



Future Ready Learning:

Technology Plan 2018 - 2023



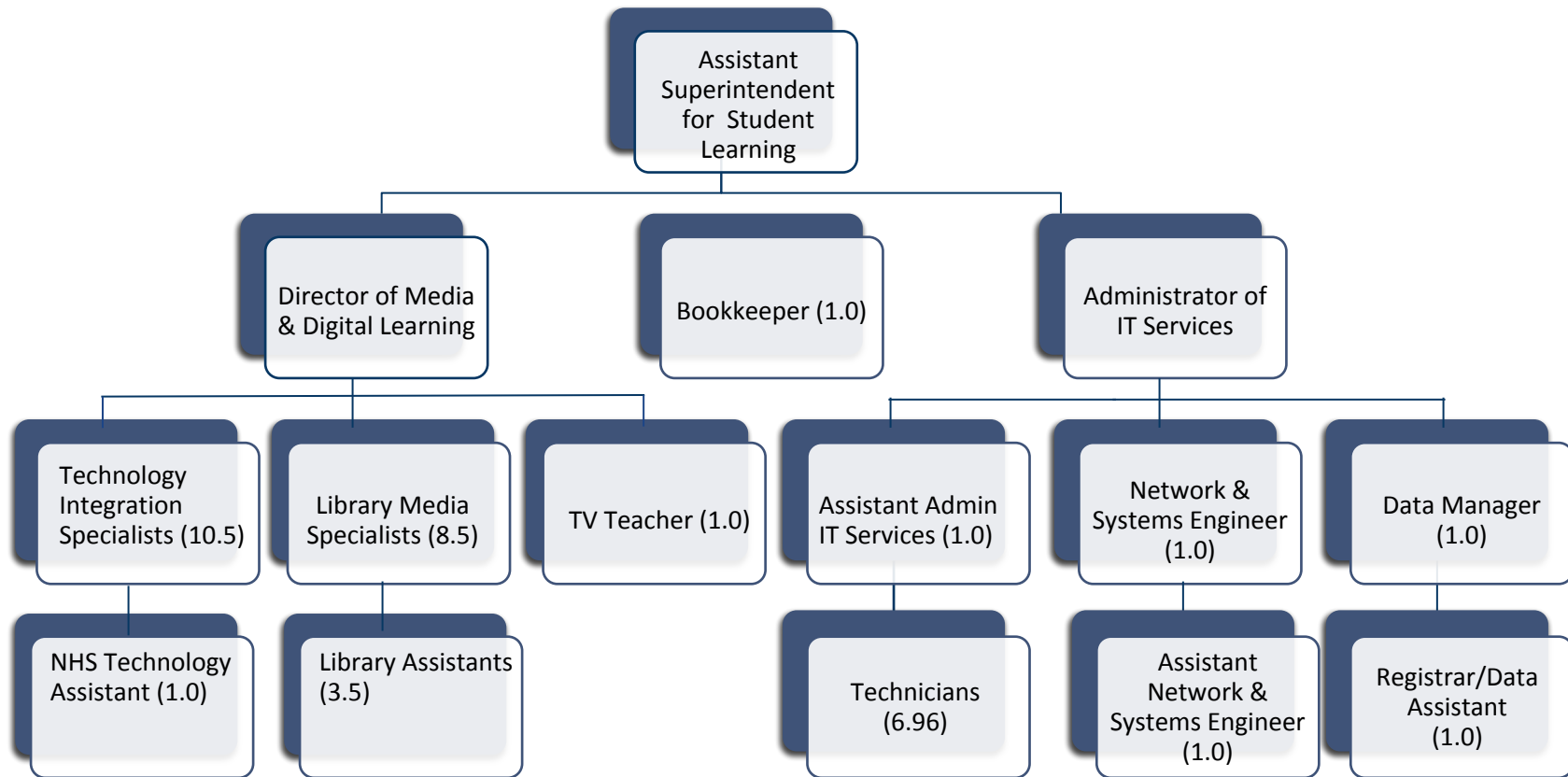
AGENDA

- Department Overview
- Budget 2019-2020
- Technology Plan
- Next Steps
- Questions





Department Overview





District Technology: The Numbers

- 7,200 devices deployed across the district
 - 2,000 Desktops & Laptops
 - 2,800 iPads
 - 2,400 Chromebooks
- 26 Enterprise Systems
- 10 DESE Reports
- Ubiquitous/secure WiFi network
- 6.96 FTE Technicians
- 3,910 Support Tickets Closed in FY18
- 10.5 FTE Technology Integration Specialists
- Supporting
 - 794 FTE teachers, administrators & staff
 - 5,721 students





FY20 Budget Priorities

- District's Values and Goals
 - Implement efficient information systems and training programs to enhance learning, manage school & district operations, improve communication, and ensure student safety. (*Objective 3.2*)
- School Committee Budget Priorities
 - Develop and maintain educational resources and a technology infrastructure that supports student learning
 - Provide resources for the implementation of Full Day Kindergarten



FY20 Budget Drivers

- Replacement Cycle
- Hardware & Software Updates
- Increased operations support (*phones, keys, security cameras*)
- Increased operations & instructional efficiencies
- Increasing enrollment/classrooms
- Full Day K (*hardware, software, instructional supplies*)





FY20 Budget Proposed Increases

1 Budget / 2 Components

Program Needs

Staffing efficiencies	\$16,797
Enterprise Systems	
Operational	\$17,000
Instructional	\$24,000
Operations-Communication & Security	<u>\$34,583</u>
Subtotal:	\$92,380

Full Day Kindergarten

Instructional Materials	\$19,500
Classroom Hardware/Apps	<u>\$40,000</u>
Subtotal:	\$59,500

Total FY20 Tech Budget Request: \$151,880



Questions



Technology Plan

Needham Public Schools is committed to creating an environment in which students and staff become curious problem-solvers, thoughtful innovators, independent lifelong learners, and socially responsible global citizens. Their work is supported and enhanced by modern and efficient digital tools that make learning more meaningful, relevant, and student-centered. Students are engaged, excited, and experience deeper understanding. Learning and operations are supported by a well-maintained technology infrastructure, efficient information systems, and knowledgeable support staff that enable digital-age leadership, streamlined workflow, and effective practices.

Starting with the Vision





Curriculum, Instruction, & Assessment

Key Findings

- Strong consensus on the desire to use technology to incorporate critical thinking and problem solving, communication, creativity and innovation, collaboration and self-direction skills (i.e “21st Century Skills”).
- Greater consistency with respect to practices and resources, especially want a central location that would be used by all teachers for student homework, class resources, calendar.
- The 1:1 program in the Needham Public Schools has had a positive impact on both teaching and learning.



Curriculum, Instruction, & Assessment

Goals

Goal 1 - 21st Century Skills

Develop a common understanding of 21st century learning skills, incorporating the recommendations from the Portrait of a Graduate work, to serve as a framework for teaching and learning in the 21st century.

Goal 2 - Leveraging Technology to Personalize Learning

Empower students and teachers with the resources and skills necessary to leverage technology for their teaching and learning.

Goal 3 - Assessment

Provide teachers and administrators with easy access to student data to inform instruction.



Personalized Professional Learning

Key Findings

- NPS provides a range of professional learning opportunities for teachers, administrators, and staff.
- Commitment to supporting the learning and growth for all its staff in the area of technology.
- 65% of the teachers and staff felt that the range of PD offerings was adequate -need to expand awareness and provide more learning opportunities tailored to a greater range of needs.
- Clear expectations with respect to technology use and help to determine individual areas for growth.



Personalized Professional Learning

Goals

Goal 1 - Promote Shared Ownership and Responsibility for Professional Growth

Cultivate a culture of shared ownership and responsibility for identifying professional learning and growth needs among teachers, administrators, and staff.

Goal 2 - Develop 21st Century Skill Set

Provide opportunities for educators to expand their capacity to incorporate a 21st century focus (e.g., critical thinking, collaboration, creativity, communication, technology competencies, self-direction, information literacy, etc.) into their instructional practices.

Goal 3 - Provide Diverse Opportunities for Professional Learning

Expand access to high-quality, ongoing, and multi-modal learning opportunities for professional growth for teachers, administrators, staff and all education professionals.



Robust Infrastructure

Key Findings

- Standard profiles of the digital environment for classrooms, special area spaces, labs, and office areas at each level enables more efficient budgeting, management of replacement cycles, and distribution of equipment.
- The network infrastructure provides dependable, efficient access - meets national capacity standards. - enables virtual and augmented activities, content creation, coding, online tests.
- The expanding scope of the department's responsibilities and the increasing complexity of many of the systems has put pressure on available staffing.



Robust Infrastructure

Goals

Goal 1 - Adequacy of Devices and Systems

Continue to provide diverse and appropriate technology devices to support powerful digital learning, professional productivity, and operational efficiency.

Goal 2 - Robust Network Infrastructure

Continue to monitor bandwidth and infrastructure to ensure reliable access to online resources for teaching, learning, and school administration.

Goal 3 - Adequate and Responsive Support

Continue to provide technical and instructional support, to ensure that administrators, teachers, and students are able to effectively use new technologies.

Goal 4 - Formal Cycle for Review and Replacement

Continue to monitor technology life cycles and inventory (software, hardware, and infrastructure) to ensure that upgrades, additions, and replacements occur in a timely and proactive manner.



Budget & Resources

Key Findings

- Greater clarity with respect to operating and capital budgets and expenditures
- Collaborative purchasing discounts and the state contract system, as well as E-rate funding, help to realize cost savings.
- Budget challenges include ability to accommodate annual replacements and upgrades, capital expenses, mobile devices, and the growing need for digital resources.
- New construction will entail adjustments to forecasts for equipment replacements that could look like "sudden jumps" in the replacement budget.



Budget & Resources

Goals

Goal 1 - Efficiency and Cost Savings

Continue strategic purchasing practices by actively seeking opportunities for efficiencies and cost savings.

Goal 2 - Alignment to District and School Plans

Budgeting and funding of technology will be clearly linked to the goals set forth in this plan, and expenditures will support this plan.

Goal 3 - Consistent Funding Streams

Continue to fund technology through both operational and capital funding streams and review budgets to verify that adequate funding is maintained particularly in light of technology innovations and prior infrastructure investments.



Data & Privacy

Key Findings

- Compliance with applicable laws and regulations regarding data privacy.
- Many practices are in place for using data to improve instruction and to make decisions.
- Software products are selected after careful vetting to ensure that the digital tools meet standards for data privacy and security.
- The district uses security safeguards such as firewalls and control of physical access to servers and files.
- Students said that they were proactive about keeping their online data private.



Data & Privacy

Goals

Goal 1 - Data and Data Systems

Implement a data management system that will improve end-user access to data for instruction and informed decision-making.

Goal 2 - Data Policies, Procedures, and Practices

Ensure that the district has up-to-date policies, procedures, and practices that address legal, ethical, and safety issues related to the privacy and security of data, and the usage of data, technology, and the Internet.

Goal 3 - Data-Informed Decision Making

Promote and support the use of formative and summative assessment data to inform teaching and learning practices.

Goal 4 - Data Literate Education Professionals

Provide professional learning opportunities so that all teachers and administrators become more data-literate, aware of the legal and ethical responsibilities about data and data use and are able to use data to inform instructional and administrative decisions.



Community Partnerships

Key Findings

- Strong partnerships exist with the families and with organizations and businesses within the greater local community.
- Partnerships benefit teachers as well as students.
- Family Communication
 - ▷ Parents prefer email (87%) over paper notices (22%) and very few are looking to social media to receive information from schools (3%).
 - ▷ Parents use the website mostly for the school calendar (86%); contact information (61%); events (58%); online payment tools (50%); and lunch menus (28%).



Community Partnerships

Goals

Goal 1 - Local Community Engagement and Outreach

Continue to strengthen and draw on relationships with the local community to build relevance, connections, and real-life experiences that enhance student learning.

Goal 2 - Global and Cultural Awareness

Continue to use technology to expand and support opportunities for students to collaborate and communicate with those from other cultures and communities.

Goal 3 - Parental Communication and Engagement

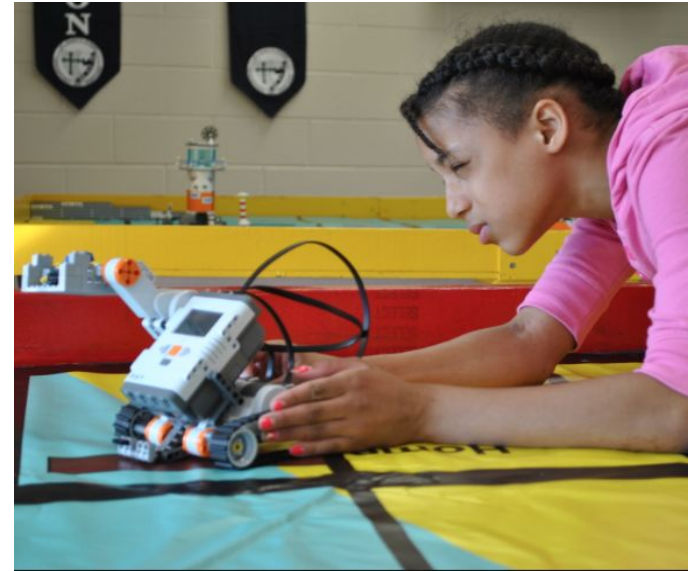
Assess ways to use technology to more efficiently communicate with parents and to enhance home-school communications.



Use of Space & Time

Key Findings

- Technology labs are evolving to reflect the innovative teaching and student projects. Labs now enable projects such as video, green screen video, voice recording, stop motion video, robotics, and STEAM.
- Adequate space to provide access to innovative technologies and creative learning opportunities is anticipated to be a challenge.





Use of Space & Time

Goals

Goal 1 - Flexible Learning, Anytime, Anywhere

Leverage technology to provide age-appropriate, anytime, any place digital learning options for students.

Goal 2 - New Pedagogy and Learning Environments for Personalized Learning

Identify technology tools and methods that help to advance student-centered learning practices.



Collaborative Leadership

Key Findings

- The ITS Admin and the Digital Learning Director collaborate in order to inform the work of each area of the department. This ensures alignment between instructional programs and hardware allocation.
- Technology Integration Specialists (TIS) guide and support teachers and students to effectively use technology.
- The Digital Learning team (TIS & Librarians) collaboratively works with students, teachers, administrators, and staff to ensure opportunities that supports 21st century teaching and learning.



Collaborative Leadership

Goals

Goal 1 - A Shared, Forward-Thinking Vision for Digital Learning

Ensure that the visions outlined in this technology plan are shared with and supported by students, teachers, administrators, parents, and the community. Develop consensus with the action steps that are associated with each of the goals.

Goal 2 - A Culture of Collaboration

Continue collaboration between the department, program leaders, and end users to ensure that decisions about technology are aligned with programmatic needs and desired outcomes for teaching, learning, operations, and efficiency.

Goal 3 - Planning, Policies, and Implementation

Technology leaders will collaborate with district and school leaders to ensure that the action steps associated with the goals of the technology plan are aligned with other district priorities.



Next Steps

- Portrait of a Graduate
- Disseminate Technology Plan
- Follow up Surveys
- Prioritizing Goals and Action Steps



Questions

