



2024 K – 12 Technology Staffing and Devices

Results from Survey of K – 12 Technology Leaders

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Contents

- OVERVIEW..... 2**
- SURVEY RESPONSES 3**
 - STAFF 3
 - DEVICES 6
 - OPEN-ENDED COMMENTS 9

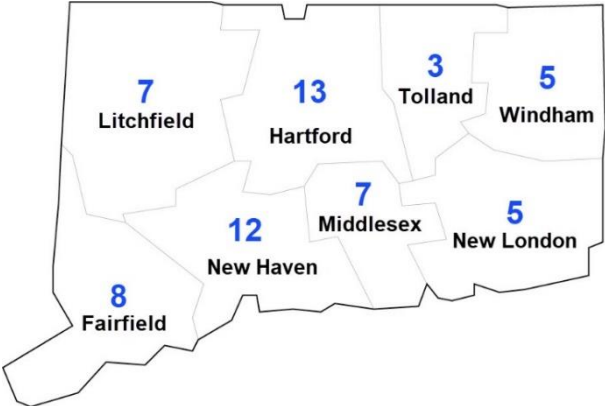
Overview

The data in this report comes from school technology leaders through a survey that the Connecticut Commission for Educational Technology developed in the fall of 2024. The intent was to index current staffing levels and salaries in the most common positions that oversee and support technology in our state’s K – 12 schools. The report also reflects current and historical device (computer) levels by grade band.

This report should help school leaders in assessing staffing types and levels to maximize investments in technology, especially given the significant expansion of digital tools during and since the COVID pandemic that accelerated remote and hybrid learning. Additionally, this year public schools face the end of federal pandemic relief aid to offset instructional and operational costs. In addition to the Commission’s [“K – 12 Technology Sustainability”](#) guidance from the spring of 2024, the following report should help districts make the most of technology investments to deepen student learning and appreciate efficiencies in all aspects of school operations.

District responses reflect the following aggregate technology needs:

- 200,380 Students (39% of state total)
- 281,925 Computing Devices
- 473 Schools
- 62 districts in all eight counties



- | | | | |
|---------------|----------------|----------------|---------------|
| Ansonia | EdAdvance | North Branford | Stamford |
| ACES | Ellington | North Haven | Sterling |
| Avon | Farmington | Norwich | Suffield |
| Barkhamsted | Glastonbury | Oxford | Thompson |
| Berlin | Integrated Day | Plainville | Trumbull |
| Bethel | Killingly | Plymouth | Wallingford |
| Branford | Lebanon | Regional 01 | Watertown |
| Bristol | Madison | Regional 08 | Westbrook |
| Brookfield | Manchester | Regional 09 | Winchester |
| Clinton | Meriden | Regional 13 | Windham |
| Colchester | Middletown | Regional 15 | Windsor Locks |
| CTECS | Milford | Regional 16 | |
| Cromwell | Montville | Regional 17 | |
| Darien | New Britain | Rocky Hill | |
| East Hampton | New Canaan | Somers | |
| East Hartford | New Fairfield | Southington | |
| Eastford | New Milford | | |

Survey Responses

The following sections reflect responses from public school leaders to a Commission survey on staffing and device levels to support digital learning.

Staff

Q: In the sections below, provide details on staffing by category (IT, Classroom and Library, and Other Specialists).

IT Staff

- Technology Manager or Director: Oversees all technology districtwide
- Assistant Technology Manager or Director: Deputy to the Technology Manager or Director
- Cyber Security Manager or Specialist: Oversees information and cyber security as well as physical security systems including cameras
- Network Engineer or Manager: Specialist in networking, security, wireless, and broadband infrastructure
- Technician I: Entry-level position that provides break-fix support
- Technician II: Mid-level position that provides break-fix support for computers, printers, and perhaps servers
- Technician III: Senior position that handles upper-level issues and performs more advanced troubleshooting
- Telecommunications Specialist: Professional who manages wired and possibly wireless telephony

Position	Districts with Position	Average Enrollment of Districts with Position	Average FTE in Districts with Position	Average Salary for Position
Technology Manager or Director	59	3,288	0.98	\$116,668
Assistant Technology Manager or Director	12	6,164	1.25	\$107,177
Cyber Security Manager or Specialist	4	9,150	1.05	\$123,000
Network Engineer or Manager	40	3,978	2.93	\$79,907
Technician I	40	3,739	2.93	\$48,347
Technician II	34	4,141	2.39	\$57,645
Technician III	32	4,170	1.89	\$68,532
Telecommunications Specialist	5	6,745	0.60	\$42,092

Districts indicating that they outsource jobs are as follows, by position and district count: Technology Manager or Director (1), Cyber Security Manager or Specialist (2), Network Engineer or Manager (2), Technician I (3), Technician III (1).

Staff (Continued)

Classroom and Library Specialists

- Assistive Technology Specialist: Professional on the use of technology for learners with special needs
- Library Media Director: Oversees library services districtwide
- Library Media Specialist: Provides library, research, information literacy, and possibly technology support services
- Technology Integration Manager or Director: Oversees technology integration districtwide
- Technology Integration Specialist: Supports teachers in the effective use of technology in the classroom
- Technology Resource Teacher: Instructs students directly on the use of technology

Position	Districts with Position	Average Enrollment of Districts with Position	Average FTE in Districts with Position	Average Salary for Position
Assistive Technology Specialist	11	5,339	1.27	\$59,637
Library Media Director	6	4,618	3.33	\$51,442
Library Media Specialist	46	3,383	4.37	\$62,833
Technology Integration Manager or Director	9	5,799	1.00	\$112,650
Technology Integration Specialist	13	4,569	2.89	\$70,610
Technology Resource Teacher	11	5,063	4.94	\$72,444

Districts indicating that they outsource jobs are as follows, by position and district count: Assistive Technology Specialist (3), Technology Integration Specialist (1).

Staff (Continued)

Other Specialists

- Administrative Assistant: Provides administrative support dedicated to the technology team
- Audio/Visual – Digital Media Coordinator: Oversees school or district AV and digital media needs
- Audio/Visual – Digital Media Technician: Provides direct support for AV and digital media hardware and software
- Data Specialist or Manager: Responsible for data collection, analysis, and reporting

Position	Districts with Position	Average Enrollment of Districts with Position	Average FTE in Districts with Position	Average Salary for Position
Administrative Assistant	23	4,336	1.03	\$49,013
Audio/Visual – Digital Media Coordinator	4	4,217	1.00	\$60,250
Audio/Visual – Digital Media Technician	7	4,099	1.04	\$52,170
Data Specialist or Manager	36	3,756	1.66	\$61,416

Districts indicating that they outsource jobs are as follows, by position and district count: Audio/Visual – Digital Media Technician (1), Data Specialist or Manager (1).

Q: Approximate Blended Benefit (Fringe) Rate of All Staff as a Percent of Salary.

- Responding Districts: 19
- Average Benefit Rate: 23%
- Low: 10%
- High: 35%

Q: Shared Positions: Choose the Option That Best Matches.

- District Staff Only Serve Our Schools: 46 (75%) Districts
- We Share Some Positions with the Town (Municipality): 1 (2%) District
- We Share All Positions with the Town (Municipality): 14 (23%) Districts

Devices

Q: How Does Your District Provide Devices to Students? For "District-Issued," Consider Those Purchased by Your District as Well as by the State or Philanthropic Organizations.

- District-Issued and Maintained: 53 Districts (87%)
- Student-Purchased and Maintained: 8 (13%) Districts
- Both District and Student: 0 Districts

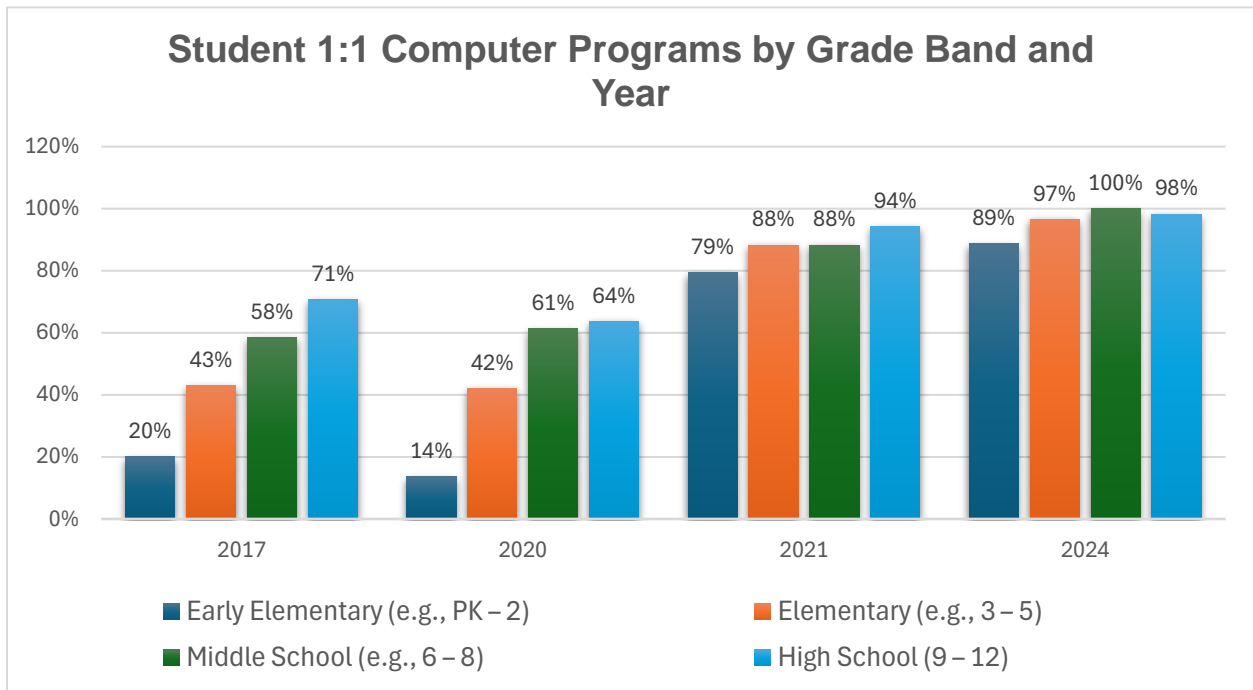
Q: What Is the Ratio of Devices to Students by Grade Band?

Grade Level	Student-to-Device Ratio				
	1:1	2:1	3:1	4:1	>4:1
Early Elementary (e.g., PK – 2)	47	3	0	2	1
Elementary (e.g., 3 – 5)	56	2	0	0	0
Middle School (e.g., 6 – 8)	58	0	0	0	0
High School (9 – 12)	56	1	0	0	0

Devices (Continued)

Longitudinal Device Levels by Year

The following graph and table reflect the percent of 1:1 student device levels by grade band, as reported by school technology leaders across surveys the Commission conducted in 2017, 2020, 2021, and 2024.



Grade Level	% 1:1 by Reporting Year			
	2017	2020	2021	2024
Early Elementary (e.g., PK – 2)	20%	14%	79%	89%
Elementary (e.g., 3 – 5)	43%	42%	88%	97%
Middle School (e.g., 6 – 8)	58%	61%	88%	100%
High School (9 – 12)	71%	64%	94%	98%

Q: How Many Total Devices (District-Provisioned and BYOD) Across All Schools Does Your Team Support? Include Student and Staff Devices but Only Those You Support Directly.

- Total Devices Across All (62) Districts: 281,925
- Average Devices per District: 4,547
- Most Devices per District: 20,000
- Least Devices per District: 240

Q: How Many People on Your Team Provide Technical (i.e., Break/Fix) Support for These Devices?

- Staff Across All Districts (62) Supporting Devices: 280
- Lowest Staff-to-Device Support Ratio: 1 : 2,667
- Largest Staff-to-Device Support Ratio: 1 : 300
- Average Staff-to-Device Support Ratio: 1 : 670
- Total (Statewide) Staff-to-Device Support Ratio: 1 : 1,008

Q: Whom Does Your Team Support* After Hours and on Weekends?

- Staff: 30 Districts
- Students: 11 Districts
- Families: 7 Districts
- Other (e.g., Board Members): 17 Districts

*District totals are not cumulative (e.g., some districts support staff only, some staff and students, etc.)

Open-Ended Comments

Survey respondents provided details on several questions. The responses below have been edited to preserve anonymity.

After-Hours and Weekend Support

- Admin staff only by director/manager
- Administrators and town staff
- Administrators and public safety
- Apart from emergencies (handled by IT Director), no support provided night and weekends
- At Superintendent request only
- Board of education members
- Central office support only
- District/town activities
- Emergency support for staff only
- Minimal support after hours for key staff only
- No support on weekends
- Only for special events (e.g., Board meetings)
- Situation based
- Special events
- Town departments

Additional Comments

- We support 5,000 student and staff devices, significantly more when accounting for all devices
- Certified staff have two devices each at this point: an iPad and a laptop. This is our new standard classroom model for mobility and capabilities.
- Certified staff are assigned laptops (Mac or PC depending on instruction area)
- Certified staff, administration, and office positions are provided Windows devices. All other employees are issued Chrome devices or use shared technology. Students are provided Chromebooks 1:1 via cart (K – 5) or directly (6 – 12). Staff are issued USB document cameras and other peripherals that their position may require.
- I did not fill out the library media section because I don't really have that information. We have a supervisor that's split with Art, Music, and Library. We have 13 media specialists and a teacher leader for instructional

technology. The Special Education department does their own adaptive technology support.

- In addition to school-issued devices, we support staff personal devices if they are used for email or other school-related work.
- Not a good comparison as more shifting of staff will be happening in the summer. IT staff are responsible for all networks, telecommunications, Internet of things (IoT), building management systems, security system integration, etc.
- Our IT staff only repair or fix staff devices. We have an outside contractor repair student devices.
- Staff have Windows laptops. Only the IT Director provides support outside normal hours, and for emergencies only.
- The total count of supported devices is around 5,000, but the number may be a bit over that. We have four technicians, a head technician, a network administrator, and my position. This is structured to be a level 1, 2, 3 scenario, with level 2 being the head technician and level 3 the network administrator.
- The network administrators, the IT manager, and CIO all work with families over weekends to assist with issues.
- The survey should include peripherals and account provisioning that takes a lot of time
- We are on year 2 of outsourcing to a third-party provider with a small integration staff employed by our district
- We are struggling with sustainability in terms of staffing, especially as we add new systems. For example, cybersecurity now includes an email system, and this requires consistent management. We have also taken on security cameras across the district as these systems are now IT devices. The 1:1 Chromebook environment is a challenge in terms of physical maintenance, given our current staffing levels.
- We do not provide after-hours support.
- We use a leasing program to provide staff laptops.
- Your survey did not ask how many devices we provide to the staff or the desktop footprint we have. We provide Chromebooks to almost all staff (1,400). Some get laptops (400). based on role within the district. We also have 8,000+ desktops, 160 servers, 42 Firewalls, thousands of wireless access points and controllers, printers, virtual reality (VR) equipment, and it goes on.