Nantucket Public Schools Technology Plan
2017-2020

Nantucket Public School Mission:
World Class Learning: We Learn, Grow and Care through Rigor, Relevance and Relationships.

Nantucket Public School Vision:
In partnership with a caring community, Nantucket Public Schools will create a dynamic learning environment which engages each of us to be inspired learners and responsible citizens, prepared to meet global challenges.

NPS Technology Plan Vision and Mission

Mission Statement

The technology mission of NPS is to provide all students and staff <u>and parents</u> with access to current technology tools and training in an equitable and appropriate manner while improving student proficiency. The goal is to prepare our students to succeed in a global economy that is rapidly becoming more sophisticated and technologically demanding.

Vision

Technology will be seamlessly integrated into the teaching and learning process.

Introduction

NPS is committed to providing meaningful and compelling opportunities for students to be actively engaged in their learning environment, to expand their knowledge and critical thinking skills, and to use technology to support and enhance the learning process. It is essential that we prepare our students with the education necessary to develop the skills required to succeed in a constantly changing and dynamic world. The District will augment this learning/teaching environment with the information systems necessary to accomplish this goal.

Goals *

Learning: Engage and Empower

All learners will have engaging and empowering learning experiences and training that prepares them to be active, creative, knowledgeable and ethical participants in our globally networked society while practicing safe and appropriate use of technology.

Assessment: Measure What Matters

Our education system at all levels will leverage the power of technology to measure what matters and use assessment data for continuous improvement.

Teaching: Prepare and Connect

Professional educators will be supported individually and in teams by technology that connects them to data, content, resources, expertise, learning experiences and professional development that enable and inspire more effective teaching for all learners.

Infrastructure: Access and Enable
All students and educators will have access to a comprehensive infrastructure for learning when and where they need it. Parents will be informed and educated about this infrastructure.

Productivity: Redesign and Transform
Our education system at all levels will redesign processes and structures to take advantage of the power of technology to improve learning outcomes while making more efficient use of time, money, and staff.

Communication: Outreach and Involve
Promote online communication among students, parents, staff, and the Nantucket community.

Goals are adapted, in part, from the National Educational Technology Plan, **Transforming American Education: Learning Powered by Technology (http://tech.ed.gov/wp-content/uploads/2013/10/netp2010-execsumm.pdf).**

District Technology Advisory Committee
The NPS District Technology Advisory Committee reviews the current state of technology at Nantucket Public Schools and provides recommendations for the three year technology plan. This includes the definition of a vision statement that reflects the philosophy of Nantucket Public Schools within a technology framework.

District Technology Department
The NPS Technology Department provides district-wide support for technology infrastructure, servers, computers, software applications, administrative databases, hosted solutions and online assessment programs. The department is also responsible for the SIMS/EPIMS/SCS data collection and reporting process for the DESE which forms the backbone of all of our student, teacher and staff data collection and analysis. The Technology Department provides staff professional development and ongoing support for the user of hardware, software, hosted applications, and assessment programs.

By building a strong foundation of physical infrastructure, security, access to computing devices and services as well as professional development the department provides the tools that allow NPS teachers, support staff and administrators to fulfill the vision of the NPS technology plan.

Implementation Goals and Strategies

Completed Goals

FY2014-2015
- *Technology strategies.*
- Maintain an enterprise class infrastructure that maximizes learning opportunities and provides connectivity to the global community with proper and secure access restrictions. This is an ongoing process with major upgrades to the network **completed in years 2014-2015 and**

2015-2016.
- *Nantucket Elementary School*
    - Adopt Google Apps for Education beginning in 2014-2015 in grades 3, 4, 5. Add Chromebooks to grades 3, 4, and 5 to support Google Apps for Education as well as PARCC online assessments.
- *Cyrus Peirce Middle School*
    - Chromebooks – Add a cart per grade and one cart for the Writing Seminar. Provide a standalone cart for sign out as needed and PARCC assessments.

FY2014-2015
- *Technology Implementation Goals*
    - Adopt Google Apps (or equivalent) for Education at all grade levels. Implemented grades 3-12. **Completed 2015-2016.**
- *Technology strategies*
    - Increase one Technology Specialist to a 12-month position. **Completed 2015-2016**.
    - Maintain an enterprise class infrastructure that maximizes learning opportunities and provides connectivity to the global community with proper and secure access restrictions. This is an ongoing process with major upgrades to the network completed in years **2014-2015 and 2015-2016**.
- *Nantucket Elementary School*
    - Introduction of Chromebooks Grades 3, 4, 5 for PARCC online assessments. **This goal has been reached.**
    - Added three additional Chromebook carts in 2015-2016.
- *Cyrus Peirce Middle School*
    - Plan for the implementation of a one-to-one initiative in 2015-2016 beginning with grade 7. Ensure sufficient devices for PARCC online assessments for grades 6, 7, and 8.
    - Implement the one-to-one initiative with grades 6, 7, and 8. Chromebooks will continue to be used.
- *Nantucket High School*
    - Continue to expand the use of Google Apps for Education, or equivalent, and explore the move toward one-to-one computing. **Completed 2015-2016**.
    - Chromebook carts in Social Studies, ELA, and Alternative Program. Individual Chromebooks in the Special Needs department. **Completed 2015-2016**.
    - Added Chromebooks to the English Department. **Completed 2015-2016**.
    - Added SMART Technologies   SMARTBoard 6065 Interactive Flat Panel to two new classrooms and a computer lab. Replace aging SMARTboards with SMART Technologies SMARTBoard 6065 Interactive Flat Panel in the math department. **Completed 2015-2016.**

FY2016-2017
- *Technology strategies*
    - Apply for ERATE Category 2 funding to support network improvements.
        - Replace and upgrade the district firewall and core switch. Scheduled to be completed 2016-2017.
        - Add fiber between the server room and MDF and MDF and boiler room closets. Scheduled to be completed 2016-2017.
- *Cyrus Peirce Middle School*
    - Continue the one-to-one initiative and add infrastructure and devices for the planned 6 classroom middle school expansion. **The middle school expansion was completed**

September 2016.

- *Nantucket High School*
  - Implemented the one-to-one initiative in grade 9-12. This included Grade 9 students retaining Chromebooks from Grade 8, the purchase of Chromebooks for Grade 10 students, distribution of existing inventory to Grade 11 students and BYOD at Grade 12 with the option to receive a device from existing inventory if needed. **Completed 2016-2017.**

2017-2020 Plan

- *Technology Implementation Goals*
  - Grades 3-12 will have full-day access to individual technology devices by school year 2018-2019. *On Track for achieving this goal.*
  - No student device within the system will be more than 4-years old.
  - All administrators and teachers will have knowledge of and will implement the Massachusetts Department of Education Digital Literacy and Computer Science Standards. (http://www.doe.mass.edu/frameworks/dlcs.pdf)
  - All students K-12 will display mastery of technology skills as outlined in the same for Digital Literacy and Computer Science Standards.
- *Technology strategies*
  - Implement the plan over four school years with full implementation at end of year four, or earlier, beginning in 2017.
  - Add a Technology Integration Specialist position to each school.
  - Explore the Implementation of a High School Technology Program aligned with the Massachusetts Department of Education Digital Literacy and Computer Science Standards (http://www.doe.mass.edu/frameworks/dlcs.pdf)
  - Evaluate and assess the existing network annually to determine what improvements are required to accommodate the expanding use of wireless devices and demands Internet bandwidth, respectively.
  - Apply for ERATE Category 2 funding to support network improvements.
    - Increase Internet bandwidth from 200/200 Mbps to 300/300 Mbps dedicated ethernet.
  - Evaluate and refresh device inventories, systems and network infrastructure annually. This is a continuing goal.
  - Evaluate the classroom devices (currently Chromebooks) annually to ensure the district is using the most up-to-date tools for students and staff and take advantage of evolving technology.
  - Coordinate technology requirements with the NIS building project team for network infrastructure. This includes a seamless connection to the existing network and all district network and hosted services.
  - Improve parent engagement through a series of workshops, tutorials, and/or parent nights focused on district technology tools including Aspen, Google G-Suite (Google Apps for Education) and others as they are implemented.
- *Nantucket Elementary School*
  - Evaluate technology requirements and acquire tools for the delivery of curriculum, assessment, and administrative tasks
  - Assess status of SMARTBoards and determine what existing inventory will be retained

and/or redistributed in grades Pre-K through 2 as well as what needs to be added or replaced.
- Distribution and placement of technology tools is dependent on the configuration of the existing building(s) following the opening of NIS in school year 2017-2018.
- *Nantucket Intermediate School*
  - Coordinate technology requirements with the NIS building project team including desktop and laptop computers, student Chromebooks, interactive projectors, document cameras, VOIP phones and printers.
  - Implement one-to-one devices in grades 3-5.
    - Grade 5 will receive new devices. Chromebooks will continue to be used for the 2017-2018 school year.
    - Grades 3 and 4 will use existing Chromebook inventory being used during the 2016-2017 school year at NES grades 3-5.
- *Cyrus Peirce Middle School*
  - Evaluate technology requirements and acquire tools for the delivery of curriculum, assessment and administrative tasks.
  - Refresh one-to-one devices in Grade 6 annually.
  - Replace aging SMARTBoards.
  - Replace aging administrative technology.
  - Implement digital signage program and related hardware.

- *Nantucket High School*
  - Evaluate technology requirements and acquire tools for the delivery of curriculum, assessment, and administrative tasks.
  - Replace aging SMARTBoards.
  - Replace aging administrative technology.
  - Evaluate one-to-one replacement strategy annually.
  - Explore the implementation of a student help desk program for CPS and NHS.

Teaching and Learning
- Inform and educate administration.
- Dedicate appropriate professional development and provide ongoing follow-up and support.
- Communicate with parents/guardians on the district and school technology mission.
- Ensure resources are available to all students, with specific attention being given to those whose home settings do not have access to the Internet.

Annual Assessment & Evaluation
- This plan will be updated and adjusted on an annual, or more frequent, basis in response to developments in technology and/or curriculum.
- The District Technology Advisory Committee will review the technology plan annually to assess progress and make adjustments as necessary.
- Technology budget requests to the School Committee will reflect the recommendations in this plan.