Frewsburg Central School District

Technology Plan

July 1, 2022-June 30, 2025

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DISTRICT MISSION STATEMENT

The Frewsburg Central School District is committed to providing a learning environment in which each student is guided to pursue excellence in all areas of academics, athletics, and extracurricular activities.

INTRODUCTION

The purpose of this document will be to establish a framework for the inclusion of technology into the curriculum offering of this district, as well as assessment of student skills and aptitudes, and improvement of current school management techniques.

The Board of Education charges the technology committee with developing a plan which will:

- Be educationally sound. All decisions shall be based on the educational welfare of the students.

- Be fiscally responsible. This plan, while reflective of student needs, shall also be implemented in a manner that will reflect good fiscal management.

- Be based on the best information currently available to the district. It is further understood that technology is constantly changing and therefore, this plan shall be assessed and updated annually, reflecting both technological change and changes in district needs.

This plan primarily addresses the educational component of the district's technology. It should be noted that other areas of district operation also require updating or installation of new technology. The technological needs of food service, facility maintenance, and the transportation departments, as well as the business office are addressed and met by the district's technology department.

To develop this plan, a team of district personnel was selected. The team included board of education members, administrators, teachers, community members and parents. The team met on several occasions and developed the plan. The committee continues meeting as needed to keep the plan current.

MEMBERS OF THE TECHNOLOGY COMMITTEE

Shelly O'Boyle	Superintendent
Heidi Reale	Director of Technology & Communications
Tiffany Frederes	High School Curriculum Coordinator
Jason Ruhlman	Board of Education Member
Chad Chitester	Board of Education Member
Larry Lodestro	Board of Education Member
Joshua Gilevski	Jr. Sr. High School Principal
Shaun Laska	Technology Integration Specialist/Parent
Emily Spielman	Jr. Sr. High School Library Media Specialist/Parent
Lindsay Marzec	Jr. Sr. High School Teacher
Jennifer Swanson	Jr. Sr. High School Teacher
Tami McKotch	Elementary Principal/Director of Special Education
Amy Caldwell	Elementary Teacher
Trisha Sisson	Elementary Teacher
Kirstie Aikman	Elementary Teacher
Mike Seastedt	Community Member

COMMUNITY DEMOGRAPHICS

Located in the western part of the state, the Frewsburg Central School District is a small, rural district that borders the Pennsylvania line. Historically, this area was rich in the agriculture and farming industry. The district comprises two campuses; a PK-6 building (Robert H. Jackson Elementary School) and a 7-12 Junior/Senior High School. A sense of 'Bear Pride' runs deep as evidenced by strong community involvement, a highly active Parent Student Teacher Association, and a highly involved Board of Education. Within the past several years, our district has begun to see a steady increase in the percentage of students receiving free and reduced lunch making us recipients of Title IA funding. Our district has also begun to see a more transient population, and our unemployment rate has risen. Despite this, our parents remain proud and will not always apply for free and reduced lunch, though many would likely qualify, so our percentage of FRLP is not a true representation of need. The education provided to our students is funded primarily through state aid and on the shoulders of our local taxpayers. Frewsburg is classified as an "average needs" district that struggles to provide opportunities for our students. You will see from our needs assessment, given our lack of STEAM initiatives, we are graduating female students who have low confidence in the areas of math, science, and engineering. The female students in our 'average needs' district deserve the same educational opportunities as those in other districts throughout the state.

VISION

It is our belief that technology integration should support and enhance curriculum at all grade levels.We will focus on providing high quality professional development with a focus on digital resources that complement/extend the curriculum. Technology integrators will assist teachers in bridging gaps within their curriculum by helping them address areas of both strength and weakness to challenge and support all learners. Exposing teachers and students to relevant online digital resources to enhance the curriculum will assist us in cultivating a blended learning environment. We will strive to provide a personalized learning experience for students by using digital content to differentiate instruction. In addition, our focus will extend student opportunities in Science, Technology, Engineering, Art, and Mathematics. The establishment of a STEAM program that prepares students for careers in the evolving 21st Century workplace will be a priority with a special focus on the development of an updated Industrial Arts curriculum and enhancement of performing arts equipment.

We recognize that for the students currently enrolled at Frewsburg Central School their living environment will be significantly different as advances in technology create changes in how they interact with society. If our graduates are to be successful we must develop a two-pronged initiative. First, we must ensure students are familiar and comfortable with existing technologies and can use this knowledge in practical applications, both in the workplace and for personal skills improvement. Secondly, and perhaps equally importantly, we must instill in students a resiliency to adapt to even further technological change and the ability to integrate and apply new technology into helping them meet their individual life goals, as socially responsible, digitally literate citizens.

INSTRUCTIONAL GOALS

Goal 1: Instill in students a resiliency to adapt to further technological change with the ability to integrate and apply new technology as responsible, digital citizens.

Goal 2: Exposing teachers and students to relevant online digital resources to provide a personalized learning experience for students, while utilizing resources to assist teachers in bridging curriculum gaps.

Goal 3: Establish a Science, Technology, Engineering, Art, and Mathematics (STEAM) program that prepares students for careers in the evolving 21st century workplace, with a special focus on the development of an updated Industrial Arts curriculum.

Goal 4: Ensure that all students and staff have access to current technology to improve academic achievement through relevant hardware and software, including the need for remote learning at times when the Global pandemic requires

INFRASTRUCTURE GOALS

Goal 1: Sustain a robust and future proof infrastructure to facilitate access to high quality, digital content for staff and students, including times of required remote learning

Goal 2: Technology will be used to enhance communication and interaction with parents, families, and community.

Goal 3: Technology will be used to increase building security for students and staff members

CURRICULUM

Goal 1: Instill in students a resiliency to adapt to further technological change with the ability to integrate and apply new technology as responsible, digital citizens.

- NYSED Goal: Provide technology-enhanced, culturally and linguistically responsive learning environments to support improved teaching and learning.
- Target Population: All students PK-12 including SWD, ELL and homeless youth.

Goal 2: Exposing teachers and students to relevant online digital resources to provide a personalized learning experience for students, while utilizing resources to assist teachers in bridging curriculum gaps.

- NYSED Goal: Increase equitable access to high quality digital resources and standards-based, technology-rich learning experiences.
- Target Population All Students PK-12, SWD, ELL and homeless youth.

Goal 3: Establish a Science, Technology, Engineering, Art, and Mathematics (STEAM) program that prepares students for careers in the evolving 21st century workplace, with a special focus on the development of an updated Industrial Arts curriculum.

- NYSED Goal: Develop a strategic vision and goals to support student achievement and engagement through the seamless integration of technology into teaching and learning.
- Target Population: Students in grades 7-12, Other (Females)

Goal 4: Ensure that all students and staff have access to current technology to improve academic achievement through relevant hardware and software.

- NYSED Goal: Provide access to relevant and rigorous professional development to ensure educators and leaders are proficient in the integration of learning technologies.
- Target Population: All students, Other (Teachers).

Action Plan:

We developed a comprehensive needs assessment with input from teachers and administrators. This needs assessment was completed by students in grades 7-10. We chose this grade band to gain insight from grades 7 and 8 based on their prior years attending our elementary school through 6th grade. 9th and 10th grade was chosen to provide a picture of the needs in our middle level/high school. In all, 209 students completed the needs assessment.

We discovered that overall our students have had limited opportunities to engage in lessons utilizing skills such as coding. We also identified a trend in the difference between females and males in the areas of electronic project completion and computer code. Although students have had some access to a 3D printer, only 17 of the females

surveyed and 22 males had used this equipment out of 209 students that took the assessment.

Based on the data from this needs assessment we made the following observations:

- Females in grades 7-10 do not feel as confident pursuing a career in the engineering field as their male peers;
- Both males and females have had limited interaction with electronics (LEGO projects, LittleBits);
- More males than females report having experience writing computer code;
- Low numbers of both males and females report having had the opportunity to use a 3D printer;
- A lower interest in how computers and electronics work was highlighted amongst females;
- When asked if they could be successful in an engineering career field, more than double the males responded yes indicating a very low confidence level of females; and
- Overall only a few students in our district have ever participated in a MakerSpace.

Our interpretations and conversations with stakeholders based on this data also revealed:

- Space is an issue; classrooms setup and arranged in the traditional manner limit collaborative/makerspace to infuse STEAM based projects;
- Females are not signing up to participate in extracurricular STEAM based initiatives (LEGO league); and
- Despite the district initiative regarding Personalized Learning, the blended learning models have not fully operationalized yet.

Project Goals, Outcomes, and Action Plan

Issue Identified from Needs Assessment Total # surveyed= 209	**Goal**	**Measurable Outcome**
Classroom activities do not support or integrate STEAM initiatives and limit exposure to collaborative environments.	Enable Business, Family & Consumer Science, Art, and Technology teachers to implement STEAM themed teaching and promote	Develop a STEAM academy at the Middle Level that guides 7th & 8th grade students through a 10 week process of design, marketing, and production.

	students ability to acquire and apply knowledge across different subject areas with an emphasis on project- based learning	
22 Males and 17 Females for a total of 39 students report having had the opportunity to use a 3D printer.	Introduce knowledge of 3D printing for students to learn through spatial representation.	Students in grades 3-6 will incorporate 3D printing in a project-based lesson.
22 Males and 17 Females for a total of 39 students report having had the opportunity to use a 3D printer, create something using computer components or electronic parts, supplies, and tools.	Introduce knowledge of 3D printing and additive manufacturing technology to students.	Students will utilize 3D printers, laser cutter, CNC, plasma cutter in their STEAM academy rotation.
17 Males and 7 Females for a total of 24 students reported having only minimal interaction with electronics (LEGO projects, LittleBits).	Provide opportunities for students to participate in after school computer science extracurricular teams/activities.	By June 2019 we will double our LEGO league and Odyssey of the Mind enrollment.
5 Males and 2 Females for a total of 7 students have ever participated in a MakerSpace. Also noteworthy is that only 49 students out of 207 surveyed responded that they have ever built something out of computer electronic	Enrich learning experiences and enhance student knowledge attainment and application through hands on and deep learning activities.	By June 2019 students in PK-2 will be regularly scheduled in a maker-space learning environment to experience hands on learning. Students in grades 3-6 will engage in hands-on learning to investigate problems while developing creative solutions in a maker-space environment.

parts.		
Personalized learning has not taken a true hold in our district despite the training we have done with faculty.	Engage students in design thinking process and problem solving practices.	Students in grades 7 & 8 will learn how to apply the design thinking protocol (Personalized Learning; Education Elements Core 4-Ongoing District Initiative).
51 Males and 31 Females for a total of 82 students have had limited opportunities to engage in lessons utilizing coding skills.	Provide coding instruction.	Elementary school students will receive coding instruction as part of their computer science curriculum. 7th grade students will participate in a coding class as part of their STEAM academy.
Females confidence surrounding their Math capabilities was lower than males. Only 28 females reported that they felt they could be successful in a career in the engineering field.	Utilize an early intervention model to educate Females on STEAM based careers and activities available.	Targeted campaigns to raise female confidence in the areas of Math, Science, Technology and Engineering.

Stakeholder (s):

Our district believes strongly in stakeholder involvement. Multiple strategies have been used in order to engage all stakeholders in establishing a direction for the educational future of our students. . Surveys have been used to get to the beliefs of both our Board of Education, who represents the community, as well as our administrative staff. The majority of our Board members and administrators identified the following 21st Century skills as most important for our students to be prepared for a successful future: 1) the ability to collaborate and work productively with others and resolve conflicts when they arise; and 2) the ability to organize, prioritize, set goals, and manage time. The information identified by these stakeholders lead us to question if our students are presented with opportunities that require them to engage in learning these important skills. This made us look to our students as important stakeholders, and they were directly asked for their input in the form of the Needs Assessment.

Due to the COVID-19 Pandemic, our progress on meeting our goals was stymied. We had just begun to implement the STEAM lab at the elementary school when students

were no longer able to work in pairs or share material. The social distancing made it impossible to utilize the equipment we had purchased. For this reason, we would like to revisit our goals that had been set in our prior plan. This allows us to revisit where we left off and ensure that our initiatives were fully carried out.

The strengths and weaknesses have been assessed in an ongoing manner while we have navigated the constraints caused by the pandemic. The digital divide has actually been extinguished in our district with the issuance of 1:1 devices to all students. However, the 21st century digital learning skills that were a major thrust of our initiatives have not been practiced or given adequate time to be considered fully synthesized practices.

This plan will revisit those initial goals to ensure that they have been fully met and that outcomes are observable in student performance.

As the district has undergone planning for Smart School Bond Act (SSBA) and our required Technology Plan, multiple stakeholder groups have met together in order to plan for the future technology for our district. Parents, teachers, community members, and administrators have come together to identify the need for STEAM initiatives in both of our schools. Knowing that it was not enough to just state that STEAM initiatives are needed, a subgroup of teachers met with our Assistant Superintendent for Curriculum and Instruction to look at Middle School flexibility and how we can design an instructional program that exposes all of our middle level students to STEAM opportunities. Again, even prior to this grant, this planning occurred. Goals were established and outcomes were planned.

Beginning late 2021, the Digital Equity Survey will be administered to parents of all students and analyzed by the Director of Technology and Director of Curriculum to identify students that need connectivity support. This support is planned for even when the threat of remote learning is not a concern. Monthly meetings between the Director of Curriculum and the Director of Technology are held to constantly stay on top of the technological needs of our students and staff. Additionally, teachers are asked for input on what is working and not working regularly to ensure we are addressing all concerns.

During the 2020-21 school year the following plan was employed to ensure continuity of instruction:

Every student and teacher in our district was issued a laptop computer and charger. Thus, remote instruction was largely supported as a main source of instructional delivery during this time. We are also aware of the limitations posed by over reliance on internet accessibility. In the instances where our students could not participate in online instruction, we continued to deliver, by bus, hard copies of lesson materials to

students' homes that do not have internet access. We issued mobile hotspots (kajeet devices) to encourage online participation. If students cannot submit their responses through Google classroom, teachers are holding phone meetings with them to gauge understanding and provide feedback. Our counselors and social worker have worked with families to help with getting internet connections. Instruction of new material should only be provided with support from the student's teacher. This may include students watching video lessons, students watching digital lessons created by individual teachers and/or direct contact between teachers and students through other means available. Our district will use the following learning materials to support remote instruction:

- Instructional materials provided via technology, such as posted on a teacher website or available through an LMS
- Individual or small group synchronous instruction facilitated using technologies such as telephone or video conferencing
- Large-group or whole class synchronous instruction facilitated using technologies such as telephone or video conferencing
- Recorded instruction disseminated through technology, including via podcast, dedicated website, or Learning Management System, scheduled or on demand television, DVD/CD
- Online learning course, accessed through an LMS, taught by a teacher

Teachers and students will continue to interact in the following formats:

- Teacher office hours, virtually (online) via video conferencing and/or chat, and/or phone
- Scheduled teacher/student(s) check-ins, virtual (online) and/or via phone
- Asynchronous communication, feedback, and support via e-mail or LMS

Additional Resources Provided:

- The District implemented a classroom management software to give teachers the ability to lock screens to keep students on task, to push out specific classroom content such as a web link and to prevent use of the Internet during instruction times, enabling the teacher to engage better with the students without other distractions.

- As the need for remote instruction became necessary, the District purchased Zoom for our staff to use as a way to deliver synchronous learning opportunities for our students.
- Many web based software applications were added to the Districts software library resources as a way to augment instruction to our students. A specific example is CAD software that previously had been only available in the specified Technology computer lab.
- Kajeet mobile hotspots were purchased by the District to provide those students who had poor or no access as determined by a needs assessment survey to the parents.

Continuity of Instruction for students with special needs (ELL, SWD, Homeless)

ESL and Special education teachers are working with general education teachers to differentiate instruction for students with disabilities and our (1) ELL student. At this time we do not have any homeless students. Teachers have been collaborating with one another and meeting virtually with the Principals to develop instructional approaches. Students with related services are being offered tele-therapy to address their IEP goals. They also have been providing videos, hard copies of activities, and calling on the phone to complete therapy. CSE meetings continue to be held over phone and computer. Alternatively placed students are receiving continuity of instruction through the various programs they are enrolled in. Administrators and teachers from those programs are communicating with the homeschool building principals. The special education teachers have been conducting office hours with all special education students in addition to providing resource rooms through zoom meetings to those students with that service on their IEP. During office hours the teachers have been differentiating and modifying work for students. Special education teachers have also sent home hard copies and called home in instances where students with disabilities have limited or no internet access. Teachers and related service providers have been talking and working directly with parents so that they can help their children at home as well. Our ESL teacher has been in contact with our ELL student and their parents by phone, zoom, email, and hard copy distribution to provide support and differentiation in student instruction during this time. The district does not currently have any homeless students, however, we will identify and support students that may become homeless during this time by maintaining open lines of communication. Specifically, our counselor, psychologist, and school social worker along with our School Resource Officer are in regular communication with our families through classroom zooms, emails, and parent phone calls. Additionally, our school nurse checks in with families that pick

up meals from our distribution every week. We are constantly assessing the stability and well being of our families during this time. Each building principal is regularly reviewing the contact logs listing student participation and calling home to check in with parents and students.

Other COVID Accommodations

FrewsburgCSD purchased devices for clerical and classroom staff who otherwise did not have mobile devices, to accommodate a remote work environment at those necessary times. Additional loaner devices were purchased to ensure devices were available for students who had to swap devices for repairs

Device deployment was much like other years, the devices were imaged in preparation for the students to include new items such as Zoom and Impero clients. The Technology Department established a process for contacting families for direct troubleshooting with the help of remote access through the Impero software client. Loaner devices were deployed, when necessary, the next day and devices were repaired and returned as soon as they were ready. One big difference was that while the District has a device for all students K-12, the primary grades (K-2) are housed in the classroom cart each evening for use the next day. The District quickly mobilized those devices to be at home with the students so they had the tools necessary to receive remote instruction.

During the 2021-22 school year the following plan was enacted:

During the 2021-22 School Year remote instruction is provided to the students that are unable to attend school due to a documented medical condition which prompts the development of a 504 plan. Students are then enrolled in the online WAVE academy offered through BOCES. Students that are periodically quarantined due to COVID symptoms or exposure are provided with synchronous and asynchronous instruction based on their individual needs, age, and teacher discretion. We provide mobile hotspots to ensure students have access to the internet and are able to complete their work.

In summary, all stakeholder groups have been working towards identifying a common set of beliefs, identifying instructional needs, establishing goals, writing action plans, establishing timelines, and identifying persons responsible for implementation since each of these components is essential for effecting change and achieving sustainability.

Implementation/Work Plan			
07/01/2022 -- 06/30/2025			
Measurable Outcome	**Month/Year**	**Steps**	**Person Responsible**
Develop a STEAM academy at the Middle Level that guides 7th & 8th grade students through a 10 week process of design, marketing, and production.	February 2022 (& annually) March annually	Meeting with FACS, Tech, Business, and Art Teachers to brainstorm structure, focus, and continued focus on STEAM Academy Scheduling process	Assistant Superintendent for Curriculum Counselors High School Principal
Students in grades 3-6 will incorporate 3D printing in a project-based lesson.	July-August 2022 Sep 2022-June 2023	Professional Development for teachers on 3D printing Teachers implement 3D printing in project based lessons	Technology Integrators/BOCES CSLO Days Embed Technology Integrators
Students will utilize 3D printers, laser cutter, CNC, plasma cutter in their STEAM academy rotation.	July-August 2022 Sep 2022-June	Professional Development for teachers on 3D printing and CNC, laser, vinyl, plasma cutters Teachers implement	Technology Integrators/BOCES CSLO Days Embed Technology

	2023	3D printing and CNC, laser, vinyl, plasma cutters in project based lessons	Integrators
Lego League and Odyssey of the Mind	October 2022	Increase our Lego League and Odyssey of the Mind enrollment. Purchase Lego robotics kits, OM fees	Curriculum Coordinator
Students in PK-2 will be regularly scheduled in a maker-space learning environment to experience hands on learning. Students in grades 3-6 will engage in hands on learning to investigate problems while developing creative solutions in a maker-space environment.	July 2022 September 2022	Create schedule for grade PK-6 Students begin rotation of visiting the maker-space	Curriculum Coordinator Elementary School Principal Technology Integrator Classroom teachers
7th grade students will participate in a coding class as part of their STEAM academy.	July 2022 September 2022	Exploration of coding curriculum and resources Purchase coding software, materials Incorporate coding in lessons	Curriculum Coordinator High School Principal Technology Integrator Classroom teachers

Funding Source:

Expense	Sustainability
Teacher Staff Development for 3D printer, Laser Cutter, Plasma Cutter, Vinyl Cutter, Heat Press, and CNC	If ongoing professional development is required after the grant expires, our technology integrators will be available to train teachers. The district is committed to cover costs of substitutes and/or summer stipends through the general fund. BOCES CSLO days purchased yearly through Co-Ser can also be used as appropriate.
STEAM Curriculum Development	The STEAM Academy curriculum development will be a one time expense. However, if teachers require time in the future to revisit the curriculum or make revisions, staff development days will be devoted to this. The district is also committed to cover cost of substitutes and/or summer stipends through the general fund.
Stipends for Club Advisors for LEGO League and Odyssey of the Mind	This will be a negotiated expense that extends beyond the grant. These stipends will be absorbed by the district general fund.
Service Plan for 3D Printers	This will be a yearly expense that extends beyond the grant. The district is committed to budgeting this cost in general fund expenses.
Software Subscriptions for 3D printing and coding, and other misc.	This will be a yearly ongoing expense that will be absorbed by general fund. The district will seek to get BOCES to support the software so that it is aidable.
Odyssey of the Mind Enrollment Fees	This will be a yearly ongoing expense. This fee can be run through a cross-contract with BOCES. Once the grant expires, the district will purchase this service through BOCES and receive 84% aid the following year.
3D Printers	The 3D printers purchased by the grant will be added to our technology replacement cycle so that they can be replaced in 5 years using general fund.
Filament for 3D Printers	This will be a yearly purchase that the district is committed to absorbing once the grant expires.

Laser Cutter	The Laser Cutter purchased by the grant will be added to our technology replacement cycle so that it can be replaced in 6 years using general funds.
Table Top Laser Cutter	The Table Top Laser Cutter purchased by the grant will be added to our technology replacement cycle so that it can be replaced in 5 years using general fund.
CNC	The CNC purchased by the grant will be added to our technology replacement cycle so that it can be replaced in 7 years using general funds.
Vinyl Cutter and Heat Press	The Vinyl Cutter and Heat Press purchased by the grant will be added to our technology replacement cycle so that it can be replaced in 8 years using general funds.
LEGO Robotic Kits	These will be replaced or added to as needed. The district is committed to purchasing these.
Odyssey of Mind Misc Materials	One time expense purchased by the grant.
Misc Materials for Coding	One time expense purchase by the grant.
Industrial Cabinet Saw	This will be replaced when necessary using the district general funds.
Workbenches	These are one time grant expenses.
Furniture for ES Makerspaces	These are one time grant expenses that will hopefully last for many years. The district will absorb replacement if/when needed.
Portable Makerspace Carts	Supplies in the Makerspace Carts will be replaced as needed using general funds. Carts should last for many years.
Misc Materials for Makerspaces	One time expense purchased by the grant.
PTZ (Pan Tilt Zoom) Camera and control console equipment	One time purchase with Smart Schools Bond Act funds, supplemented as necessary with local funds
1:1 Student Devices	Student devices are now on a replacement plan and will be sustained with local funding sources.

Keyboarding Skills-Grades K-12

Grade(s)	Keyboarding Instruction Expectations in NYS Next Generation English Language Arts Learning Standards	Page
PreK	Students should begin to explore keyboards.	12
K	Students should explore keyboards.	18
1	Students should continue to explore keyboards.	25
2	Students should be introduced to keyboarding.	32
3 and 4	Students should receive instruction in keyboarding, with a focus on technique over speed.	39, 46
5 and 6	Students should continue to improve keyboarding skills, with a focus on increasing speed as well as accuracy.	53, 60
7, 8, 9/10	Students should continue to improve keyboarding skills to increase speed and accuracy.	68, 74, 83
11/12	Students should demonstrate proficient keyboarding skills.	90

Grade(s)	Keyboarding Instruction
P-1	Identify a keyboard Explore keyboards General familiarity with letter and number placement
2	Intro to enter key and space bar Intro to backspace, delete, shift Intro to Home Row Intro to correct posture and hand placement
3-4	Direct, consistent instruction on keyboarding begins. Technique (including posture and hand placement) reinforced over speed.
5-6	Instruction on keyboarding continues (formal and/or informal). Technique (including posture and hand placement) reinforced over speed.
7-8	Students should continue to improve speed and accuracy. Technique (including posture and hand placement) and speed reinforced. Correct posture and hand placement should continue to be reinforced.
9-12	Students should continue to improve speed and accuracy until district mastery goal is met. Correct posture and hand placement should continue to be reinforced.

CURRICULUM

Technology Skills/Kindergarten
Standard: In addition to beginning to acquire alphabetic and orthographic skills—the letter-sound connections and the letter combinations—students in kindergarten should begin to learn about how technology and digital tools for writing can increase learning and communication (e.g., use technology to write, draw, and explore concepts; explore keyboards).

TOPIC	**OBJECTIVES**
Digital Citizenship NetSmartz.org Internet safety video Internet Safety-BrainPop Jr.	• Staying safe online like staying safe in the real world • Not sharing of passwords • Traveling safe on the internet
Rules for handling devices	• Carrying the laptop • No food or drink • Plugging into charging station • Being “kind” i.e. not dropping it, pushing on keyboard to hard, etc..
Introduction to devices Computer Parts by Little Bud	• Naming computer components/hardware • Logging into • Start and restart the devices • Shut down properly
Desktop features	• Icons on desktop • Opening icon/program from desktop
Using the mouse TVOKids ABCya!	• Mouse skills, movement and control • Introduce skills of open, close, move, resize, and minimize a window .
Keyboarding Keyboarding w/out tears	• Basic keyboarding skills • Identify/Explore a keyboard • General familiarity with letter and number placement
Internet	Introduction to these skills • Opening a web browser • Typing URL address • Using search engines • Opening a new tab • Identify & uses of back arrow • Refresh icon

Technology Skills/1st Grade

- students in 1st and 2nd grade should begin to learn about how technology and digital tools for writing can increase learning and communication (e.g., use technology to write, draw, and explore concepts; continue to explore keyboards, etc

Topics	**Objectives**
Digital Citizenship NetSmartz	• Staying safe online like staying safe in the real world • Not sharing of passwords • Traveling safe on the internet
Rules for handling devices	Review rules from kindergarten • Carrying the devices • No food or drink • Plugging into charging station • Being “kind” i.e. not dropping it, pushing on keyboard to hard, etc..
Introductions to devices	Reviewing parts of the devices and vocabulary
Keyboarding TypingClub TurtleDiary	• Identify/Explore a keyboard • General familiarity with letter and number placement • Basic keyboarding skills • Capital and lowercase letters • Symbols, enter, backspace
Word processing  (Microsoft word and powerpoint)	• Changing text, font, color, size, bold, italic, inserting picture & shapes, saving, drawing • How to use icons in the toolbar
Introduction to Google Suite	• Google slides • Google docs • Gmail
Mouse skills	Reinforcing these skills • Introduce skills of open, close, move, resize, and minimize a window . • Saving files to different locations
Desktop skills	Reinforcing these skills • Icons on desktop • Opening icon/program from desktop
Internet	Introduction to these skills • Opening a web browser • Typing URL address • Using search engines • Opening a new tab • Identify & uses of back arrow • Refresh icon

Technology Skills/2nd Grade

- students in 1st and 2nd grade should begin to learn about how technology and digital tools for writing can increase learning and communication (e.g., use technology to write, draw, and explore concepts; continue to explore keyboards, etc

Digital Citizenship NetSmartz	• Staying safe online like staying safe in the real world • Not sharing of passwords • Traveling safe on the internet • Social media
Rules for handling devices	Review rules
Introduction to devices	• Review parts of devices and vocabulary, • Uses in society: careers
Keyboarding skills TypingClub TurtleDiary	• Intro to enter key and space bar • Intro to backspace, delete, shift • Intro to Home Row • Intro to correct posture and hand placement
Word Processing: Microsoft Word & Powerpoint There needs to be an introduction to equation editor and Math type for students in preparation for CBT	• Review icons in toolbar and what they do. • Inserting a graph/chart • Saving a file • Keyboard shortcuts
Introduction to Google Suite	• Google docs • Google slides • gmail
Internet	Reinforcing these skills • Opening a web browser • Typing URL address • Using search engines • Opening a new tab • Identify & uses of back arrow • Refresh icon

Technology Skills/3rd Grade

- Students in 3rd grade will write for multiple purposes (to entertain, to explain, to persuade) and learn about various tools (print and digital) to produce, share, and publish writing. students should continue to learn about how technology and digital tools for writing can increase learning and communication (e.g., use technology to write and explore concepts). Students should receive instruction in keyboarding, with a focus on technique over speed.

Digital Citizenship	● Staying safe online like staying safe in the real world ● Not sharing of passwords ● Traveling safe on the internet ● Social media
Rules for handling devices	Review rules
Introduction to devices	● Review parts of devices and vocabulary, ● Uses in society: careers
Keyboarding skills TypingClub	● Direct, consistent instruction on keyboarding begins. ● Technique (including posture and hand placement) reinforced over speed.
Word Processing: Microsoft Word & Powerpoint	● Review icons in toolbar and what they do. ● Keyboard shortcuts ● Intro to spreadsheets
Google Suite	● Google docs ● Google slides ● Gmail ● Google Sheets: introduction
Internet	Reinforcing these skills ● Opening a web browser ● Typing URL address ● Using search engines ● Opening a new tab ● Identify & uses of back arrow ● Refresh icon ● Toggling between two tabs
Computer based testing ● Castle learning ● Edulastic	Working with programs to increase their CBT skills

Technology Skills/4th, 5th, and 6th Grade

- Students in 4th, 5th, and 6th grade will write for multiple purposes (to entertain, to explain, to persuade) and learn about various tools (print and digital) to produce, share, and publish writing. students should continue to learn about how technology and digital tools for writing can increase learning and communication (e.g., use technology to write and explore concepts). Students should receive instruction in keyboarding, with a focus on technique over speed

Digital Citizenship	● Social media ● Leaving digital footprints ● Rights and Responsibilities ● Digital Law ● Cyberbullying
Internet	● Refining web searches
Technological Awareness	● Troubleshooting minor device problems ● Careers & jobs
G suite	● Google docs ● Google slides ● Gmail ● Google Sheets: introduction
Keyboarding Skills	● Direct, consistent instruction on keyboarding begins. ● Technique (including posture and hand placement) reinforced over speed. ● Instruction on keyboarding continues (formal and/or informal).

Technology Skills/7th-12th Grade

Digital Citizenship NetSmartz.org http://www.isafe.org/ https://www.meganmeierfoundation.org/ https://nobullying.com/ Cyberbullying	• Social media • Leaving digital footprints • Rights and Responsibilities • Digital Law • Cyberbullying
Technological Awareness	• Troubleshooting minor device problems • Staffing of student help desk to assist peers • Careers & jobs
Advanced Business Applications	• Desktop publishing and spreadsheet skills oriented toward business applications • Use of office software to solve complex application problems
Computer Aided Design and Production	• Use of CAD software to solve problems • Application of designs to physical product creating using lasers, 3D printers
Video Production and Communications	• Use of A/V mixers to produce daily broadcast communications • Digital camera equipment and fundamentals of videography • Publishing software to produce student-generated newspapers (electronic and print) • Creation of blog posts to communicate ideas online • Student use of various presentation technologies in the classroom to foster innovative communication skills
Visual and Performing Arts	• Use of software for digital photography • Digital audio, lighting, and visual and sound effects equipment for theatrical productions • Computer-based composition and music engraving • Student-driven music skills development using adaptive software
Keyboarding Skills	• Continue to work toward fluency in keyboarding skills aligning with state standards • Students should continue to improve speed and accuracy. • Technique (including posture and hand placement) and speed reinforced.

	● Correct posture and hand placement should continue to be reinforced.
Research Skills/Media Literacy	● Learn to evaluate online sources of information for validity ● Access a variety of journal articles using online databases
Copyright Law and Attribution	● Learn details of copyright and fair use law ● Develop protocols of attribution to produce proper citations when using others' work
Data Collection and Analysis	● Use digital devices to gather scientific data ● Use of computer software and hardware to analyze data in order to verify hypotheses or to make predictions
Coding	● Formulate paradigms for algorithmic design using a variety of languages and models ● Apply coding principles to solve problems and interact with real world objects (robots, smart devices)

Students with Disabilities and Assistive Technology

Keyboard access may present a challenge for some students with disabilities. Such students may have assistive technology, instructional accommodations, and testing accommodations recommended on their individualized education programs (IEPs) or Section 504 accommodation plans (504 plans) to address their disability-related needs. For some students with disabilities, keyboarding may not be appropriate, even with the use of assistive technology tools. For these students, other assistive technology devices may be recommended, such as speech-to-text programs or eye-gaze technology for typing. In our district we use Dragon Speak and Learning Ally for some students.

A student with a disability requiring keyboarding accommodations and/or assistive technology is given the opportunity to participate in general instructional technology activities, including keyboarding instruction, as appropriate to his or her individual needs. During such instruction the assistive technology and/or accommodations recommended for a student with a disability must be consistently implemented in accordance with the specifications on the student's IEP or 504 plan.

SWD will continue to participate in the least restrictive environment. With access to more technology and online curriculum, more opportunities for closing achievement gaps will be attainable. Teachers will identify student strengths and weaknesses and use this information in writing IEP goals as well as progress monitoring.

Student Achievement

The district will:

1. Utilize NYS testing data, NWEA MAP and MPG data, and other sources of formative assessment to inform instruction by identifying trends that highlight possible gaps in the curriculum.

2. Use web-based software to ease the transition to fully aligned curricula by providing students ample self-directed practice opportunities, doubling as powerful formative assessments for teachers. Study Island will be used to develop an individual learning path based on data gained from NWEA MAP and MPG assessments.

3. Encourage the integration of devices and online resources into the curriculum, through professional development and the use of teacher leaders in the area of technology, to engender the growth of 21st century skills among our learners. Tech integrators will support this work as they push into classrooms to support teachers.

Technology Delivery

1. The Internet – via smart panels and direct student access on 1:1 devices -being used district-wide to enhance student learning and achievement. Instructional videos, interactive lessons, and online self-assessments are all examples of the types of instructional technologies that are being delivered to our students. Furthermore, the Internet has allowed students to collaborate and communicate more effectively as 21st century learners.
2. Interactive Panels have allowed teachers in the district to create more dynamic and engaging lessons for their classes, allowed for the use of recording software, and for teachers to investigate the flipped classroom model.
3. Google Apps For Education (GAFE) –allows collaboration between student, teacher and parent as well as other educators from around the world. Additionally GAFE's cloud based storage also allows individuals access to documents from anywhere there is an Internet Connection and offline access when they are not "connected." Recently the integration specialists have begun working with teachers using SMART Screen Share to allow students and teachers to project their work for the class to view.
4. System Center Configuration Manager (SCCM) –allows for faster provisioning of new devices onto the network by creating a more automated approach to deploying software packages and maintaining Windows updates.
5. In development is Microsoft InTune-a service that focuses on device and application management both On Premise and Remote.

Parental Communications & Community Relations

1. The technology plan will be uploaded to our school website. A hard copy will also be available at a community member's request.
2. The District offers a Parent & Student Portal through our student management system, eSchoolData. The portal allows access with a username and password so parents and students can see progress reports, report cards, assignments and attendance.
3. The District utilizes Blackboard Connect, a rapid calling system, to communicate with parents in an emergency situation or to relay information regarding school events.
4. The District subscribes to Remind, an application that allows the teachers and coaches two way communication with parents and students, without disclosing their personal contact information.
5. Frewsburg Central School District produces a community newsletter, spotlighting student achievements in academics and other extra-curricular activities.
6. The District and individual schools utilize the website to highlight student achievements, upcoming events, district information and much more.

PROFESSIONAL DEVELOPMENT

Professional Development:

After analyzing the needs assessment, we developed selected activities as part of our district strategy to increase access to personalized rigorous learning experiences supported by technology. In order to be effective, we understand the necessity in providing high quality professional development to our teachers. The strategy we will use in moving forward with these initiatives largely relies on the teaching that happens within classrooms. For example, in order to implement a coding program at the elementary school, our teachers will need to have time to figure out where this fits in with their curriculum. Additionally, they will need support in delivering the instruction. We will utilize our technology integrators for this work and encourage them to work side by side with our classroom teachers. In addition, we will utilize our BOCES supports to structure CSLO days that expand on the coding topic. Another form of professional development includes turn key training led by teacher leaders in which personalized learning is modeled and supported. Our tech integrators have been trained as part of a district PL initiative with Education Elements. We will continue this work within our district by assisting in the opportunities for students to participate in blended learning. Work will build upon prior learning about design thinking as teachers will utilize this protocol in the STEAM academy.

Financial Commitment:

- **Subscription Purchases:**
  Our goals and measurable outcomes rely on expansion of our curriculum. We need to purchase software and hardware that are interactive and engaging. Some of the subscriptions we have looked at include; Tynker, Wonder Workshop, Kibo and Sphero. These subscriptions for elementary students will assist in forming early curiosities around computer science for all students. This also supports our goal to increase the interest and confidence of females in the area of engineering. We also need to allocate resources to support the expansion of existing clubs (LEGO league) and plan for more STEAM based summer opportunities.
- **Classroom Design**:
  To define spaces that are rich in collaborative opportunity, the district recognizes the need to move away from the traditional classroom setup. Furniture, supplies, and materials designated for students to engage in creative, limitless exploration is necessary to meet these needs.
- **STEAM Development**:
  To meet our goal in developing a STEAM academy for students in grades 7 & 8 we will need to make purchases that include 3D printer, CNC, plasma cutter, laser engraver, and appropriate software. At the elementary levels, we will invest in the development of mobile STEAM carts and equipment for a hands on learning lab to promote the idea that this type of learning is not confined to a set “space.”
- **Confidence and Exposure Campaign:**
  The development of a campaign to inspire and motivate females to pursue engineering related careers will begin as an early intervention initiative in Pre-K. Curriculum work involving presentation of a variety of STEAM career opportunities will be intentionally highlighted at all grade levels. Additionally, field trip opportunities to expose all students to STEAM based careers will be explored. Students in grades 2,4,6,8, and 10 will attend St. Bonaventure University’s Challenger Space Center taking part in a simulation as well as experiencing many hands-on STEAM based activities. The advisors for LEGO League and Odyssey of the Mind will broaden their marketing of clubs to be more enticing to females. The District increased personalized professional development opportunities from our Technology Integrators in support of Google Classroom, Impero Classroom Management, annotation and screen recording softwares and various other classroom applications. Teachers participate in forums led by BOCES as well.

INFRASTRUCTURE, HARDWARE, TECHNICAL SUPPORT, AND SOFTWARE

Current Status:
Frewsburg Central School District presently receives a 2 Gigabit Broadband connection from the WNYRIC into the Main Closet at the high school where it terminates in the router. The district utilizes power over Ethernet gigabit switch technology with the closets linking together with multi-mode fiber. Each wiring closet utilizes uninterruptible power supplies (UPS) to maintain connectivity during a power outage until the time power is restored or the generator takes over sustaining power. Classrooms and offices are connected to the wiring closets via CAT 5e or in some areas, CAT 6 with Ethernet connectors in the closets as well as the classrooms. Robert H. Jackson Elementary school is connected to the high school main closet via a 10 Gigabit fiber connection to the main closet at the elementary building. The bus garage is connected to the High School via a 10 Gigabit fiber connection and via wireless access to the Bus Garage Storage building. Every classroom is equipped with a wireless access point to allow up to 50 simultaneous connections to the district network. All maintenance of the district's LAN is handled through contractual agreement with the Erie I BOCES WNYRIC.

There are approximately 1180 devices with Internet access within the District. In house we have 19 servers, most of which are virtualized, for management, data storage, security camera system, cafeteria point of sale program, transportation system, wireless, and library automation.

Our District utilizes Voice over IP for its phone system. Every classroom and office is able to dial within the building as well as externally. This system includes messaging services, allowing teachers to receive phone messages without classroom interruptions. This provides staff with better access to parents and vice versa.

Frewsburg CSD has purchased the use of mobile hotspots to ensure equitable access when no Internet is available at home.

Student Technology
All students at Frewsburg Central School District have access to a device in order to access classroom content via Google Classroom, online resources, and to collaborate on projects.. In the Frewsburg Jr/Sr High School, all students, grades 7-12 were individually assigned a Windows device with touchscreen that they use throughout the day and also take home. This resource can be used offline to complete assignments or utilize home wifi for the purpose of accessing online resources to enhance their learning experience. This school is equipped with two distance learning (DL) rooms and two portable Polycom TV carts where students receive instruction from teachers in other school districts for classes they otherwise would not have access to. These rooms and carts are also available for online field trips or other collaborative initiatives.There is a STEAM (Science, Technology, Engineering, Art, Math) learning lab, equipped with higher capacity Windows computers and setup to allow for the future expansion of the STEAM space. There is also a designatedTV Production room, complete with a green screen and project appropriate technology for student-led productions, such as morning announcements.

Within Robert H. Jackson Elementary, all students have individual access to a windows based laptop for use during the day. For students in Grades UPK-2 these devices are kept in the classroom and transitioned to at home in times of required remote learning. Students in grades

3-6 are assigned a device that they use in the classroom but also take home. The school has a designated makerspace learning environment to be incorporated into regularly scheduled classes for grades PK-2. Additionally the stakeholders will investigate developing creative solutions in a makerspace environment for grades 3-6.

Technology Support:
Frewsburg Central School District employs an Assistant Superintendent for Curriculum & Instruction who works closely with the Director of Technology & Communications to ensure that instructional goals are met and enhanced by the integration of technology. Additionally, the full time Director of Technology & Communications oversees the daily operation of the technology department and prioritizes the needs of the staff and students. The District also employs a full time Network Technician to help plan for and implement hardware upgrades, deployment of software, including operating system patches, and assist with security upgrades. The District also contracts with Erie I BOCES to have a senior network technician in District 25 days per year. Three days a week are contracted with Erie 2 BOCES for a Personal Computer Specialist to assist with tech support requests and to maintain the increasing number of computers and devices attached to their network. Each school employs a Technology Integration Specialist to assist teachers with integrating technology into their curriculum. As well, they act as a liaison between the teachers and technology department to ensure seamless transition of updates and new initiatives.
The Frewsburg Jr/Sr High School has implemented a help desk located within one of the Distance Learning rooms and the AV Aide, who oversees the DL Room operations and is there to assist with front line troubleshooting of the student 1:1 devices. The AV Aide assesses the situation initially and determines if the technology department needs to become involved with the repair of the device or if necessary, processes a loaner device to the student. At the elementary school, the Librarian doubles as one of the Technology Integration Specialists and is available to receive student devices with issues and check out loaner devices when required.

Security
The District has put in place many security measures to aid in the safety of our students and staff. All District employees are required to wear identification badges at all times. Both schools have controlled door access in that staff are given access for times specific to their roles. There is a robust IP based camera system in place internally and externally for all campus areas. The paging system is integrated with the Voice over IP phones so administration can utilize any area of the school to communicate announcements as needed to our staff and students.

Plan for Continuous Upgrading
The District has a plan to refresh the infrastructure components every 5 years or as needed, to upgrade student devices every 4 years and to evaluate other classroom technology (interactive boards, projectors, document cameras, etc) as necessary to ensure they are relevant and current. The administrative team has looked at all funding sources including local, eRate and Smart Schools Bond Act funds as well as pandemic relief funding to create a fiscally sound financial plan.

INFRASTRUCTURE GOALS

Goal 1: Sustain a robust and future proof infrastructure to facilitate access to high quality, digital content for staff and students.

Stakeholders: Erie I BOCES WAN support staff, District Technology Department

Frewsburg Central District believes a strong infrastructure is the backbone to support any Education Technology initiative, especially 1:1 devices for the students. We believe it is critical for every classroom to have a wireless access point allowing for no less than 25 concurrent connections. The wiring closets need to be equipped with switches that will allow for power over ethernet as well as a high bandwidth throughput. The dual core switch, located in the server room at the high school has been upgraded to prepare the district to move towards an environment that supports 10 GB connectivity. Upgrades to wiring will be considered when capital projects are evaluated for the schools. Those wiring upgrades will include CAT 6a to each wireless access point and CAT 6 to each teacher workstation, VoIP phone and any future SIP devices. It is also necessary for the wiring closets to be connected via 12 strand multimode, 50 micron fiber to sustain higher bandwidth throughput. Our virtual machine environment will receive two upgrades, one in 2023 and the other in 2024. This upgrade will allow for future expansion of our VM network as necessary. The replacement plan we established will require us to upgrade our physical domain controller in 2025.

Goal 2: Technology will be used to increase building security for students and staff members.

Stakeholders: District & Building Administrators, District Technology Staff, District Maintenance Staff, Erie I BOCES support staff

A robust voice over IP phone system will be maintained within the District, to include a phone in all offices and classrooms.

The IP Surveillance Camera System, will be recommended for upgrade in 2025, the system will be evaluated and a recommendation made for improvements to increase the quality and quantity of security within the school building as well as the exterior campus areas.

The district will continue to assess physical access control and reporting measures to stay current with regulations and the needs of the district. The door access system at Robert H Jackson Elementary will be upgraded in a 2023 capital improvement project.

Goal 3: Technology will be used to enhance communication and interaction with parents, families, and community.

Stakeholders: District Administrators, District Technology Staff

Technology will be used to enhance communication and interaction with parents, families, and community. Frewsburg Central School District utilizes the Public Relations Professional as the District webmaster, responsible for website creation, ADA Compliance, and ongoing updates to publish viable content to our community, parents and students. The Superintendent will utilize the Public Relations Professional to allow visibility into content created regarding Frewsburg Central Schools on social media platforms such as Facebook and Twitter. This will allow her to quickly address concerns that arise from the community as well as squelch the proliferation of misinformation.

The district will maintain a *Report a Threat,* online reporting form as well as an online *Report Bullying Now* form, so people can anonymously post concerns found on social media, texting and other areas. The ease of access for users, coupled with the anonymity we believe will create a safe environment for us to collect relevant information to protect the safety of our students and staff.

Implementation/Work Plan-Goal 1 Sustain a robust and future proof infrastructure to facilitate access to high quality, digital content for staff and students.			
07/01/2022 -- 06/30/2025			
Measurable Outcome	**Month/Year**	**Steps**	**Person Responsible**
Upgrade Classroom Wiring	July-August/2023 2022-24 Ongoing evaluation of future wiring during capital project planning meetings	Installation of new wiring during RHJ Capital Project Plan with Erie 1 BOCES WAN team & Facilities Planning	Erie 1 BOCES WAN Director of Technology Director of Maintenance Administration
Plan for future wireless upgrade & expansion (ERate Y5)	June 2024 June 2025	Plan with Erie 1 BOCES WAN team & Facilities Planning Begin Implementation	Erie 1 BOCES Network Technician Director of Technology
Upgrade AC in HS WC#2	July-August/2023		Siemens and District
VM 4 Host Replacement	July 2022 July 2023	Planning Installation	Erie 1 BOCES Network Technician Director of Technology
VM 5 Host Replacement	July 2023 July 2024	Planning Installation	Erie 1 BOCES Network Technician Director of Technology
Physical DC Replacement	July 2023 July 2024	Planning Installation	Erie 1 BOCES Network Technician Director of Technology
HVAC Server Replacement	July 2024 July 2025	Planning Implementation	Siemens and District Siemens and District
Upgrade WC to 10GB Internal	January 2025	Plan with Erie 1 BOCES WAN team & Facilities Planning	Erie 1 BOCES Network Technician Director of Technology

Student Device Upgrades	July 2022 July 2023 July 2024	5 Grades 5 Grades 3 Grades	Erie 1 BOCES Director of Technology Network Technician Administration PC Specialist
Staff Device Upgrades	July 2023	Staff/Teachers	Erie 1 BOCES Director of Technology Network Technician Administration PC Specialist
Outdoor Access Points at High School	July 2022 July 2023	Planning Implementation	Erie 1 BOCES Director of Technology Network Technician
Outdoor Access Points at Elementary School	July 2022	Installation	Erie 1 BOCES Director of Technology Network Technician
STEAM Lab High School Upgrade	July 2022	Installation	Director of Technology Network Technician PC Specialist

Implementation/Work Plan-Goal 2 Technology will be used to increase building security for students and staff members.			
07/01/2022 -- 06/30/2025			
Measurable Outcome	**Month/Year**	**Steps**	**Person Responsible**
Upgrade IP Camera Surveillance System Upgrade Servers Improve Camera Coverage Replace cameras as needed	 July/2024 July 2025 Ongoing October 2022 February 2023	 Planning Implementation Identify low coverage areas with Administration Create a replacement plan Budget for replacements	 Erie 1 BOCES Director of Technology Network Technician Administration Director of Technology Network Technician Administration Director of Technology

Upgrade VoIP System Voice Gateway Voice Server Analog Gateway Fax Hardware	 July 2022 August 2022 July 2022 July 2023 January 2024 January 2023 July 2025	 Procurement Implementation Planning Implementation Planning Planning Implementation	 Erie 1 BOCES Director of Technology
Vape Detectors	December 2022	Continue planning and implementation	Administration
Enhance Internal/External Building Security RHJ Door Access Upgrade	July 2022 July 2023	Planning for Integrating Systems-entry, camera, etc Installation	Administration Director of Technology Facilities Planning Maintenance

Implementation/Work Plan-Goal 3 Technology will be used to enhance communication and interaction with parents, families, and community.			
07/01/2022 -- 06/30/2025			
Measurable Outcome	**Month/Year**	**Steps**	**Person Responsible**
Website Template Redesign	July 2022	Evaluate & Implementation	Erie 1 BOCES Support Public Relation Professional Superintendent
Evaluate Infuencers	December 2022 Ongoing	Ongoing monitoring and response to feedback from community members	Superintendent Public Relation Professional
Monitor Online Threat forms	Continuous	Monitor through automated emails when threats are reported and react appropriately	Building Principals
Live Stream Events	July 2022 September 2022 - as funding allows	Continue Planning for live stream options: Investigation, Testing and Acquisition Implementation of Hudl Cameras for Sporting Events	Administration Athletic Director Director of Technology Erie 1 BOCES
Partner with Internet Provider to Facilitate High Speed Broadband to students attending Before and After School Programs & Families in need of home internet	July 2022 September 2022	Planning Implementation	ECF Coordinators Wind Stream Director of Technology Business Official

MONITORING AND EVALUATION

Evaluation

Annually, the district will evaluate the impact of our technology plan on students' performance by: reviewing the school report card data, graduation and drop-out rates, student attendance and discipline as well as student grades. The Chief Information Officer (CIO) and Data Management Specialist will be responsible for collecting and compiling this data. Student proficiency will be assessed through performance on state-wide tests, classroom tests and projects, and checklists. Support staff will be evaluated annually through the support staff evaluation.

The district Annual Professional Performance Review (APPR) plan is inclusive of district documents to record teacher performance and student learning. Data obtained through this process will be aggregated for district use in determining strengths and weaknesses of our staff and students' knowledge and skills. The key indicators of success are multi-faceted, but always focused on student achievement:

- Graduation Rate
- Advanced Regents Diplomas
- Regent's scores
- College Connection and credits earned
- SAT/ACT scores
- Project-based learning

Accountability for the technology plan will be assessed through individual performance evaluations as part of the APPR process. Teacher proficiency will be assessed through a myriad of strategies including teacher evaluation, formative, summative and informal walk-through and teacher portfolio. Through ongoing needs assessment, the district will collect information and analyze it to make decisions to ensure staff has the technology and resources necessary to implement New York State Learning Standards in all classes.

The needs of teachers and students are ever changing. Through the technology committee, administration, conversations with the CIO, Data Management Specialist, and department chairs, information will be brought forward so the individual needs of teachers and students can be addressed. The Director of Technology and Communications along with the District Technology Committee will meet as needed throughout the year to review the Technology Plan goals and work plan. They will look at the progress, discuss obstacles, and make revisions to the plan if necessary in response to concerns brought forward. This plan is a fluid document brought to life by the ever changing needs of the staff, to respond fully and thoroughly to the needs of our students, based on data.

Acceptable Use Policy

To protect our network and our students the district requires all users to read, sign, and abide by the district's AUP. These documents can be found in the appendixes. The district provides internet filtering through Erie I BOCES using iBoss Systems software. All users and computers in the District are filtered based on their role. The district believes the best protection is careful monitoring by all staff. As part of the district internet safety policy students are allowed on computers, and other technology, only under the direct supervision of staff. The District's Internet Safety/Internet Content Filtering Policy was first adopted in 2008. There was a public forum held for this policy on January 14, 2010. Since then, this policy has been modified and can be found in the (linked to BoardDocs) appendixes.

Student Acceptable Use Policy 7315
Staff Acceptable Use Policy 6410
Internet Safety/Internet Content Filtering Policy 8271