Technology and Libraries
Robert Ford, Director of Technology

The Technology and Libraries team supports the district's teaching, learning, and operations in the areas of technology and information literacy. The team includes both teachers and operations staff who work with faculty and students in a variety of ways.

Technology and Information Literacy Integration: Four instructional technology specialist teachers and two librarians work with classroom teachers to incorporate technology and information literacy into the curriculum. The instructional technology specialists also work with teachers to integrate technology tools into areas where they enhance curriculum and improve student learning.

Direct Instruction: The district has adopted ambitious curricula for Technology Literacy and Library Media. These curricula are delivered both through integration into the broader curriculum and through direct instruction led by the instructional technology specialists and librarians. Topics covered include Technology Ethics, Safety and Society, Research Skills, Technology Skills, and Information Literacy.

Technology Operations: The district's network manager and two technicians work year-round to support, manage, and maintain all of the district's technology systems including over 1,200 student and faculty devices (desktops, laptops, and tablets), printers, servers, software, projectors and audiovisual systems, telephone systems, the district's network, and a wide range of curriculum and software.

Data Systems: The team supports and manages the district's data systems for scheduling, grading, attendance, assessment, reporting, and teacher evaluation. The district's data manager leads these efforts and is responsible for state and federal reporting including SIMS, EPIMS, SCS, and SSDR reporting. The technology department also supports curriculum leaders in their work with student assessments. A strategic priority for the district is improving the systems and processes for collecting and reporting student assessment data.

Base Operating Budget
Our base operating budget request includes a modest increase for FY17, reflecting expected license cost increases. The most significant portion of the technology budget is equipment maintenance and replacement, including repairs and the new technology replacement cycle, which account for 69% of the technology budget. Annual licenses and support contracts, and consumables, primarily replacement printer toner cartridges, represent, respectively, another 16% and 9% of the budget request. Among the miscellaneous expenses in the remainder of the technology budget request are software, training, and professional development.

Technology Replacement Cycle

In FY16, through the thoughtful support of the Capital Committee, the School Committee, and the Town as a whole, the district was able to introduce a technology replacement cycle for the first time. Under this replacement cycle, which includes all desktop computer, laptop computers, and tablets, with the exception of the Hanscom Middle School 1:1 program, all equipment will be replaced on a five year cycle. This will ensure that the equipment in the hands of our students and teachers will be reliable and capable of meeting the educational needs in our classrooms.

In FY16, we replaced the following equipment under the replacement cycle:

- 46 Teacher laptops *
- 4 Administrative support staff desktops
- 25 Desktops in the Lincoln School Link Computer Lab
- 80 Laptops in grade 3-5 classrooms (replacing the same number of desktops)
- 15 Laptops in science on the Hanscom campus.
- 47 iPads are scheduled to be purchased in early 2016 to replace iPads in the Smith Building and at HPS. The timing of this purchase is being coordinated with the state's anticipated PARCC/MCAS decision and training for teachers.

    * Good condition teacher laptops were completely refurbished and used to replace older student computers primarily in science classrooms and the Lincoln Library.

Feedback from faculty about the new replacement cycle has been overwhelmingly positive, particularly in regards to the new equipment in grades 3-5 and the Link Lab. One grade 3 teacher commented that "Moving from the desktops to the laptops opened up the room and allowed the layout to be more flexible…" Another teacher reported that "Teaching in the new Link Lab is much easier with the new computers because they are faster… Rather than spending minutes waiting we can spend time on learning." Teachers are also beginning to embrace the flexibility of having laptops in the classroom, including by sharing computers across classrooms to facilitate whole class activities.

In addition to the equipment that was replaced, 1 new teacher laptop for the new Hanscom BCBA position and two student tablets for the ELL program were added to meet program needs:

Under the replacement cycle, we carefully track the age and condition of all equipment. The cycle is budgeted to replace 20% of our equipment each year, based on a projected number of devices reaching the end of their lifecycle. The specific mix of devices (computers vs tablets) will be adjusted at the time of purchase to address any needs that have emerged throughout the year.

FY17 Technology Replacement Cycle			
Device	Total Number	Annual Number to be Replaced	Estimated FY17 Replacement Cost
Computer	723	145	$140,729
Tablet	371	74	$41,736
Total	1,091	219	$182,465

Improvement Initiatives

There are no technology improvement initiates this year.