RSU #22
Hampden Newburgh Winterport Frankfort
District Learning Technology Plan

Date Approved by the School Board: (TBD)
2018 - 2021

District Learning Technology Plan:

Section 1

Plan Authors:
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Schools Affected by 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 2018. 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. To aid the district in its work, students and staff participated in a comprehensive technology survey (Clarity) which provided invaluable information.

Section 2
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.

Section 3
Shared Leadership

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.

- RSU 22 prepares a newsletter (Link 22) that is mailed to the community, providing updates and informing community members of activities occurring at all schools. The newsletter is also available on the district website.

- School newsletters will be 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.

- Our high school, Hampden Academy, has sponsored distance-learning opportunities to local community groups. Community members have attended distance-training sessions and taken college courses at the various University of Maine campuses. The district will continue to provide this support.

- The student information system, PowerSchool, 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.

- RSU 22 will seek to work with vendors to develop an app. The goal of this app is to centralization communication with members of the RSU 22 district and its 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.

- Through Penobscot River Education Partnership (PREP), offer a summer technology institute to provide technology professional development to staff.

- 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, University of Maine, Maine Department of Education - MoMEntum grant, nonprofits) 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 you have seen 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 that can effectively use technology is an integral component. It provides optimal learning opportunities and supports varying learning needs of individual students.

District Learning Technology Data and Action Goals:

BrightBytes is the data collection tool provided to schools throughout Maine that are participating in the Maine Learning Technology Initiative. The BrightBytes survey covers four areas: Classroom, Access, Skills, and Environment. The Classroom reflects the use of technology in the classroom and day to day learning. Access refers to the ease with which technology resources are made available to students and teachers. Skills refers to the familiarity and facility of staff and students with foundational technology related functions, online uses, and multimedia. Environment refers to the policies, procedures and practices, support, professional development, and beliefs about the role of technology in learning.

According to the BrightBytes survey, schools in RSU 22 are making progress, and rate as "Proficient" in the overall score for the district. The district scores "Advanced" in the area of access to devices and technology resources, "Advanced" in the level of teacher and student technology skills, "Proficient" in the overall learning environment, and "Emerging" in the use of technology in the classroom.

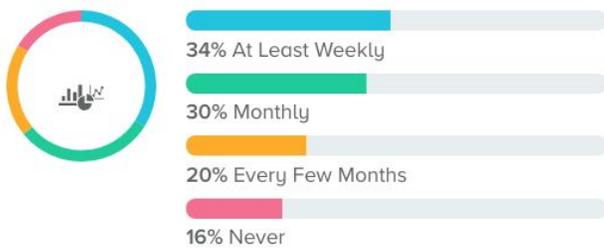# Student Learning & Teacher Practice

Results of the Data:

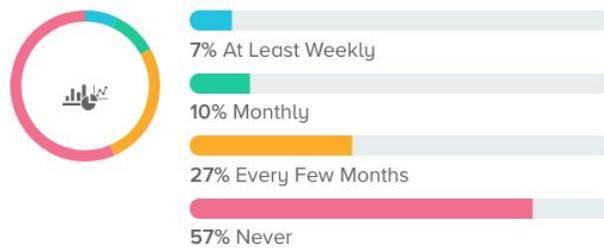### Student-reported frequency of computer use in the classroom

88% Almost Daily

8% Weekly

1% Monthly

1% Every Few Months

3% Never

Teacher-reported frequency of student computer use in the classroom

78% Almost Daily

8% Weekly

6% Monthly

3% Every Few Months

6% Never

Students are asked to collect and analyze data

34% At Least Weekly

30% Monthly

20% Every Few Months

16% Never

Teachers ask students to collect and analyze data

7% At Least Weekly

10% Monthly

27% Every Few Months

57% Never

Students are asked to conduct experiments or perform measurements

22% At Least Weekly

26% Monthly

26% Every Few Months

26% Never

Teachers ask students to conduct experiments or perform measurements

7% At Least Weekly

7% Monthly

10% Every Few Months

77% Never

Students are asked to identify and solve authentic problems

19% At Least Weekly

23% Monthly

21% Every Few Months

36% Never

Teachers ask students to identify and solve authentic problems

3% At Least Weekly

13% Monthly

13% Every Few Months

70% Never

Students are asked to create and upload art, music, movies, or webcasts

14% At Least Weekly

18% Monthly

28% Every Few Months

40% Never

Teachers ask students to create and upload art, music, movies, or webcasts

6% At Least Weekly

13% Monthly

23% Every Few Months

58% Never

Students think learning is more engaging when using technology

24% Strongly Agree

26% Agree

34% Are Neutral

10% Disagree

7% Strongly Disagree
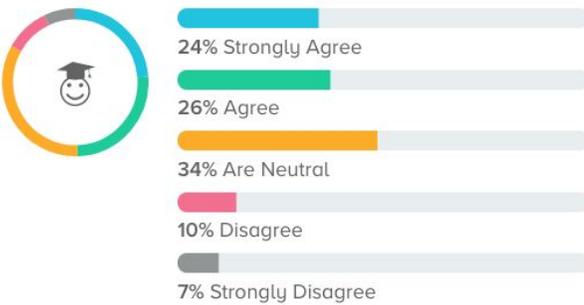
Teachers think learning is more engaging when using technology
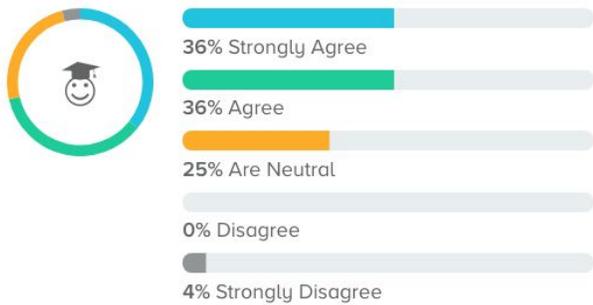
36% Strongly Agree

36% Agree

25% Are Neutral

0% Disagree

4% Strongly Disagree

Students are asked to create animations, demonstrations, models, or simulations

9% At Least Weekly

13% Monthly

21% Every Few Months

57% Never

Teachers ask students to create animations, demonstrations, models, or simulations

3% At Least Weekly

7% Monthly

23% Every Few Months

67% Never
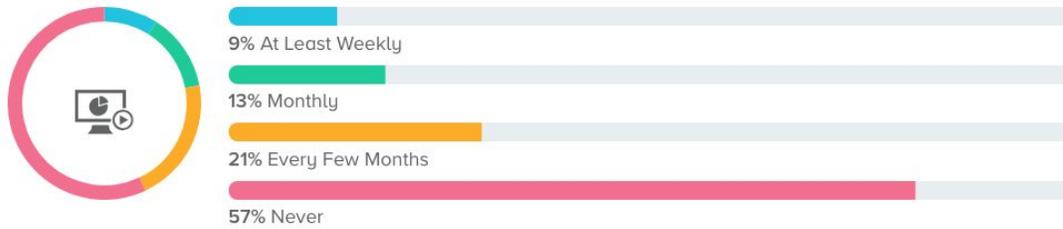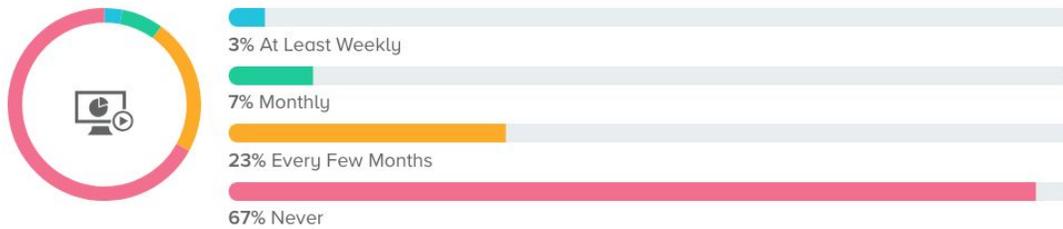
Teachers report that the quality of support for problems disrupting instruction is

21% Excellent

29% Above Average

39% Average

7% Below Average

4% Poor

0% None
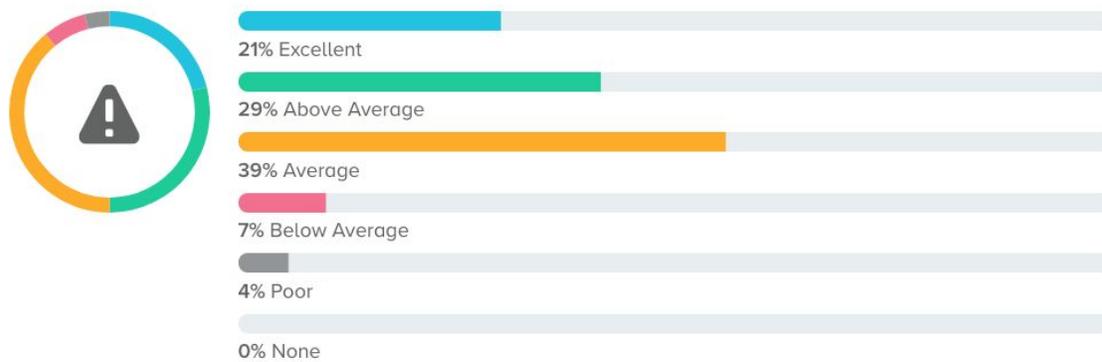
Teachers believe that computers and technology enhance daily life

46% Strongly Agree

43% Agree

11% Are Neutral

0% Disagree

0% Strongly Disagree

Implications for Student Learning & Teacher Practice:

Teachers and students report a high frequency of technology use in the classroom, and are generally in agreement that technology increases the level of engagement in learning. It was interesting to note that students believe that they are asked to collect and analyze data on a much more frequent basis than their teachers believe they ask of them. Students also believe they are frequently asked to conduct experiments and perform measurements while their teachers believe they hardly ever request this. Both groups report that they hardly ever create multimedia projects for learning.

Instead of completely redefining instruction, technology in the classroom can be incorporated in any range of ways that suits an educator's comfort level. That spectrum is summarized with the letters **SAMR**, which stands for Substitution, Augmentation, Modification, and Redefinition. These represent four different degrees of technological integration into learning, from slightly supplementing instruction to completely redefining what it means to teach. Students and Teachers reported using the technology on almost a daily basis. Yet, for the most part, they both agree that it is hardly used beyond an the Augmentation stage of this model with an exception of a few pockets of Modification.

Our district plan is to have students and teachers use these technology devices to their fullest potential. We have come a long way, but need to continue to provide teachers with professional development and support that will continue to move them along the **SAMR** model. With that goal in mind, we know that it is important to offer teachers and supporting staff opportunities to gain the knowledge necessary to push past the old model of web, research, and word processing into the new era of creation, expansion, and learning. Our district must promote and expand technology integration within our classrooms to support students' academic achievement, provide our students with 21st century knowledge and skills, and promote responsible digital citizenship.
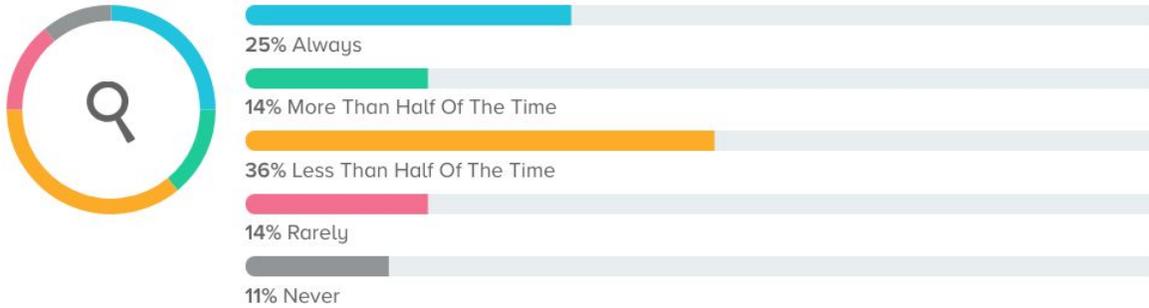
Student Learning & Teacher Practice Actions

Interventions and Next Steps	Person/Position Responsible	Timeline
Provide the BrightBytes survey results to the District Technology Committee to review with constituent groups, analyze results, prioritize needs, and propose next steps.	Administrative Team, District Technology Committee	Ongoing
Review the results of the BrightBytes survey and compare to current technology and learning efforts.	District Technology Committee, Administrative Team	Ongoing
Professional Development	Technology Support, Technology Integrators, Leading Teachers, MLTI Teacher Leaders	Ongoing
Continue to refine and implement a tech integration guide for students at the elementary, middle and high school level indicating minimum standards for technology use.	Technology Director, Curriculum Coordinator, Technology Integrators	Ongoing
Maintain the ratio of building technology integrators to classroom teachers.	RSU 22 School Board, Superintendent, Technology Director	Ongoing
Continue to refine an integrated K-12 curriculum guide that will promote responsible digital citizenship.	Curriculum Coordinator, Technology Director, Technology Integrators	Ongoing

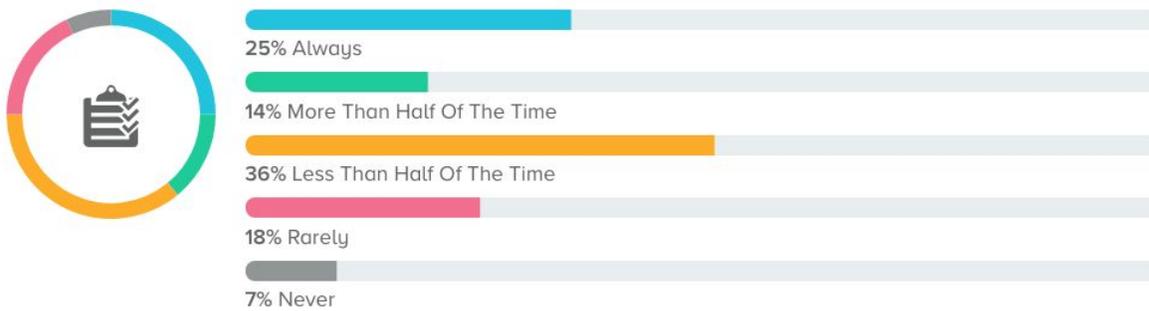| Introduce PreK-12 coding curriculum for the district developing interest at an early age and building upon that interest as they progress through the grade levels within the district.	Curriculum Coordinator, Technology Director, Technology Integrators	2019, Ongoing
Continue to introduce and support Keyboarding and Robotics programs within the district	Curriculum Coordinator, Technology Director, Technology Integrators	Ongoing

Leadership for Learning Through Technology:

Results of the Data

Teachers discuss technology use during classroom observations or visits

25% Always

14% More Than Half Of The Time

36% Less Than Half Of The Time

14% Rarely

11% Never

Teachers discuss technology use during evaluations

25% Always

14% More Than Half Of The Time

36% Less Than Half Of The Time

18% Rarely

7% Never

👍 **Teachers believe the school encourages technology use for teaching and learning**
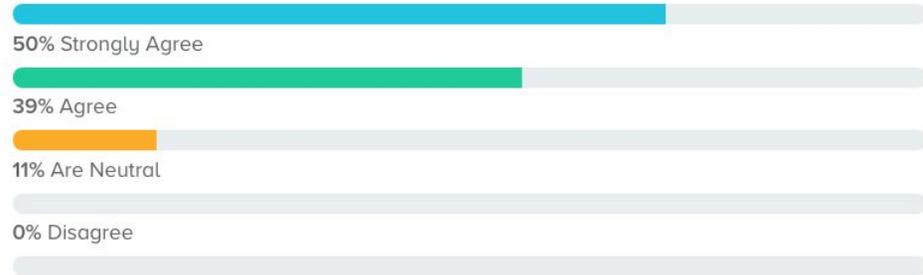
50% Strongly Agree

39% Agree

11% Are Neutral

0% Disagree

0% Strongly Disagree

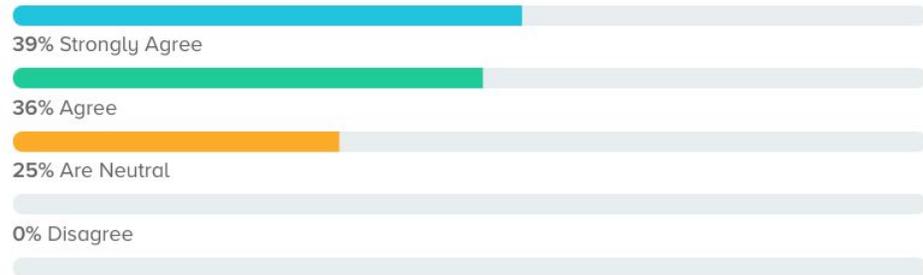🗯 **Teachers want to learn more about effective technology use for teaching and learning**

39% Strongly Agree

36% Agree

25% Are Neutral

0% Disagree

0% Strongly Disagree

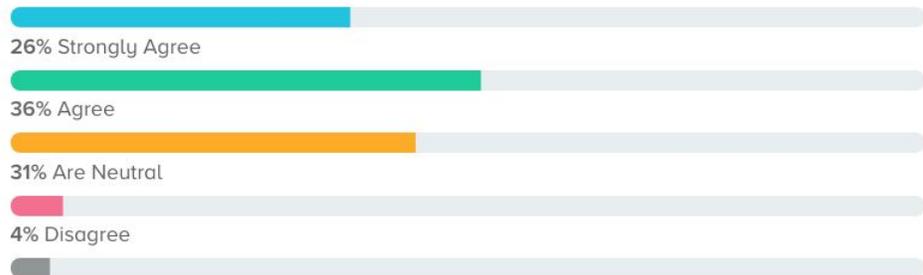👍 **Students believe the school encourages technology use for teaching and learning**

26% Strongly Agree

36% Agree

31% Are Neutral

4% Disagree

3% Strongly Disagree

💻 **Students believe technology use in class can enhance learning**
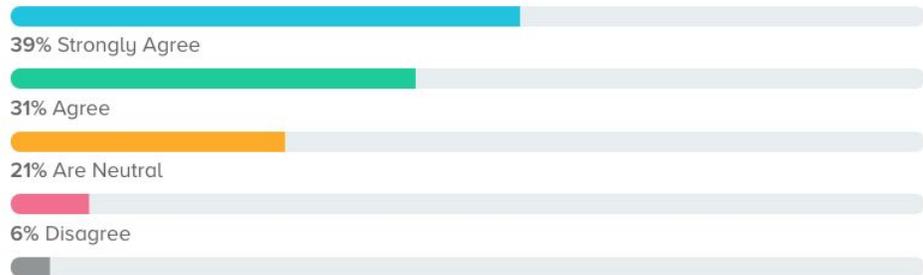
39% Strongly Agree

31% Agree

21% Are Neutral

6% Disagree

3% Strongly Disagree

Implications for Leadership for Learning Through Technology:

Most teachers and students report that their school encourages the use of technology for teaching and learning. Also, most teachers report wanting to learn more. The leadership team would like to see more teachers at the modification level of the SAMR model. One of the ways this committee believes it can achieve this goal is by discussing technology use within the classroom at a higher frequency during classroom visits and teacher evaluations. The leadership team also believes modeling this behaviour will set a great example. Technology is a powerful tool in the classroom, and if a teacher is underutilizing it, then supervisors need to address this with the teacher in the teacher's growth plan.

In order for teachers and administrators to know what effective use of technology looks like, they need to be exposed to it. Professional development opportunities related to technology, which include sessions and demonstrations by teachers, would allow administrators to see how educators inside and outside of our district are effectively utilizing technology.

Leadership for Learning Through Technology Actions:

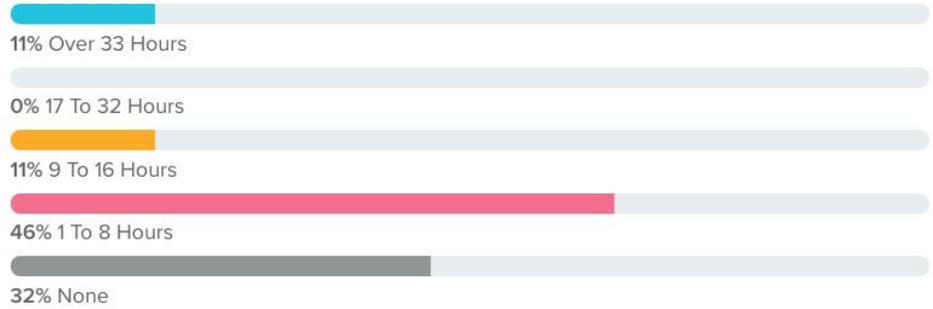| Interventions and Next Steps	Person/Position Responsible	Timeline
Include effective and meaningful technology use in the observation and evaluation models for all staff, where applicable.	Administrative Team	18-19, Ongoing
Showcase student work using technology in staff meetings	Administrative Team, Department Heads, District Technology Committee	18-19, Ongoing
Showcase Teacher tech tips from classroom teachers	Administrative Team, Teachers, Department Heads	18-19, Ongoing
Provide PD to Leadership team to support request of increased technology discussions in classroom visits and teacher evaluations.	Administrative Team, District Technology Committee	18-19, Ongoing
Provide the BrightBytes survey results to the District Technology Committee to review with constituent groups, analyze results, prioritize needs, and propose next steps.	Administrative Team, District Technology Committee	18-19, Ongoing

Professional Learning

Results of the Data

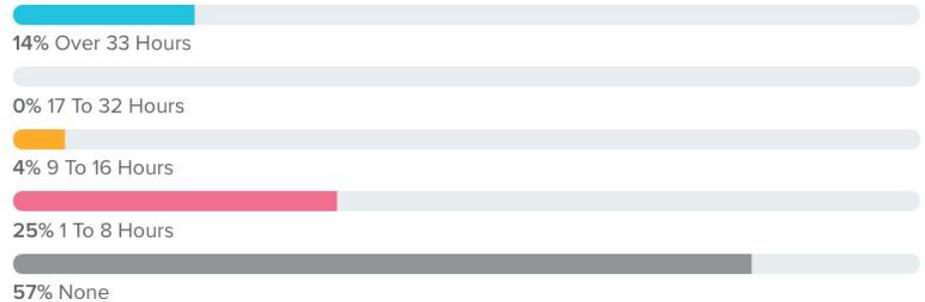## Teachers discuss technology use during department or grade-level team meetings

11% Always

18% More Than Half Of The Time

46% Less Than Half Of The Time

18% Rarely

7% Never
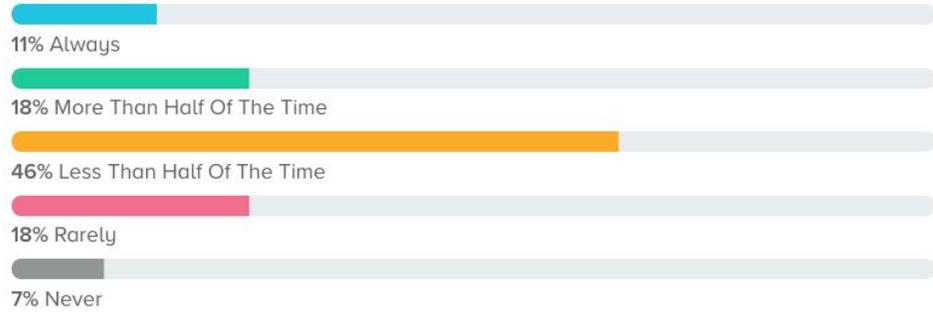
Teacher-reported time spent per year participating in school-sponsored PD

11% Over 33 Hours

0% 17 To 32 Hours

11% 9 To 16 Hours

46% 1 To 8 Hours

32% None

Teacher-reported time spent per year participating in non-school-sponsored formal PD

18% Over 33 Hours

4% 17 To 32 Hours

7% 9 To 16 Hours

14% 1 To 8 Hours

57% None

Teacher-reported time spent per year participating in non-school-sponsored informal PD

14% Over 33 Hours

0% 17 To 32 Hours

4% 9 To 16 Hours

25% 1 To 8 Hours

57% None

Implications for Professional Learning:

The data show that involvement in technology related professional development, both within the district and externally, is low. Few teachers are independently taking advantage of formal and informal professional development activities inside or outside of the district. Investment in technology related professional development, whether internal or external, needs to occur more frequently. Our onsite experts and administrators need to stay current on strategies and tools for effective technology use in the classroom. Our district needs to continue to provide ongoing diversified professional development to increase all staff 's skills in utilizing technology to enhance teaching and learning.
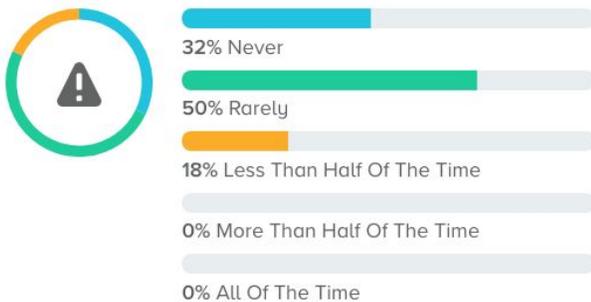
Interventions and Next Steps	Person/Position Responsible	Timeline
Budgetary planning of involvement with internal and external PD opportunities	Superintendent	Ongoing
Send a team to ACTEM conference (classroom teachers and integrators) who share their learning experiences with all staff in their schools	Technology Director, Building Principals	Yearly
Work with the District Curriculum and Professional Development Committees to include technology in meaningful ways to deepen and enrich learning.	Assistant Superintendent, Curriculum Coordinator, Technology Director, Technology Integrators	18-19, Ongoing
Integrate technology into content area professional development	Curriculum Coordinator, Department Heads, Lead Teachers	Ongoing
Continually identify essential technology skills all teachers need to effectively integrate technology into the classroom.	Technology Director, Technology Integrators	Ongoing
Through Penobscot River Education Partnership (PREP), offer a summer technology institute to provide technology professional development to staff. Other additional professional development will likely be provided through the partnership during the school year.	Superintendent, Technology Director	Ongoing
Continue to develop and implement online training for staff to learn basic technology skills at their own pace.	Technology Director	Ongoing
Continue to promote partnerships with other organizations (other districts, University of	Technology Director	Ongoing

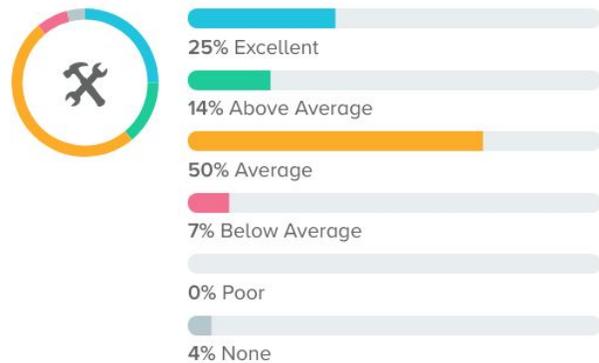| Maine, nonprofits) to offer technology based professional development opportunities.		
Share building resources to promote district level professional development for all staff.	Superintendent, Building Principals, Leadership Team	Ongoing

Learning Focused Access

Results of the Data

⚠️ **Teachers report that school filters prevent access to websites needed for classes**

32% Never

50% Rarely

18% Less Than Half Of The Time

0% More Than Half Of The Time

0% All Of The Time

🛠️ **Teachers report that the quality of support for hardware repair is**

25% Excellent

14% Above Average

50% Average

7% Below Average

0% Poor

4% None

🚧 **Students believe the following obstacles prevent their use of technology at school**

9% "I Don't Have The Necessary Skills."

4% "My Classes Don't Require The Use Of Technology."

5% "School Technology Isn't Good Enough."

30% "School Rules Limit My Technology Use."

16% "My School Has Different Computers Or Software Than I'm Used To."

52% Beginning

Learning Focused Access Implications:

The data reported out here is generally pretty positive. The majority of teachers within the district perceive that the quality of Internet speed is above average. We have worked closely with Network Maine and the MLTI project to ensure this high level of performance on our networks. The Internet filters at the schools are doing their job and for the majority of time are not blocking access to websites teachers need access to for their classes. The District IT team takes pride in its support of IT hardware to all RSU 22 employees. This team was reduced a year ago by 1 Full Time position but is performing at a high level. The team has expressed the need to reconsider this Full Time position if more technology is to be introduced within the district.

Interventions and Next Steps	Person/Position Responsible	Timeline
Provide the BrightBytes survey results to the District Technology Committee to review with constituent groups, analyze results, prioritize needs, and propose next steps.	Administrative Team, District Technology Committee	Ongoing
Student Tech Teams - Continue to support and encourage students for these learning opportunities.	Technology Director, Technology Integration, Building Principals	Ongoing
Continue to maintain our 1-1 devices in grades 6-12 as well as our carts of laptops and tablets in Pre-K - 5	School Board, Administrative Team, Technology Director	Ongoing

Responsible Use:

Firewall: Firewall services are provided by Baraccuda Network Services. The Baraccuda services provide firewall and Virtual Private Networking (VPN). The Baraccuda firewall protects the computer network from unauthorized users.

Filtering: Internet filtering is provided on all RSU 22 devices. There are two services we use to accomplish this. GoGuardian and Cisco's Open DNS Umbrella. These programs provide filtering by maintaining a database of sites on the Internet. Each school is broken down into different categories of filtering. RSU 22 has the ability to allow access to blocked Internet addresses if the content is appropriate. These programs also give us the ability to provide "Safe Search". Major search engines provide Safe Search filters that help to block explicit images, videos, and websites from search results. End users can easily turn off this feature within search engines. However, with Umbrella you can enforce this filter for Google, YouTube, and Bing. This ensures your users access only suitable browsing content.

Policies and Safety: Policies related to technology use (such as the Acceptable Use Policy, Use of Student Images and Work, Social Media Use, and others) and student and staff safety (as well as compliance with CIPA and CIPA II) require regular review and revision. This policy work is undertaken by the Policy Committee, which is comprised of board members and administrators. In addition, policies are brought to the full board for comment and revision, and the community is invited to participate in the board meetings. Parent and community involvement is encouraged through open communication, MLTI parent meetings, and other feedback opportunities. Schools within RSU 22 address issues of safe computing through presentations, guest speakers, and the implementation of the Common Sense Media curriculum for safe computing. The importance of educating students on the safe use of Internet resources, and of protecting their privacy and personal digital footprint, is addressed multiple times at all schools.

Section 4
Certifications:

By signing below, the superintendent is acknowledging the following:
> • The district has completed one Technology Access Survey per school in the district
> • The information submitted in the Technology Access Survey is accurate
> • The Learning Technology Plan has been approved by the SAU's school committee
> • The district is committing to work the plan (recognizing that plans do evolve over time)

Regional School Unit 22   **Email: rlyons@rsu22.us**

Superintendent Signature   **Date:**