

Wachusett Regional School District



Technology Plan 2016 – 2021

WRSD Technology Plan
2016-2021

Table of Contents

Executive Summary	3
Vision	3
The Role of Technology	3
Wachusett Regional School District’s Philosophy of Technology in Education	3
Part 1 - Technology Plan Benchmarks:	4
Benchmark 1 - Commitment to Clear Vision and Implementation Strategies	4
A. Vision, Goals and Action Steps	4
B. Technology Planning Committee	7
C. Needs Assessment	7
D. Budget	8
E. Evaluation of Requests	9
Benchmark 2 -Technology Integration and Literacy	10
A. Technology Integration	10
B. Digital Citizenship	10
C. Staffing	10
Benchmark 3 -Technology Professional Development	11
Benchmark 4 - Accessibility of Technology	12
A. Hardware Access	12
B. Internet Access	13
C. Networking (LAN/WAN)	13
D. Staffing Plan	14
Benchmark 5 - Virtual Learning and Communications	14
Benchmark 6 – Safety, Security, and Data Retention	15
Conclusion	15
Part 2 – Technology Investments	16
Part 3 - Technology Plan Priority Goals for FY21	18

Executive Summary

Vision

The Wachusett Regional School District is committed to providing a safe educational environment in which everyone learns and collaborates in new and creative ways where technology seamlessly enriches our daily learning experiences.

The Role of Technology

For the Wachusett schools to be truly relevant and meaningful in our students' lives, the use of technology in teaching and learning must no longer be optional, but become a necessity. We believe the District must ensure that technology is available so that all students and educators can learn and continuously grow as independent, confident, resilient and thoughtful individuals who are able to explore new ideas, reflect on progress, and challenge themselves in today's ever changing world. In order to meet these needs, District technology and resources must support the communication needs of teachers and students alike, allowing them to exchange ideas and feedback at anytime. In addition, students and teachers must be able to utilize web-based tools and digital resources in order to collaborate, analyze data, and share information with others. To make this work, our technology infrastructure must be robust and omnipresent, and students must be surrounded by technology and relevant applications throughout their entire educational experience.

Wachusett Regional School District's Philosophy of Technology in Education

It is the District's belief that technology can truly improve teaching and learning when implemented correctly. By this, we mean that technology is used to enhance student learning by creating personalized, student-centered learning environments, where every student has equal access to the curriculum. It is the District's understanding, however, that not all learning is enhanced by the use of technology. Technology needs to be used where appropriate and in a way that it helps students reach specific learning outcomes. Therefore, the District fully supports a balanced approach to the use of technology that also includes more traditional educational strategies.

It is also our belief that the District and our teachers need to be partners in this new educational experience. With the constant and rapid evolution of new technologies and the increase of information on how we learn, our teachers need to have access to quality, ongoing professional development, and quality support as they learn and try out new applications. We believe that developing teachers who are comfortable and experienced integrating technology into their instruction is one of the most important goals of our District and its schools today. Technology and professional development must go hand-in-hand.

Part 1 - Technology Plan Benchmarks:

In order to help us focus our planning efforts both in the short and long term, the District has adopted six benchmarks. It is our intention that this plan will help our District secure funding, identify areas for targeted growth, and identify professional development needs. Ultimately, we believe that this plan will help our District better support student learning.

The six benchmarks are, 1) Commitment to a clear vision and implementation strategies, 2) Technology integration and literacy, 3) Technology professional development, 4) Accessibility of technology, 5) Virtual learning and communications, and, 6) Safety, security, and data retention. Information detailed below for each benchmark was used to set the goals found in Part II of this plan.

Benchmark 1 - Commitment to Clear Vision and Implementation Strategies

A. Vision, Goals and Action Steps

Vision: The Wachusett Regional School District is committed to providing a safe educational environment in which everyone learns and collaborates in new and creative ways where technology seamlessly enriches our daily learning experiences.

To support the District's vision, technology needs to be fully integrated into all classrooms at all grade levels across the District. Achieving this vision will require a greater number of devices be made available in all of our schools to support the educational needs of our students and staff alike, periodic increases in Internet bandwidth based on user demand, access to robust wireless networks, comprehensive curriculum planning, a focused professional development plan, and expanded support for technology integration and training.

Goals and Action Steps: This Technology Plan has been updated to align with the District Strategic Plan (<http://www.wrsdonline.net/documents/WRSDStrategicPlan.pdf>) as set forth by the Superintendent of Schools and the School Committee. The Strategic Plan's theories of action, strategic objectives (goals) and relevant action steps are detailed on the following pages.

District Strategic Plan

Domain 1: Leadership, Governance, and Communication

If the district establishes a clearly defined set of goals, develops a responsible budget based on priority initiatives, and works closely with community stakeholders to communicate district needs and adopt the budget, *then* the district will have the resources to allow students to realize their highest potential.

Domain 1 Strategic Objectives

- A. Establish and communicate a clearly defined set of goals and strategic objectives to guide district and school improvement initiatives.

WRSD Technology Plan 2016-2021

- B. Develop a transparent budget that supports the district's goals and strategic objectives and share details with community stakeholders in an environment open to dialogue and collaboration.
- C. Ensure that relevant information is communicated out to community stakeholders and is easily understood.

Domain 1 Action Steps supported by the Technology Plan:

- 1. Train selected personnel and the administrative team on the purpose and use of social media in the District for recruiting and sharing District news and events. Update school webpages to include social media integration.
- 2. Create an emergency communication plan in partnership with local police and fire. Share these plans on District and school webpages.
- 3. Provide advanced training for administrators and support staff on the use of the District's auto alert and email broadcast systems to ensure standardized communication protocols.
- 4. Create a WRSD Budget Book that is updated throughout the course of the budget season and with the newest version available online to all stakeholders.
- 5. Develop a budget that addresses facility and technology needs in order to support effective instruction. Specific technology-related items are identified in the budget.

Domain 2: Aligned Curriculum

If educators implement an aligned curriculum that articulates common, well-defined learning outcomes with a focus on depth of understanding and critical thinking, *then* students will be prepared for the next level of learning.

Domain 2 Strategic Objectives:

- A. Develop a consistently implemented and vertically aligned Pre K- 12 Curriculum.
- B. Develop common, well-defined learning outcomes with a focus on depth of understanding and critical thinking across all grades and content areas.

Domain 2 Action Steps supported by the Technology Plan:

- 1. Provide teachers and students with access to tools that support differentiated, student-centered, personalized learning by expanding wireless infrastructure, Internet connectivity, and access to portable devices. Train staff in the use of these tools. Support staff and students as they use of these tools.
- 2. Provide staff with resources that allow them to remotely collaborate in the development and revision of curriculum documents.

Domain 3: Effective Instruction

If educators implement evidence-based, high-quality instructional practices focused on critical thinking, creativity, and collaboration, and systematically measure, analyze, and act upon student learning data, *then* all students will be challenged to grow as individuals and global citizens.

Domain 3 Strategic Objectives:

- A. Implement evidence-based, high-quality instructional practices focused on critical thinking, creativity, and collaboration.
- B. Systematically measure, analyze, and act upon student learning data.
- C. The staff regularly use technology to support student learning, enhance student engagement, and work toward developing innovative instructional practices.

WRSD Technology Plan
2016-2021

Domain 3 Action Steps supported by the Technology Plan:

1. Ensure that the technology and the infrastructure is sufficiently robust and up to date in order to meet student learning needs and staff instructional needs.
2. Support and train staff in integrating technology into the classroom environment so that students are supported and engaged.
 - a. Instructional staff differentiate core instruction and assessment to meet the diverse needs of all learners.
 - b. Establish district wide and building based groups to research, pilot, and share best practices.
 - c. Staff examine student data to evaluate and monitor student learning and evaluate instructional practices.
3. Staff regularly use technology to prepare students to be successful in and beyond school.
 - a. Students consistently receive constructive, targeted feedback as well as guidance on how to improve.

Domain 4: Professional Development and Structures for Collaboration

If staff is consistently provided with professional development that enhances their content knowledge and their pedagogy is enriched through collaboration with staff across all schools in the district, *then* educators will be able to implement effective educational practices that will improve the learning and growth of all students.

Domain 4 Strategic Objectives:

- A. Professional development includes high-quality job-embedded professional development aligned with district, school, and educator goals.
- B. Systems, structures, and protocols are in place and used to guide collaborative discussions to improve implementation of the curriculum and instructional practices.
- C. Professional development and structures for collaboration are evaluated for their effect on raising student achievement.

Domain 4 Action Steps supported by the Technology Plan:

1. Staff are trained in the use of survey data to monitor student needs and progress.
2. Professional development opportunities are specific, ongoing, and include a plan for support during the initial stages of implementation across all buildings.
3. The budget process supports identified professional development needs.
4. Staff will share best practices of using technology to support effective instruction.

Domain 5: Students' Social, Emotional, and Health Needs

If the district supports effective researched-based practices that promote a healthy school climate, builds an understanding of social, emotional and physical health as factors affecting learning, and works collaboratively with families and community services, *then* students will be able to utilize their knowledge and skills to maximize their learning potential.

Domain 5 Strategic Objectives:

- A. Build an understanding of social, emotional and physical health as factors affecting learning.
- B. Engage families and the community in a partnership to increase the district's capacity to address students' social, and emotional health needs.

Action Steps supported by the Technology Plan:

1. Develop and implement lessons to help students learn to become safe and responsible digital citizens.

WRSD Technology Plan
2016-2021

B. Technology Planning Committee

Name	Position	Location
Dr. Darryll McCall	Superintendent	District
Robert Berlo	Deputy Superintendent	District
Barry Sclar	Supervisor of Info Services	District
Ed McAuliffe	Network Manager	District
Erik Githmark	Principal	Mountview Middle School
Dixie Estes	Principal	Naquag Elementary School
Anthony DiBenedetto	Asst. Principal	WRHS
Scott Wahlstrom	Teacher	Paxton Center School
Scott Jaffe	Teacher	Glenwood Elementary School

C. Needs Assessment

Wachusett Regional School District annually assesses all technology products and services. To develop our Needs Assessment, a variety of methods are employed, including an updated inventory and data from groups such as school faculty, administrative staff, and School Councils. The table below contains highlights from the most recent hardware and software inventory.

Student Laptops (Chromebooks)
<ul style="list-style-type: none"> ● As of FY20, all grade 9-12 students have a Chromebook to use at school and home. This completes the third phase of the District's 1:1 Program. Beginning in FY21, incoming grade 9 and grade 11 students will receive new devices. ● In FY20, grade 8 History teachers across the district were provided with dedicated Chromebook carts to support their online civics textbook. In FY21, grade 6 and 7 History teachers across the district will also require dedicated Chromebook carts for their Ancient Civilizations and Geography online courses. ● There are currently 111 Chromebook carts available for student use across the District, which means that each school now has enough Chromebooks available to conduct the state mandated online testing (MCAS 2.0). Minimally, this means that there are enough devices in each school to allow at least one full grade to take this online test at a time. However, there still remains a need for more devices dedicated to each classroom to support student learning.
Staff Laptops
<ul style="list-style-type: none"> ● A refresh schedule has been established for all WRHS staff laptops. The oldest units are now replaced each summer. ● All PreK-8 teachers have Chromebooks. The oldest units will be replaced each year.
Network Infrastructure
<ul style="list-style-type: none"> ● Minimum Internet bandwidth in middle schools will be increased to at least 200 Mbps in FY21 to meet anticipated increases in usage with the roll out of online texts.

WRSD Technology Plan 2016-2021

<ul style="list-style-type: none"> • Due to increased demands, the overall district-wide Internet bandwidth has been increased by 400% to 2.1Gbps. • Robust school-wide wireless networks have been installed at all K-12 schools. • Upgrades to the oldest switches will occur in the next iteration of the Technology Plan.
Desktop Computers
<ul style="list-style-type: none"> • Some staff and subjects need desktop computers. All desktop computers are now on a refresh cycle.
Servers
<ul style="list-style-type: none"> • No new server purchases are anticipated until at least FY21. • Extensions on existing hardware warranties will occur in FY20 as well.
Printers
<ul style="list-style-type: none"> • Our printer fleet is meeting current needs and does not require significant upgrades at this time. An emphasis on electronic assignment submission may reduce overall printing needs.

Conclusions:

- More progress must be made to increase the availability of portable devices (laptops/Chromebooks/tablets) that can be easily integrated with traditional classroom activities and, in addition, be used to support learning wherever it takes place. Financial support from the local budget is needed to ensure that sufficient laptop carts are available in all schools to meet classroom demands. External funds, grants, and donations will also be used to supplement school needs.
- Staff laptops/Chromebooks need to remain current in order to allow staff to explore educational options and seamlessly integrate technology into their instructional practices.
- Hardware refresh cycles are now set to match the demand placed on the product, with the most heavily used devices being replaced every two years, and most of our other devices being replaced every four years in order to maintain essential functionality.
- All school buildings networks will continue to be upgraded and expanded to ensure that we have robust, up-to-date wireless networks that support student and staff needs.
- Internet bandwidth capacity will continue to be increased to match user needs and to support additional device acquisitions. As the district rolls out more online texts and as we expand the use of online learning environments, such as Actively Learn, the minimum school Internet bandwidth will need to be increased. For FY21, this minimum level will be increased to 200 Mbps.
- Staff and student training and support will continue to evolve as it is aligned to better meet identified needs.

D. Budget

According to the DESE guidelines for technology per pupil expenditures, Wachusett Regional School District in FY20 moved up a level from the Early Tech level to the Developing level. Currently, the District is spending a little more than \$200 per pupil on technology. In the table below, the column entitled “Tech Budget” lists all expenditures related to technology as reported in our annual end of the year report as well as what we anticipate spending in the current budget (i.e., all Munis accounts related to technology). Technology spending includes software, hardware, Internet access, network costs, repair costs, supplies, contracted services, professional development, and salary expenses.

WRSD Technology Plan 2016-2021

Spending at the Proficient or Advanced level is viewed by the state as a level that will support ongoing district technology needs, including an annual plan for hardware lifecycle costs, increasing bandwidth needs, ongoing, job-embedded professional development, instructional support for staff, adequate technician support, contracted service fees, and adequate department leadership.

DESE Guidelines: Early Tech-Less than \$175/Pupil Developing-\$175-\$300/Pupil
 Proficient-\$300-\$425/Pupil **Advanced-more than \$425/Pupil**

FY	Enrollment	Tech Budget	Per Pupil Expense	Level
2013	7,469	\$707,113	\$95	Early Tech
2014	7,388	\$749,914	\$102	Early Tech
2015	7,349	\$788,283	\$107	Early Tech
2016	7,343	\$1,100,895	\$150	Early Tech
2017	7,298	\$795,899	\$109	Early Tech
2018	7,148	\$936,304	\$131	Early Tech
2019	7,103	\$1,289,972	\$161	Early Tech
2020*	7,015*	\$1,409,207*	\$200*	Developing

*Based on Oct. 1st enrollment numbers and the FY20 adopted budget

Summary of Technology Spending

The District recognizes that technology plays a critical role in achieving our strategic and school improvement goals. As indicated in the table above, over the past few years the overall technology budget has increased and this has allowed us to make significant progress towards the goals laid out in this five year technology plan. It should be noted, however, that although the technology budget has been limited in totality, the District has still made significant progress in developing a robust infrastructure, providing students and staff with access to current devices, and providing staff with relevant professional development. The eight year average for technology expenditures is \$972,198.

As we wrap up this five year plan and move towards developing our next plan, our main focus will need to switch from primarily focusing on infrastructure and hardware towards the end user. Obviously, our infrastructure will need to continue to seamlessly support the learning needs of students and staff, and our hardware needs to remain current in order to be able to access instructional platforms and learning tools, but the new plan will need to be more focused on supporting online learning. This will include supporting online learning environments as well as the physical learning spaces. To support initiatives in this new plan, we will need to have a consistent technology budget. In FY20, we moved into the Developing level of spending for technology. To successfully meet the goals of the next plan, we will need to continue to fund technology at this level.

E. Evaluation of Requests

All technology requests from educators are reviewed by the technology department and administration to ensure that they support strategic initiatives and school improvement plan goals.

WRSD Technology Plan
2016-2021

The Technology Department works closely with Principals and District Leaders to develop and prioritize annual technology-related budget requests, and to ensure that the technology and software can be integrated and supported.

Benchmark 2 -Technology Integration and Literacy

A. Technology Integration

Goal #1	Met	Not Met
At least 90% of teachers use technology effectively every day outside of teaching time.	✓	
Goal #2		
At least 90% of teachers use technology appropriately with students everyday to improve student learning.		✓

B. Digital Citizenship

Goal #1	Met	Not Met
At least 90% of eighth grade students show proficiency in all MA Technology and Literacy standards and Expectations.		✓
Goal #2		
At least 90% of students in grades 2-12 will be trained annually on grade appropriate digital citizenship topics.		✓
Goal #3		
At least 70% of core academic teachers will teach and model digital citizenship skills in their class.		✓

C. Staffing

The District currently maintains a technology staff consisting of one Supervisor of Information Services, one Network Manager, one Applications Specialist, three Technology Associates, five Technology Assistants, and one Technology Integration Specialist (12 FTEs total). The District does not have a district-level technology director/coordinator.

The District currently has one instructional technology integration specialist located at the high school. The Supervisor of Information Services (SIS) partly fills the role of Technology Integration Specialist for the elementary and middle schools, however this makes up only a small part (only about 20%) of the total responsibility of the SIS. The DESE recommends one technology integration specialist per 60-120 instructional staff. Wachusett Regional has approximately 550 instructional staff. This would translate into roughly four additional technology integration specialists being added to meet minimal DESE recommendations. It should be noted that the new District Staff Plan, includes the addition of three more technology integration specialists over the next five years.

WRSD Technology Plan
2016-2021

The District has staff specifically dedicated to data management and assessment. Currently, the District has a Deputy Superintendent who works in the Central Office and an Applications Specialist who works in the Technology Department who both are used to address our needs related to student and staff data management. As more staff use online student learning and assessment tools and platforms, the need to manage student accounts has increased dramatically. As a result, there is a need to add an assistant Data Manager. This position also appears in the District Staff Plan.

Goal #1	Met	Not Met
The District has a district-level technology director/coordinator.*		✓
Goal #2	Met	Not Met
The District provides one FTE instructional technology specialist per 60-120 instructional staff to coach and model.		✓

Position	School	Current FTE	Minimum DESE Recommendations
Technology Director*	District	0.8	1
Data Manager	District	1	1
Network Administrator	District	1	1
Technology Integration*	Elementary	0.1	2 (1 for every 60-120 Staff)
	Middle School	0.1	1 (1 for every 60-120 Staff)
	High School	1	2 (1 for every 60-120 Staff)
Technology Support	District	8**	14 (1 for every 400 Computers)

*The current Supervisor of Information Services partly fills the role Technology Director, webmaster, as well as Technology Integration Specialist for Prek-8.

**Current level of support is 1 tech for every 700 computers

Benchmark 3 -Technology Professional Development

Goal #1	Met	Not Met
At least 80% of teaching staff have participated in technology-related P.D.	✓	
Goal #2	Met	Not Met
At least 80% of teaching staff have participated in technology-related P.D that enhances their instructional practices.	✓	

To expand the scope and allow more staff to participate, technology professional development has been consistently supported through grants funds and now includes a wider variety of delivery models. PD offerings are based on input from staff. The district is now using Title IIA federal grant funds to support staff training on an annual basis, which includes support for technology professional development. As we move into the next Technology Plan, local funds should also be used to support staff professional development needs instead of relying solely on grant funding to meet our needs.

WRSD Technology Plan
2016-2021

Expanded delivery models for technology professional development will continue to be used and will include blended learning classes (face-to-face time with an online component), job-embedded training/support, just-in-time training, staff-driven professional development, teacher and student led share fairs, and study groups. Lastly, teacher and administrator professional development needs will be assessed annually using a locally created professional development survey.

Benchmark 4 - Accessibility of Technology

A. Hardware Access

Goal #1					Met	Not Met
The District has an average ratio of one high-capacity, Internet connected computer for each student.						✓
Benchmark	Currently	FY17	FY18	FY19	FY20	FY21
WRHS (Gr. 9-12)	No	Wire Bldg. & Tchr. PD	Gr. 9* & Tchr. P.D.	Gr.9-10* & Tchr. P.D.	Gr. 9-12* & Tchr. P.D.	Ongoing Gr. 9 + 11*
MS (Gr. 6-8)	Begun	Begin Teacher Training	Wiring Phase 2	Finish Wiring	Gr. 8 1-to-1	Gr. 6-8 1-to-1
			3:1 Devices	2:1 Devices		
			Teachr. P.D..	Teachr. P.D.		
Elem (Gr. 1-5)	No	Begin Wiring	Wiring Phase 2	Wiring Phase 3	Finish Wiring	Elementary Schools all at least 2:1
		Teacher Training	5:1 Devices	4:1 Devices	Elemen. 3:1	
			Teachr. P.D	Teachr. P.D.		
Early Childhood	No	No	No	No	Tchr. P.D.	Bldg. Wiring
1:1 Teacher Laptops	No	Grades 9-12	Grades 6-8	Grades 3-5	Grades PK-2	Ongoing Replenish

*HS 1:1 initiative

Orange-plan not yet addressing; Purple-plan is in the process of addressing the need; Green-need has been met and the plan will continue to support.

Technology Tools & Software Available to Students and Staff

The table below shows many - but not all - of the software products commonly used throughout the District.

District Software Titles			
Actively Learn	Learning Management Sys.	Lexia	Literacy Support/Assmnt.
Adobe Creative Suite	Graphic Design Tools	Mojo Helpdesk	Help Desk
AIMSweb	Student Assessment	MS Office	Productivity Tools
Boardmaker	Special Ed Software	Munis	HR / Financial
Clever	Single Sign-On Portal	Naviance	College/Career Planning

WRSD Technology Plan
2016-2021

CPS	Student Response System	Nutrikids	Food Services
Edmodo	Learning Management	PowerSchool	Student Information System
Educere	Virtual Learning	Quicken	Financial Management
Edulastic	Interactive Assessments	Raz-Kids	Self-Paced Learning
eSped	Special Ed / IEP	School Messenger	Notification System
ExamView	Test Generator	Securly	Web Filtering / Reporting
Family ID	Online Athletic Sign-Ups	Smart Notebook	Interactive Whiteboard
FitnessGram	Physical Fitness	Smore	Newsletter/Communication
Follett Destiny	Library Management	SNAP	Health Services
G Suite	Email, Calendar, Docs	TeachPoint	Teacher Evaluation
Google Classroom	Learning Management	TypingClub	Keyboarding Skills
IXL	Self-Paced Learning	Versatrans	Transportation

B. Internet Access

Internet access is available on all computers and Internet-capable devices across the District, and, as a result, Internet usage patterns and bandwidth utilization needs are very closely monitored. This is especially important as new devices are added to the network. As we move closer to a 1:1 environment in future years, Internet bandwidth will need to be increased in all locations in the District in order to better meet student learning needs and teacher instructional needs. Our school Internet connections have been increased since the adoption of this plan, and it is anticipated that the need for scalability will be an ongoing need for the foreseeable future. Our goal for school Internet access is to be at least 1 Gbps for every 1,000 users (students and staff).

C. Networking (LAN/WAN)

All District buildings are currently connected to each other as well to the District office by means of a robust Wide Area Network. At this time, all essential District data is centralized at the Central Office datacenter. The datacenter is housed in a climate-controlled room with redundant power supplies and offsite storage.

In order to meet the learning needs of our students and to support the instructional demands of our teachers, all schools in the district now have an updated wireless network supported by Power over Ethernet (PoE) switches in all network closets. Any new access points will need to support the latest Wi-Fi Protocols in a high-density setup in order to continue to support all classrooms and learning spaces with a density of at least 1:1.

WRSD Technology Plan
2016-2021

D. Staffing Plan

Position	FTE	Year	Notes
Technology Director	1.0	FY20	Result of Dept. Reorganization. Lend direction to technology expansion, staff training, and communication with stakeholders (no net impact to budget)
Data Manager	1.0	FY20	Result of Dept. Reorganization (no net impact to budget)
	1.0	FY22	Assistant Data Manager
Network Manager	1.0	FY18	Necessary to support expanded network use and increased number of devices.
Technology Integration Specialists	1.0	FY19	HS Tech. Integration Specialist (new to budget)
	1.0	FY21	MS Tech. Integration Specialist (anticipated new to budget)
	1.0	FY23	Elementary Tech. Integration Specialist (anticipated new)
	1.0	FY25	District-wide Integration Specialist (new to budget)
Technology Support	8.0	Existing	Note: the number of new devices is expected to increase each year with new devices being under warranty

Benchmark 5 - Virtual Learning and Communications

- A. By the end of this plan, the District will encourage the development and use of innovative strategies for developing high-quality courses through the use of technology in the following ways:
 - 1. Providing wireless Internet access to all students and staff in all buildings.
 - 2. Utilization of digital tools and software to assess student learning and to provide immediate student feedback.
 - 3. Utilization of web-based tools to encourage student centered learning and to support collaborative projects.
 - 4. Communicating information and ideas respectfully to all students and families through the use of a variety of digital tools and environments.
- B. By the end of this plan, the District will provide wireless Internet access to all students and staff throughout all buildings.
- C. Currently, students are able to collaborate with peers and instructors both in the classroom and at home through Google Apps for Education and other web-based tools in all grades. This Technology Plan includes training in the use of Web-based tools, including Google Classroom. Any Learning Management System, such as Google Classroom, could provide virtual learning opportunities, courses, collaborative projects, field trips, or discussions for students and staff.
- D. The District maintains up-to-date websites that include information for parents and community members and are ADA compliant across all pages.

WRSD Technology Plan
2016-2021

Benchmark 6 – Safety, Security, and Data Retention

- A. The District has a CIPA-compliant Acceptable Use Policy (AUP) regarding student Internet access (refer to School Committee policy [6531](#)). It should be noted that this policy is reviewed as needed to ensure it aligns with the new DESE guidelines for “Responsible Use Policies.” In addition, the district provides firewalls and web content filtering systems where needed to protect students from inappropriate content.
- B. As a result of this plan, the District will ensure that students and staff are educated about appropriate online behavior in a variety of ways. Students will receive instruction on digital citizenship, with topics that include cyber-bullying, responsible use of social media, and safe use of online environments. Staff will receive training on digital citizenship and responsible use of social media.
- C. The District has a plan to protect the security and confidentiality of personal information of its students and staff. All access to student data is password protected on secure servers. In addition, our network is password protected and all users are required to authenticate before they are granted access to the District’s network.
- D. The District complies with federal and state law, and local policies for archiving electronic communications produced by its staff and students. The District utilizes an online, remote service to archive all electronic information created in Gmail. The District informs staff and students that any information distributed over the District or school network may be a public record.

Conclusion

The Wachusett Regional School District will review and update this plan as needed to ensure that it is accurate and relevant. This document serves only as a tool for planning and describing the District vision for technology use and integration. It does not set official District policy, but does comply with all relevant policies established by the Wachusett Regional School District Committee.

WRSD Technology Plan
2016-2021

Part 2 – Technology Investments

FY17 Improvements	
Item	Comments
WRHS WiFi Project	100% Coverage of academic areas to support 1:1 initiative
WRHS Chromebook Pilot	Purchase 5 carts to pilot classroom use in preparation for 1:1 rollout in FY18
WRHS Teacher Training	Advanced Google training for lead teachers Beginning/intermediate Google training for all staff
Desktop PC Upgrades	All Windows XP computers replaced district-wide
Monitor Upgrades	All CRT monitors replaced replaced with LCD monitors district-wide
WRHS Staff Laptop Upgrades (Phase 1)	Replace oldest MacBook models as part of ongoing replacement plan
WRHS Mac Upgrades	Replaced oldest models, developed ongoing replacement plan
Server Replacement (Phase 1)	All primary district datacenter servers replaced

FY18 Improvements	
Item	Comments
1st year of WRHS 1:1 program	WRHS 1:1 Program launched with Chromebooks for Grade 9
Student Devices (Phase 1)	25 Chromebook carts were purchased and deployed district-wide
WRHS Staff Laptop Upgrade (Phase 2)	Oldest MacBook models were replaced as part of our ongoing plan
Staff Chromebooks (Phase 1)	Chromebooks purchased for all middle school teaching staff
Teacher Training - Middle/High School	PD on integrating technology into instruction practices throughout the year
Server Replacement (Phase 2)	Replaced 5 school servers, completing district-wide server upgrades
Staffing	
Network Administrator FTE	Hired Network Manager - Responsible for the day-to-day operation of the network and other data communication systems.

WRSD Technology Plan
2016-2021

FY19 Improvements	
Item	Comments
2 nd year of WRHS 1:1 program	Devices issued to incoming Grade 9 students
WRHS Staff Laptop Upgrade	Oldest MacBook models were replaced as part of our ongoing plan
Staff Chromebooks (Phase 2)	Chromebooks purchased for all PreK to 5 teaching staff
Network Tools & Software	Investment in software and services to support student learning
Staffing	
Tech Integration Specialist	Support the instructional needs of HS staff as they integrate technology into their classes

FY20 Improvements	
Item	Comments
3 rd year of WRHS 1:1 program	Devices provided to students in grades 9 & 12
Middle School Device Increase	Chrome carts provided for grade 8 online history program
Teacher Training	PD for teachers in tech integration
HS Laptop Renewal (Ongoing)	Replace approximately 25% per year as part of ongoing plan
Software	Actively Learn Grades 6-12, Q-Global Assessments district-wide

FY21 Anticipated Improvements		
Item	Estimated Cost	Comments
Continuation of WRHS 1:1 program	\$250,000*	Devices provided to students in grades 9 & 12
Middle School Device Increase	\$45,000	Continue to move toward 1:1 device ratio
Teacher Training	\$20,000**	Ongoing PD for teachers in tech integration
HS Staff Laptop Renewal (Ongoing)	\$20,000	Replacing approximately 25% per year as part of ongoing plan
Software	\$25,000	Educational software licenses

*Purchase of 1,200 Chromebooks outright as opposed to 3-year financing

**Grant funded

WRSD Technology Plan
2016-2021

FY22 Development of New Technology Plan

- The new plan will need to look beyond devices and network access to also focus on learning spaces and instructional approaches
- Review of staffing responsibilities and roles in comparison to district needs
- Use of data and management of student accounts
- Use, sharing, and reporting of student learning data

Part 3 - Technology Plan Priority Goals for FY21

Area of Focus	Priority Goals
I. Commitment to Clear Vision and Implementation Strategies	Develop, define, and communicate the WRSD Technology Plan to all District and community stakeholders to establish a budget and professional development plan that supports the District needs and vision.
II. Technology Integration and Literacy	Surround students with technology throughout their entire educational experience, with a focus on providing 1:1 access to technology at the middle and high school levels.
III. Technology Professional Development	Support teachers through professional development so they can effectively integrate technology into their instruction.
IV. Accessibility of Technology	Provide increased access to technology at all grade levels with an emphasis on the 1:1 initiatives and expanded Internet bandwidth.
V. Virtual Learning and Communications	Maintain a technology infrastructure that is robust and omnipresent.
VI. Safety, Security, and Data Retention	Ensure that all students and staff are educated on appropriate and safe online behavior. Protect the security and confidentiality of personal information of all students and staff.