Making IT Happen

Newton Board of Education
January 24, 2018

Newton Public Schools IT Department
Who are we?

Mary Decker - Director of Information Services
Patrick Dierling - Network Technician
Joseph Deluca - Technician
Betsy Van Orden - Instructional Technology Assistant
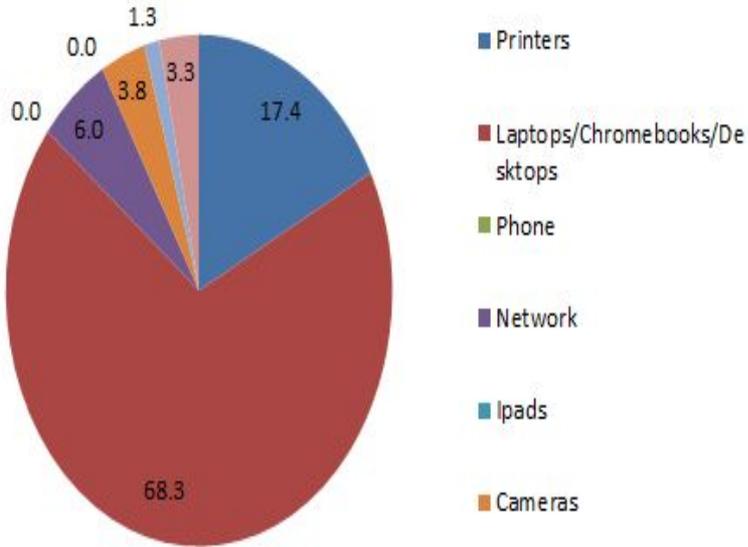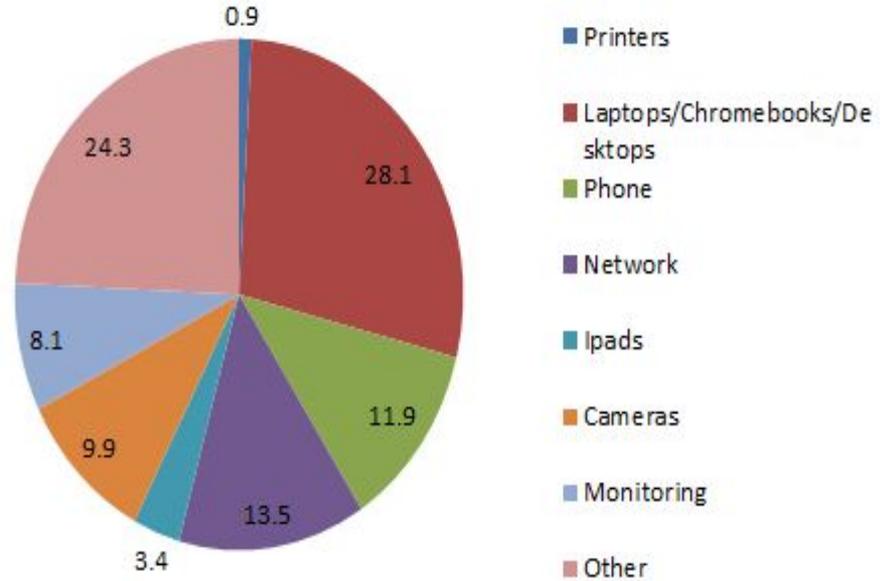
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By the Numbers

Hardware	2007	2017
Number of Laptops/Desktops	415	310
Chromebooks	0	995
Labs	9	3
Wireless Access Points	0	150
Printers	350	76
Ipads	0	35
Security Cameras	46	56
Network Structure	T1 Lines - 3 Connections	Fiber Connection - 1 connection
Phone System	Analog supported by Outside Vendor	VOIP support by IT
Smartboards, Document Cameras, 3DPrinters, Virtual Reality, Other peripherals	230	434

By the Numbers - Workorders

The classroom:

2007

2017

"Classroom tech is going to become more seamless. Instead of just adding technology into the classroom, schools will begin making it an integral part of the classroom's ecosystem. And gone are the days of waiting minutes between presentations. Wireless collaboration software makes casting from a student's personal device to the classroom display possible in seconds. Side-by-side and multi-screen projection will create new comparative learning opportunities for teachers."
 - Jason Meyer, Sr. Product Manager, Projectors, Epson America, Inc.

How much has technology changed the world in such a relatively short space of 10 years?

Uber,Lyft	Google Chrome	Virtual/Augmented Reality
The IPAD	Snapchat, Instagram	Kickstarter/Crowdsourcing
Air Bnb	Spotify	Android
Smart TV's	Venmo, Zelle, Square	4G

Some of the jobs that technology helped create over the past 10 years:

Social Media Marketers	Social Media Managers	Cloud Managers
Uber Drivers	Air BnB Hosts	YouTube Content Creators
App Developers	Drone Operators	

Technology is changing rapidly and we must be able to adapt and support the changes

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Today's Student & Technology

- Students have grown up fully immersed in technology as a way of learning.

- Social Media plays a huge role in a student's life.

- Multiple Studies have shown technology aids in helping students with higher level thinking

- Technology has aided in the shift of learning from students being content consumers to content creators.

- Student Center Learning uses technology as a critical component for student achievement

Technology staff no longer sits in a room working with technology but must interact with Teachers, Students, Administration, and the Community.

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Technology Today

- Learning takes place in the classroom; students don't have to cross the school to use a computer lab whose setup is less than ideal for collaborative work.
- Learning takes place anytime, anywhere. Students can work online or offline wherever they are, with or without Internet access.
- Communication becomes much easier. All students can communicate via email, videoconferencing, chats, social media, etc with their peers, with teachers and the entire world.
- Collaboration through shared documents with real-time multi-user editing
- Students take their documents and other materials with them in their district Google Apps account.
- Students can leverage the growing amount of online-only content and assessments that teachers are using to deliver instruction.
- Assessment tests are also taken on the Chromebooks in the classroom.
- Reducing paper and printing. Paper becomes less important. Its usage, handling, costs, and auxiliary costs (such as printers and copiers) are reduced.
- Online grading with immediate student (and parent) feedback.
- Communication with Parents and Stakeholders can be immediate.

Now, technology is always available. 24/7 anytime, anyplace.

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Role of Technology Department Today

- 24/7 support - uptime vital
- Cybersecurity - protecting our technology infrastructure and data is the number one priority and is constantly changing.
- Professional Development - both keeping up with the ever changing technology world through webinars, articles etc and communicating with staff at all levels.
- Working hand in hand with Curriculum to support their needs, TECHNOLOGY NEVER drive the needs.
- Assessment - Technology support is now critical to a successful online assessment delivery. - PARCC, DLM, WIDA, SCIENCE
- Digital Citizenship - Must be a role model and balance safety with responsibility
- Monitoring - Network, Gmail, Social Media
- Administering - GoGuardian, Google admin
- Parent Communication - Report Cards, Alerts, Paperless
- Internet of Things
    - Nurse - Diabetes Devices
    - Sports - livestreaming social media
    - Activities - Project Launch, Dream Girls

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Looking Forward

"Look how many industries have been turned upside down, from computing to publishing to entertainment to lodging to taxis to power generation to real estate to biotechnologies to artificial intelligence to political campaigns to education to communication to self-driving cars and the beat goes on."

Ira Friedman, CEO at Material Technologies, Inc.

Newton Technology looks forward to Making IT Happen