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" **Wellesley Public Schools**
" **Technology Plan Committee**
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"
" Kathleen Dooley, Director of Educational Technology"
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" Brian Allieri, Instructional Technology Specialist"
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" Joseph Hutton, IT Operations Manager"
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" Karen Poole, Hardy Grade 3 Teacher"
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" Annie Cohen, Parent"
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" Bala Iyer, Community Member"
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" Thom Henes, WHS English Teacher"
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" David Homa, Parent"
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" Michail Bletsas, Parent"
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" Lauren Belmont, Parent"
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" Tom Lahive, Parent"
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" Diogo Teixeira, Community Member"
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Teachers continue to feel the pressures of state mandates, testing, and

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The Technology committee established objectives grounded in student and staff experiences for our community. These objectives drive the technology planning process. Once the experiences were defined, the planning to support these can continue to outline devices, infrastructure, and resources needed to create the educational environment where students and staff have technology rich experiences to match the world around them.."

- !. _____ equitable access to technology for all students"
- #. _____ students to learn through the use of technology - Harness the passion that students have for technology and tie into how they learn - Inspire - Engage - Learn; enable natural flow between school life and home life and use of technology in both"
- \$. _____ active creating over passive consuming"
- /. _____ learning opportunities outside the four walls of the classroom enabled by technology / delivered digitally"
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Our technology program offers students a 1:1 experience from grades K-12 that is aligned with stages of student development and learner independence. "

Early Elementary Grades PK-2:

In the early elementary grades of K-2, our earliest learners share carts of iPads. These students are dependent learners and often working in small groups in the classroom learning to read, solve math problems and investigate science and social studies. iPads are primarily used as learning centers in the classroom but could be scheduled with grade level teachers for whole class use in a 1:1 environment for special projects. The devices are purchased by the school district."

Primary Elementary Grades 3-5:

In elementary grades 3-5, students begin reading to learn, have more independence in the classroom, and are developing skills in different subject areas. During this time while they still spend most of their time in their one classroom they have a class set of iPads that are accessible at any point in time. The data is always available to them on their designated device and they are learning technology norms through their classroom teacher. Devices stay in school and are managed and protected by the Firewall and filters in place within the school. The devices are purchased by the

Teams, Clusters, and Houses designed in our middle school structure. Managing and organizing this schedule requires students to keep track of due dates across many subject classes, organize and track assignments from class to class, etc.

The technology program aligns to the Middle School structure by providing personal technology for students to use to keep track of their schedules, due dates and assignments in a digital binder along with or in place of the traditional binder. The device, currently an iPad, travels with the student from class to class and home each day. Google classroom is used as the organizational tool and students are sent reminders when their homework is due. The homework and assignments are passed out and submitted digitally which helps with organization. The iPad video tools provide an additional dimension to teaching and learning. Students have freedom to explore within a supervised environment. Management control systems are applied to the devices so Internet filtering and other settings travel with the device. The control settings are discussed with parent groups and applied to be sure to minimize classroom distractions and maximize effective use of the educational tool at home as well as in school. The funding at this stage is a partnership program with families. The district covers the cost of the infrastructure, staf1 (os)(h) -202 (f) 5 (af) sch

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In order to implement its Technology Plan and move forward, the district has created a high performance team to provide seamless access to ubiquitous technology, curriculum, instruction, and assessment."

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The district will create a permanent District Technology Committee comprised of district stakeholders, which will meet regularly to provide guidance on the implementation of technology throughout the district. This committee, comprised of technology personnel, teachers, Instructional Technology Specialists, parents, community members, local foundation/organizations representatives, and administration will."

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- Outline the experiences for both students and staff members from the technology program
- Give feedback on design plans for implementation of long-term major projects involving the purchase and use of educational technology.
- Make recommendations on funding procedures through the operational budget, and outside organizations such as parent associations, grant foundations, etc.
- Bring forth new programs, innovations and emerging technologies used in higher education and the workplace.
- Discuss and make recommendations for equity.

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The current Strategic Technology Plan specifies the structure related to technology management and staffing to provide high performing and seamless access to our educational programs. This structure is shown below and described in the following brief position descriptions.

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Director of Educational Technology - The Director is responsible for administering educational technology programs as an integral part of the instructional and administrative program, supporting the curriculum with appropriate equipment, materials and services. The Director is accountable for creating and implementing a vision which encourages all others in the Wellesley Public Schools to confidently and critically use technologies to extend student and adult learning. The director coordinates and oversees the integration of technology into all of the system's classrooms, oversees the use and updating of the computer, video and telephone networks in the different buildings and between the buildings; provides appropriate training activities for classroom teachers, support staff, and administrators in technology use; educates Wellesley educators on future directions of technology; establishes program priorities in conjunction with the Director of Curriculum; delegates responsibilities to appropriate personnel to address program priorities and to maintain ongoing program commitments; develops and manages the budget to support programs; and provides for staff development opportunities, supervision, and evaluation.

high school students on video production and associated courses. The secondary focus is to assist with special projects in and around the district.

Department Administrative Assistant - This position works with the technology department and library/media department to provide phone support, is the primary contact for the purchasing of district hardware and software once it is approved, and coordinates curriculum and library software and online subscriptions."

Webmaster - The primary role of this position is to maintain current and updated content and manage the web server software. The webmaster debugs issues that arise with the performance of the website and is the liaison between IT partners and schools and departments. The webmaster troubleshoots areas including content, links,

Specialists due to workload or problem area."

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Tech Specialist – The Technical Specialists provide first tier software, hardware, printing, network and audio-visual support to teachers, staff, students, librarians and administrators. Work involves maintaining asset inventory, evaluating, troubleshooting, documenting, and resolving to the satisfaction of the user all support issues in a timely and accurate fashion. If issues cannot be resolved at this level the Technical Specialist escalates issues in a timely fashion to the appropriate member of the technology department for further evaluation and response."

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Assistive Technology Specialist –



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As part of the successful migration to 1:1 classrooms, professional development in technology is paramount. Varied opportunities and delivery methods is the most effective approach for maximizing teacher participation. A multitude of professional development opportunities are provided to our staff. These opportunities include courses for graduate credit offered both face to face and online, smaller workshops during the year delivered face-to-face and online, and

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The goal of the Wellesley Public Schools network infrastructure is to provide a reliable, cost effective, high speed infrastructure to make information available to properly authenticated students, staff, and parents at any time, at any place, and on any appropriate device."

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The infrastructure must meet these goals:"

- Provide high speed bandwidth to each facility, campus and classroom within the District
- Ensure that Wellesley Public Schools network resources are available via wired or wireless connections.

- Support BYOD access to needed resources at Wellesley High School.

- Provide a secure transmission path for all sensitive data.

- Provide data standards to support interoperability and accessibility for all users.

- Provide equitable access to e-learning technologies for all users.

- Provide reliable access to all computers and systems

- Coordination of information resources across departments and buildings, and providing seamless, transparent access to users provides significant design challenges.

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Additionally, as technology continues to rapidly evolve, and since there is no way to predict the products available three or four years from now, hardware, software, and network architectures must be

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District based and cloud based file storage space available for every student and employee.

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Every classroom in the District is wired with a minimum of three 1Gbps Ethernet drops. One is used for classroom wireless access points, one is used for computers or a printer, one is used for a telephone. Additionally, each classroom has a PA drop, a coaxial video drop, and multimedia presentation system including proj

Each School has a Local Area Network that interconnects the classroom drops, wireless access

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Instructional software is generally identified and vetted by staff in curricular positions as well as by academic need. At the point that the software is identified, staff in the technology department performs a detailed analysis to determine if the identified software will function properly within our network environment and available on identified hardware. District standard software titles are published and updated periodically."

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As software vendors make their applications more available via the web, it has become our preferred method of accessing the vendor's content. As students and teachers are able to access many of our technology resources via the cloud, we encourage this secure method to be utilized with new and/or updates to current software. This allows our staff to access their resources via a single sign-

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In addition to the applications listed above, teachers use:"

through either OAuth 2.0, Secure LDAP or SAML connections. We have been able to reach a point where we have nearly all systems using this identity system for authentication and authorization."

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The district has contingency processes in place; for example, the wide-area backbone network is built to withstand fiber cuts, power loss, and most equipment failures. In addition, district Data Centers have both battery and generator backup systems in place. The district has a disk based backup and de-duplication system for the backup of all critical application and file server data."

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Goals

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In support of Wellesley's vision for technology the district has established the following strategic instructional technology goals. Research tells us that real change takes 3-5 years. We have built a 4-year plan with the realistic approach that we may very well take 5 years to implement it."

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Action Plans

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1. Student Outcomes Continued"

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" 1.7 Teachers, departments, and specialists will work
2-4" together on cross-

2. Educator Skills

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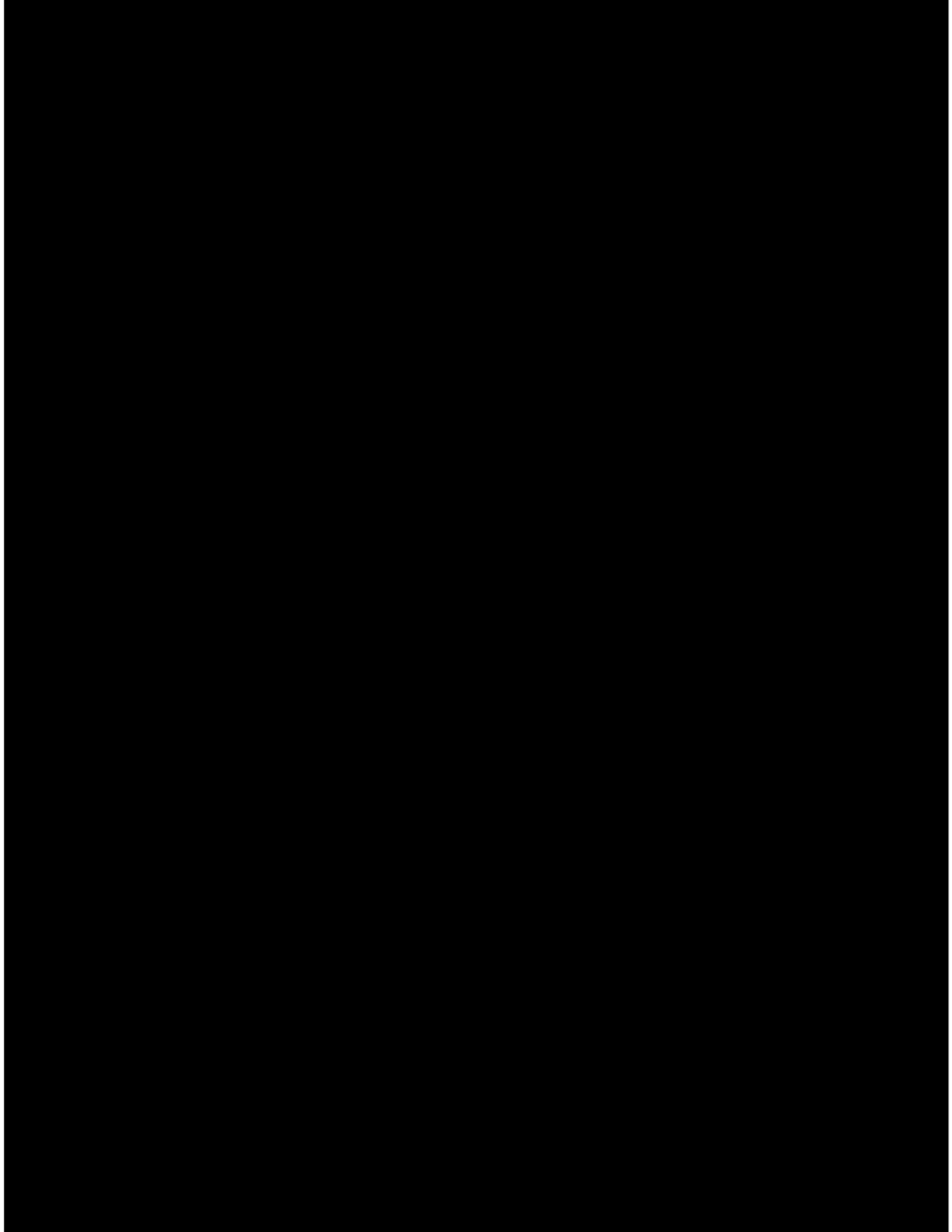
GOALS:"

1. Teachers will continuously improve their practice by participating in professional development and promoting and demonstrating the effective use of digital tools and resources.
2. Teachers will establish a student-centered atmosphere in which students learn to think critically, problem-solve, communicate, and collaborate about real world experiences.
3. Teachers will use their knowledge of subject matter, teaching and learning, and technology to facilitate differentiated experiences that advance student learning, creativity and innovation.
4. Teachers will develop and implement opportunities for students to apply digital citizenship practices.
5. Teachers will share best practices in digital age learning through staff meetings, team meetings, video releases, and/or web postings
6. Administrators will participate in and provide professional development throughout the school year in order to learn and provide 21st century classroom support and guidance
7. Teachers will continuously improve their practice by participating in professional development which focuses on developing student centered learning, differentiated instruction and digital citizenship.
8. Teachers collaborate on curriculum, best practice, technology use, and student centered learning.

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Year" Action Item"

Start Date"



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This multi-year living plan will be implemented from September 2016 through June 2020. It is Wellesley's intent to begin the implementation of the goals and actions of this Strategic Technology Plan as soon as possible, in service of the district's mission and overall vision of the plan. Given that several of the action items identified in the plan require funding, the implementation of these items will be contingent on available funds. The district plans to utilize the following funding sources in order to support implementation of these action items: Allocation of funds within the capital budget; operating budget; E-Rate funding; grants and private funding; and

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Evaluation Design

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Wellesley is committed to conducting a regular and on-going evaluation process that aims to measure the level of implementation of technology in the classroom for students and support for faculty and staff. This evaluation goes beyond accounting for technology infrastructure and reporting quantitative data on students, teachers, and administrators achieving basic technology literacy benchmarks. The district's technology plan evaluation effort will report on the qualitative impact of technology on teaching and learning. Data will be gathered through: surveys of all stakeholders, observations of practices, and qualitative feedback from educators, students, and parents. This data will be used to inform practices of the district in terms of professional development, technology integration, and communication."

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Click the links below for applicable Technology and digital media related policies for the Wellesley Public Schools. The policies align with an environment utilizing emerging technologies and personal technologies in schools.

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Click the link below for the new draft International Society for Technology in Education (ISTE) Nets Standards for Students, Teachers, and Administrators. The student draft is to be finalized and announced at the ISTE conference in June, 2016. The draft is updated to match a 1:1 environment and the use of personal technologies in schools. Once the student version is finalized an update of the teacher and administrator versions will follow."

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[ISTE NETS-S \(Students\)](#)"

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[ISTE NETS-T \(Teachers\)](#)"

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[ISTE NETS-A \(Administrators\)](#)"

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