

**ADVANCED TELECOMMUNICATIONS IN U.S. PUBLIC SCHOOLS, K-12**

**FAST RESPONSE SURVEY SYSTEM**

This survey is authorized by law (20 U.S.C. 1221e-1). While you are not required to respond, your cooperation is needed to make the results of this survey comprehensive, accurate, and timely.

**DEFINITIONS**

**Advanced telecommunications** - refers to modes of communication used to transmit information from one place to another including broadcast and interactive television, networked computers, etc.

**Broadcast television** - refers to network television such as NBC, CBS, etc.

**Cable television** - refers to subscription television such as CNN, Learning Channel, Discovery, etc.

**Closed-circuit television** - refers to the transmission of television on noncommercial lines (e.g., inhouse broadcast).

**E-mail (Electronic mail)** - refers to text messages transmitted across networks and usually accessible only by the addressee.

**56Kb** - refers to a digital transmission speed of 56 Kilo (thousand) bits per second.

**Instructional rooms** - refers to rooms in the school building used for any instructional purposes (includes classrooms, labs, media centers, art rooms, rooms used for vocational or special education, etc.).

**Internet** - refers to a network of networks all running the TCP/IP protocols, sharing the same underlying network address space as well as the same domain name space, and interconnected into a network of information.

**ISDN (Integrated Services Digital Network)** - refers to data communication that integrates voice and data.

**Local area network** - refers to the linkage of computers and/or peripherals (e.g., printer) confined to a limited area that may consist of a room, building, or campus that allows users to communicate and share information.

**Modem** - a device which connects between a computer and a phone line to translate between the digital signal of the computer and the analog signal required for telephone transmission.

**Newsgroups** - electronic conferences/discussion groups similar to mailists. Newsgroup messages, called articles, are not mailed to a subscriber's e-mailbox but are distributed to a subscribing system's news server. The single copy is then accessed by all users on their network-connected machines. Each newsgroup focuses on a subject area.

**One-way video with two-way audio or two-way computer link** - refers to the ability to transmit or receive picture in one direction with the capability to communicate in two directions (interactively) via computer or some audio method.

**PPP (Point to Point Protocol)** - refers to a protocol that allows a computer to use TCP/IP (Internet) protocols (and become a full-fledged Internet member) with a standard telephone line and a high speed modem. See SLIP.

**SLIP (Serial Line Internet Protocol)** - refers to a protocol that allows a computer to use TCP/IP (Internet) protocol using serial lines such as dial-up telephone lines. See PPP.

**T1 rate** - refers to a digital transmission speed of 1.544 Megg (million) bits per second.

**Two-way video and audio** - refers to the ability to transmit and receive pictures and sound simultaneously in real time.

**Wide area network** - refers to a data communications linkage designed to connect computers over distances greater than the distance transmitted by local area networks (e.g., building to building, city to city, across the country, or internationally), that allows users to communicate and share information.

**World Wide Web (WWW)** - refers to a system that allows access to information sites all over the world using a standard, common interface called hypertext to organize and search information. It simplifies the process of finding a site, connecting, locating the appropriate documents and downloading the information through the use of a browser (e.g., Netscape, MOSAIC).

**AFFIX LABEL HERE**

IF ABOVE INFORMATION IS INCORRECT, PLEASE MAKE CORRECTIONS DIRECTLY ON LABEL.

Name of person completing form: \_\_\_\_\_ Telephone: \_\_\_\_\_

Title/position: \_\_\_\_\_ Number of years at this school: \_\_\_\_\_

Best days and times to reach you (in case of questions): \_\_\_\_\_ E-mail: \_\_\_\_\_

PLEASE RETURN COMPLETED FORM TO:  
WESTAT

IF YOU HAVE ANY QUESTIONS, CONTACT:  
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1650 Research Boulevard  
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The time required to complete this information collection is estimated to average 30 minutes per response, including the time to review instructions, search existing data resources, gather and maintain the data needed, and complete and review the information collection. **If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to:** U.S. Department of Education, Washington, DC 20202-4651.

FRSS Form No. 57, 10/95

PLEASE REFER TO DEFINITIONS ON COVER PAGE FOR WORDS IN ITALICS.

**I. Telecommunications**

1. What is the total number of instructional rooms in this school? Include all rooms used for any instructional purposes (including classrooms, computer and other labs, media centers, etc.). \_\_\_\_\_ Total instructional rooms
2. What is the total number of computers in this school? \_\_\_\_\_ Total computers
3. Please indicate whether or not each type of equipment or service is available at this school, and where in the school it is located. Then provide the number of instructional rooms (include classrooms, computer and other labs, media centers, etc.) in which the equipment/service is available. (Circle yes or no or enter appropriate responses in each column for each item.)

Equipment or service	1		2		3		4		5		6		7
	Available at school		In administrative offices?		In teacher work-rooms?		In class-rooms?		In computer labs?		In Library/media centers?		Total number of instructional rooms with service (Columns 4-6)

a. Computers connected to a local area network .....	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
b. Computer with modem .....	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
c. Computer with connection or access to a wide area network .....	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
d. Broadcast television .....	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
e. Cable television .....	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
f. Closed-circuit television ...	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
g. One-way video with two-way audio or computer link	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____
h. Two-way video and audio .	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	Yes	No	_____

If you answered no to question 3a, column 1, check here and skip to question 5a.  No local area network.

**II. Local Area Networking Capabilities**

4. Does your local area network connect any of the following for instructional and/or administrative purposes? (Circle all that apply.)

**Purpose**

	Administrative purposes	Instructional purposes	Neither
a. Computers to a shared printer or other peripherals (e.g., CD-ROM reader) for .....	1	2	3
b. Computers within the same room for .....	1	2	3
c. Computers in different rooms in your school building or on your school campus for .....	1	2	3
d. Computers in your school with a regional, national, or international network for .....	1	2	3

**III. Wide Area Networking Capabilities**

- 5a. What type of access to the Internet does this school have? (Circle one.)

No access to the Internet..... 1

Direct access to the Internet .....	2	<i>(Skip to question 6)</i>
Access to the Internet through another wide area network (e.g., America Online, Prodigy, CONNECT, etc.) .....	3	<i>(Skip to question 6)</i>
Both direct access to the Internet and access through another wide area network .....	4	<i>(Skip to question 6)</i>

5b. Does this school have plans to obtain access to the Internet? (Circle one.)

- Yes, direct access to the Internet is planned ..... 1 (Skip to question 5c)
- Yes, access through another wide area network (e.g., America Online, Prodigy, CompuServe, etc.) is planned ..... 2 (Skip to question 5c)
- Yes, both direct access to the Internet and access through another wide area network is planned ..... 3 (Skip to question 5c)
- No ..... 4 (Skip to question 12)

5c. If yes, by what year do you expect to obtain access to the Internet? 19\_\_\_\_\_ (Skip to question 12)

6. Which of the following Internet resources or capabilities does your school have and who in your school has access to each? (Circle all that apply.)

Resource/capability	Not available	Available for administrative staff	Available for teachers	Available for students
a. E-mail.....	1	2	3	4
b. News groups.....	1	2	3	4
c. Resource location services (e.g., Gopher, Archie, Veronica, etc.).....	1	2	3	4
d. World Wide Web Access (e.g., Browsers such as Netscape, MOSAIC).....	1	2	3	4
e. Other (specify).....	1	2	3	4

7a. How many computers in this school have access to the Internet? \_\_\_\_\_ Computers

7b. How many rooms used for instructional purposes (include classrooms, labs and media centers, etc.) have a computer with access to the Internet? \_\_\_\_\_ Rooms

8. How does your school connect to *wide area networks* (e.g., Internet, America Online, Prodigy, CompuServe, etc.)? (Circle all that apply.)

- Modem ..... 1
- SLIP/PPP connection ..... 2
- 56Kb..... 3
- T1 ..... 4
- ISDN ..... 5
- Other (specify) \_\_\_\_\_)..... 6

9. Who has responsibility for administering the *wide area network* in your school? (Circle one.)

- A full-time network administrator (staff member whose primary responsibility is network administration) ..... 1
- A staff member with part-time responsibility for administering the network..... 2
- No single individual ..... 3
- Administered by the district ..... 4

10. To what extent do administrative staff, teachers, and students use *wide area networks* (e.g., Internet, America Online, Prodigy, CompuServe, etc.) in your school? (Circle one for each item.)

**Use wide area networks**

Not at all	Small extent	Moderate extent	Large extent	
a. Administrative staff .....	1	2	3	4
b. Teachers.....	1	2	3	4
c. Students .....	1	2	3	4

11. Which of the following possible restrictions involving student access to *wide area networks* (e.g., Internet, America Online, Prodigy, CompuServe, etc.), apply in your school? (*Circle all that apply.*)
- a. No students have access..... 1
  - b. All students have access ..... 2
  - c. Network access is restricted to specific grades ..... 3
  - d. Network access is restricted to those students currently enrolled in or having completed a computer course..... 4
  - e. Network access is restricted to students in specific programs (e.g., gifted and talented, honors, advanced placement, remedial, etc.) ..... 5
  - f. Other (*specify*)..... 6

12. To what extent do each of the following groups have a formal role in developing your school's *advanced telecommunications* activities? (*Circle one for each item.*)

<b>Not at all</b>	<b>Small extent</b>	<b>Moderate extent</b>	<b>Large extent</b>	
a. Students .....	1	2	3	4
b. Teachers/Staff.....	1	2	3	4
c. Parents .....	1	2	3	4
d. School district .....	1	2	3	4
e. State Education Agency .....	1	2	3	4
f. Regional associations .....	1	2	3	4
g. Business leaders.....	1	2	3	4
h. Institutions of higher education.....	1	2	3	4
i. Other community organizations (e.g., libraries) .....	1	2	3	4
j. Other ( <i>specify</i> ) .....	1	2	3	4

**IV. Barriers**

13. Please indicate to what extent, if any, each of the following are barriers to your school's acquisition or usage of *advanced telecommunications* capabilities. If your school is currently using *advanced telecommunications*, please indicate to what extent the following are barriers to upgrading or maximizing telecommunications usage. (*Circle one for each item.*)

	<b>Not a barrier</b>	<b>Minor barrier</b>	<b>Moderate barrier</b>	<b>Major barrier</b>
a. Lack of or poor equipment.....	1	2	3	4
b. Inadequate hardware upkeep and repair.....	1	2	3	4
c. Too few telecommunication access points in building .....	1	2	3	4
d. Problems with telecommunications service provider .....	1	2	3	4
e. Lack of instructional software .....	1	2	3	4
f. Software too complicated to use.....	1	2	3	4
g. Lack of time in school schedule .....	1	2	3	4
h. Telecommunications links not easily accessible .....	1	2	3	4
i. Telecommunications equipment not easily accessible .....	1	2	3	4
j. Lack of technical support or advice.....	1	2	3	4
k. Lack of administrative support or initiative .....	1	2	3	4
l. Lack of or inadequately trained staff .....	1	2	3	4
m. Lack of teacher interest .....	1	2	3	4
n. Lack of teacher awareness regarding ways to integrate telecommunications into curriculum .....	1	2	3	4
o. Lack of student interest .....	1	2	3	4
p. Lack of parent or community interest.....	1	2	3	4
q. Not enough help for supervising student computer use .....	1	2	3	4
r. Concern about student access to inappropriate materials .....	1	2	3	4
s. Funds not specifically allocated for telecommunications .....	1	2	3	4
t. Variability of telecommunications rates from service providers .....	1	2	3	4
u. Use of <i>advanced telecommunications</i> does not fit with the educational policy of this school.....	1	2	3	4

14. In what year was this school built? 19\_\_\_\_\_

15. When was the last major renovation? 19\_\_\_\_\_

16. Did the construction or renovation include wiring for telecommunication services? (*Circle one.*)

Yes..... 1    No..... 2

17. What percentage of your students are eligible for the federally funded free or reduced-price lunch program? \_\_\_\_\_%

**THANK YOU!**