Danvers Public Schools
2016-2021 Educational Technology Plan[1]

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[1] This plan was created in January 2016 and is projected through January 2021

Table of Contents

Introduction

The Danvers Public Schools Technology Plan is intended to be a living document that delineates the use of technology over the next five years. The plan proposes a technology infrastructure and culture that will aid our educators in guiding students to achieve the learning outcomes envisioned by our community, by the Massachusetts Curriculum Frameworks, and the Massachusetts Instructional Technology Standards.

The successful application of technology into the teaching and learning environment requires access to hardware and software, professional development for educators, and on-going support.

Mission Statement

The Danvers Public Schools technology mission is to enhance and enrich student learning, teacher instruction, communication, and a safe environment throughout our district.

By providing equal access to current technology resources, the Danvers Public Schools will foster a community of creative, critical and ethical users of information. We will fulfill this mission by:

- Providing training and support to inspire the Danvers Public Schools community to become self-directed, lifelong learners.
- Integrating technology skills seamlessly throughout the academic curriculum.
- Utilizing technology for effective information management.
- Encouraging the use of technology as a tool for problem solving, collaboration, evaluation, critical thinking and communication.
- Support personalized learning.

Community Profile

Danvers is situated approximately 17 miles north of Boston, at the junctions of Routes 1 and I- 95/ Rt. 128, and has both business and industry. Incorporated in 1757, Danvers prospered in the trades of brick making, shipping, shipbuilding and the manufacture of leather goods in the period following the Revolutionary War.

Over the past decade, the town has maintained a stable population of 26,400 people within its nearly 14 square miles. Local legislative decisions are made by a representative town meeting consisting of over 100 residents. A five-member school committee formulates school policies. There is a high level of community involvement with the school. The Danvers Educational Enrichment Partnership (DEEP) is the district's school business alliance. Each school has its own Parent Advisory Council (PAC).

Children are educated in seven schools - the Great Oak School, Highlands School, Riverside School, Ivan G. Smith School, Willis E. Thorpe School, the Holten Richmond Middle School and Danvers High School. The Danvers Public Schools is also a member of the North Shore Educational Consortium for special needs services. Additionally, students may choose to attend the Essex Agricultural and Technical High School for grades 9-12. The K-12 school population is approximately 3,600.

Vision

This plan is built upon a vision for education in which students and educators have full access to appropriate technologies for meeting both the school system's, and the state's curriculum standards, as well as providing each student the opportunity to meet their personal learning objectives. In this vision, Danvers' students are not passive learners, but are creative, collaborative and adaptive users of technology.

This vision is one in which technology is used to connect Danvers' students and staff to each other and to the global community to make learning, assessment, and educational management more relevant and efficient. At all times, it is expected that technology is used in ways that are equitable and ethical.

Technology Benchmarks

A. System Wide Goals

1. Networking and Infrastructure
   a. Deploy up to date servers and switches throughout the district to support network operations.
   b. Maintain the latest server operating systems throughout the district.
   c. Improve the network infrastructure in each school and across the district as needed.
   d. Provide appropriate Internet bandwidth to support the educational and administrative needs of the district.
   e. Furnish CIPA compliant filtering at all schools.
   f. Deploy hardware and software for monitoring network traffic and activities for diagnostics and network security.
   g. Maintain firewalls to protect the security of the network.
   h. Install wireless access points and additional switches and routers to support the accomplishment of district goals.

2. Hardware
   a. Replace and upgrade all desktop computer across the district when necessary.
   b. Maintain current classroom curriculum delivery hardware such as LCD projectors, interactive whiteboards, listening enhancement systems and continue to utilize the latest technology available.
   c. Provide adaptive and assistive technology hardware as needed.
   d. Furnish each student with appropriate hardware to accomplish personalized learning.

3. Software
   a. Update and deploy all educational and administrative software as required.
   b. Support the interconnection of proprietary software platforms used by the district for student information and data, faculty professional development, parent and community communications, teacher evaluation, student health management, and district administration.

4. **Network Security**
   a. Establish protocols to ensure the network is a secure environment and can detect and stop attacks and malicious activity from interfering with network operation.
   b. Ensure all sensitive data is secured, backed up and can be reinstalled in case of an intrusion.

5. **Professional Development**
   a. Coordinate technology professional development offerings and opportunities with the DPS curriculum department to match the district's strategic plan.
   b. Provide professional development opportunities for the acquisition of technology skills related to the use of district wide platforms.
   c. Continue training on district wide collaborations tools such as Google Apps for Education.

6. **Student Outcomes**
   a. Align student technology outcomes with the Massachusetts instructional technology standards.
   b. Align information literacy outcomes with the Massachusetts School Library Media Association Standard.
   c. Improve student performance in all academic areas through the use of technology.
   d. Continue to update student curriculum for online safety and anti - bullying.
   e. Promote the effective and responsible use of online collaboration technologies.
   f. Provide opportunities for students to take online courses.
   g. Support blended learning opportunities for personalized learning.

B. Needs Assessment

1. The district assesses the technology products and services that will be needed to improve teaching and learning.

All hardware, software, subscriptions, licenses, professional development, grading and management programs, and databases go through a thorough analysis before acquisition. This includes participation and input from the stakeholders, cost analysis, and impact on teaching and learning.

2. This technology plan includes an assessment of the services and products that are currently being used and that the district plans to acquire.

The services, products and system-wide goals are under yearly review by the technology department and the administration.

C. Policies

a. The district's Acceptable Use and Responsible Use Policies are posted on the Danvers Public Schools web site. Students are required to sign these policies before being granted internet access permission.

b. All faculty are required to sign the Town of Danvers Telecommunications Policy, which is integrated into the Employee Handbook.

D. Budget

a. The Danvers Public Schools' operational budget supports this plan with technology line item accounts.

The Danvers Public School Technology Budget Line Items	
District Wide Technology	Technology Staff Salaries
	Computer Supplies
	Licenses and Software
	Technology Equipment
	Technology Equipment Maintenance
	Contracted Technology Services
Danvers High School Technology	Technology Equipment
	Technology Equipment Maintenance
	Technology Supplies
Holten Richmond Middle School	Technology Equipment
	Technology Equipment Maintenance
	Technology Supplies
Danvers Elementary Schools	Technology Equipment
	Technology Equipment Maintenance

E. Evaluation

The district will continue our ongoing evaluation of technology resources, to determine their effectiveness in helping to achieve our educational goals including equitable access. We will also continue to use our established budgeting process to carefully assess hardware, software, and consulting needs prior to committing funds.

F. Technology Professional Development

The technology department's professional development primary focus is offered in the classroom integration of technology. Its secondary focus is training on administrative software including, but not limited to, the district's student information system, faculty professional development platform, teacher evaluation platform, and new hardware operations.

Professional development will take place in both small groups, and large training sessions, during faculty common planning time, early release times, and August pre-service days. The Danvers Public Schools is also a member of regional consortia and membership organizations that provide technology training for our faculty. Training is available in several modes including in person and online courses.

G. Hardware Access

a. In September 2015 the Danvers Public Schools initiated a one computer to one student initiative at the Holten Richmond Middle School. Each student and faculty member received a laptop to use to enhance teaching and learning. Funding is based on a 3-year lease to own program. At the end of the 3-year cycle new hardware will be purchased. Exclusive of the laptop program, 4 specialty computer labs are used at the middle school for engineering, media production, and business technology.

b. In September 2016 a one to one program is to be implemented at the Danvers High School. Each student and faculty member will

receive a laptop to use to enhance learning. Funding is based on a 4-year lease to own program. At the end of the 4-year lease new hardware will be purchased. Exclusive of the laptop program, 9 specialty computer labs are used at the high school for engineering, media production, credit recovery, digital music composition, digital photography, world language arts, and business technology.

c. As of January 2016 each elementary school has a computer lab and several carts with either laptops or tablets. In 2018, at the end of the middle school laptop lease, it is anticipated that these devices will be migrated to the elementary school so that each classroom will have a full complement of technology to meet a one to one ratio.

H. Networking - Local Area Network (LAN) and Wide Area Network (WAN)

a. All schools in the district connect to a central switch through the town's fiber network. Each school receives up to 1Gb of LAN bandwidth.
b. Each classroom is connected to the district's LAN with 100 Mb line.
c. Access to the internet (WAN) is provided to every classroom. The district has 2 fiber lines connected to a central router, which is set up in a hub and spoke configuration. One line provides 300/300 Mbps, while the second line provides 200/200 Mbps. The lines are coming into the hub from geographically different locations.

I. Communications

a. The Danvers Public Schools maintains a web site for the district (danverspublicschools.org) and each individual school that provides parents and community members with timely information including calendar of events, newsletters, parent information, important links etc.

b. The district complies with federal and state law, and local policies for archiving electronic communications produced by its staff and students. The district informs staff and students that any information distributed over the district or school network may be a public record.

Goal Assessment

Annually, the Danvers Public Schools' Technology Department reviews its accomplishments for the past year, and aligns its planning with this document and the district's Strategic Plan.

Appendix

  A. DPS Responsible Use Policy
  B. Employee Telecommunication Policy
  C. Technology Department Organizational Chart

Appendix A

Danvers Public Schools

Responsible Use Policy

At the Danvers Public Schools, technology is a vital tool for learning and communicating who we are, what we value, and how we represent our family, school, and community. Because our technology choices affect others, and ourselves *and because the use of technology is a privilege not a right,* the expectation is that middle school students will abide by and support this agreement **both in and out of school.** While we understand that any of us can make a mistake, we believe that living according to these values is critically important. Infractions will be enforced using the Student Code of Conduct. By signing this policy, I agree to:

1. Use the Danvers Public Schools' technology resources responsibly.

- I will use DPS technology only for assigned and intended school purposes. I will ask for teacher approval if I am not sure.
- If I am issued a school email account, I will use it only for school assignments.
- I will keep my passwords to myself.
- I will access only my own assigned computer, account, and/or files. I understand that posing as someone else will result in disciplinary consequences.
- I will only download items from the Internet only under a teacher's direction.
- I will inform my teacher if I have concerns about the functionality or suitability of the hardware or software I am using.
- I will not give out identifying information over the Internet.
- I understand that the Chromebook assigned to me is the property of the Danvers Public Schools and I'm responsible for taking care of it and keeping it in good condition. Tampering with the Chromebook is not permitted. I will not eat or drink near any Chromebook. I understand that I'm responsible for any damage to my Chromebook or any other Chromebooks that I have contact with.
- I will come to class fully prepared, including a charged Chromebook and all required printing prior to class.
- I will not damage DPS hardware or software, delete any files not belonging to me, use unauthorized software, attempt to bypass school filters, send viruses, or make modifications to system files.

2. Be respectful of others (including cell phone and other electronic device use).

- I will not participate in bullying, harassing, stalking or teasing other people or publicly defaming people by spreading gossip, insults or other unkindness, and/or accessing any social network, website, blog, Wiki, etc. with the purpose of creating, viewing or participating in the humiliation of others.
- If I see a message, comment, image or anything else online that makes me concerned for my safety or the safety of another student (for example something that could be considered harassment, bullying, or a threat), I will bring it to the attention of a teacher or administrator immediately.
- If I'm uncertain whether an activity is permitted or appropriate, I will ask a teacher or administrator before engaging in that activity.
- I will not make or forward sexually suggestive photographs.
- I will not retrieve material that is obscene, profane, violent, discriminatory or depicts or describes illegal activities.
- I will not steal someone's password and/or identity.
- I will not use technology in any other inappropriate way.
- I will uphold DPS' values of respect and integrity.

3. Publish ethically.

- I will not plagiarize by representing the work of others as my own. I will cite any and all use of websites, books, media, etc.
- I will not manipulate technology to cheat.
- I will obey copyright and software licensing laws.

I have read, understand, and agree to abide by the terms and conditions of this Technology Use Agreement.

School administration and the DPS Technology Department reserves the right to examine, use and disclose any data found on the school's information networks in order to further the health, safety, discipline or security of any student or other person or to protect property.

_____

Please print the student's name

_____

Student Signature   **DATE**

_____

Parent /Guardian Signature   **DATE**

Appendix B

Faculty and Staff Telecommunications Policy
- From the Danvers Public Schools Employee Handbook

III. GENERAL EMPLOYMENT INFORMATION

EMAIL

Faculty and staff are expected to use their danvers.org email for educational/work purposes only. If you need to communicate with an entire staff, please ask your Principal/Assistant Principal prior to sending such email. Student names should never be mentioned in the subject line or body of an email. Soliciting money for charitable causes via email must receive prior administrative Central Office approval.

IX. ACCEPTABLE USE POLICY – TECHNOLOGY

TELECOMMUNICATIONS POLICY

A. Purpose: To ensure the proper use of the Danvers Public Schools telecommunications systems, which include the telephones, personal computers, including electronic mail (e-mail) and the Internet. These facilities are under the control of the Technology Department.

B. Policy: The Danvers Public Schools provides staff with the ability to send messages and information through voice mail, fax mail, electronic mail (e-mail) and, in some cases, through the Internet. The purpose of this technology is to allow the schools to serve the public more effectively. Therefore, it is the Danvers Public Schools policy that use of these technologies are subject to the same management oversight as any other employee resource. The telecommunication systems are the property of the Danvers Public Schools and should be used for appropriate educational purposes.

C. Procedures:

Electronic Communication and Storage Systems:

1. Electronic Communication and Storage Systems are the property of the Danvers Public Schools and should be used for educationally related purposes. While sending and receiving personal messages is not expressly prohibited, any personal use of the system must be at a level that will not interfere in any way with the system's ability to serve its intended official purpose, nor detract in any way from the employee's performance of duties. Employees should use discretion in utilizing this resource. Abuse of the Danvers Public Schools technology resources could result in loss of the privilege for the individual and possibly others throughout the organization.

2. The Danvers Public Schools reserves the right to retrieve and read any electronic communication messages or other data stored on school-owned equipment for any purpose without prior notice or limitation including systems maintenance and compliance monitoring. Employees should not assume that voice mail, fax mail, e-mail messages, Internet postings, or accessing Internet websites are personal or confidential. In fact, the opposite is true. Electronic communications may be discoverable even though the messages have been deleted. Subject to certain exceptions in the law, electronic communications may also be considered public records.

3. Data and messages should be treated as confidential by other employees and should be accessed only by the intended recipient, except as otherwise provided herein. Employees are not authorized to retrieve or read any messages or data that are not sent to them unless the intended recipient gives express permission. In addition, employees should not use another employee's user identification and/or

password to access or retrieve any information unless authorized to do so.

SECURITY

1. The telecommunications systems may not be used to create any offensive or disruptive messages or images. Among those which are considered offensive are any messages or images which contain sexual implications, racial slurs, gender-specific comments, or any other comment which might constitute intimidation, hostile or offensive material based on sex, race, color, national origin, age, religion, sexual orientation or physical or mental disability.

2. The telecommunications systems may not be used for any illegal activity, including, but not limited to, the transmission of copyrighted or trade secret material, the transmission of obscene, defamatory, or threatening material, or the propagation of any type of criminal activity.

3. The Danvers Public Schools retains the right to monitor computer and telecommunications systems as may be necessary. Reasons for monitoring include, but are not limited to, review of employee productivity, investigations into claims of possible criminal activity, and investigations into violations of this policy.

4. Executable programs imported from other sites to school computers must not be used unless they have been authorized by the Technology Department. The Department may from time to time impose additional restrictions or regulations on the importing of remote files and such restrictions or regulations shall be considered part of this policy.

5. Public record laws guarantee citizen access to governmental processes and require governmental accountability. However, they do not require unlimited access to governmental databases, or require governmental employees to use their time responding to specialized data requests free of charge. Raw computer data and specialized analyses and reports do not fall within the traditional definition of public records. The Town has established standard and reasonable charges for such electronic products and services.

6. All Danvers Public Schools business must be conducted through the official District email system, danvers.org. According to the December 1, 2006 U.S. Supreme Court ruling, email is subject to discovery in a court proceeding and must be saved and archived by the District.

7. Prior approval and inspection by the technology department is required for all laptop, desktop, tablet computers and smartphones or other electronic devices before they are placed on any Danvers Public Schools network.

8. Electronic communication users shall not give the impression that they are representing, giving opinions, or otherwise making statements on behalf of the Danvers Public Schools. Neither should they construct a communication so it appears to be from someone else (false identity).

ENFORCEMENT

The use of the Town's telecommunications system constitutes employee consent to the Town, its agents, servants, and employees to enforce this policy in any reasonable way, including taking disciplinary actions in enforcement hereof.

I have read and understand my responsibilities related to this Acceptable Use Policy.

| _____ | _____ | _____ |
| Print your name | Signature | Date |

Appendix C

Danvers Public Schools Technology Department
FY 2016 - 2021 Staffing Projection

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                                    │ Director of Technology │
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│ Help Desk │─│ Database  │─│ Network   │─│ Computer  │─│ Technology │
│ Manager   │ │ Manager   │ │ Manager   │ │ Systems   │ │ Support    │
│           │ │           │ │           │ │ Specialist│ │ Specialist │
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        │ DHS       │ │ Great Oak │ │ Highlands │ │ Riverside │ │ Smith     │ │ Thorpe    │
        │ Technology│ │ Technology│ │ Technology│ │ Technology│ │ Technology│ │ Technology│
        │ Integration│ │ Integration│ │ Integration│ │ Integration│ │ Integration│ │ Integration│
        │ Specialist│ │ Aide      │ │ Aide      │ │ Aide      │ │ Aide      │ │ Aide      │
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                            │ Elementary│ │ HRMS      │ │ DHS       │
                            │ Schools   │ │ Librarian │ │ Librarian │
                            │ Librarian │ │           │ │           │
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│ Great Oak │ │ Highlands │ │ Riverside │ │ Smith     │ │ Thorpe    │ │ HRMS Library│ │ DHS Library│
│ Library Aide│ │ Library Aide│ │ Library Aide│ │ Library Aide│ │ Library Aide│ │ Aide      │ │ Aide      │
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