# RSU 22 School District 2022-2026 Technology Plan Report

# *EXECUTIVE SUMMARY*

**Purpose of Report:** To provide to the School Board information regarding the District's 2022-2026 Technology Plan.

The RSU 22 School District maintains a five-year technology plan that guides the District in appropriating technology to teach students effectively, develop staff proficiencies, and maximize equipment usage. The current plan expired in 2021, so a new plan is proposed for the coming five years of the District.

The Technology Plan has three sections highlighting eleven goals over a five year period. The Plan will continue to equip classrooms with technology that is seamless, sustainable, and flexible while effectively supporting 21st Century instruction and aligning with the district's strategic plan.

The focus of the Plan is on refreshing the multiple technology platforms, and all costs will be submitted over five years in the budget.

# 2022-2026 Technology Plan Report

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**District Priority Area:** Fiscal Accountability/Systems Management

**Goal:** The District will provide multiple programs and pathways to support improved student achievement across the curriculum.

**Strategy:** Review and approve the District's Technology Plan.

**Explanation:** The District Technology Plan is a document that guides the District in appropriating technology to teach students effectively, develop staff proficiencies, and maximize equipment usage. The District's current plan expired in 2021-2022, and a five-year revision cycle should be maintained.

The technology plan is organized in three distinct sections:
- **Instructional Technology, Digital Learning, and Support**
- **District Systems and Business Intelligence**
- **Infrastructure and Security**

Instructional Technology, Digital Learning, and Support encompasses those technologies that impact the classroom. This section focuses on the classroom experience and highlights the initiatives the District intends to implement over the next five years.

District Systems and Business Intelligence refers to the systems that support the operation of the District. This section includes our student information systems, Finance, Human Resources, Payroll, and reporting systems.

Infrastructure and Security are the foundational elements that create the environment for the above-mentioned sections. This area highlights the core technology systems and security that underpin the above initiatives. The upgrade and expansion of our core infrastructure is key to maintaining a growing district.

The strategies outlined in the following document highlight the projects and processes that will guide our decision making over the next five years.

**Costs:** Contingent upon the annual budget process.

**Committee Participation:** The District Technology Committee is composed of administrators, support staff, and instructional coaches.

**Summary:** The 2022-2026 Technology Plan provides a direction for the District's technology implementation over the next five years. The Plan will be reviewed on an annual basis and adjusted accordingly as technology requirements change.

# RSU #22
### Hampden Newburgh Winterport Frankfort
# District Learning Technology Plan

**Date Approved by the School Board: (TBD)**
# 2022 - 2026

**District Learning Technology Plan:**

**Section 1**

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**Schools Included in the Plan:**
Hampden Academy
Reeds Brook Middle School
Samuel Wagner Middle School
George B. Weatherbee Elementary School
Earl C. McGraw Elementary School
Leroy H. Smith Elementary School
Newburgh PreK

**Introduction:** This Learning Technology Plan was created in the Spring of 2022. The authors of this plan worked together with insight from district staff and students for the express purpose of defining the course of our learning technology work over the next three years.

**Shared Vision for Learning:**

*Education enables all students to learn the skills, acquire the knowledge, and develop the attitudes necessary for them to reach their potential as citizens who can meet the challenges of a changing global society.*

We believe that:

- All citizens in our communities share the responsibility to educate our children and themselves.

- Our schools are community support systems and should welcome and encourage all members of our communities to participate.

- Our schools will have a supportive and empowering atmosphere for all students and community members.

**Shared Leadership in Improving Communication with the RSU 22 Community:**

"Technology is an essential component that facilitates parents, teachers, and community members working together to optimize learning for all students."

- The district website regularly updates public information for all community members, such as school board goals, plans, policies, the district budget, curricula, employee and employment information, health and safety updates, and links to each school's website. Newsletters are published on the district websites and also pushed out through the district's mobile app.

- School newsletters are published and updated regularly on school websites, as well as sent to parents and community members via email.

- Student work (with permissions) will be published on school websites.

- The student information systems, PowerSchool, SeeSaw, & Google Classroom will serve as a portal for parents to gather information about their child's educational experience in RSU 22.

- RSU 22 will continue to use social media tools to engage the community.

- The district continues to offer a wide variety of technology courses, workshops, and distance learning through the adult education program.

- Curriculum support will be provided to families via teacher web sites, blogs, wikis and other online tools.

- RSU 22 uses School Messenger, a broadcast voice, email, text, and social media distribution system to engage the RSU 22 community.  School Messenger is used to improve communication with parents and community members about events, important notices, safety announcements, and opportunities of interest to the RSU 22 community.

**Shared Leadership in Policy Making and Review:**

- Administrative staff and board members serve on the RSU22 Policy Committee to review and provide feedback on all technology and learning related policies.  These policies are shared and discussed at stated board meetings to which the public is welcome.

- The RSU 22 Acceptable Use Policy (AUP), Student Computer and Internet Policy, and Permission to Publish on the Web forms will be distributed to each student to be read and reviewed with parents, and returned to school with a signature.

- Middle school parent technology sessions continue to be important informational nights to ensure that students are able to bring their devices home as part of the MLTI project.

**Shared Leadership for Planning Professional Learning Opportunities:**

- Continually identify essential technology skills all teachers need to have to effectively integrate technology into the classroom.

- Based upon district goals and self-assessment, the integration team will assist teaching staff in creating a personal learning plan for technology.

- Continue to develop and implement online training for staff to learn basic technology skills at their own pace.

- Continue to promote partnerships with other organizations (other districts, Universities, & Maine Department of Education) to offer technology based professional development opportunities.

- Share building resources to promote district level professional development for all staff.

- RSU 22 uses surveys of staff to identify preferred times and formats for training, as well as to suggest topics. This information is then incorporated into professional development opportunities.

- Each year RSU 22 funds professional development opportunities for staff to attend state and national conferences. Staff attending these sessions meet with the participating group every day to discuss the sessions attended, and how those materials can be shared throughout the district.

The district visioning work is constantly under review. The stakeholders are primarily the same but getting them to focus on a common vision requires regular review and emphasis on the commitment to this vision. Leadership will continue to focus on this vision as stated from the goals listed above. The policy committee and school board members will review district policies to make sure they reflect the heart of this vision. The district will continue to provide vision-focused professional development to School board members, leadership team and professional staff. Effective and efficient use of technology requires ongoing, comprehensive professional development for all staff. Technology is a tool that enables parents, teachers, and community members to work together to optimize learning for our students. The fundamental goal of technology in the school program is to improve the quality of education. We believe that technology is an essential tool for school transformation that leads to changes in how teachers teach and how students work and learn. Well trained stakeholders who can effectively use technology are essential. Technology provides optimal learning opportunities and supports varying learning needs of individual students.

**Technology Leadership:**

The Technology Department works to aid in the implementation of the District strategic plan to meet the vision and mission. The department stays true to the goal of achieving this implementation through sound service delivery principles.

- Innovation through research and development of new ideas
- Quality projects through implementing continuous improvement practices
- Professionalism through adherence to high quality customer service
- Organized Project Management via adherence to project best practices and repeatable processes

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Infrastructure and Security are the foundational elements that create the environment for the above-mentioned sections. This area highlights the core technology systems and security that underpin the above initiatives. The upgrade and expansion of our core infrastructure is key to maintaining a growing district. The strategies outlined in the following document highlight the projects and processes that will guide our decision making over the next five years.

**Financial Overview**
The technology plan is funded by the technology budget. The Technology Department develops a yearly budget to support the activities of the District.

Audio/Visual Projects
Elementary and middle school classroom projectors will need to be replaced during the five year cycle of this plan. These projectors have a life cycle of about 10 years. Most of the elementary and middle school classroom projectors are in their 9th year. Estimate of this project will be $250,000.00

Network Projects
The networks at the following schools will need to be updated during the life-cycle of this plan. The estimated costs for these upgrades will be $250,000.00
- George B. Weatherbee
- Earl C. McGraw
- Leroy H. Smith
- Central Office

Devices 1-1 Computing Staff & Students
The chromebooks in the district have a four year life cycle. RSU 22 was able to save a lot of capital by refreshing the majority of its student devices through COVID relief funds and ESSER Grants. These devices will need to be refreshed. RSU 22 participates in the MLTI (Maine Learning Technology Initiative) This initiative is planning on expanding to provide devices for a total of four grade levels instead of two. Based on this we are able to project the following schools and device associated costs:
- Hampden Academy: $250,000.00
- Reeds Brook Middle School: Covered by MLTI
- Samuel Wagner Middle School: Covered by MLTI
- George B. Weatherbee School: $130,000.00
- Leroy H. Smith School: $35,000.00
- Pre K - 12 Teaching Staff: $250,000.00

Copiers and Printers
The district will continue to work with SPC Copy Pro to get the best value on this equipment along with the support for maintaining it. During the five year cycle of this plan we will enter into phase 2 of our current equipment upgrades. The estimated cost for these Copiers, Printers, Service Contract and Lease is $70,000 per year to maintain and support them.

**Instructional Technology, Digital Learning, and Support**

**Goal 1: Identify, integrate, and evaluate effective instructional technology resources guided by the SAMR and TPACK model during Curriculum Studies.**

District Sponsor: Curriculum/ITS- Instructional Technology Staff

Description: The Curriculum department performs curriculum studies across the areas: content standards, content/skills, instruction, and assessments. These studies provide for K-12 alignment and ensure that communication, collaboration, creativity, and critical thinking are embedded in the curriculum. ITS participates in these curriculum studies to assist in providing a roadmap of technology that supports the outcome of the study.

Rationale: ITS participation in the study aligns technology with curriculum standards and helps to guide purchasing decisions throughout the District.

**Goal 2: Expansion of Learning Management System (LMS) by developing and extending continuous training and support for existing and new instructional methodologies.**

District Sponsor: Curriculum/ITS

Description: Learning Management Systems are systems designed to support the delivery of educational course material through a software application. PreK - 2 is using SeeSaw and 3-12 is using Google Classroom. Our Student Record System is Powerschool. Powerschool is used for PreK - 12.  Additional strategies include merging interoperability between the LMS and our Student Record System and developing additional training to support teachers in the use of these systems.

Rationale: Leveraging the use of an LMS brings consistent delivery of classroom learning and professional development of staff through the use of technology platforms.

**Goal 3: 1:1 Third Grade through Fifth Grade Chromebook Initiative Support**

District Sponsor: Curriculum/ITS

Description: Currently each grade level from PreK through 12th grade has a one to one device. The PreK - Fifth Grades were formerly supported by carts of devices. The need for 1-1 devices became evident during  the COVID pandemic and COVID relief funds and grants were used to support 1-1 devices at these levels. This project would extend the utilization of chromebooks at the third, fourth, and fifth grade levels to be one to one.

Rationale: Further enhance the ability for teachers to provide engaging learning experiences and deliver instruction more effectively to each student at the grade levels of kindergarten and first grade.

**Goal 4: Yearly Recurring Classroom and Staff technology budget roadmap.**

District Sponsor: ITS

Description: ITS operates on a refresh cycle for technology equipment. The refresh cycle applies to desktop, laptop, Chromebooks, Phone Systems, Printing, and projectors. It is estimated that during the life-cycle of this technology plan the district will pay $1,300,000.00 for its refresh cycle.

Rationale: Refreshing technology equipment on a cycle provides modern technology equipment for students, teachers, and staff.

**Goal 5: Hampden Academy PA System**

District Sponsor: ITS

Description: The PA system for the high school is 10 years old. The system is faulty, and is no longer supported by the manufacturer warranty or third parties. The objective is to replace this system. Replacement cost of roughly $100,000.00. If this is not covered under the Hampden Academy Expansion project, it will need to be replaced through the ITS budget.

Rationale: The PA system is used to communicate with the office. It provides students and staff with a bell schedule and can make announcements throughout the building.

**District Systems and Business Intelligence**

**Goal 6: District Business Intelligence and Reporting Systems.**

District Sponsor: ITS/Assessment

Description: Data warehouse, data analysis, and data self-service reporting collectively provide the infrastructure needed for District decision makers to query data and make informed decisions.

Rationale: Data intelligence enhances the District's ability to make informed decisions in areas such as staffing, student outcomes, and other decision making.

**Goal 7: Implement a digital records project.**

District Sponsor: RSU 22 Leadership / ITS

Description: ITS will plan, acquire, and implement a digital records management system with the ability to provide paperless workflow for electronic documents.

Rationale: Efficient and streamlined processes and the reduction of paper in favor of electronic files enhances the ability of the District to be responsive to requests, manage workflow efficiently, and serve the needs of the community.

**Goal 8: District Systems technology budget roadmap.**

District Sponsor: ITS

Description: ITS selects and acquires applications related to the operational software needed across the District. Annual licensing allows District staff and teachers to access these resources. Annual review of ongoing technology software purchases (Microsoft Office, Powerschool, SeeSaw, Google, Adobe, Finance, Payroll (ADS-Tyler Tech), Human Resources, etc.)

Rationale: Annual renewal of software provides consistent access to tools and software needed to perform the functions of the District.

**Goal 9: Create, maintain, review, and update District policies and procedures.**

District Sponsor: ITS

Description: ITS reviews annual its policies and procedures.

Rationale: Annual review of policies ensure a safe and secure technology operating environment, and compliance with state and federal requirements.

**Infrastructure and Security**

**Goal 10: Infrastructure and Security technology budget roadmap.**

District Sponsor: ITS Description: ITS selects and acquires hardware related to the operations of the central computing systems. During this cycle we will be updating the networks at 4 locations as previously mentioned. This upgrade is estimated to cost approximately $250,000.00

Rationale: Annual refreshing of hardware allows for growth of services and maintenance of existing applications. As a growing and expanding District, we annually need to add additional services and replace existing equipment to maintain a robust and dynamic learning environment.

**Goal 11: ITS Security Initiative Project.**

District Sponsor: ITS

Description: ITS Security Initiative is a comprehensive set of tasks designed to bring awareness, evaluate and mitigate risk, and overall enhance the security of the District.

Rationale: Secure computing provides a lower level of risk, adheres to compliance, and increases efficiency.

**Digital Citizenship - Technology Standards**
RSU 22 has identified the following digital citizenship "key concepts" to teach our students. The RSU 22 Technology Committee works with Technology Integrators and key stakeholders to develop plans for teaching these key concepts to all students K-12.

- Etiquette and Respect
- Safety and Security
- Digital Identity
- Digital Law
- Access & Evaluation

**Acceptable and Ethical Use of Technology Resources**

The systems and networks include all of the computer hardware, operating system software, application software, stored text, and data files. This includes electronic mail, local databases, externally accessed databases (such as the Internet), optical media, clip art, digital images, digitized information, communications technologies, and new technologies as they become available.

The use of the District Network, inclusive of the Wide Area Network (WAN) and the Local Area Network (LAN – includes wireless access) is a privilege, not a right. Persons using the District Network, regardless of whether the equipment used is personal or District provided, shall have no expectation of privacy or confidentiality in the content of electronic

communications or other computer files sent and received on the District Network. All persons using the District Network regardless of whether the equipment used is personal or District provided, are governed by District Policies/Regulations.

Guidelines are provided to make all users aware of the responsibilities associated with educational, efficient, ethical, and lawful use of network resources. If a person violates any of these provisions, privileges may be terminated, access to the District Network may be denied, and the appropriate disciplinary action shall be applied. The District's discipline policy shall be applied to student infractions.

The District does not guarantee that the District Network will be uninterrupted or error-free; nor does it make any warranty as to the results to be obtained from use of the service or the accuracy or quality of the information obtained on or by the network. Access to the District Network is provided on an "as is" basis without warranties of any kind. Neither the District nor any of its agents or employees shall be liable for any direct, indirect, incidental, special, or consequential damages arising out of the use of or inability to use the District Network or out of any breach of any warranty.

**Internet Safety**

The District shall operate a technology protection measure that blocks or filters Internet access. The technology protection measure shall protect against access by adults and minors to content, including visual depiction that is abusive, obscene, profane, sexually explicit, threatening, and illegal or pertains to pornography or with respect to use of the computers by minors, other information that is harmful to minors. The District shall make every effort to restrict access to inappropriate materials and shall monitor the online activities of the end users. District staff may file a request with the Technology Director to unblock websites that they believe have significant educational value. If the website is determined to be appropriate, the site will be unblocked for educational purposes or bona fide research only.

To the extent possible, steps shall be taken to promote the safety and security of users of the District Network when using electronic mail, chat rooms, and other forms of direct electronic communications. Specifically, prevention of inappropriate network usage includes (1) unauthorized access, including so-called "hacking," and other unlawful activities; and (2) unauthorized disclosure, use, and dissemination of personal identification information regarding minors.

The District shall make every effort to restrict access to inappropriate materials and shall monitor the online activities of minors. The District will educate minors about appropriate online behavior, including interacting with other individuals on social networking web sites and in chat rooms and cyber-bullying awareness, prevention and response.

Security of the District Network is a high priority. Anyone observing a security problem on the District network shall notify District personnel. Any person identified as a security risk or having a history of problems with other computer systems may be denied access to the District Network.

**Educational Use of District Technology Resources**

Online communication and network resources are critical to 21st Century teaching and learning. The District Network and all technology resources are considered to be an extension of the classroom. An educator's primary responsibility is to develop students who are fully prepared to communicate effectively, ethically and safely. Teachers will provide developmentally appropriate guidance to students using telecommunications and electronic information resources related to the District curriculum. Teachers may allow students to use forms of online collaboration such as email, wikis and blogs, etc. only for educational purposes and only with proper supervision. Proper supervision shall include the teachers having knowledge of the students participating and monitor the student activity within the program. Any email account issued by District Staff is the property of the District and students have no expectation of privacy or confidentiality in the content of electronic communications sent to or from that email address. The District expressly reserves the right at any time to review the subject, content, and appropriateness of electronic communications reporting any violation to the school administration or law enforcement officials.

**Acceptable Use of District Technology Resources:**

Internet use by students for direct classroom instruction is allowed. Teachers should be prepared to provide alternate activities for students who have lost privileges through disciplinary action.

All user accounts are considered the property of the District. The District expressly reserves the right at any time to review the subject, content, and appropriateness of electronic communications or other computer files and remove them if warranted, reporting any violation to the school administration or law enforcement officials.

Disciplinary action may be taken against students whose electronic communications cause a substantial disruption to the education environment or interfere with another student's rights. Criminal action may be taken against students if their electronic communications constitute a threat.

The District's Network may not be used for personal gain, which includes District email and/or web pages, to solicit sales or conduct business.

**Proper Use of District Network and Computer Systems**

Proper use of the District Network requires that District staff and students abide by the following guidelines. District staff and students shall:
- Be responsible for all use of the networks under their accounts, regardless of whether access is gained with or without the person's knowledge and/or consent;
- Immediately notify the District if the person suspects any unauthorized use of their account. The person shall remain liable and responsible for any unauthorized use until the District is notified of the suspected unauthorized use and has a reasonable opportunity to act upon such notice;
- Be responsible for any costs, fees, charges, or expenses incurred under the person's account number in connection with the use of the network except such costs, fees, charges, and expenses as the District explicitly agrees to pay;
- Avoid anonymity when communicating through electronic resources, unless authorized by the District or completing professionally-related surveys;
- Develop web-based content only to fulfill course or school-related activity; web pages shall include an identifiable image of a student with or without association to the student's name, school, or program only if written authorization has been obtained from the student's parent or guardian through the District's registration form; Annual Emergency Health, Student Update and Authorizations form; or other written consent;
- Ensure that student information shared electronically complies with the Family Educational Rights and Privacy Act, the Children's Online Privacy Protection Act.
- Delete non-District authorized or adopted software if disk-space or system conflict issues arise;
- Abide by all District policies and regulations when accessing personal email accounts, chat rooms, social networking sites or other forms of direct electronic communications via the District's Network;
- Not send, access, or retain any abusive, defamatory, obscene, profane, sexually explicit, pornographic, threatening, or illegal material;
- Not transmit copyrighted material without the express consent or authorization of the owner of the copyrights;
- Not disclose passwords except to authorized District staff;
- Be responsible for damages or the cost of correcting any damage to the District Network, District equipment or software or attempts to harm or destroy data of another person. This includes, but is not limited to, "hacking" or creating, loading, or sharing malicious software, scripts or code (e.g. executable files (*.exe), batch files (*.bat), command files (*.com), system files (*.sys)). ;
- Not install equipment on or make modifications to the District's Network, or download free or paid-for online educational services, or applications, which might utilize protected student information, without pre-authorization from the Director of Technology and Information Services;
- Not utilize proxy sites or other means to circumvent the District's filter;

**Ethical Use of District, Public, or Private Technology Resources**

- Ethical behavior requires that District staff and students show consideration and respect whenever using computers or electronic communication/technology/devices/resources. When interacting with each other, District staff and students shall:
- Not include in electronic communication between staff, students and/or parents/guardians, comments or content that would not be acceptable in a face-to-face communication;
- Not disclose, use, or disseminate unauthorized personal information of another person; Distinguish between personal social networking sites and professional social networking sites. Staff shall not invite or accept current District students, except for the staff person's relatives, into any personal social networking sites;
- Evaluate all information for its accuracy, reliability, and authority.

**District Protection of Student Personally Identifiable Information**

The District allows the use of online and cloud-based services and applications that are educationally appropriate. When such services may utilize personally identifiable information, the District must ensure the provider agrees to protect such information before District staff or students use the service or disclose any student information.

When the District provides student data to providers for use of online educational services, all data created by students, teachers, and staff, related to students, will be considered personally identifying information protected by the Family Educational Rights and Privacy Act (FERPA). Personally identifying information includes specific identifiers such as name, address, or student number, and any information, alone or combined, that may allow someone to identify the student with reasonable certainty. In order to protect personally identifying information, the District shall enter into written agreements with third party vendors or service providers and these agreements shall include satisfactory assurances that the provider will appropriately safeguard any personally identifying information in accordance with state and federal laws. At a minimum, any agreement shall include terms that 1) ensure the provider uses the information for authorized purposes only; 2) prevents disclosure of protected student information by the provider to other third parties; 3) maintains that student data collected by the provider is under the direct control of the District with regard to the provider's use of that information; and 4) requires the provider to observe state and federal laws for the use, and breach, of personal identification information. When a provider requires the user to accept the providers' standard 'terms of service' agreement (TOS), the District will review the TOS to ensure the provider will protect personally identifying information before allowing use of the service, or application, by staff and students.

To prevent inadvertent disclosure, all free and paid-for online educational services, or applications, to be used either on District computers or personally owned devices, which might utilize personally identifying information, must be reviewed and approved by the Director of Technology and Information Services prior to use by staff and students.

If, for any reason, a provider plans to use personally identifying information for its own commercial or marketing purposes, the District shall obtain parental consent before disclosing such information.

**Discipline**

Disciplinary action may be taken against staff or students whose communications (on or offsite) constitute a threat and cause a substantial disruption to the education environment or substantially interfere with another's rights. Criminal action may be taken if the communication constitutes a threat.