronic administrative tools				Online curricula				Opportunities for distance learning				Online student assessment tools			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts .	87	6	95	2	66	14	66	16	64	13	65	14	73	12	72	14
District enrollment size																
Less than 2,500	89	4	95	2!	66	12	67	14	67	11	68	12	74	11	73	13
2,500 to 9,999	83	11	95	3	67	18	67	20	57	17	60	17	71	15	68	18
10,000 or more	82	11	93	5	64	20	65	23	54	23	56	24	72	16	72	18
Community type																
City	84	12	94	5	62	22	61	24	53	28	57	27	76	15	74	16
Suburban	78	12	94	5!	64	18	62	20	50	19	52	20	59	18	59	23
Town	92	5	97	1!	63	22	63	25	65	16	66	16	77	15	75	18
Rural	89	4	94	2!	69	8	70	11	71	8	71	10	78	8	75	10
Region																
Northeast	80	10	95	3!	61	21	57	23	54	21	53	25	60	19	56	27
Southeast	88	6	94	1	72	8	74	9	70	12	73	10	78	5	76	8
Central	87	5	97	1!	65	12	70	14	69	9	70	10	76	12	77	12
West	91	5	92	3	70	13	65	17	63	14	65	13	79	9	77	11
Poverty concentration																
Less than 10 percent	86	8	98	2!	67	19	65	20	59	18	60	19	70	15	67	20
10 to 19 percent	85	6	95	2	64	13	67	15	63	13	65	14	71	13	72	15
20 percent or more	89	4	91	3	70	11	67	13	70	10	70	10	80	8	77	8

! Interpret data with caution; the coefficient of variation is greater than 50 percent.
NOTE: Percents are based on the percent of public school districts with teachers at that level (97 percent of districts have elementary teachers and 88 percent have secondary teachers).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 7. Percent of public school districts offering various technology resources to all or some elementary school or secondary school students, by district characteristics: Fall 2008

District characteristic	Email accounts used for schoolwork				Electronic storage space on a server				Online access to the library catalogue				Online access to databases			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts .	11	21	28	19	62	17	83	7	72	6	82	2	60	10	68	6
District enrollment size																
Less than 2,500	11	23	30	19	63	15	85	3	69	5	80	1!	59	9	66	4
2,500 to 9,999	9	15	25	20	59	22	78	14	79	7	87	3	64	12	72	8
10,000 or more	13	22	23	23	58	23	74	17	84	7	87	6	64	13	68	14
Community type																
City	10	23	30	19	52	32	75	16	80	14	89	5	59	23	72	14
Suburban	11	15	19	17	67	15	84	7	76	7	87	2	63	10	72	7
Town	13	23	40	15	63	18	84	7	82	4	88	2	62	10	71	7
Rural	10	23	27	22	60	16	83	6	66	5	77	1	59	9	64	4
Region																
Northeast	7	25	26	15	73	16	90	4	78	8	88	3	68	8	74	5
Southeast	17	20	34	22	43	20	64	18	74	4	82	3	60	9	65	10
Central	13	19	29	22	67	14	91	2	71	4	82	‡	58	9	69	3
West	9	22	26	18	53	22	75	10	69	6	77	2	57	14	61	8
Poverty concentration																
Less than 10 percent	8	25	30	16	76	12	92	3	82	6	92	1!	71	8	79	4
10 to 19 percent	10	20	24	20	60	19	85	7	69	5	82	2	58	12	67	7
20 percent or more	15	20	32	22	50	21	72	10	66	6	72	2	53	10	57	6

See notes at end of table.

Table 7.   Percent of public school districts offering various technology resources to all or some elementary school or secondary school students, by district characteristics: Fall 2008—Continued

District characteristic	Online curricula				Opportunities for distance learning over the Internet or through videoconferencing				Remote access to most software used in their classes			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts	47	19	53	25	30	22	46	31	9	10	12	13
District enrollment size												
Less than 2,500	46	17	53	23	32	21	50	28	8	10	11	12
2,500 to 9,999	50	23	54	28	26	22	38	32	11	11	14	14
10,000 or more	49	26	51	34	23	32	33	47	9	13	9	21
Community type												
City	47	28	46	36	24	36	32	48	13	21	15	27
Suburban	40	23	46	30	26	18	35	31	10	11	12	13
Town	44	26	51	31	31	23	45	32	11	6	13	9
Rural	52	14	57	20	32	21	52	28	7	11	11	13
Region												
Northeast	41	22	42	36	26	33	35	42	9	13	11	9
Southeast	52	16	59	20	27	20	52	33	14	10	16	14
Central	45	20	56	21	33	19	51	24	8	9	11	14
West	55	17	54	23	29	16	46	30	8	10	11	14
Poverty concentration												
Less than 10 percent	45	22	51	30	29	28	42	35	10	13	11	16
10 to 19 percent	44	20	51	28	25	22	45	32	8	9	13	11
20 percent or more	54	14	56	18	36	15	51	25	9	10	11	13

! Interpret data with caution; the coefficient of variation is greater than 50 percent.
‡ Reporting standards not met.
NOTE: Percents are based on the percent of public school districts with students at that level (97 percent of districts have elementary students and 88 percent have secondary students).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 8. **Percent of public school districts with written policies on acceptable student use for specific types of technology, by district characteristics: Fall 2008**

District characteristic	Cell phones	MP3 players/ iPods	Wikis and/or blogs[1]	Social networking websites[2]	Email	Other Internet use
All public school districts	88	72	52	76	84	92
District enrollment size						
Less than 2,500	89	77	53	79	84	91
2,500 to 9,999	86	61	47	68	84	92
10,000 or more	80	55	49	67	84	93
Community type						
City	84	63	46	59	86	95
Suburban	87	69	51	70	82	88
Town	90	71	54	77	82	95
Rural	88	74	52	79	86	92
Region						
Northeast	87	76	55	76	81	88
Southeast	92	64	49	70	81	90
Central	89	71	49	74	85	93
West	85	72	53	79	87	93
Poverty concentration						
Less than 10 percent	86	71	54	75	82	89
10 to 19 percent	87	69	49	75	85	94
20 percent or more	90	76	52	77	87	91

[1] For this survey, wikis were defined as collaborative websites that allow users to freely create and edit web page content (e.g., Wikipedia) and blogs were defined as websites where an individual or group creates a running log of entries that can be read by other users, such as in a journal.
[2] For this survey, social networking websites were defined as online social networks for communities of people who share interests and activities or who are interested in exploring the interests and activities of others (e.g., Facebook, MySpace).
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 9.   Percent of public school districts keeping various types of student data in an electronic data system, by district characteristics: Fall 2008

District characteristic	Keep student data in an electronic data system[1]	Type of student data[2]											
		Personal data (e.g., contact information)	Demo-graphic data	Enroll-ment data	Atten-dance data	Records on disciplin-ary actions	Health record data	Recent report cards	Grade history	Individ-ual Education Plans (IEPs)	Transpor-tation data	State standard-ized assess-ment scores	District-wide assess-ment results
All public school districts	100	99	99	99	100[3]	91	86	95	93	89	80	89	85
District enrollment size													
Less than 2,500	100	99	98	99	100[3]	88	82	93	91	87	76	86	83
2,500 to 9,999	100	100[3]	100[3]	100	100	98	95	98	97	92	89	95	91
10,000 or more	100	100	100	100	100	98	95	99	99	94	92	98	95
Community type													
City	100	100	100	100	100	99	97	97	98	95	93	97	94
Suburban	100	100[3]	100[3]	100	100[3]	88	87	92	87	95	89	87	83
Town	100	100	100	100	100	96	96	97	98	94	85	94	91
Rural	100	99	98	99	100	90	81	95	93	84	73	87	84
Region													
Northeast	100	100[3]	100	100	100	89	87	95	90	97	94	88	84
Southeast	100	100	100	100	100	100[3]	93	99	98	95	88	87	86
Central	100	100[3]	99	99	100[3]	91	81	94	92	86	75	90	86
West	100	98	97	99	100	89	88	95	95	83	70	90	86
Poverty concentration													
Less than 10 percent	100	100	99	100	100[3]	89	85	95	90	93	84	89	85
10 to 19 percent	100	99	99	98	100	89	85	93	93	84	80	91	87
20 percent or more	100	99	99	100	100	96	88	97	96	91	75	87	83

[1] Reported having an electronic data system for any type of student data listed in this table.
[2] A district may keep more than one type of student data in an electronic data system.
[3] Rounds to 100 percent.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 10. Percentage distribution of public school districts reporting whether they employ an individual responsible for educational technology leadership full or part time, by district characteristics: Fall 2008

District characteristic	Yes, full-time devoted to this role	Yes, part-time devoted to this role	No
All public school districts	51	32	17
District enrollment size			
Less than 2,500	42	37	21
2,500 to 9,999	70	23	7
10,000 or more	83	12	5
Community type			
City	79	16	5
Suburban	67	22	11
Town	66	24	10
Rural	36	41	23
Region			
Northeast	66	24	10
Southeast	69	22	10
Central	43	34	23
West	43	40	16
Poverty concentration			
Less than 10 percent	60	26	13
10 to 19 percent	48	35	17
20 percent or more	47	33	20

NOTE: Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 11. Percent of public school districts offering teacher professional development and percent requiring teachers to take professional development in various educational technology topics, by district characteristics: Fall 2008

District characteristic	Using multimedia digital content for instruction		Using content-specific software tools for instruction		Using Internet resources and communication tools for instruction		Integrating technology into instruction		Creating or using digital portfolios		Developing curriculum plans that include using technology to address content standards		Applying technology in assessing student achievement with respect to state curriculum standards	
	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required
All public school districts	86	14	86	16	91	15	95	39	51	5	85	37	82	40
District enrollment size														
Less than 2,500	84	16	84	15	90	14	95	40	48	5	84	37	81	40
2,500 to 9,999	89	10	91	20	92	17	94	38	55	5	87	39	84	39
10,000 or more	95	9	94	18	97	14	98	30	58	4	90	23	90	40
Community type														
City	95	14	95	20	97	13	96	32	60	4	89	28	91	35
Suburban	87	11	90	17	93	14	96	34	45	6	89	32	78	31
Town	81	11	85	16	85	12	92	37	53	5	79	32	81	40
Rural	86	17	84	16	91	16	95	42	51	5	85	41	83	45
Region														
Northeast	89	11	92	15	92	10	97	41	56	9	88	36	82	36
Southeast	90	18	91	28	92	20	98	53	61	10	90	49	88	50
Central	82	11	85	14	90	14	93	35	47	3	84	36	79	39
West	88	20	81	16	91	17	94	35	47	4	81	33	85	42
Poverty concentration														
Less than 10 percent	85	9	88	16	92	15	98	40	54	6	86	37	82	38
10 to 19 percent	85	14	83	14	91	15	92	32	46	5	82	30	79	34
20 percent or more	87	20	89	21	90	14	96	46	53	5	88	48	87	50

See notes at end of table.

Table 11.   Percent of public school districts offering teacher professional development and percent requiring teachers to take professional development in various educational technology topics, by district characteristics: Fall 2008—Continued

District characteristic	Using technology to access or manipulate data to guide instruction		Using student assessment and evaluation strategies that involve technology		Teaching via distance learning		Using technology to support collaboration		Using technology to promote dialogue on student performance indicators and related data		Internet safety		Intellectual property and copyright rules	
	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required
All public school districts	83	32	74	27	47	4	80	16	72	20	89	55	77	45
District enrollment size														
Less than 2,500	81	29	71	24	48	4	78	16	70	18	90	57	77	44
2,500 to 9,999	88	38	82	35	44	4	82	15	76	24	87	49	76	45
10,000 or more	93	38	86	31	46	2	86	13	81	19	90	48	84	45
Community type														
City	96	33	90	37	46	1	87	8	80	17	93	45	87	39
Suburban	82	33	72	27	45	4	83	14	78	20	89	46	76	36
Town	85	29	77	25	45	4	76	17	77	19	81	49	73	44
Rural	82	32	73	26	48	4	79	17	67	20	92	61	78	49
Region														
Northeast	86	33	75	24	47	2	81	22	79	24	91	53	76	37
Southeast	90	42	86	41	60	11	83	24	78	25	92	63	85	59
Central	77	30	71	26	49	2	81	10	65	16	86	51	74	41
West	88	30	74	25	39	4	75	14	73	19	90	59	80	50
Poverty concentration														
Less than 10 percent	84	36	76	26	45	4	81	18	76	24	88	52	76	43
10 to 19 percent	80	27	68	22	43	2	78	13	66	17	87	49	76	37
20 percent or more	87	35	82	34	54	5	81	16	76	18	93	68	80	58

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 12. Percentage distribution of public school districts reporting agreement or disagreement with various statements on using educational technology in the instructional program in the district, by district characteristics: Fall 2008

District characteristic	Technology is a priority for the district administration			Teachers are sufficiently trained to integrate technology into classroom instruction			Teachers are interested in using technology in classroom instruction			Technology infrastructure is adequate		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
All public school districts	7	5	88	24	18	58	7	10	83	16	7	78
District enrollment size												
Less than 2,500	6	5	89	21	18	61	7	11	82	16	8	77
2,500 to 9,999	8	6	86	29	17	53	7	8	85	16	4	80
10,000 or more	8	6	87	34	19	47	5	12	83	15	6	80
Community type												
City	8	8	84	31	17	52	2	9	89	8	7	85
Suburban	6	4	91	27	23	50	6	10	84	15	3	82
Town	7	3	90	31	19	50	7	13	80	15	7	79
Rural	7	6	87	20	15	65	8	10	82	17	8	75
Region												
Northeast	6	3	91	29	15	56	6	11	82	12	3	85
Southeast	7	4	89	19	12	69	8	5	87	19	5	77
Central	5	9	86	19	18	62	6	11	83	15	9	77
West	9	3	87	28	22	50	9	11	80	19	8	73
Poverty concentration												
Less than 10 percent	5	3	92	24	17	60	3	16	81	12	5	83
10 to 19 percent	7	8	86	23	20	56	8	9	82	15	6	78
20 percent or more	9	4	87	25	16	60	9	6	85	20	9	71

See notes at end of table.

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Table 12. Percentage distribution of public school districts reporting agreement or disagreement with various statements on using educational technology in the instructional program in the district, by district characteristics: Fall 2008—Continued

District characteristic	Technical support for educational technology is adequate			Funding for educational technology is adequate			Funding for educational technology is being spent in the most appropriate ways			Use of educational technology is adversely affected by competing priorities in the classroom		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
All public school districts	22	9	68	47	11	42	8	9	83	19	27	54
District enrollment size												
Less than 2,500	19	8	73	44	11	45	8	8	85	20	29	51
2,500 to 9,999	28	12	60	53	12	35	11	11	78	18	24	59
10,000 or more	34	12	53	67	10	23	10	15	75	12	22	65
Community type												
City	31	12	57	58	13	29	10	14	76	18	16	66
Suburban	24	10	66	45	15	40	8	7	85	22	26	52
Town	22	9	69	46	17	37	7	10	83	19	25	56
Rural	21	8	71	47	8	45	9	9	82	17	30	53
Region												
Northeast	20	8	72	31	18	52	7	5	88	26	24	50
Southeast	25	10	65	59	9	32	9	11	80	15	27	57
Central	21	8	71	47	10	44	9	9	82	19	27	53
West	25	12	64	58	8	34	8	11	81	13	30	57
Poverty concentration												
Less than 10 percent	20	8	72	41	12	47	7	6	87	24	21	55
10 to 19 percent	22	11	67	47	11	42	9	10	81	18	31	52
20 percent or more	25	8	67	53	10	36	9	10	80	14	29	56

NOTE: The response options in the questionnaire were strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, and strongly agree. Responses to the "strongly" and "somewhat" categories were combined in the table. Detail may not sum to totals because of rounding.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

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Appendix A

Standard Error Tables

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Table 1a. Standard errors for the percent of public school districts with local area (school-level) network(s), percent with a district network, and of those with a district network, percent connected to the Internet, by district characteristics: Fall 2008

District characteristic	Local area network in:		District network in:		Connected to the Internet
	All schools	Some schools	All schools	Some schools	
All public school districts	0.5	0.5	1.9	0.6	†
District enrollment size					
Less than 2,500	0.7	0.6	2.9	0.8	†
2,500 to 9,999	0.8	0.8	1.0	0.7	†
10,000 or more	0.6	0.5	0.8	0.8	†
Community type					
City	1.2	1.1	5.8	0.9	†
Suburban	0.8	0.3	2.6	0.5	†
Town	1.0	1.0	3.7	1.6	†
Rural	0.8	0.8	3.2	1.0	†
Region					
Northeast	0.6	†	5.1	0.7	†
Southeast	0.9	0.9	3.4	0.6	†
Central	0.9	0.9	3.0	1.0	†
West	1.3	1.3	4.7	1.4	†
Poverty concentration					
Less than 10 percent	0.4	0.3	4.4	0.4	†
10 to 19 percent	0.6	0.6	3.3	1.3	†
20 percent or more	1.5	1.5	3.3	0.9	†

† Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 2a. **Standard errors for the percent of public schools with a local area (school-level) network, percent connected to the district network, and of those with a district network, percent with each type of connection to the district, by district characteristics: Fall 2008**

District characteristic	Schools with a local area network	Schools connected to the district network	Type of connection from school to district							
			Dial-up or ISDN	DSL	Broad-band cable	T1 or DS1	T3 or DS3	Direct fiber	Wireless	Other
All public schools	0.2	1.0	†	0.3	0.4	0.9	0.4	1.2	0.7	0.5
District enrollment size										
Less than 2,500	0.6	3.3	0.4	1.0	1.1	2.5	1.0	3.8	2.0	0.8
2,500 to 9,999	0.3	0.7	†	0.4	1.0	1.6	0.8	1.7	1.3	1.0
10,000 or more	0.3	0.3	†	0.3	0.5	1.0	0.6	1.3	1.2	0.8
Community type										
City	0.5	0.9	†	0.3	0.6	1.5	0.9	2.1	1.5	1.1
Suburban	0.5	0.7	†	0.3	0.9	1.3	0.6	2.0	1.0	1.1
Town	0.6	4.0	†	0.7	1.0	2.7	1.4	3.7	1.6	1.3
Rural	0.5	3.1	0.4	1.0	1.1	2.3	0.6	2.4	1.9	0.9
Region										
Northeast	0.2	4.9	†	0.8	1.9	2.4	1.0	3.7	1.6	1.2
Southeast	0.2	1.3	†	†	0.8	1.4	0.7	2.2	1.2	1.3
Central	0.7	1.2	0.4	0.6	1.0	2.3	1.0	2.2	1.6	0.7
West	0.5	1.3	†	0.7	0.4	1.6	0.6	2.0	1.4	0.9
Poverty concentration										
Less than 10 percent	0.3	3.7	†	0.5	1.3	1.9	0.7	2.5	1.5	1.0
10 to 19 percent	0.3	0.9	†	0.6	0.7	1.3	0.8	1.8	1.3	0.9
20 percent or more	0.6	1.2	†	0.5	0.7	1.8	0.6	2.1	1.5	0.9

† Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 3a.   Standard errors for the percent of public school districts with a district network, and of those districts, percent with each type of connection to the Internet service provider(s), by district characteristics: Fall 2008

District characteristic	With district network	Type of connection from district to Internet service provider(s)							
		Dial-up or ISDN	DSL	Broad-band cable	T1 or DS1	T3 or DS3	Direct fiber	Wireless	Other
All public school districts	2.0	0.4	0.8	1.3	2.2	0.9	1.8	2.0	0.8
District enrollment size									
Less than 2,500	2.8	0.6	1.3	2.1	3.4	1.3	2.4	3.0	1.0
2,500 to 9,999	0.6	0.5	0.8	1.4	2.2	1.5	2.5	1.5	1.5
10,000 or more	0.2	0.5	0.6	0.8	1.6	2.0	2.1	1.3	1.3
Community type									
City	6.0	0.4	1.5	2.4	2.0	3.4	4.3	2.3	2.3
Suburban	2.6	0.7	0.7	3.0	4.0	1.6	3.5	1.9	1.9
Town	3.7	0.8	1.7	2.2	4.7	2.9	5.7	2.9	1.7
Rural	3.3	0.8	1.7	2.6	4.6	1.6	2.5	3.9	0.9
Region									
Northeast	5.0	0.8	1.4	3.8	5.2	2.1	5.4	2.4	2.0
Southeast	3.4	1.2	1.1	2.5	3.3	2.1	2.8	2.9	2.0
Central	2.9	0.8	1.3	3.0	4.5	1.8	3.0	4.3	1.1
West	4.6	1.0	2.5	1.7	3.9	1.7	3.2	3.1	0.9
Poverty concentration									
Less than 10 percent	4.4	0.8	1.4	3.2	3.9	1.7	4.6	3.1	1.3
10 to 19 percent	3.2	0.6	1.6	2.1	3.4	1.7	2.7	4.3	1.4
20 percent or more	3.1	1.0	1.9	2.7	4.3	2.1	2.7	3.2	1.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 4a. Standard errors for the percent of public school districts with a backup connection to the Internet, percent with a formal computer replacement plan reflected in long-term budget planning, and percent with an asset recovery program for all or some computers, by district characteristics: Fall 2008

District characteristic	Backup connection to the Internet	Formal computer replacement plan	Asset recovery program for:	
			All computers	Some computers
All public school districts	1.4	2.3	1.9	2.0
District enrollment size				
Less than 2,500	1.9	3.2	2.7	2.4
2,500 to 9,999	1.9	2.1	2.1	1.9
10,000 or more	2.0	2.2	2.3	1.9
Community type				
City	2.7	5.3	5.6	3.4
Suburban	3.4	2.8	3.7	3.1
Town	3.6	4.7	4.6	2.2
Rural	1.5	3.4	3.0	2.7
Region				
Northeast	3.2	5.1	4.9	4.4
Southeast	2.6	3.8	3.2	3.1
Central	2.8	4.1	2.9	2.9
West	2.0	3.5	3.5	3.2
Poverty concentration				
Less than 10 percent	2.7	4.1	4.3	3.6
10 to 19 percent	2.3	4.0	3.0	2.6
20 percent or more	2.0	3.1	3.4	2.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 5a. Standard errors for the percent of public school districts reporting various treatments of older computers that can no longer serve their original purpose, by district characteristics: Fall 2008

District characteristic	Continue to use until nonfunc- tional	Upgrade memory or components to extend useful life	Re-purpose for less demanding tasks	Donate to other school districts, nonprofits, families, etc.	Sell/ auction	Recycle/ dispose	Other
All public school districts	2.0	1.4	2.0	2.4	2.0	1.1	0.6
District enrollment size							
Less than 2,500	2.8	1.9	2.8	3.4	2.8	1.6	0.9
2,500 to 9,999	1.9	1.7	1.4	2.1	2.0	1.0	1.0
10,000 or more	2.0	1.5	1.4	1.4	1.9	1.5	0.6
Community type							
City	3.0	2.5	2.7	5.7	3.4	2.2	0.9
Suburban	3.4	3.4	1.9	3.5	3.0	1.9	1.1
Town	5.9	3.0	5.2	5.2	4.6	1.6	1.1
Rural	2.3	1.9	3.1	3.8	3.2	1.9	1.1
Region							
Northeast	4.9	3.7	4.0	5.5	2.8	2.1	1.2
Southeast	3.2	3.0	2.7	3.8	3.1	2.4	1.0
Central	2.8	2.4	3.9	4.0	3.5	1.8	1.0
West	3.8	2.4	3.3	4.4	3.5	2.4	1.4
Poverty concentration							
Less than 10 percent	4.0	3.3	3.4	4.2	2.8	1.9	0.8
10 to 19 percent	2.8	2.0	3.6	3.8	3.8	1.3	0.5
20 percent or more	3.3	2.5	2.7	3.6	3.1	2.8	1.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 6a.   Standard errors for the percent of public school districts offering various technology resources to all or some elementary school or secondary school teachers, by district characteristics: Fall 2008

	Offered to all or some elementary or secondary teachers															
District characteristic	Server space for posting their own web pages or class materials				Access to online district resources				Remote access to school or district software				Access to course management and delivery software			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts .	1.9	0.7	1.6	0.7	1.2	0.9	0.8	0.6	2.0	1.3	1.7	1.3	2.4	1.2	2.2	1.0
District enrollment size																
Less than 2,500	2.5	0.8	2.3	0.8	1.6	1.2	1.3	0.8	2.7	1.9	2.5	1.8	3.2	1.6	3.2	1.5
2,500 to 9,999	1.7	1.1	1.5	1.0	1.4	0.8	1.3	0.8	2.2	1.3	2.3	1.5	2.6	1.7	2.5	1.7
10,000 or more	1.7	1.5	1.7	1.3	1.1	0.8	1.1	1.0	2.5	1.7	2.7	1.8	2.0	1.7	2.0	1.3
Community type																
City	3.0	2.1	2.0	1.3	1.4	1.2	1.6	1.4	4.5	2.9	4.7	3.1	5.7	2.7	5.4	2.3
Suburban	2.8	1.9	2.7	1.8	2.4	2.0	2.6	2.0	3.5	3.6	3.1	2.2	4.3	2.7	3.7	3.0
Town	2.1	1.1	2.6	1.3	1.6	1.1	1.7	1.2	4.3	2.7	4.1	2.1	4.6	2.6	4.6	2.9
Rural	3.0	0.7	2.4	0.9	1.9	1.3	1.5	0.7	3.1	1.7	2.8	1.9	3.5	1.7	3.2	1.5
Region																
Northeast	2.6	1.9	2.2	1.7	2.2	1.8	2.3	1.9	5.2	3.6	5.4	3.1	4.9	4.2	4.7	3.8
Southeast	2.1	1.1	2.2	1.1	2.1	0.8	2.3	0.7	4.0	2.2	4.1	1.8	4.1	1.9	4.0	1.7
Central	4.1	0.9	2.6	0.8	2.6	2.0	1.7	0.9	3.0	1.9	2.6	1.7	3.5	1.7	3.2	1.7
West	3.1	1.2	3.5	1.3	1.4	0.7	1.9	0.7	4.0	2.7	3.5	2.6	4.0	1.8	3.5	2.2
Poverty concentration																
Less than 10 percent	1.9	1.4	1.4	1.2	2.9	2.6	1.8	1.4	4.1	2.8	4.4	2.2	4.7	1.9	4.2	1.9
10 to 19 percent	3.7	1.0	2.3	1.0	1.5	0.9	1.4	0.7	3.4	1.8	2.8	1.8	4.1	2.4	3.3	1.8
20 percent or more	3.0	0.8	3.1	1.1	1.4	0.7	1.8	0.9	3.7	2.8	3.3	2.8	3.3	1.6	4.1	2.0

See notes at end of table.

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Table 6a. Standard errors for the percent of public school districts offering various technology resources to all or some elementary school or secondary school teachers, by district characteristics: Fall 2008—Continued

District characteristic	Offered to all or some elementary or secondary teachers															
	Access to electronic administrative tools				Online curricula				Opportunities for distance learning				Online student assessment tools			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts .	1.8	0.9	1.0	0.6	2.2	1.4	2.0	1.7	1.9	1.6	1.8	1.6	1.6	1.3	1.7	1.4
District enrollment size																
Less than 2,500	2.6	1.2	1.5	1.0	2.9	1.9	2.8	2.2	2.6	2.1	2.5	2.2	2.2	1.7	2.4	2.0
2,500 to 9,999	1.3	1.5	0.8	0.6	2.0	1.8	2.1	1.9	2.1	2.0	2.1	1.9	1.9	1.6	2.3	1.8
10,000 or more	1.9	1.3	1.0	0.9	2.0	1.6	1.8	1.8	2.1	2.2	2.0	2.2	2.0	1.7	2.0	1.8
Community type																
City	2.9	2.4	1.4	1.3	6.3	2.9	6.4	2.8	4.9	5.2	5.2	5.5	3.8	2.9	4.2	3.3
Suburban	3.1	2.3	2.3	2.3	3.3	3.1	3.3	2.9	3.2	2.9	3.1	2.4	3.3	2.5	3.4	2.8
Town	1.8	1.5	1.2	0.5	4.1	5.2	4.3	5.4	4.8	5.1	5.1	5.3	4.7	4.9	4.9	5.1
Rural	3.1	1.4	1.7	0.9	3.5	1.4	3.0	1.7	3.3	1.4	2.8	1.7	2.5	1.4	2.6	1.8
Region																
Northeast	3.4	2.7	2.3	2.1	4.3	4.2	4.4	4.8	4.7	4.5	5.2	4.9	4.8	4.8	5.1	5.3
Southeast	2.2	1.2	1.9	0.4	4.0	1.7	3.9	1.9	3.7	2.0	3.9	1.6	3.4	1.3	3.4	2.1
Central	4.0	1.9	1.4	1.0	4.1	2.0	2.8	1.8	3.4	2.0	2.9	1.7	2.5	1.7	2.4	1.9
West	2.3	1.0	2.4	1.1	3.5	2.1	3.6	2.5	3.7	2.1	3.3	2.2	2.9	1.8	3.2	1.9
Poverty concentration																
Less than 10 percent	2.6	2.5	1.6	1.6	4.1	3.6	3.6	4.0	3.8	3.6	4.2	3.8	3.7	3.9	4.1	4.1
10 to 19 percent	3.6	1.2	1.3	0.9	3.6	1.9	2.7	2.0	3.3	2.0	2.6	1.8	2.9	1.8	2.5	2.1
20 percent or more	2.3	0.9	2.3	1.1	3.6	2.0	3.4	2.3	2.9	1.8	3.0	1.8	2.9	2.0	3.2	1.7

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 7a. Standard errors for the percent of public school districts offering various technology resources to all or some elementary school or secondary school students, by district characteristics: Fall 2008

	Offered to all or some elementary or secondary students															
District characteristic	Email accounts used for schoolwork				Electronic storage space on a server				Online access to the library catalogue				Online access to databases			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts .	1.2	2.4	2.5	1.7	1.9	1.5	1.4	0.7	2.5	0.8	1.8	0.4	2.3	1.3	2.1	0.7
District enrollment size																
Less than 2,500	1.7	3.3	3.6	2.4	2.5	1.8	2.0	0.7	3.3	1.2	2.5	0.4	3.0	1.8	2.8	0.9
2,500 to 9,999	1.1	1.5	1.9	1.5	2.0	1.9	1.6	1.8	1.8	1.0	1.5	0.7	2.2	1.5	2.3	1.1
10,000 or more	1.5	1.8	1.8	2.0	2.1	1.6	1.8	1.2	1.8	1.1	1.4	1.0	1.9	1.6	2.0	1.6
Community type																
City	1.8	6.4	5.9	3.6	5.3	6.0	3.8	2.9	5.5	5.9	2.3	1.5	5.6	6.4	4.0	2.8
Suburban	2.7	3.3	2.3	2.2	3.5	2.8	3.0	1.1	4.1	1.9	2.8	1.0	4.7	2.7	3.3	1.1
Town	2.1	5.4	6.0	3.2	4.3	3.2	2.6	1.5	2.5	1.0	2.0	0.8	5.6	2.7	5.3	1.9
Rural	1.8	3.8	3.2	2.9	3.2	2.3	2.2	1.1	3.7	1.4	2.9	0.3	3.1	1.8	2.8	1.0
Region																
Northeast	1.9	6.0	6.0	3.2	4.1	3.4	3.0	1.1	4.4	2.1	2.7	1.1	5.4	2.0	4.9	1.2
Southeast	3.1	3.0	3.3	2.8	3.1	2.6	3.4	2.8	3.5	0.9	3.3	1.0	3.9	1.8	3.7	2.2
Central	2.5	4.2	2.8	2.8	3.7	1.9	1.8	0.7	3.9	1.8	2.6	†	3.9	2.2	2.7	0.9
West	1.8	4.4	4.1	3.1	3.3	3.3	3.2	1.9	4.8	1.6	3.9	0.7	3.6	3.2	3.6	1.7
Poverty concentration																
Less than 10 percent	2.1	4.8	4.9	2.6	3.6	2.2	2.3	0.8	3.8	2.4	2.2	0.3	4.7	2.8	3.9	0.8
10 to 19 percent	1.8	4.2	2.2	2.5	3.2	2.2	1.7	1.1	4.2	0.9	2.4	0.7	3.7	2.4	3.0	1.1
20 percent or more	2.6	2.7	4.2	3.6	3.2	2.8	3.2	1.7	3.4	1.4	3.9	0.5	3.6	2.0	3.7	1.2

See notes at end of table.

Table 7a. Standard errors for the percent of public school districts offering various technology resources to all or some elementary school or secondary school students, by district characteristics: Fall 2008—Continued

District characteristic	Offered to all or some elementary or secondary students											
	Online curricula				Opportunities for distance learning over the Internet or through videoconferencing				Remote access to most software used in their classes			
	Elementary		Secondary		Elementary		Secondary		Elementary		Secondary	
	All	Some	All	Some	All	Some	All	Some	All	Some	All	Some
All public school districts	2.4	1.7	2.4	1.7	1.4	2.2	1.8	1.9	1.1	1.2	1.0	1.1
District enrollment size												
Less than 2,500	3.1	2.5	3.1	2.4	2.0	3.0	2.5	2.6	1.4	1.6	1.4	1.5
2,500 to 9,999	1.9	2.1	2.0	1.8	1.8	1.8	2.1	2.0	1.5	1.1	1.8	1.5
10,000 or more	2.3	2.0	2.2	1.8	2.0	2.0	2.0	1.8	0.9	1.7	1.0	2.0
Community type												
City	5.8	3.4	5.8	4.0	4.2	5.2	4.9	5.4	3.2	5.7	3.4	5.4
Suburban	3.9	3.9	3.1	3.0	3.0	2.7	3.2	3.1	1.9	3.2	2.0	2.3
Town	4.4	4.9	4.4	4.9	4.2	5.5	4.5	4.9	2.5	1.4	2.8	2.0
Rural	3.7	2.2	3.5	2.5	2.7	3.3	3.1	3.1	1.4	1.7	1.6	1.8
Region												
Northeast	5.4	5.2	5.2	5.0	3.0	5.4	4.3	5.6	1.7	4.1	1.9	1.8
Southeast	4.3	2.4	4.1	2.4	3.2	3.1	3.6	3.2	2.7	1.6	2.7	2.1
Central	3.6	2.7	3.2	2.4	3.3	4.0	3.3	2.5	1.9	1.7	2.0	1.9
West	4.2	2.1	4.0	2.9	3.0	3.0	3.3	3.1	2.0	2.1	2.4	2.7
Poverty concentration												
Less than 10 percent	4.4	4.3	4.4	4.4	3.1	4.9	3.8	4.3	1.7	2.7	1.5	2.2
10 to 19 percent	3.4	2.6	3.1	2.3	2.5	3.7	2.7	2.7	1.5	1.7	1.8	1.5
20 percent or more	3.2	2.1	2.7	2.4	3.0	2.2	3.2	2.7	1.8	2.1	2.0	2.7

† Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 8a. **Standard errors for the percent of public school districts with written policies on acceptable student use for specific types of technology, by district characteristics: Fall 2008**

District characteristic	Cell phones	MP3 players/ iPods	Wikis and/or blogs	Social networking websites	Email	Other Internet use
All public school districts	1.7	2.2	1.9	2.0	2.1	1.3
District enrollment size						
Less than 2,500	2.3	2.9	2.5	2.8	2.9	1.7
2,500 to 9,999	1.5	2.5	2.6	2.2	1.8	1.4
10,000 or more	1.4	2.5	1.9	1.9	1.3	1.0
Community type						
City	2.8	3.8	4.7	5.3	2.0	1.5
Suburban	1.8	3.3	4.0	3.7	2.5	3.1
Town	2.5	3.5	4.8	3.6	5.2	1.5
Rural	2.9	3.5	3.2	3.2	3.4	1.8
Region						
Northeast	2.4	3.9	5.3	3.9	4.4	3.4
Southeast	1.7	3.5	4.7	3.7	3.6	3.8
Central	4.0	4.2	3.9	4.3	4.7	1.7
West	2.6	3.5	3.1	2.5	2.4	1.9
Poverty concentration						
Less than 10 percent	2.2	3.1	3.8	3.3	3.4	2.8
10 to 19 percent	3.4	4.0	3.8	3.4	4.3	1.1
20 percent or more	1.8	2.7	4.1	2.7	2.5	2.3

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 9a. **Standard errors for the percent of public school districts keeping various types of student data in an electronic data system, by district characteristics: Fall 2008**

District characteristic	Keep student data in an electronic data system	Personal data (e.g., contact information)	Demographic data	Enrollment data	Attendance data	Records on disciplinary actions	Health record data	Recent report cards	Grade history	Individual Education Plans (IEPs)	Transportation data	State standardized assessment scores	District-wide assessment results
All public school districts	†	0.4	0.6	0.5	0.1	1.9	1.8	1.7	1.8	2.0	2.0	1.2	1.3
District enrollment size													
Less than 2,500	†	0.6	0.8	0.7	0.1	2.7	2.6	2.4	2.6	2.9	2.7	1.6	1.9
2,500 to 9,999	†	0.3	0.2	†	†	0.7	1.0	0.6	0.9	1.1	1.6	1.0	1.1
10,000 or more	†	†	†	†	†	0.5	0.9	0.3	0.4	1.2	1.5	0.6	0.8
Community type													
City	†	†	†	†	†	0.3	1.1	1.3	1.0	1.6	1.5	1.3	1.5
Suburban	†	0.3	0.3	†	0.3	4.0	2.9	3.5	3.9	1.1	2.3	3.3	4.0
Town	†	†	†	†	†	1.7	2.0	1.6	1.2	2.0	3.7	2.0	2.5
Rural	†	0.8	1.1	0.9	†	3.2	3.1	2.9	3.1	3.5	3.0	1.8	1.8
Region													
Northeast	†	0.1	†	†	†	3.9	3.4	3.2	3.8	0.9	2.0	3.0	3.5
Southeast	†	†	†	†	†	0.3	1.8	0.7	0.8	1.7	2.6	3.3	2.6
Central	†	0.2	0.7	0.8	0.2	3.9	3.9	4.0	4.0	4.0	3.8	2.0	2.3
West	†	1.5	1.9	1.4	†	3.7	2.9	2.0	2.1	4.4	3.4	2.3	2.8
Poverty concentration													
Less than 10 percent	†	†	0.8	†	0.2	3.6	3.0	2.4	3.4	1.4	2.9	2.3	2.8
10 to 19 percent	†	1.0	1.0	1.2	†	4.0	3.6	3.7	3.7	4.1	3.7	1.6	1.9
20 percent or more	†	0.4	1.3	†	†	1.5	2.7	1.5	1.7	2.3	3.4	2.4	2.5

† Not applicable.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

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Table 10a. Standard errors for the percentage distribution of public school districts reporting whether they employ an individual responsible for educational technology leadership full or part time, by district characteristics: Fall 2008

District characteristic	Yes, full-time devoted to this role	Yes, part-time devoted to this role	No
All public school districts	2.3	2.0	1.9
District enrollment size			
Less than 2,500	3.3	2.9	2.7
2,500 to 9,999	2.0	1.8	1.3
10,000 or more	1.6	1.7	0.9
Community type			
City	3.0	2.9	1.3
Suburban	4.0	2.9	3.4
Town	4.3	3.6	2.3
Rural	3.2	3.4	3.1
Region			
Northeast	4.8	3.9	3.1
Southeast	3.8	3.6	2.4
Central	3.5	2.5	3.9
West	3.6	4.4	2.9
Poverty concentration			
Less than 10 percent	4.5	2.8	3.3
10 to 19 percent	3.4	3.2	3.6
20 percent or more	3.1	3.6	2.8

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Table 11a. Standard errors for the percent of public school districts offering teacher professional development and percent requiring teachers to take professional development in various educational technology topics, by district characteristics: Fall 2008

District characteristic	Using multimedia digital content for instruction		Using content-specific software tools for instruction		Using Internet resources and communication tools for instruction		Integrating technology into instruction		Creating or using digital portfolios		Developing curriculum plans that include using technology to address content standards		Applying technology in assessing student achievement with respect to state curriculum standards	
	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required
All public school districts	1.5	1.6	1.8	1.5	1.2	1.4	0.8	2.3	2.3	0.7	1.5	2.0	1.5	2.0
District enrollment size														
Less than 2,500	2.0	2.1	2.4	1.7	1.7	2.0	1.1	3.2	3.2	1.0	2.2	2.8	2.1	2.8
2,500 to 9,999	1.4	1.4	1.2	2.2	1.3	1.8	1.0	1.9	2.2	0.9	1.3	2.1	1.5	2.5
10,000 or more	1.0	1.1	1.0	1.5	0.7	1.3	0.7	1.9	2.1	0.7	1.4	1.7	1.2	2.4
Community type														
City	1.2	5.8	1.4	3.5	0.8	2.5	1.1	5.1	4.6	0.9	1.9	4.9	1.5	4.6
Suburban	3.0	2.5	2.3	2.7	2.0	2.2	1.5	3.4	3.8	1.6	1.8	3.7	3.2	3.3
Town	4.8	2.2	4.8	2.6	5.0	2.3	2.0	4.2	4.8	1.5	4.8	3.4	3.2	4.3
Rural	2.0	2.4	2.5	2.2	1.6	2.2	1.1	3.6	3.1	1.0	2.2	3.2	2.1	2.8
Region														
Northeast	4.3	2.5	4.4	2.6	4.1	2.0	1.2	4.8	5.4	2.0	4.1	4.5	2.9	5.0
Southeast	2.7	3.0	2.3	3.9	2.1	3.1	0.8	3.4	4.3	2.1	2.4	3.6	2.1	3.3
Central	2.7	2.1	2.4	2.3	2.1	1.8	1.7	4.5	3.3	0.9	3.0	2.8	2.8	3.0
West	2.2	4.5	3.8	2.6	1.6	3.7	1.5	4.1	3.5	1.2	3.0	4.0	2.7	4.1
Poverty concentration														
Less than 10 percent	3.7	1.9	3.4	2.8	3.5	2.6	0.8	3.8	4.6	1.6	3.6	4.5	2.9	4.2
10 to 19 percent	2.3	2.9	3.1	2.2	1.7	2.8	1.5	4.3	3.1	1.1	2.8	3.7	2.5	3.4
20 percent or more	1.9	3.5	2.1	2.7	2.0	2.2	1.2	3.6	3.2	1.2	2.7	4.1	2.7	3.7

See notes at end of table.

Table 11a. Standard errors for the percent of public school districts offering teacher professional development and percent requiring teachers to take professional development in various educational technology topics, by district characteristics: Fall 2008— Continued

District characteristic	Using technology to access or manipulate data to guide instruction		Using student assessment and evaluation strategies that involve technology		Teaching via distance learning		Using technology to support collaboration		Using technology to promote dialogue on student performance indicators and related data		Internet safety		Intellectual property and copyright rules	
	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required	Offered	Required
All public school districts	1.9	2.2	2.0	1.6	2.2	0.6	1.5	1.7	2.2	1.9	1.4	2.1	1.9	1.9
District enrollment size														
Less than 2,500	2.6	2.8	2.8	2.0	3.1	0.8	2.2	2.2	3.1	2.6	1.8	2.8	2.4	2.6
2,500 to 9,999	1.5	2.8	1.8	2.9	2.2	0.8	1.9	1.6	1.7	2.1	1.5	2.1	1.8	2.2
10,000 or more	1.3	2.5	1.6	1.9	1.8	0.5	1.7	1.4	1.7	1.8	1.2	2.0	1.6	2.2
Community type														
City	1.1	3.8	1.8	5.6	4.7	0.2	2.2	1.9	3.0	2.4	1.3	4.4	2.4	4.6
Suburban	3.1	3.3	3.0	3.1	4.4	1.4	2.5	2.4	2.9	2.9	1.6	3.5	2.8	3.7
Town	2.5	3.8	4.6	3.8	4.7	1.4	4.7	3.6	3.2	3.7	4.7	4.4	5.2	4.5
Rural	3.0	3.3	3.3	1.9	3.7	1.0	2.4	2.6	3.5	3.1	1.5	2.9	2.8	2.9
Region														
Northeast	2.9	4.9	4.2	3.4	5.9	1.2	4.2	4.6	2.9	4.9	4.3	4.9	4.7	5.0
Southeast	2.3	3.6	3.3	3.6	3.8	3.0	3.3	3.1	3.1	4.0	2.2	3.2	2.5	3.1
Central	4.0	3.0	3.7	2.4	4.1	1.0	2.7	1.5	3.8	2.2	2.1	4.2	3.8	3.3
West	2.5	4.1	3.4	2.9	3.6	1.5	3.4	3.7	3.4	4.0	1.5	4.0	3.0	4.7
Poverty concentration														
Less than 10 percent	3.0	3.7	3.3	2.8	4.2	1.4	3.1	3.9	3.0	3.8	3.3	4.2	3.7	4.2
10 to 19 percent	3.6	3.6	3.8	2.3	3.8	0.9	2.5	3.0	3.6	3.1	1.8	3.9	3.5	3.2
20 percent or more	2.5	3.2	3.1	3.5	3.9	1.3	3.0	2.2	3.1	2.9	1.6	3.2	3.1	2.9

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

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Table 12a.   Standard errors for the percentage distribution of public school districts reporting agreement or disagreement with various statements on using educational technology in the instructional program in the district, by district characteristics: Fall 2008

District characteristic	Technology is a priority for the district administration			Teachers are sufficiently trained to integrate technology into classroom instruction			Teachers are interested in using technology in classroom instruction			Technology infrastructure is adequate		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
All public school districts	0.8	1.5	1.5	1.3	1.6	2.1	0.9	1.4	1.8	1.4	1.1	1.7
District enrollment size												
Less than 2,500	1.1	2.2	2.2	1.9	2.2	2.8	1.3	2.0	2.4	1.9	1.6	2.3
2,500 to 9,999	1.3	1.1	1.5	1.8	1.8	2.4	1.1	1.4	1.7	1.7	0.8	1.8
10,000 or more	1.2	1.0	1.4	2.2	1.7	2.3	1.0	1.4	1.5	1.3	1.0	1.6
Community type												
City	2.1	2.1	2.8	3.5	2.6	4.6	0.7	1.6	1.7	1.4	1.9	2.4
Suburban	1.3	0.8	1.5	2.7	3.9	3.3	1.3	2.3	2.5	2.4	0.9	2.5
Town	2.0	1.2	2.2	4.3	3.5	4.6	1.9	5.0	5.8	2.7	1.8	3.0
Rural	1.3	2.8	2.8	2.1	2.3	3.1	1.6	1.8	2.2	2.4	2.1	2.9
Region												
Northeast	1.4	1.3	1.7	4.3	3.6	4.2	1.3	4.4	4.7	2.2	1.0	2.3
Southeast	1.8	1.2	2.3	3.7	2.1	3.6	2.1	1.3	2.5	3.4	1.4	3.5
Central	1.4	3.9	3.9	2.7	2.4	3.5	1.3	2.3	2.6	2.5	2.3	3.3
West	1.8	1.1	2.1	3.3	3.8	4.3	2.3	2.1	2.8	2.8	1.8	3.1
Poverty concentration												
Less than 10 percent	1.2	1.0	1.7	3.9	3.1	4.1	0.8	4.1	4.3	1.7	2.3	2.8
10 to 19 percent	1.2	3.6	3.5	2.3	2.7	3.5	1.9	1.9	2.3	2.2	1.5	2.8
20 percent or more	1.7	1.3	2.4	3.0	2.7	3.4	2.1	1.5	2.5	2.9	2.5	3.5

See notes at end of table.

Table 12a. Standard errors for the percentage distribution of public school districts reporting agreement or disagreement with various statements on using educational technology in the instructional program in the district, by district characteristics: Fall 2008—Continued

District characteristic	Technical support for educational technology is adequate			Funding for educational technology is adequate			Funding for educational technology is being spent in the most appropriate ways			Use of educational technology is adversely affected by competing priorities in the classroom		
	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree	Disagree	Neither agree nor disagree	Agree
All public school districts	1.6	0.9	2.0	2.2	1.2	2.3	0.9	1.1	1.2	1.8	2.0	2.1
District enrollment size												
Less than 2,500	2.1	1.2	2.5	3.2	1.5	3.3	1.1	1.5	1.7	2.6	2.9	2.9
2,500 to 9,999	2.0	1.4	2.4	1.9	1.5	2.0	1.3	1.6	2.0	1.4	1.8	1.8
10,000 or more	1.9	1.3	2.2	2.3	1.3	1.8	1.0	1.5	1.6	1.4	2.1	2.2
Community type												
City	2.9	2.6	3.4	4.4	3.0	4.9	1.9	2.5	3.1	5.5	2.6	4.5
Suburban	2.6	1.6	3.1	3.5	2.8	4.0	1.6	1.4	2.4	3.3	3.5	3.7
Town	2.9	2.4	3.6	4.0	2.9	4.9	2.0	2.2	3.0	4.3	2.5	5.1
Rural	2.5	1.5	3.0	3.8	1.4	3.9	1.4	2.0	2.3	2.6	3.1	3.3
Region												
Northeast	2.5	2.1	3.1	3.2	3.1	4.3	1.3	1.3	2.1	4.7	3.9	4.9
Southeast	3.6	1.8	3.7	3.6	2.1	3.7	1.9	2.3	3.1	2.7	3.2	4.2
Central	2.8	1.8	3.4	3.4	1.8	4.1	1.6	2.1	2.4	2.7	3.6	3.6
West	3.0	2.1	3.1	4.0	1.4	4.0	1.7	2.3	2.6	3.1	3.2	3.4
Poverty concentration												
Less than 10 percent	2.7	1.7	3.1	3.8	1.9	3.7	1.5	2.1	2.5	3.7	2.9	3.6
10 to 19 percent	2.4	1.9	3.4	3.7	1.7	4.0	1.4	1.7	2.0	2.5	3.6	3.9
20 percent or more	3.2	1.7	3.4	3.3	1.9	3.7	2.1	2.3	2.8	2.9	4.0	4.4

SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts, Fall 2008," FRSS 93, 2008.

Appendix B

Technical Notes

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Technical Notes

Fast Response Survey System

The Fast Response Survey System (FRSS) was established in 1975 by the National Center for Education Statistics (NCES), U.S. Department of Education. FRSS is designed to collect issue-oriented data within a relatively short time frame. FRSS collects data from state education agencies, local education agencies, public and private elementary and secondary schools, public school teachers, and public libraries. To ensure minimal burden on respondents, the surveys are generally limited to three pages of questions, with a response burden of about 30 minutes per respondent. Sample sizes are relatively small (usually about 1,000 to 1,500 respondents per survey) so that data collection can be completed quickly. Data are weighted to produce national estimates of the sampled education sector. The sample size permits limited breakouts by classification variables. However, as the number of categories within the classification variables increases, the sample size within categories decreases, which results in larger sampling errors for the breakouts by classification variables.

Sample Design

The sample for the FRSS 2008 district survey on educational technology consisted of 1,589 public school districts in the 50 states and the District of Columbia. This survey was one of three related FRSS surveys conducted under a nested design involving a sample of schools, districts that administered the sampled schools, and teachers within the sampled schools. The selection of districts included two stages.

For the first stage, a nationally representative sample of regular U.S. public schools was selected from the 2005–06 NCES Common Core of Data (CCD) Public School Universe file, which was the most current file available at the time of selection. The sampling frame included 85,719 regular schools. Excluded from the sampling frame were schools with a high grade of prekindergarten or kindergarten and ungraded schools, along with special education, vocational, and alternative/other schools; schools outside the 50 states and the District of Columbia; and schools with zero or missing enrollment. The public school sampling frame was stratified by level (elementary or secondary/combined), categories of enrollment size, and categories for percent of students eligible for free/reduced-price lunch. Schools in the frame were then sorted by type of locale and region to induce additional implicit stratification.

For the second stage, the public school districts that contained at least one sampled school were identified using the 2005–06 CCD Local Education Agency file. The district sample is representative of all public school districts in the nation that administer at least one regular school as described above.

Data Collection and Response Rates

Questionnaires and cover letters for the study were mailed to the superintendent of each sampled school district in early August 2008. The letter introduced the study and requested that the questionnaire be completed by the person most knowledgeable about educational technology in the district. Respondents were offered the option of completing the survey via the Web. Telephone follow-up for survey nonresponse and data clarification was initiated in late August 2008 and completed in January 2009.

Of the 1,589 school districts in the sample, 60 were found to be ineligible for the survey because the district had closed or merged with another district. This left a total of 1,529 eligible school districts in the sample. Completed questionnaires were received from 1,408 districts, or 92 percent of the eligible districts (table B-1). Of the districts that completed the survey, 75 percent completed it by the Web, 21 percent completed it by

mail, 4 percent completed it by fax, and less than 1 percent completed it by telephone. The weighted response rate was 90 percent. The weighted number of eligible districts in the survey represents the estimated universe of public school districts in the 50 states and the District of Columbia with one or more regular schools.[4]

Table B-1. **Number and percent of responding public school districts in the study sample, and estimated number and percent of public school districts the sample represents, by district characteristics: Fall 2008**

District characteristic	Respondent sample (unweighted)		National estimate (weighted)	
	Number	Percent	Number	Percent
All public school districts	1,408	100	13,600	100
District enrollment size				
Less than 2,500	457	32	9,600	70
2,500 to 9,999	512	36	3,200	23
10,000 or more	439	31	900	6
Community type				
City	277	20	800	6
Suburban	457	32	3,100	23
Town	225	16	2,500	18
Rural	449	32	7,200	53
Region				
Northeast	284	20	3,200	24
Southeast	312	22	1,600	11
Central	398	28	5,100	37
West	414	29	3,700	28
Poverty concentration				
Less than 10 percent	413	29	4,100	30
10 to 19 percent	574	41	5,600	41
20 percent or more	419	30	3,900	29

NOTE: There were a small number of cases for which poverty concentration was missing. Detail may not sum to totals because of rounding or missing data for poverty concentration.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts," FRSS 93, 2008.

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[4] For more details about the development of survey weights, see the section of this report on Sampling Errors.

Imputation for Item Nonresponse

Although item nonresponse for key items was very low, missing data were imputed for the items with a response rate of less than 100 percent (table B-2).[5] The missing items included both numerical data such as the number of schools with Digital Subscriber Line (DSL) connections to the district, as well as categorical data such as whether the district had written policies on student use of cell phones. The missing data were imputed using a "hot-deck" approach to obtain a "donor" district from which the imputed values were derived. Under the hot-deck approach, a donor district that matched selected characteristics of the district with missing data (the recipient district) was identified. The matching characteristics included metropolitan status, geographic region, district enrollment size, district type code, and agency charter code (indicating the presence of charter schools in the district). In addition, relevant questionnaire items were used to form appropriate imputation groupings. Once a donor was found, it was used to obtain the imputed values for the district with missing data. For categorical items, the imputed value was simply the corresponding value from the donor district. For numerical items, the imputed value was calculated by taking the donor's response for that item (e.g., number of schools with DSL connections to the district network) and dividing that number by the total number of schools connected to the district network. This ratio was then multiplied by the total number of schools connected to the district network in the recipient district to provide an imputed value.

Table B-2. **Percent of cases with imputed data in the study sample, and percent of cases with imputed data the sample represents, by questionnaire item: Fall 2008**

Questionnaire item		Respondent sample (unweighted)	National estimate (weighted)
Question 5: District Network Connections[1]			
Q5apart1	Number of schools with dial-up or ISDN connections to the district	0.21	0.19
Q5apart2	Does the district have a dial-up or ISDN connection to the Internet service provider?	0.07	0.01
Q5bpart1	Number of schools with DSL connections to the district	0.21	0.19
Q5bpart2	Does the district have a DSL connection to the Internet service provider?	0.14	0.08
Q5cpart1	Number of schools with broadband cable connections to the district	0.21	0.19
Q5cpart2	Does the district have a broadband cable connection to the Internet service provider?	0.07	0.01
Q5dpart1	Number of schools with T1 or DS1 connections to the district	0.21	0.19
Q5dpart2	Does the district have a T1 or DS1 connection to the Internet service provider?	0.07	0.01
Q5epart1	Number of schools with T3 or DS3 connections to the district	0.21	0.19
Q5epart2	Does the district have a T3 or DS3 connection to the Internet service provider?	0.07	0.01
Q5fpart1	Number of schools with direct fiber connections to the district	0.21	0.19
Q5gpart1	Number of schools with wireless connections to the district	0.21	0.19
Q5gpart2	Does the district have a wireless connection to the Internet service provider?	0.14	0.12
Q5hpart1	Number of schools with other connections to the district	0.21	0.19
Q5hpart2	Does the district have other connections to the Internet service provider?	0.07	0.01
Question 9: District's Treatment of Older Computers			
Q9d	Treatment of older computers: donate to other school districts, nonprofits, families, etc.	0.07	0.02
Q9e	Treatment of older computers: sell/auction	0.07	0.07
Question 10: Written Policies on Student Use of Technology			
Q10a	Written policies on student use specifically for: cell phones	0.07	0.11
Q10b	Written policies on student use specifically for: MP3 players/iPods	0.14	0.13
Q10e	Written policies on student use specifically for: email	0.07	0.14

See notes at end of table.

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[5] Per NCES standards, all missing questionnaire data are imputed.

Table B-2.   Percent of cases with imputed data in the study sample, and percent of cases with imputed data the sample represents, by questionnaire item: Fall 2008—Continued

Questionnaire item		Respondent sample (unweighted)	National estimate (weighted)
Question 11: Technology Resources Offered to Teachers			
Q11apart1	Offers elementary teachers: server space for the purpose of posting web pages or class materials	0.21	0.28
Q11bpart1	Offers elementary teachers: access to online district resources	0.07	0.24
Q11cpart1	Offers elementary teachers: remote access to school or district software	0.21	0.28
Q11dpart1	Offers elementary teachers: access to course management and delivery software	0.14	0.32
Q11epart1	Offers elementary teachers: access to electronic administrative tools	0.07	0.24
Q11fpart1	Offers elementary teachers: online curricula	0.28	0.40
Q11gpart1	Offers elementary teachers: opportunities for distance learning	0.14	0.32
Q11hpart1	Offers elementary teachers: online student assessment tools	0.14	0.38
Q11apart2	Offers secondary teachers: server space for the purpose of posting web pages or class materials ...	0.21	0.06
Q11bpart2	Offers secondary teachers: access to online district resources	0.14	0.08
Q11cpart2	Offers secondary teachers: remote access to school or district software	0.28	0.19
Q11dpart2	Offers secondary teachers: access to course management and delivery software	0.36	0.30
Q11epart2	Offers secondary teachers: access to electronic administrative tools	0.14	0.09
Q11fpart2	Offers secondary teachers: online curricula	0.28	0.26
Q11gpart2	Offers secondary teachers: opportunities for distance learning	0.14	0.14
Q11hpart2	Offers secondary teachers: online student assessment tools	0.28	0.30
Question 12: Technology Resources Offered to Students			
Q12apart1	Offers elementary students: email accounts used for schoolwork	0.14	0.38
Q12bpart1	Offers elementary students: electronic storage space on a server	0.07	0.24
Q12cpart1	Offers elementary students: online access to the library catalogue	0.07	0.24
Q12dpart1	Offers elementary students: online access to databases	0.21	0.36
Q12epart1	Offers elementary students: online curricula	0.43	0.54
Q12fpart1	Offers elementary students: opportunities for distance learning over the Internet or through videoconferencing	0.36	0.36
Q12gpart1	Offers elementary students: remote access to most software that is used in their classes	0.21	0.34
Q12apart2	Offers secondary students: email accounts used for schoolwork	0.14	0.12
Q12bpart2	Offers secondary students: electronic storage space on a server	0.07	0.05
Q12cpart2	Offers secondary students: online access to the library catalogue	0.21	0.18
Q12dpart2	Offers secondary students: online access to databases	0.28	0.29
Q12epart2	Offers secondary students: online curricula	0.21	0.35
Q12fpart2	Offers secondary students: opportunities for distance learning over the Internet or through videoconferencing	0.21	0.31
Question 13: Types of Student Data Kept in Electronic Data System			
Q13a	Student data kept in electronic data system: personal data	0.07	0.12
Q13b	Student data kept in electronic data system: demographic data	0.07	0.12
Q13c	Student data kept in electronic data system: enrollment data	0.07	0.12
Q13d	Student data kept in electronic data system: attendance data	0.07	0.12
Q13e	Student data kept in electronic data system: records on disciplinary actions	0.07	0.12
Q13f	Student data kept in electronic data system: health record data	0.14	0.24
Q13g	Student data kept in electronic data system: recent report cards	0.07	0.12
Q13h	Student data kept in electronic data system: grade history	0.07	0.12
Q13i	Student data kept in electronic data system: Individual Education Plans	0.07	0.12
Q13j	Student data kept in electronic data system: transportation data	0.07	0.12
Q13k	Student data kept in electronic data system: state standardized assessment scores	0.07	0.12
Q13l	Student data kept in electronic data system: district-wide assessment results	0.07	0.12

See notes at end of table.

Table B-2. **Percent of cases with imputed data in the study sample, and percent of cases with imputed data the sample represents, by questionnaire item: Fall 2008—Continued**

Questionnaire item		Respondent sample (unweighted)	National estimate (weighted)
Question 15: Topics in Which District Offers or Requires Professional Development			
Q15apart1	Offers professional development in: using multimedia digital content for instruction	0.21	0.22
Q15bpart1	Offers professional development in: using content-specific software tools for instruction	0.07	0.12
Q15cpart1	Offers professional development in: using Internet resources and communication tools for instruction	0.07	0.12
Q15dpart1	Offers professional development in: integrating technology into instruction	0.07	0.12
Q15epart1	Offers professional development in: creating or using digital portfolios	0.21	0.43
Q15fpart1	Offers professional development in: developing curriculum plans that include using technology to address content standards	0.14	0.35
Q15gpart1	Offers professional development in: applying technology in assessing student achievement with respect to state curriculum standards	0.14	0.13
Q15hpart1	Offers professional development in: using technology to access or manipulate data to guide instruction	0.07	0.12
Q15ipart1	Offers professional development in: using student assessment and evaluation strategies that involve technology	0.21	0.36
Q15jpart1	Offers professional development in: teaching via distance learning	0.14	0.13
Q15kpart1	Offers professional development in: using technology to support collaboration	0.07	0.12
Q15lpart1	Offers professional development in: technology for dialogue on student performance data	0.07	0.12
Q15mpart1	Offers professional development in: Internet safety	0.14	0.13
Q15npart1	Offers professional development in: intellectual property and copyright rules	0.07	0.12
Q15apart2	Requires professional development in: using multimedia digital content for instruction	0.57	0.43
Q15bpart2	Requires professional development in: using content-specific software tools for instruction	0.57	0.65
Q15cpart2	Requires professional development in: using Internet resources and communication tools for instruction	0.57	0.48
Q15dpart2	Requires professional development in: integrating technology into instruction	0.64	0.61
Q15epart2	Requires professional development in: creating or using digital portfolios	0.78	0.84
Q15fpart2	Requires professional development in: developing curriculum plans that include using technology to address content standards	0.64	0.80
Q15gpart2	Requires professional development in: applying technology in assessing student achievement with respect to state curriculum standards	0.71	0.63
Q15hpart2	Requires professional development in: using technology to access or manipulate data to guide instruction	0.64	0.74
Q15ipart2	Requires professional development in: using student assessment and evaluation strategies that involve technology	0.64	0.48
Q15jpart2	Requires professional development in: teaching via distance learning	0.71	0.96
Q15kpart2	Requires professional development in: using technology to support collaboration	0.64	0.72
Q15lpart2	Requires professional development in: using technology to promote dialogue on student performance indicators and related data	0.50	0.59
Q15mpart2	Requires professional development in: Internet safety	0.50	0.64
Q15npart2	Requires professional development in: intellectual property and copyright rules	0.43	0.58
Question 16: Extent of Agreement or Disagreement With Statements on Educational Technology in District			
Q16a	Extent of agreement with: Technology is a priority for the district administration	0.07	0.02
Q16b	Extent of agreement with: Teachers are sufficiently trained to integrate technology into classroom instruction	0.07	0.01
Q16f	Extent of agreement with: Funding for educational technology is adequate	0.07	0.06

[1] See technical notes for definitions of types of network connections.
NOTE: Data were imputed using hot-deck imputation procedures.
SOURCE: U.S. Department of Education, National Center for Education Statistics, Fast Response Survey System (FRSS), "Educational Technology in Public School Districts," FRSS 93, 2008.

Data Reliability

Although the Educational Technology in Public School Districts survey was designed to account for sampling error and to minimize nonsampling error, estimates produced from the data collected are subject to both types of error. Sampling error occurs because the data are collected from a sample rather than a census of the population, and nonsampling errors are errors made during the collection and processing of the data.

Sampling Errors

The responses were weighted to produce national estimates (table B-1). The weights were designed to reflect the variable probabilities of selection of the sampled districts and were adjusted for differential unit (questionnaire) nonresponse. The nonresponse weighting adjustments were made within classes defined by variables correlated with response propensity: district size class, metropolitan status of the district, and a measure of poverty status defined by the estimated percentage of children in the district with families living below the poverty level.[6] Within the final weighting classes, the base weights (i.e., the reciprocal of districts' probabilities of selection) of the responding districts were inflated by the inverse of the weighted response rate for the class. The findings in this report are estimates based on the sample selected and, consequently, are subject to sampling variability. General sampling theory was used to estimate the sampling variability of the estimates and to test for statistically significant differences between estimates.

The standard error is a measure of the variability of an estimate due to sampling. It indicates the variability of a sample estimate that would be obtained from all possible samples of a given design and size. Standard errors are used as a measure of the precision expected from a particular sample. If all possible samples were surveyed under similar conditions, intervals of 1.96 standard errors below to 1.96 standard errors above a particular statistic would include the true population parameter being estimated in about 95 percent of the samples. This is a 95 percent confidence interval. For example, the estimated percentage of public school districts with a district network is 84.0 percent, and the standard error is 2.0 percent (tables 3 and 3a). The 95 percent confidence interval for the statistic extends from [84.0 – (2.0 x 1.96)] to [84.0 + (2.0 x 1.96)], or from 80.1 to 87.9 percent. The 1.96 is the *critical value* for a statistical test at the 0.05 significance level (where 0.05 indicates the 5 percent of all possible samples that would be outside the range of the confidence interval).

Because the data from the FRSS educational technology survey were collected using a complex sampling design, the variances of the estimates from this survey (e.g., estimates of proportions) are typically different from what would be expected from data collected with a simple random sample. Not taking the complex sample design into account can lead to an underestimation of the standard errors associated with such estimates. To generate accurate standard errors for the estimates in this report, standard errors were computed using a technique known as jackknife replication. As with any replication method, jackknife replication involves constructing a number of subsamples (replicates) from the full sample and computing the statistic of interest for each replicate. The mean square error of the replicate estimates around the full sample estimate provides an estimate of the variance of the statistic. To construct the replications, 50 stratified subsamples of the full sample were created and then dropped one at a time to define 50 jackknife replicates. A computer program (WesVar) was used to calculate the estimates of standard errors.

All specific statements of comparisons made in this report have been tested for statistical significance at the .05 level using Student's *t*-statistic to ensure that the differences are larger than those that might be expected due to sampling variation. Adjustments for multiple comparisons were not included. Student's *t* values were computed to test the difference between estimates with the following formula:

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[6] For more information about poverty status, see the section of this report on Definitions of Analysis Variables.

$$t = \frac{E_1 - E_2}{\sqrt{se_1^2 + se_2^2}}$$

where E_1 and E_2 are the estimates to be compared and se_1 and se_2 are their corresponding standard errors. Many of the variables examined are related to one another, and complex interactions and relationships have not been explored.

Nonsampling Errors

Nonsampling error is the term used to describe variations in the estimates that may be caused by population coverage limitations and data collection, processing, and reporting procedures. The sources of nonsampling errors are typically problems like unit and item nonresponse, differences in respondents' interpretations of the meaning of questions, response differences related to the particular time the survey was conducted, and mistakes made during data preparation. It is difficult to identify and estimate either the amount of nonsampling error or the bias caused by this error. To minimize the potential for nonsampling error, this study used a variety of procedures, including a pretest of the questionnaire with school district respondents. The pretest provided the opportunity to check for consistency of interpretation of questions and definitions and to eliminate ambiguous items. The questionnaire and instructions were also extensively reviewed by NCES and the data requester at the Office of Educational Technology. In addition, manual and machine editing of the questionnaire responses were conducted to check the data for accuracy and consistency. Cases with missing or inconsistent items were recontacted by telephone to resolve problems. Data were keyed with 100 percent verification for surveys received by mail, fax, or telephone.

Definitions of Analysis Variables

Many of the district characteristics, described below, may be related to each other. For example, district enrollment size and community type are related, with city districts typically being larger than rural districts. Other relationships between these analysis variables may exist. However, this *First Look* report focuses on national estimates and bivariate relationships between the analysis variables and questionnaire variables rather than more complex analyses.

District Enrollment Size—This variable indicates the total number of students enrolled in the district based on data from the 2005–06 CCD. The variable was collapsed into the following three categories:

> **Less than 2,500 students**
> **2,500 to 9,999 students**
> **10,000 or more students**

Community Type—This variable indicates the type of community in which the district is located based on data from the 2005–06 CCD Local Education Agency (School District) Locale Code files. The 12 category urban-centric district locale code that was assigned using the 2000 Decennial Census data was collapsed into the following four categories:

> **City**—Includes large, midsize, and small principal cities
> **Suburban**—Includes large, midsize, and small urbanized territories outside principal cities
> **Town**—Includes fringe, distant, and remote territories that are inside an urban cluster
> **Rural**—Includes fringe, distant, and remote territories that are outside of urbanized areas and urban clusters

Region—This variable classifies districts into one of the four geographic regions used by the Bureau of Economic Analysis of the U.S. Department of Commerce. Data were obtained from the 2005–06 CCD Local Education Agency Universe file. The geographic regions are as follows:

> **Northeast**—Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont
>
> **Southeast**—Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia
>
> **Central**—Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin
>
> **West**—Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Oklahoma, Oregon, Texas, Utah, Washington, and Wyoming

Poverty Concentration—This variable indicates the percentage of children in the district ages 5–17 in families living below the poverty level, based on the Title I data provided to the U.S. Department of Education by the U.S. Census Bureau, "Small Area Income and Poverty Estimates." For detailed information on the methodology used to create these estimates, please refer to http://www.census.gov/did/www/saipe/index.html.

Data on this variable were missing for a small number of responding districts; districts with missing data were excluded from all analyses involving poverty concentration. The variable was collapsed into the following three categories:

> **Less than 10 percent**
> **10 to 19 percent**
> **20 percent or more**

Definitions of Terms Used in this Report

Definitions included on the questionnaire:

> **Technology:** Information technology such as computers, devices that can be attached to computers (e.g., LCD projector, interactive whiteboard, digital camera), networks (e.g., Internet, local networks), and computer software. We specifically are not including non-computer technologies such as overhead projectors and VCRs.
>
> **Asset recovery program:** Asset recovery programs provide third-party disposal services for owned or leased computers, which are then usually refurbished or recycled.
>
> **Blogs:** Websites where an individual or group creates a running log of entries that can be read by other users, such as in a journal.
>
> **Wikis:** Collaborative websites that allow users to freely create and edit web page content (e.g., Wikipedia).
>
> **Social networking websites:** Online social networks for communities of people who share interests and activities or who are interested in exploring the interests and activities of others (e.g., Facebook, MySpace).

Definitions for types of network connections (these definitions were not included on the questionnaire):

Dial-up connection: Data transmission through a normal telephone line upon command, at the maximum speed of 56 KB per second.

ISDN (Integrated Services Digital Network): Sends voice and data over digital telephone lines or normal telephone wires at the speed of up to 128 KB per second.

DSL (Digital Subscriber Line): Refers collectively to a group of digital subscriber lines, including ADSL (Asymmetric Digital Subscriber Line), SDSL (Symmetric Digital Subscriber Line), HDSL (High Data Rate Digital Subscriber Line), and SHDSL (Single-Pair High-Speed Digital Subscriber Line). Available transmission speeds vary according to provider and geographic area.

Broadband cable: Dedicated transmission of data through cable TV lines. Available transmission speeds vary according to provider and geographic area.

T1 or DS1: Dedicated digital transmission of data and voice at a speed up to 1.5 MB per second; composed of 24 channels.

T3 or DS3: Dedicated digital transmission of data and voice at a speed up to 45 MB per second; composed of 672 channels.

Direct fiber: Transmission of data by sending pulses of light through an optical fiber. With direct fiber architecture, each fiber leaving the central location goes to exactly one customer. Available transmission speeds vary according to provider and geographic area.

Wireless: Transmission of data without the use of physical wires or cables. Generally uses electromagnetic waves, such as radio waves, microwaves, or laser beams. Available transmission speeds vary according to provider and geographic area.

Contact Information

For more information about the survey, contact Peter Tice, Early Childhood, International, and Crosscutting Studies Division, National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, 1990 K Street NW, Washington, DC 20006, e-mail: peter.tice@ed.gov; telephone: (202) 502-7497.

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Appendix C

Questionnaire

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U.S. DEPARTMENT OF EDUCATION NATIONAL CENTER FOR EDUCATION STATISTICS WASHINGTON, D.C. 20006–5651	FORM APPROVED O.M.B. No.: 1850–0733 EXPIRATION DATE: 10/2009
EDUCATIONAL TECHNOLOGY IN PUBLIC SCHOOL DISTRICTS, FALL 2008 FAST RESPONSE SURVEY SYSTEM	

Please answer this survey using Fall 2008 information.

Definitions

Technology: Information technology such as computers, devices that can be attached to computers (e.g., LCD projector, interactive whiteboard, digital camera), networks (e.g., Internet, local networks), and computer software. We specifically are not including non-computer technologies such as overhead projectors and VCRs.

Asset recovery program: Asset recovery programs provide third-party disposal services for owned or leased computers, which are then usually refurbished or recycled.

Blogs: Websites where an individual or group creates a running log of entries that can be read by other users, such as in a journal.

Wikis: Collaborative websites that allow users to freely create and edit web page content (e.g., Wikipedia).

Social networking websites: Online social networks for communities of people who share interests and activities or who are interested in exploring the interests and activities of others (e.g., Facebook, MySpace).

IF ABOVE <u>DISTRICT</u> INFORMATION IS INCORRECT, PLEASE UPDATE DIRECTLY ON LABEL.

Name of Person Completing This Form: _____

Title/Position: _____

Telephone Number: _____   Email: _____

Best days and times to reach you (in case of questions): _____

THANK YOU. PLEASE KEEP A COPY OF THE SURVEY FOR YOUR RECORDS.

PLEASE RETURN COMPLETED FORM TO:	**IF YOU HAVE ANY QUESTIONS OR COMMENTS, CONTACT:**
Mail: Cindy Gray (8096.13.03) Westat 1650 Research Boulevard Rockville, Maryland 20850-3195 **Fax:** 800-254-0984	Cindy Gray at Westat 800-937-8281, Ext. 4336 or 301-251-4336 Email: cgray@westat.com

FRSS 93, 08/2008

Please answer this survey using Fall 2008 information.

1. How many schools are there in your district? _____

2. How many schools in your district have a local area network (LAN) connecting the computers within the school? ____

3. Does your district have a network connecting the district to its schools (e.g., a Wide Area Network)?

    Yes 1   No .... 2 *(Skip to question 6.)*

4. How many schools are connected to the district network? _____

5. Please provide information on your district network connections:
    In part 1, indicate the number of schools that have each type of connection to the district. (*Exclude connections that are only internal to schools. If no schools have a specific connection type, enter 0.*)
    In part 2, indicate "yes" or "no" for each connection type from the district to the Internet service provider(s). (*If you obtain Internet service through a regional or state network, include the connection from your district to that network.*)

Type of district network connection	1. From district to schools	2. From district to Internet service provider(s)	
	Number of schools	Yes	No
a. Dial-up or ISDN	_____	1	2
b. DSL	_____	1	2
c. Broadband cable	_____	1	2
d. T1 or DS1	_____	1	2
e. T3 or DS3	_____	1	2
f. Direct fiber	_____	1	2
g. Wireless	_____	1	2
h. Other (specify type for each "other" connection):	_____	1	2

    (1) From district to schools: _____
    (2) From district to Internet: _____

6. Does your district have the ability to switch to a backup connection to the Internet if a primary connection goes down?

    Yes 1   No 2

7. Does your district have a formal computer replacement plan (for some or all computers) that is reflected in long-term district budget planning?

    Yes 1   No 2

8. Does your district participate in an asset recovery program for its computers? (*See definition on cover.*)

    Yes, for all computers 1   Yes, for some computers 2   No 3

9. What does your district generally do with older computers that can no longer serve their original purpose? (*Circle one on each line.*)

	Yes	No
a. Continue to use until nonfunctional	1	2
b. Upgrade memory or components to extend useful life	1	2
c. Re-purpose for less demanding tasks	1	2
d. Donate to other school districts, nonprofits, families, etc.	1	2
e. Sell/auction	1	2
f. Recycle/dispose	1	2
g. Other (*please specify*): _____	1	2

10. Please indicate whether your district has written policies restricting use (e.g., blocking access) or specifying acceptable use by students that *specifically* address each of the following: (*Circle one on each line.*)

	Yes	No
a. Cell phones	1	2
b. MP3 players/iPods	1	2
c. Wikis and/or blogs (*definitions on cover*)	1	2
d. Social networking websites (*definition on cover*)	1	2
e. Email	1	2
f. Other Internet use.	1	2

11. Please indicate whether your district offers its elementary and secondary school <u>teachers</u> the following:
    (*Circle one on each line for elementary teachers and one for secondary teachers.*)
    If your district has no elementary school teachers, check here ☐ *and leave part 1 blank.*
    If your district has no secondary school teachers, check here ☐ *and leave part 2 blank.*

Technology offered to teachers	1. Elementary school teachers			2. Secondary school teachers		
	Yes, to all elementary teachers	Yes, to some elementary teachers	No	Yes, to all secondary teachers	Yes, to some secondary teachers	No
a. Server space for the purpose of posting their own web pages or class materials	1	2	3	1	2	3
b. Access to online district resources (multi-media resources, professional development materials)	1	2	3	1	2	3
c. Remote access (e.g., access from home) to school or district software	1	2	3	1	2	3
d. Access to course management and delivery software	1	2	3	1	2	3
e. Access to electronic administrative tools (e.g., electronic gradebooks)	1	2	3	1	2	3
f. Online curricula	1	2	3	1	2	3
g. Opportunities for distance learning (e.g., professional development offered over the Internet or through videoconferencing)	1	2	3	1	2	3
h. Online student assessment tools	1	2	3	1	2	3

12. Please indicate whether your district offers its elementary and secondary <u>students</u> the following:
    (*Circle one on each line for elementary students and one for secondary students. If your district has no students at one of those levels, leave that level blank.*)

Technology offered to students	1. Elementary school students			2. Secondary school students		
	Yes, to all elementary students	Yes, to some elementary students	No	Yes, to all secondary students	Yes, to some secondary students	No
a. Email accounts used for schoolwork	1	2	3	1	2	3
b. Electronic storage space on a server	1	2	3	1	2	3
c. Online access to the library catalogue	1	2	3	1	2	3
d. Online access to databases	1	2	3	1	2	3
e. Online curricula	1	2	3	1	2	3
f. Opportunities for distance learning over the Internet or through videoconferencing	1	2	3	1	2	3
g. Remote access (e.g., at home) to most software that is used in their classes	1	2	3	1	2	3

13. Are the following types of <u>student</u> data kept in an electronic data system? (*Circle one on each line.*)

	Yes	No
a. Personal data (e.g., contact information)	1	2
b. Demographic data (e.g., race/ethnicity, gender)	1	2
c. Enrollment data (e.g., status and location)	1	2
d. Attendance data	1	2
e. Records on disciplinary actions	1	2
f. Health record data	1	2
g. Recent report cards	1	2
h. Grade history (e.g., transcripts)	1	2
i. Individual Education Plans (IEPs)	1	2
j. Transportation data (e.g., bus assignments)	1	2
k. State standardized assessment scores	1	2
l. District-wide assessment results	1	2

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14. Does your district employ an individual who is responsible for educational technology leadership (e.g., a Chief Information Officer or comparable role)?

Yes, full-time devoted to this role 1   Yes, part-time devoted to this role ... 2   No 3

15. In <u>part 1</u>, indicate whether your district <u>offers</u> teacher professional development (e.g., workshops, courses, coordinated workgroups) in the following topics. In <u>part 2</u>, indicate whether your district <u>requires</u> teachers to participate in professional development in each topic. (*Please answer both parts for each item. Even if a topic is not offered, please report whether it is required.*)

Topic for teacher professional development	1. Offered by district		2. Required by district	
	Yes	No	Yes	No
a. Using multimedia digital content (e.g., digital audio or video) for instruction	1	2	1	2
b. Using content-specific software tools for instruction (e.g., graphic organizers, interactive math programs, graphing tools, etc.)	1	2	1	2
c. Using Internet resources and communication tools for instruction (e.g., accessing education materials, online discussion forums, virtual field trips)	1	2	1	2
d. Integrating technology into instruction	1	2	1	2
e. Creating or using digital portfolios	1	2	1	2
f. Developing curriculum plans that include using technology to address content standards	1	2	1	2
g. Applying technology in assessing student achievement with respect to state curriculum standards	1	2	1	2
h. Using technology to access or manipulate data to guide instruction	1	2	1	2
i. Using student assessment and evaluation strategies that involve technology (e.g., real-time feedback on assessments, databases that link standards with instructional resources and strategies)	1	2	1	2
j. Teaching via distance learning	1	2	1	2
k. Using technology to support collaboration	1	2	1	2
l. Using technology to promote dialogue on student performance indicators and related data	1	2	1	2
m. Internet safety	1	2	1	2
n. Intellectual property and copyright rules	1	2	1	2

16. Please indicate the extent to which you agree or disagree with each of the following statements as it relates to using educational technology in the instructional program in your district. (*Circle one on each line.*)

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
a. Technology is a priority for the district administration ...	1	2	3	4	5
b. Teachers are sufficiently trained to integrate technology into classroom instruction	1	2	3	4	5
c. Teachers are interested in using technology in classroom instruction	1	2	3	4	5
d. Technology infrastructure is adequate (e.g., adequate Internet speeds)	1	2	3	4	5
e. Technical support for educational technology is adequate	1	2	3	4	5
f. Funding for educational technology is adequate	1	2	3	4	5
g. Funding for educational technology is being spent in the most appropriate ways	1	2	3	4	5
h. Use of educational technology is adversely affected by competing priorities in the classroom	1	2	3	4	5