

Gilford  
School District  
SAU 73

*Technology Plan*

*2 Belknap Mountain Road  
Gilford, NH 03249  
(603) 527-9215*

## **Gilford School District Mission & Beliefs Statement**

The mission of the Gilford School District, in partnership with the community, is to actively engage all students in a broad range of educational opportunities that enables them to make responsible choices and succeed throughout life in a changing society.

### **Vision Statement**

Gilford: A community developing lifelong learners contributing to a better world.

### **Our Expectations**

The Gilford School District will:

- Provide a disciplined, respectful, and safe environment that promotes learning.
- Provide students with a dynamic curriculum that prepares them for careers and further education.
- Ensure that all students can learn and will meet yearly curriculum competencies.
- Recognize and adapt curriculum to meet individual student learning styles.
- Actively engage families in the educational process.
- Promote personal responsibility, accountability and wellness as an integral part of the educational process.
- Develop strong business and community partnerships to support a broad range of opportunities and positive influences for students.
- Establish a plan for students to participate in community service projects to develop character and citizenship.
- Promote open communications that promote accountability.
- Expect employees to excel in their roles and will support their efforts for continuous improvement.
- Examine the use of all resources to maximize impact and effectiveness.
- Provide the integration of appropriate technology essential to the education process.

## Technology Vision Statement

It is Gilford School District's philosophy to ensure that technology becomes an integral and routine part of the learning experience in the Gilford educational community.

We believe that technology, appropriately and effectively used, is an essential tool for creating challenging interactive learning environments.

Technology should be integrated into all aspects of the curriculum where appropriate.

Technology should be utilized to the fullest extent to streamline administrative tasks.

Provide adequate access to technology, training, and technical assistance for systems and curriculum integration.

## Goals

The District will expand the use of technology in the educational process in order to:

1. Improve student skills in all academic subject areas.
2. Improve and increase student and faculty access to information and resources.
3. Improve communication with community and parents.
4. Implement an integrated approach to the use of 21<sup>st</sup> century tools, including, but not limited to digital technology and communication tools, within all curriculum areas.

Strategies:

- upgrade applications, peripherals, and infrastructure on an ongoing basis without significant budget spikes
- maintain a secure network
- review, revise, and upgrade communications strategies, tools, and programs
- provide hardware, software, and connectivity for staff and student use

## **Student Learning:**

1. Provide a developmentally appropriate collection of instructional resources that shall be current, comprehensive, and necessary to support the curriculum as well as the instructional needs of the total school population
  - Provide all K-4 students with a mobile device for utilization in school
  - Provide all Grade 5 – 12 students with a mobile device for utilization in school and at home
  - Ensure opportunities are provided and accessible (i.e. AP, Virtual High School, college courses, community-based programs, etc.) . Increase participation in on-line & virtual activities & coursework where appropriate and cost effective
  - Review existing online subscriptions and make projections for upgrades reflecting cost and cycle as related to maintenance / version upgrades
  - Review textbook purchases and adopt online textbooks where cost effective and feasible

2. The Gilford School District will develop and maintain an ongoing curricular framework across the Gilford School District
  - The curricular framework will include the technology K-12 skills continuum and curriculum as taught in our computer courses
  - The curricular framework will include various technology components that are taught and integrated throughout all classrooms in the Gilford School District
  
3. Ongoing implementation of ethics strand of technology curriculum as it integrates throughout all of the learning activities for students including but not limited to copyright, hacking, virus protection, appropriate use, etc. Promote responsible use of technology in developing the good student/citizenship skills.

### **Community Collaboration**

1. Increase regular, timely and consistent communications to parents, school board and the public utilizing most appropriate tool via social media, email, phone, text messages etc.
  
2. Utilize our student management system for student/teacher and parent/teacher portal communication access
  - Utilize phone apps for parent / student utilization for updated grades
  - Develop consistent practices for access to student information for parents
  - Develop consistent practice of emailing report cards, schedules etc. home to parents
  - Develop consistent practice of teachers' utilization of technology for communication with parents on assignments, etc. by school level
  
3. Provide consistent access to general information via the schools' & district websites including calendars

### **Safety & Facilities**

1. Provide a secure network environment for the district
  - Revise & update backup and restoration procedures updated as technology changes
  - Revise & update Firewall protection and update network vulnerabilities to protect against external threats
  - Utilize hosted solutions for critical applications
  - Provide adequate cooling / heating for the infrastructure of technology
  - Outside computers do not have access to our network
  - USB sticks are restricted to approved individual devices on an as needed basis
  
2. Provide adequate infrastructure for fully equipped classrooms as technology changes
  - Provide significant bandwidth for effective student access including wireless access, WAN connections (10 GB switched network)
  - Upgrade classroom instructional resources with emerging technologies including but not limited to video projector systems, document cameras and interactive boards where

applicable. Items such as virtual reality computer systems and other technologies as they come out need to be addressed via the budget

3. Maintain and update all guidelines, procedures and laws that are issued by the federal and state government
  - Update websites to follow the new guidelines of accessibility
  - Develop the data security plan and list of resources as outlined in HB 1612
  - Update and maintain the Technology Department's procedures and policies on an as needed basis

## **Resource Management**

1. Gilford School District will look to improve efficiency and ease of use with technology where applicable. Consideration should be given to the following items but not limited to:
  - Implement long-term archiving of important documents / files of Gilford School District Records – i.e. board meetings, student records
  - Implement Absence / Substitute web portal for calling for substitute teachers / staff
  - Transition from paperwork to electronic option for paperwork reduction and cost-savings overall
    - i. Online registration and re-registration for new incoming students and returning students each year
    - ii. Online staff self-service human resource portal
    - iii. Utilize electronic file storage of My Learning Plan options
    - iv. Consider implementation of online timesheets, purchase orders, etc
2. Gilford School District will provide the necessary hardware and technology resources access to support student learning.
  - An ongoing replacement plan and cycle of all technology aspects including hardware (five years for computers and three years for chromebooks), subscription services etc will be developed without a significant budget spike or yo-yo effect. GSD will provide adequate personnel to support the use and maintenance of technology in the Gilford School District.
3. GSD will provide adequate technical staff to support technology use throughout the district
  - Technology Integrators in each building to provide ongoing professional development for staff for differentiated instruction utilizing technology within their classrooms
  - Provide adequate technical staff for just-in-time support to be readily available on-site for both infrastructure and application
4. GSD will maintain and update the network and infrastructure on a regular basis. Redundancy will be implemented of specific components to provide reliable and consistent service.

## **Personnel**

Current staffing is as follow:

- |   |  |
|---|--|
| 1 | full time District-wide Technology Coordinator |
| 1 | full time District-wide Network Administrator  |
| 3 | part time school wide tech integrators         |
| 1 | part time summer help                          |

As the use of technology continues to increase throughout the district, consideration should be given for a district-wide Level I tech support / integrator for the district. This would allow the part time tech integrators to return their focus to their classes and the part time summer help to be eliminated. In addition to supporting technology across the district (ie. working on tech support issues and training) this person could be responsible for website updates and public communication such as Facebook.

Workstation / Mobile Devices

Typical expectation for computer replacement is: 20% every year so that computers have a 5 year life expectancy. Expectations for chromebook replacement is 33% every year based upon current use.

Item	Inventory	Annual Replacement Amount	Projected Individual Cost	Projected Annual Budget Total
Computers	375	75	\$800	\$60,000
Chromebooks	1250	400 - 450	\$230	\$92,000
				\$152,000

Network / Infrastructure

The network and infrastructure is a vital component that needs to be maintained and updated on a regular basis. Redundancy of specific components is key to providing reliable and consistent service.

Annual Replacement of Network / Infrastructure

Item	Inventory	Individual Cost	Total Cost	Cycle	Projected Annual Budget Total
Firewalls	2	\$4000	\$8,000	5 years	
Webfilter	1	\$20,000 - \$25,000	\$25,000	5 years	
Backup Power	15	\$1,500	\$22,500	3 – 4 years	
Storage Devices	2	\$15,000	\$30,000	5 years	
			\$85,500	5 years	
					\$17,100 per year

Long-Term Replacement Upgrade of Network / Infrastructure

The use of capital reserve funds should be considered for funding for long-term (more than 5 years) projects as currently is being done with the wireless infrastructure. An ongoing request for long term replacement of technology infrastructure through the Capital Improvement Plan should be considered. The amount to be determined as the timeline of upgrades is considered.

Item	Inventory	Individual Cost	Projected Total Cost	Cycle	Average Budget Total
Cabling	3 buildings	\$120,000	\$360,000	10 – 15 years	
Phone	2 systems	\$25,000 - \$150,000	\$175,000	8 – 10 years	

Fiber	10 Internal	\$8,000	\$80,000	10 years	
Fiber	External	\$100,00 - \$150,000	\$125,000	15 years	
Wireless Infrastructure	135	\$1,000	\$135,000	5 – 7 years	
Switches	13	\$5,000 - \$15,000	\$100,000	8 – 10 Years	
			\$975,000	10 years	\$97,500 avg

Funding for technology must remain fluid as more services and / or devices are drawn into the technology umbrella. This budget summary below will be reviewed and revised annually on an as needed basis. The costs reflected below are approximations based upon current technologies and services.

	18-19	19-20	20-21	21-22	22-23	23-24
Repairs	5000	4000	3000	3000	2000	2000
Supplies	16000	17000	17000	17000	19000	21000
Software	17400	12400	12400	12400	10,400	9400
C/S	115000	125000	128000	130000	140000	145000
New Equip	0	0	0	0	0	0
Repl Equip.	119700	152000	169000	169000	185,000	203,500

**273,100    310,400    329,400    331,400    356,400    380,900**

#### Projection Systems -

In addition to the technology budget, classroom projection systems are on an ongoing replacement plan. These have been funded through the schools' budget. The costs reflected below are approximations based upon current technologies and services.

	Count	Cost per year
GES	4 per year	\$7,200
GMS	4 per year	\$7,200
GHS	6 per year	10,800
District (Auditorium, SAU etc)	1 per year	\$2,500 - 10,000

### **Conclusion**

As technology progresses at a faster and faster pace, we can barely keep up with it. As emerging technologies become a crucial part of our everyday lives, we as a district must make technology an integral part of our operations. Otherwise, we run the risk of becoming increasingly irrelevant to our student's perception of the world.

We hope to be able to integrate technology throughout our educational system not only in curricular and instructional areas, but also to improve communication and processes throughout the school community.

All Gilford students should be provided with the necessary tools that will enable them to meet their highest academic and professional goals for the 21<sup>st</sup> century.