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# NEW HAMPSHIRE SCHOOL TECHNOLOGY SURVEY Comparison Report for 1999, 2000, and 2001 Data

The following Comparison Report for 1999, 2000, and 2001 is the result of the New Hampshire School Technology Surveys. The Office of Educational Technology (OET) at the New Hampshire Department of Education sent surveys to technology contacts in each NH public school building. The 1999 Technology Survey was mailed in October 1998 and the 2000 Technology Survey was mailed in October of 1999. The 2001 survey was completed online between October 2000 and June 2001. Completion of the surveys is required, in order for a NH school district to be eligible for any technology funds administered through OET. All New Hampshire public school buildings responded to each survey. In 1999 this included 449 school buildings. In 2000 this included 441 school buildings. In 2001 this included 435 school buildings.

To assist those completing the 2000 and 2001 surveys, responses from the previous years were populated into the new survey. The questions varied slightly from the 1999 survey to the 2000 survey, so the numbering from the 2000 survey took precedence. The same questions were asked in 2001 as in 2000. This enabled many of our schools to note changes and growth with respect to individual questions.

For more information regarding the New Hampshire School Technology Surveys please contact:

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#### **HARDWARE**

1. What is your current student-to-modern multimedia computer ratio as defined by levels A, B, and C in question 2? Please count only computers which are available for student use (i.e., no administrative computers).

RATIO:	1999	2000	2001
None	0.44%	0.00%	0.46%
> 25:1	17.56%	10.86%	4.83%
Between 25:1 and 10:1	49.78%	46.61%	40.69%
<b>Between 9:1 and 5:1</b>	22.67%	27.60%	40.00%
Lower than 5:1	6.67%	7.92%	12.18%
No response	2.89%	7.01%	1.84%

2. How many computers of each type does your school building have? [In the 1999 technology survey C level computer numbers were reported together with B level computers.]

FEATURES	486 PC/Mac '040 8-16 Mb RAM Win 3.1/Mac OS 7.0		Pentium/Power PC 16-32 Mb RAM CD/Multimedia Win 95-98/Mac OS 7.6		Pentium II/Mac G3 or better 32-64 Mb RAM or more CD/Multimedia Win 95-98/Mac OS 8.x	
	MAC:	3,308	MAC:	5,617	MAC:	N/A
	<b>PC</b> :	3,459	<b>PC</b> :	9,959	PC:	N/A

8-16 Mb R		486 PC/Mac '040 8-16 Mb RAM Win 3.1/Mac OS 7.0		Pentium/Power PC 16-32 Mb RAM CD/Multimedia Win 95-98/Mac OS 7.6 Pentium II/Mac G3 better 32-64 Mb RA or more CD/Multimedia W 95-98/Mac OS 8.		64 Mb RAM more imedia Win
	MAC:	3,459	MAC:	5,310	MAC:	1,899
	PC:	3,530	PC:	10,061	PC:	4,615

#### NEW HAMPSHIRE SCHOOL TECHNOLOGY SURVEY

Comparison Report for 1999, 2000, and 2001 Data

2001 LEVEL	S:	A		В		С
FEATURES	486 PC/Ma 8-16 Mb R Win 3.1/M	AM	Pentium/P 16-32 Mb CD/Multin 95-98/Mac	RAM nedia Win	better 32- or CD/Mult	II/Mac G3 or 64 Mb RAM more timedia Win Mac OS 8.x
	MAC:	2,880	MAC:	4,925	MAC:	4,239
	PC:	2,214	<b>PC</b> :	10,141	PC:	10,268

# 3. What percent of the school's classrooms have at least one modern multimedia computer? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	21.83%	28.95%	45.21%	4.01%
2000	13.15%	26.30%	60.32%	0.23%
2001	7.59%	17.24%	74.48%	0.69%

# 4. What percent of the school's modern computers are located in computer labs? Check only one.

<b>RANGE:</b>	0-30%	31-80%	Over 80%	No response
1999	57.68%	33.18%	5.57%	3.56%
2000	57.82%	37.19%	4.31%	0.68%
2001	55.63%	39.77%	3.68%	0.92%

# 5. What percent of the school's modern computers are located in instructional classrooms? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	26.73%	43.88%	26.28%	3.12%
2000	17.69%	49.66%	31.75%	0.91%
2001	14.94%	49.20%	35.17%	0.69%

### 6. What percent of the school's modern computers are located in the library media center? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	86.64%	8.02%	2.00%	3.34%
2000	91.38%	6.58%	1.13%	0.91%
2001	93.10%	4.83%	1.15%	0.92%

# 7. What percent of the school's modern computers are located in administrative offices? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	92.87%	3.56%	0.45%	3.12%
2000	96.37%	2.72%	0.23%	0.68%
2001	97.47%	1.61%	0.23%	0.69%

### 8. What percent of printers available to students in your school are dot matrix printers? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	61.69%	23.39%	11.58%	3.34%
2000	75.51%	15.42%	7.48%	1.59%
2001	86.90%	8.51%	3.91%	0.69%

# 9. What percent of printers available to students in your school are ink jet printers? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	36.97%	39.42%	20.49%	3.12%
2000	31.75%	39.68%	27.44%	1.13%
2001	25.98%	40.69%	32.41%	0.92%

# 10. What percent of printers available to students in your school are laser printers? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	72.16%	19.38%	5.35%	3.12%
2000	69.68%	20.14%	8.37%	1.81%
2001	63.68%	21.38%	14.02%	0.92%

#### NEW HAMPSHIRE SCHOOL TECHNOLOGY SURVEY

Comparison Report for 1999, 2000, and 2001 Data

11. How does your school deal with the technical maintenance and/or technical support of hardware? Check all that apply. [In the 1999 technology survey descriptions with a N/A response were not included.]

DESCRIPTION	1999	2000	2001
No maintenance Plan. Support provided piecemeal fashion by staff and students.	19.82%	12.52%	16.09%
Our school has part-time contracted services.	68.37%	27.40%	31.72%
Our school has full-time contracted services.	N/A	1.09%	2.99%
Our school has a part-time technical support person on staff.	N/A	28.49%	37.01%
Our school has at least one full-time, in-school technical support person on staff.	6.68%	10.34%	19.54%
Our school has a program for providing technical support by students	N/A	3.63%	5.52%
Other	N/A	13.25%	22.30%
No response	5.12%	3.27%	1.38%

### **CONNECTIVITY**

#### 12. What percent of your classrooms or libraries are connected to the Internet? Check only one.

DESCRIPTION	1999	2000	2001
No Internet access in the school	6.24%	2.94%	1.38%
Internet access available in the library or computer lab only	21.60%	10.18%	4.37%
Less than 50% of classrooms are connected to the Internet	21.38%	13.80%	6.90%
More than 50% of classrooms are connected to the Internet	47.22%	71.27%	86.67%
No response	3.56%	1.81%	0.69%

SECTION: *HARDWARE* Page 5 of 15

### 13. What percent of your building administrators are connected to the Internet? Check only one.

DESCRIPTION	1999	2000	2001
No Internet access in the school specially for administration	23.39%	9.30%	0.00%
Less than 50% of administrators are connected to the Internet	11.80%	4.76%	2.30%
More than 50% of administrators are connected to the Internet	9.58%	7.71%	5.06%
All administrators are connected to the Internet	49.67%	76.19%	87.82%
No response	5.57%	2.04%	4.83%

#### 14. How are the majority of your classroom or library computers connected? Check only one.

DESCRIPTION	1999	2000	2001
Not applicable / No connection	19.60%	9.28%	3.91%
LAN (Local Area Network) only (within the building)	42.32%	44.34%	43.22%
WAN (Wide Area Network) only (to other buildings in district)	3.56%	2.94%	2.76%
Both LAN and WAN	28.51%	41.86%	49.66%
No response	6.01%	1.58%	0.46%

# 15. Of those classrooms or libraries connected to the Internet, what type of connection do the majority have?

DESCRIPTION	1999	2000	2001
Not applicable / No connection	6.68%	2.93%	1.38%
Dial-up access	20.71%	11.96%	5.52%
56Kb Internet access	38.08%	42.66%	27.59%
High-speed Internet access (e.g., ISDN, T1, Cable, ATM)	28.95%	39.50%	64.83%
No response	5.57%	2.93%	0.69%

SECTION: CONTENT Page 6 of 15

16.	What percent of your students have an e-mail address provided by the school? Check only
	one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	89.98%	2.45%	2.23%	5.35%
2000	94.56%	1.81%	1.36%	2.27%
2001	95.17%	1.61%	2.07%	1.15%

# 17. What percent of your teachers have an e-mail address provided by the school? Check only one.

<b>RANGE:</b>	0-30%	31-80%	Over 80%	No response
1999	41.43%	12.25%	40.98%	5.35%
2000	28.34%	12.02%	57.82%	1.81%
2001	17.01%	9.43%	72.64%	0.92%

# **18.** Is your school filtering Internet access to students? Check all that apply. [Specific application names were not asked in the 1999 Technology Survey.]

DESCRIPTION	1999	2000	2001
No. We do not filter. (If no, do not check any other box)	65.70%	65.99%	49.66%
Yes. We use the following filtering software and /or procedures:	28.06%	32.74%	41.84%
Cyberpatrol	N/A	4.94%	7.82%
Surfwatch	N/A	4.63%	0.23%
Net Nanny	N/A	0.62%	0.46%
QSonic Wall	N/A	4.94%	11.72%
WebSense	N/A	0.15%	0.46%
Microsoft Proxy	N/A	5.56%	9.89%
Netscape Proxy	N/A	3.09%	0.69%
CSM Proxy	N/A	1.54%	7.13%
Other - please specify	N/A	7.26%	18.85%
No response	6.24%	1.27%	1.15%

SECTION: CONTENT

Comparison Report for 1999, 2000, and 2001 Data

19. Please indicate whether your school is engaged in any of the following distance learning activities and the type of connectivity used to deliver content. Check all that apply. [This question was not asked on the 1999 Technology Survey.]

2000 - CONTENT	ISDN	<b>T</b> 1	ATM	Cable	Satellite	Broadcast	Other
<b>Coursework for students</b>	0.15%	1.07%	0.00%	4.27%	3.05%	2.90%	0.76%
Coursework for staff	1.07%	3.35%	0.76%	1.07%	1.07%	0.30%	2.13%
<b>Projects for students</b>	1.22%	5.49%	0.30%	3.96%	1.68%	1.83%	2.29%
Projects for staff	0.46%	3.05%	0.30%	1.22%	0.91%	0.61%	0.46%
Video-conferencing	0.00%	1.37%	0.61%	0.30%	0.61%	0.00%	0.15%
Connectivity available but not yet utilized	0.76%	1.83%	0.61%	3.35%	1.68%	1.37%	1.52%
No response	40.09%						

2001 - CONTENT	ISDN	<b>T1</b>	ATM	Cable	Satellite	Broadcast	Other
<b>Coursework for students</b>	1.15%	2.53%	0.92%	7.36%	4.14%	3.91%	3.68%
Coursework for staff	3.91%	13.79%	1.61%	5.98%	2.76%	0.69%	11.49%
<b>Projects for students</b>	2.53%	11.95%	0.69%	7.13%	3.68%	2.53%	7.82%
Projects for staff	2.30%	10.34%	1.15%	3.22%	2.76%	0.46%	6.44%
Video-conferencing	0.00%	3.45%	0.92%	0.46%	2.53%	0.00%	2.53%
Connectivity available but not yet utilized	2.07%	4.14%	0.46%	9.2%	2.99%	2.99%	2.53%
No response	40.00%						

#### **CONTENT**

20. What percent of your students use *drill and practice* programs (i.e. educational software that engages students in multiple choice, true and false, or "worksheet" type of questions) on regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	71.94%	19.15%	5.57%	3.34%
2000	69.39%	24.49%	5.22%	0.91%
2001	66.21%	25.06%	8.51%	0.23%

SECTION: CONTENT Page 8 of 15

#### NEW HAMPSHIRE SCHOOL TECHNOLOGY SURVEY

Comparison Report for 1999, 2000, and 2001 Data

21. What percent of your students use *basic authoring* applications such as word processors, spreadsheets and drawing programs (i.e., KidPix) on a regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	23.39%	47.44%	25.39%	3.79%
2000	18.10%	45.93%	33.94%	2.04%
2001	13.56%	44.37%	41.15%	0.92%

22. What percent of your students use *advanced authoring* applications such as Web publishing software, presentation software (i.e., PowerPoint) and/or collaborative GroupWare on a regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	84.41%	10.47%	1.78%	3.34%
2000	79.37%	16.33%	2.27%	2.04%
2001	69.89%	23.68%	5.52%	0.92%

23. What percent of your students use *simulating* software (i.e., SimCity, ADAM, etc.) on regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	Over 80%	No response
1999	84.41%	10.91%	0.89%	3.79%
2000	85.97%	12.44%	0.68%	0.90%
2001	82.30%	14.02%	3.22%	0.46%

24. What percent of your students use *CD-ROM research resources* (i.e., CD-ROM encyclopedias) on regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	39.42%	41.43%	15.81%	3.34%
2000	34.01%	45.58%	19.50%	0.91%
2001	29.89%	48.51%	21.38%	0.23%

25. What percent of your students use the *World Wide Web* on a regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	Over 80%	No response
1999	60.13%	30.96%	5.35%	3.56%
2000	47.85%	40.14%	11.11%	0.91%
2001	34.02%	46.21%	19.54%	0.23%

SECTION: CONTENT Page 9 of 15

26. What percent of your students use *networked communications* (i.e., e-mail bulletin boards, list serves, etc. to contact resources outside the classroom) on a regular basis as part of the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	91.09%	4.45%	0.45%	4.01%
2000	90.93%	6.80%	0.45%	1.81%
2001	89.66%	7.59%	2.30%	0.46%

#### PROFESSIONAL DEVELOPMENT

27. How many technology-related professional development hours, over the past year, have the majority of teachers completed? Check only one.

<b>RANGE:</b>	0-5 hours	<b>6-10 hours</b>	Over 10 hours	No response
1999	59.47%	30.73%	6.24%	3.56%
2000	52.26%	41.86%	4.98%	0.90%
2001	48.05%	45.98%	5.52%	0.46%

28. Are technology skills addressed in the individual teachers' staff development plans? Check only one.

<b>RANGE:</b>	Yes	No	No response
1999	81.74%	14.03%	4.23%
2000	87.56%	10.86%	1.58%
2001	88.51%	11.03%	0.46%

29. How long have the majority of teachers been frequent users of technology? Check only one.

<b>RANGE:</b>	1999	2000	2001
0-3 months	3.56%	0.68%	0.23%
3 months - 2 years	53.45%	34.24%	22.99%
2-3 years	21.38%	34.24%	36.32%
Over 3 years	18.49%	29.71%	40.00%
No response	3.12%	1.13%	0.46%

SECTION: CONTENT Page 10 of 15

# NEW HAMPSHIRE SCHOOL TECHNOLOGY SURVEY Comparison Report for 1999, 2000, and 2001 Data

30. Does your school provide teachers with regular out-of-class preparation time during their scheduled day for learning and integrating technology into the curriculum? Check only one.

<b>RANGE:</b>	Yes	No	No response
1999	21.83%	74.39%	3.79%
2000	23.81%	75.28%	0.91%
2001	26.90%	72.18%	0.92%

31. How does your school provide staff support for (a) effectively using applications software and (b) applying curriculum integration strategies? Check all that apply. [This question was not asked on the 1999 Technology Survey.]

2000 - DESCRIPTION	Application Software	Curriculum Integration
There is no official support plan in place. Support is provided in a piecemeal fashion by staff and students.	34.92%	41.95%
Our school has part-time contracted services.	7.26%	6.80%
Our school has full-time contracted services.	0.91%	0.10%
Our school has a part-time support person on staff.	26.53%	24.04%
Our school has at least one full-time, in-school support person on staff.	13.38%	12.02%
Our school has a program for providing support by students.	1.81%	1.36%
Other. Please explain in question 42 if you provide support in another way.	12.02%	12.47%

2001 - DESCRIPTION	Application Software	Curriculum Integration
There is no official support plan in place. Support is provided in a piecemeal fashion by staff and students.	43.22%	35.86%
Our school has part-time contracted services.	13.33%	9.20%
Our school has full-time contracted services.	26.21%	0.69%
Our school has a part-time support person on staff.	50.34%	24.14%
Our school has at least one full-time, in-school support person on staff.	35.40%	19.08%
Our school has a program for providing support by students.	11.49%	1.84%
Other. Please explain in question 42 if you provide support in another way.	31.03%	18.39%

# 32. What type of on site technology-related professional development did your teachers participate in during the previous academic year? Check all that apply.

DESCRIPTION	1999	2000	2001
Basic introduction to hardware/software applications.	87.75%	82.18%	86.44%
Multi-day courses run by public or private technology training organizations.	31.63%	35.41%	38.62%
On-site visits to technology-using classrooms.	19.38%	19.15%	20.00%
On-line distance learning professional development courses.	5.12%	10.69%	16.55%
In-school one-on-one professional mentoring on a consistent or just-in-time basis	50.56%	69.93%	71.03%
Collaborative team-teaching opportunities with technology proficient instructors.	38.75%	44.32%	47.36%
Action-research oriented projects.	10.69%	17.37%	17.93%
Research using the Internet on a regular basis.	38.75%	46.77%	52.64%

#### INSTRUCTOR SKILL-LEVELS

33. What percent of your teachers are at the stage Entry and Adoption, i.e., teachers are just beginning to learn how to use basic applications such as word processors and drill and practice software? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	54.12%	35.63%	5.57%	4.68%
2000	59.18%	35.15%	3.63%	2.04%
2001	62.07%	33.56%	3.68%	0.69%

34. What percent of your teachers are at the stage Adaptation, i.e., teachers are familiar with a variety of applications and often require students to use technology to complete assignments? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	41.20%	51.67%	2.90%	4.23%
2000	33.33%	61.68%	3.17%	1.81%
2001	30.11%	64.14%	5.06%	0.69%

35. What percent of your teachers are at the stage Appropriation, i.e., teachers regularly use technology for collaboration, communication, and research and integrate these processes into the curriculum? Check only one.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	74.61%	20.49%	0.67%	4.23%
2000	70.98%	26.76%	0.91%	1.36%
2001	64.14%	32.87%	2.30%	0.69%

36. What percent of your teachers are at the stage Inventions, i.e., teachers leverage technology as a tool to craft new curriculum and new teaching and learning techniques? Check only one.

Page 13 of 15

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	93.10%	2.45%	0.00%	4.45%
2000	94.78%	3.85%	0.00%	1.36%
2000	91.72%	7.13%	0.69%	0.46%

SECTION: INSTRUCTOR SKILL LEVELS

#### **INTEGRATION AND USE**

# 37. What pattern of student technology use best describes the majority of your school's classrooms? Check only one.

DESCRIPTION	1999	2000	2001
Irregular, individual use (i.e., computers are in labs and libraries)	17.37%	12.86%	8.97%
Regular individual use for some students (i.e., as reward for students who complete in-classroom work)	14.92%	14.86%	12.18%
Irregular group use for short collaborative activities and/or regular individual use for most students	48.33%	52.99%	52.64%
Regular individual and group use of technology as communication and research tools as needed (i.e., students leverage technology to engage in authentic project-based learning)	13.14%	17.29%	25.75%
No response	6.24%	2.00%	0.46%

38.	What percent of y	vour students use a	computer at school	daily? Checl	k only one.
- JU.	vviiat percent or	your students use a	computer at senious	uant. Cncc	iz Omit ome.

<b>RANGE:</b>	0-30%	31-80%	<b>Over 80%</b>	No response
1999	42.09%	47.22%	5.79%	4.90%
2000	33.26%	55.43%	9.50%	1.81%
2001	23.91%	62.76%	13.10%	0.23%

#### 39. What percent of your teachers use a computer at school daily? Check only one.

<b>RANGE:</b>	0-30%	31-80%	Over 80%	No response
1999	26.95%	53.01%	15.14%	4.90%
2000	16.10%	53.06%	28.57%	2.27%
2001	10.34%	46.90%	42.30%	0.46%

Page 14 of 15

SECTION: INTEGRATION AND USE

#### **ADMINISTRATIVE**

This section was not included on the 1999 Technology Survey.

#### 40. What student information system software do you use for tracking enrollment?

SOFTWARE	2000	2001
OSIRIS	3.80%	3.22%
SASSY	3.80%	3.45%
Win School	7.83%	10.80%
Mac School	24.83%	19.77%
Other	52.57%	60.46%
No response	7.16%	5.06%

#### 41. What software program do you use to track school finance?

SOFTWARE	2000	2001
Lotus	1.08%	0.92%
Peachtree	0.22%	0.92%
Microsoft Excel	19.05%	16.32%
Quickbooks/Quicken	10.17%	13.79%
Quattro	0.22%	16.09%
Other	54.98%	49.66%
No response	14.29%	9.20%

The qualitative responses to question 42 have not been included in this report.

SECTION: INTEGRATION AND USE Page 15 of 15

<sup>42.</sup> Please briefly include here any additional information about your school technology needs which you believe are important for the NH Department of Education to know. Please include any effective and engaging software and on-line resources used in the classroom. You may add an additional page as necessary.