

Technology Update



April 24, 2018

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Technology Team



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Technology Plan and Action Items

Dedham Public Schools District Technology Plan



July 1, 2016 - June 30, 2019

[Technology Plan](#)
[FY19 Action Plan](#)
[FY18 Action Plan](#)
[FY17 Action Plan](#)



Top Ten Countdown



**Top 10 Most
Exciting DPS
Technology
Updates!**

Honorable Mentions



- Quarterly Meetings - SpEd (Secondary, Elementary, ECEC), Facilities, Curriculum Directors
- Projector and whiteboard updates DHS and upcoming in elementary schools
- Updated filtering and monitoring toward improved digital citizenship
- Student Registration Upgrades
- 4is - Student, Staff \ Electronic Records
- Library 5-Year Plan



Update Network Summer 2018


- Update wired network equipment that is beyond normal product life cycle
- Update wireless network equipment to accommodate increased usage and provide better network coverage
- Provide for improved stability, security and bandwidth to our network.




New Website




[District Home](#) | [Our Schools](#) | [Translate](#) | [Sign In](#)



Dedham Public Schools
America's first tax supported, free public school

District Calendar

[Home](#) | [Administration](#) | [Human Resources](#) | [Students](#) | [Parents](#) | [Faculty](#) | [Community](#) | [Calendar](#)



News
Superintendent's 30-Day Update 3/22/2018
Superintendent's Letter Re: March 14 Activities

Calendar
Monday, April 16
NO SCHOOL - April Vacation
Tuesday, April 17
NO SCHOOL - April Vacation
Wednesday, April 18
NO SCHOOL - April Vacation
Thursday, April 19
NO SCHOOL - April Vacation
Friday, April 20
NO SCHOOL - April Vacation
[View Calendar](#)

Quick Links
[Science Fair](#)
[DPS 2017-2018 Calendar](#)

Tweets by
[@MJWelchDedham](#)



Michael J. Welch
[@MJWelchDedham](#)

Interested in Science? Check out the 2nd Annual DPS Science Fair for Students in Grades 3-6 info here:
sites.google.com/dedham.k12.ma...



Student Data Privacy

Stopping Cambridge Analytica / Facebook

- Dedham is top five in the state in obtaining vendor signed contracts
- “School Official Exception” allows school districts to work with third party vendors as long as they agree to our terms
- We have third party vendor sign contracts to agree to DPS terms in regarding to safeguarding data
- Professional development for teachers around process of procuring educational technology resources and increasing their knowledge of the laws

[Link to Dedham MSPA information](#)

[Link to playposit about the laws](#)



Unified Protection Management

- Prevents unwanted traffic from entering our environment
- Better management for our network traffic

04-11 15:34	■■■■■	United Kingdom	159.65.87.1
04-11 01:42	■■■■■	United States	159.65.224
04-11 01:38	■■■■■	United States	159.65.224
04-10 16:29	■■■■■	United States	138.68.53.6
04-10 11:03	■■■■■	France	213.56.141
04-10 11:03	■■■■■	France	213.56.141
04-10 01:25	■■■■■	China	122.114.24
04-09 20:58	■■■■■	China	121.31.21.1
04-09 20:36	■■■■■	Indonesia	103.82.242
04-09 03:00	■■■■■	Brazil	191.188.80
04-08 22:41	■■■■■	China	61.160.223
04-08 22:41	■■■■■	China	61.160.223
04-08 12:48	■■■■■	China	54.223.45.1
04-08 12:48	■■■■■	China	54.223.45.1
04-08 08:16	■■■■■	Netherlands	185.244.25
04-07 06:33	■■■■■	United Kingdom	194.154.19
04-05 23:50	■■■■■	United States	167.99.228
04-05 23:32	■■■■■	United States	167.99.228
04-05 23:00	■■■■■	Netherlands	185.244.25
04-05 22:28	■■■■■	Jordan	193.188.65
04-05 21:47	■■■■■	United States	167.99.228
04-05 21:29	■■■■■	United States	167.99.228
04-05 20:58	■■■■■	United States	167.99.228
04-05 20:49	■■■■■	United States	167.99.228
04-05 07:20	■■■■■	Turkey	31.210.119
04-05 07:20	■■■■■	Turkey	31.210.119
04-04 18:13	■■■■■	United States	23.24.101.1
04-03 01:28	■■■■■	United States	104.131.12
04-03 00:36	■■■■■	Brazil	191.188.80



PowerSchool - Special Education

EQUALITY VERSUS EQUITY



In the first image, it is assumed that everyone will benefit from the same supports. They are being treated equally.



In the second image, individuals are given different supports to make it possible for them to have equal access to the game. They are being treated equitably.



In the third image, all three can see the game without any supports or accommodations because the cause of the inequity was addressed. The systemic barrier has been removed.

All teachers can now access all their students Individual Education Plans (IEPs) and Disability Information (504) electronically simply by logging into PowerSchool

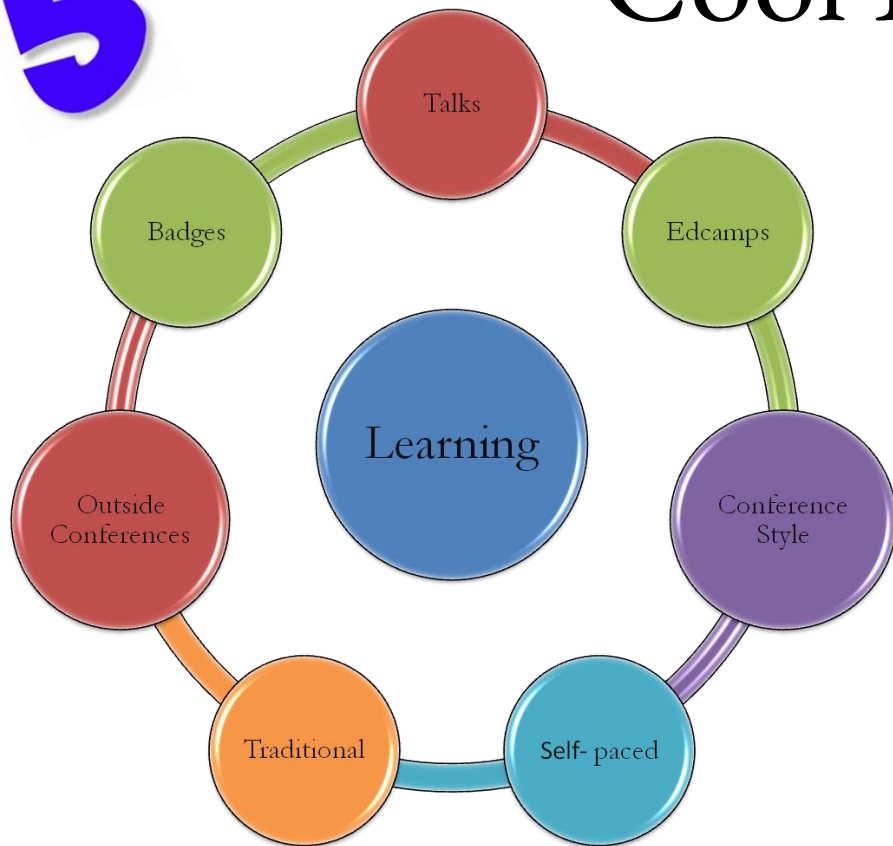


PowerSchool



5

Cool PD



Below are links to pages which detail information about the different approaches we have taken to provide high quality training and support to district teachers

[Talks](#)
[Edcamps](#)
[Conference Style](#)
[Traditional](#)
[Outside Conferences](#)
[Self-paced](#)
[Badges](#)





Blended & Digital Learning

Principal / Administration Training



BLENDED & PERSONALIZED
LEARNING CONFERENCE
Convening Educators, Leaders, & Innovators

- Friday Institute - Team of 7
- Training of 50 TEC Administrators - 8 Districts
- Presenting at National Conference - Being Bolder

Teacher Training FUSE Fellows

- High School Rachel Dudley; Middle School Andrew Patterson, Elementary Ken Toomey
- Design Team - 12 Early Adopter Teachers at three levels



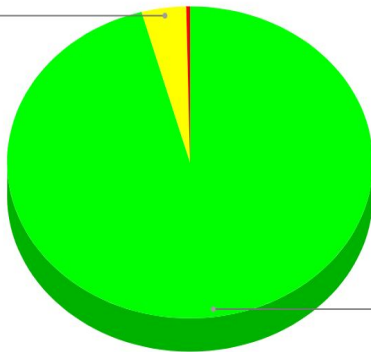


Internet Access at Home

603 of 610 Middle School Students March 2018

Internet Connection at Home

Cell
3.9%



Speed and Reliability:

	Grade 6	Grade 7	Grade 8
Great/Good	92%	86%	89%
Red	4	7	2
Yellow	8	8	13
Smartphones	90%	94%	97%

Red = Can't connect or daily problems

Yellow = Multiple Times a week problems, slow or didn't answer

Broadband
95.7%



1:1 Initiative

- High School FY11 Netbooks, iPads, Chromebooks - Take Home Model
- Middle School FY15 Chromebooks - Take Home Model
- Elementary
 - Grade 3-5 FY18 Chromebooks Cart Model
 - PreK-2 FY15 iPads & FY19 Chromebooks - Center Model



Note: MCAS NextGen



Government Math The Fiber Story

Initial Cost \$172,000

Minus \$86,000 (50% Erate Reimbursement)

Subtotal \$86,000

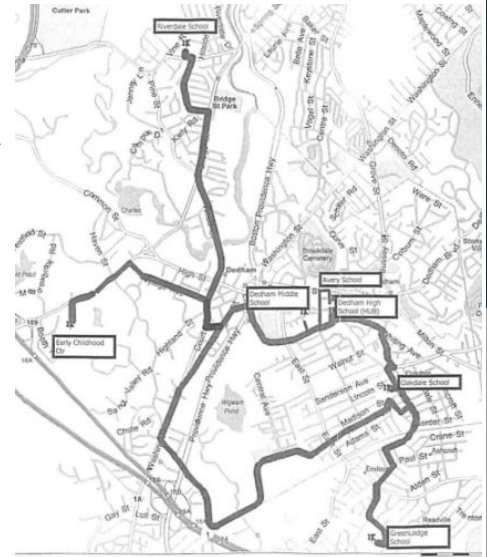
Minus \$34,400 (10% State and 10% Federal Bonus)

Subtotal \$51,600

Add \$15,800 Police Details

Total \$67,400

Town of Dedham took \$90,000 from Comcast to retire i-Net



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Technology Plan and Action Items

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July 1, 2016 - June 30, 2019

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Next
Technology Plan
FY2020-2022



What's on the Horizon?

Key Trends Accelerating Technology Adoption in K–12 Education

Long-Term Trends: Driving technology adoption in K–12 education for five or more years

- > **Advancing Cultures of Innovation**
- > **Deeper Learning Approaches**

Mid-Term Trends: Driving technology adoption in K–12 education for the next three to five years

- > **Growing Focus on Measuring Learning**
- > **Redesigning Learning Spaces**

Short-Term Trends: Driving technology adoption in K–12 education for the next one to two years

- > **Coding as a Literacy**
- > **Rise of STEAM Learning**



NMC/CoSN Horizon Report > 2017 K-12 Edition



<https://www.nmc.org/publication/nmccosn-horizon-report-2017-k-12-edition/>

What's on the Horizon?

Significant Challenges **Opportunities** **Impeding Technology Adoption in K-12 Education**

Solvable Challenges: Those that we understand and know how to solve

- > **Authentic Learning Experiences**
- > **Improving Digital Literacy**

Difficult Challenges: Those that we understand but for which solutions are elusive

- > **Rethinking the Roles of Teachers**
- > **Teaching Computational Thinking**

Wicked Challenges: Those that are complex to even define, much less address

- > **The Achievement Gap**
- > **Sustaining Innovation through Leadership Changes**



NMC/CoSN Horizon Report > 2017 K-12 Edition

<https://www.nmc.org/publication/nmccosn-horizon-report-2017-k-12-edition/>



What's on the Horizon?

Important Developments in Educational Technology for K-12 Education

Time-to-Adoption Horizon: One Year or Less

- > **Makerspaces**
- > **Robotics**

Time-to-Adoption Horizon: Two to Three Years

- > **Analytics Technologies**
- > **Virtual Reality**

Time-to-Adoption Horizon: Four to Five Years

- > **Artificial Intelligence**
- > **The Internet of Things**



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Questions?