



2021 K – 12 Technology Staffing

Results from Statewide Survey of K – 12 Technology Leaders

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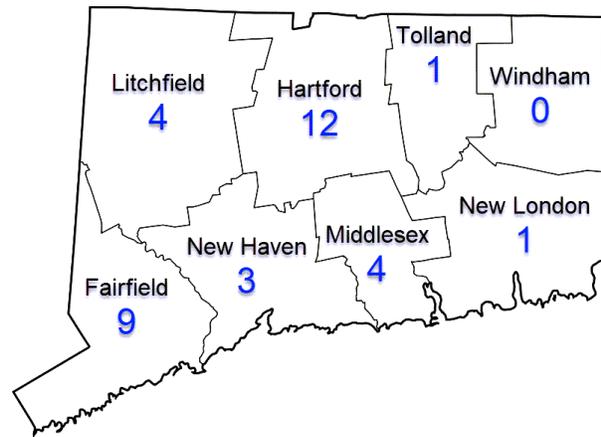
Introduction

In the summer of 2021, the Commission for Educational Technology developed a survey to collect information about public school staffing to support technology and digital learning. These positions include traditional information technology (IT), instructional (classroom) technology, and library media positions, which typically provide student instruction and staff professional development to support digital literacy skills. District leaders requested this data collection to help establish a baseline for personnel levels, especially given the recent expansion in technology to support learning.

Adoption of digital tools, devices and broadband for remote and blended learning in the 2019 – 20 and 2020 – 21 academic years included the addition of 142,000 computers from State and philanthropic donations; tens of thousands of new student home broadband connections; a 35 – 40 percent increase in the use of educational technology tools; and expansion of technology support by some schools to include evening and weekend help desks for families as well as students and staff.

District responses reflect the following, aggregate technology needs:

- 133,623 Students
- 189,235 Computing Devices
- 247 Schools
- Districts in seven of eight counties:



- 34 Districts (i.e., Local Education Agencies):

ACES	Glastonbury	Plymouth	West Hartford
Avon	Granby	Regional 04	Weston
Berlin	Griswold	Ridgefield	Wilton
Brookfield	Manchester	Rocky Hill	Winchester
Clinton	Meriden	Somers	
CTECS	Middletown	South Windsor	
Darien	New Canaan	Stratford	
East Windsor	New Milford	Suffield	
Fairfield	North Haven	Thomaston	
Farmington	Plainville	Trumbull	

Survey Responses

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

Staffing

Q: In the sections below, provide details on staffing by category (IT, Classroom and Library, and Other Specialists). Enter the number of staff in whole or partial full-time equivalents (FTE, e.g., 2.5), the average ANNUAL salary, and the approximate number of FTE positions you outsource to external vendors.

IT Staff

- 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
- Technology Manager or Director: Oversees all technology districtwide
- Telecommunications Specialist: Professional who manages wired and possibly wireless telephony

Position	Districts with Position	Average FTE in Districts with Position	Average Salary for Position	Average Outsourced FTE
Cyber Security Manager or Specialist	4	1.00	\$70,000	0.20
Network Engineer or Manager	25	1.08	\$80,618	0.87
Technician I	19	3.68	\$50,801	1.50
Technician II	20	2.50	\$56,162	0.00
Technician III	21	2.10	\$71,286	0.00
Technology Manager or Director	31	1.03	\$123,306	0.87
Telecommunications Specialist	4	1.00	\$60,000	0.15

Staffing (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 FTE in Districts with Position	Average Salary for Position	Average Outsourced FTE
Assistive Technology Specialist	10	1.10	\$63,832	0.00
Library Media Director	2	1.00	\$78,000	0.00
Library Media Specialist	28	6.70	\$75,750	0.00
Technology Integration Manager or Director	6	0.88	\$133,079	0.00
Technology Integration Specialist	14	2.64	\$79,448	0.30
Technology Resource Teacher	5	3.20	\$76,782	0.00

Staffing (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 FTE in Districts with Position	Average Salary for Position	Average Outsourced (Contract) FTE
Administrative Assistant	13	1.12	\$51,915	0.00
Audio/Visual – Digital Media Coordinator	4	0.88	\$63,413	0.00
Audio/Visual – Digital Media Technician	4	1.00	\$61,667	1.00
Data Specialist or Manager	23	1.70	\$73,676	0.63

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

- Responding Districts: 12
- Average Benefit Rate: 19%
- Low: 6%
- High: 35%

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: 28 Districts
- Both District and Student (BYOD): 6 Districts
- BYOD Only: 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	NA*
Early Elementary (e.g., PK – 2)	27	4	2	0	1
Elementary (e.g., 3 – 5)	30	2	1	0	1
Middle School (e.g., 6 – 8)	30	2	0	1	1
High School (9 – 12)	32	1	0	0	1

*Not Applicable: District does not have students at these grade levels.

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.

- Average Devices per District: 5,507
- Most Devices per District: 15,000
- Least Devices per District: 1,100

Devices (Continued)

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

- Average Staff per District Supporting Devices: 5.34
- Average Devices Supported per Staff Member: 1,032
- Largest District Team Supporting Devices: 10
- Smallest District Team Supporting Devices: 1

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

- Staff Only: 11 Districts
- Staff and Students: 1 District
- Staff, Students, and Families: 12 Districts*

*Aggregate across these 12 districts of 54,641 students supported by 60 staff members for a staff-to-student support ratio of one staff member per 910 students, not including staff or students' families.

Open-Ended Comments

Devices: Currently most staff have desktops and Chromebooks. We have begun transitioning to staff laptops instead of two devices, but the full transition won't be made until later this year. We have a fleet of Chromebooks constantly available for switch out when a student/staff device is broken. We also support iPhones for administrators, landline phones for each school room, HVAC, security cameras, SMART boards with onboard android devices or mini CPUs, etc.

Going 1 to 1 does require more tech staff to keep up with demand.

I only include devices in the sense of computers. If you also include servers, phones, security equipment, SMART boards, projectors, TVs, document cameras, intercoms, and other devices, it is easily over 10,000 devices.

Our tech team also provides support for the entire town, including Emergency Services (Police, Fire, Ambulance).

The 8,000+ devices includes smartboards, projectors, and any technology equipment in our inventory fleet.

We have enough devices to be 1:1 but do not have a formal 1:1 program due to inadequate staffing and technical support that would be needed to manage it successfully.

We keep all devices under warranty.

We run a grade 9 – 12 BYOD program supplemented with loaner devices.