



# Technology Plan

## Thompson Public Schools

### 2017-2020

## Table of Contents

District Vision Statement .....	3
District Mission Statement.....	3
Technology Committee .....	4
Technology Department Structure .....	5
Current Software Subscriptions Offered at Thompson Public Schools .....	6
Guiding Principles for Technology in Early Childhood Programs as Defined by the Thompson School Readiness Program Policy.....	9
Guiding Principles for Technology in the Middle School .....	10
Guiding Principles for Technology in the High School .....	10
Guiding Principles for Technology in Pupil Services .....	11
Goal 1: Support Infrastructure for Teaching and Learning .....	11
Goal 2: Develop Device Rollout Procedures and Cycle .....	13
Goal 3: Professional Development for Technology .....	14

## District Vision Statement

The Thompson Public Schools will be the highest performing public-school system in Northeast Connecticut.

## District Mission Statement

To that end, the Thompson Board of Education is committed to ensuring that every student is prepared for success in life in the 21<sup>st</sup> century.

We accomplish this by...

- Providing dedicated leadership
- Encouraging community involvement and support
- Hiring and retaining an engaged, enthusiastic, focused, and professional staff
- Providing state of the art instruction
- Maintaining a safe and caring environment that fosters lifelong learning
- Embracing our differences
- Striving to help every student reach his or her potential

# Technology Commitee

## **Superintendent Office**

Melinda Smith, Superintendent

## **Technology Department**

Heather Burns, Director

Dannette Seney

Tracy Bachand

## **Curriculum Department**

Ian Polun, Vice Principal/ Curriculum Director

## **Elementary School**

Noveline Beltram, Principal

Alycia Godzik

Jonathan Fontaine

Lori Chesanek

Jen Errichetti

## **Middle School**

Christopher Scott, Principal

Larry Prentiss, Vice Principal

Mary Aubin

Lauryn Langlois

Patty Chenail

Lucy Trudeau

Caitlyn Adler

Louise Morrison

Judy Perkins

Laura Stefanski

## **High School**

Megan Baker, Principal

Trish Tupaj

Mike Joyce

Keri Procko

Cindy Ouillette

Dan Ten Eyck

## Technology Department Structure

**Technology Director-** The Technology Director reports to the Superintendent and oversees the overall health of the network, network upgrades, and projects. This position manages the district's technology budget and makes recommendations for district wide technology needs, equipment, and materials. The Director leads efforts to disperse new technology to students and teachers. This position also works with appropriate staff to provide training and professional development to teachers, students, and staff in all areas of technology. The Director supervises the technology staff, serves as point of contact for vendors, and completes the required district state reports.

**Data Manager-** The Data Manager reports to the Technology Director. This position serves as point of contact for the student information system, cafeteria software, and nurse's software. The Data Manager maintains the district website, provides support for the phone system, and manages the printer and copier contracts. This position assists in student registrations and provides data mining services for the Superintendent and principals as needed.

**Network Technician-** The Network Technician reports to the Technology Director. The Network Technician's focus is to provide technical support and assistance to the Thompson Public School district. This position is responsible for maintaining an accurate inventory of all devices, server troubleshooting, network software installation, and repair and regular maintenance on student and teacher devices.

**Intern Program-** The Technology department utilized interns from Quinebaug Valley Community College (QVCC) each semester. They assist with technical troubleshooting and gain networking experience.

## Current Software Subscriptions Offered at Thompson Public Schools

### Mary R. Fisher Elementary School:

Program Name	Grades Served	Subject Areas	Short Description
Classlink	2-4	N/A	Single sign on, online storage
Symphony Math	K-4	Math	Foundational Math Concepts
Study Island	K-4	Math and Reading	Foundational Concepts, Integrates with NWEA
NWEA	K-4	Math and Reading	Measures academic progress Fall, Winter, and Spring
Lexia Core 5	K-4	Reading	Data driven plans to help differentiate instruction
Dibels	K-4	Reading	Assessment of early literacy skills
Read Live	K-4	Reading	Reading intervention
Common Sense Media	K-4	Digital Citizenship	Internet safety, cyberbullying, and digital footprint
ConnectED	K-6	Reading	Reading curriculum

### Thompson Middle School:

Classlink	5-8	N/A	Single sign on, online storage
Study Island	5-8	Math, Reading, Science	Foundational Concepts, integrates with NWEA
GSuite	5-8	N/A	Email, Google Apps, and Google Classroom

NWEA	5-8	Math, Reading, ELA, Science	Measures academic progress Fall, Winter, and Spring
Everfi	5-8	Digital Citizenship	Internet safety, cyberbullying, and digital footprint
CPM	5-9	Math	Math curriculum
Moby Max	5-8	All subject areas	Foundational concepts
Edgenuity	5-8	All subject areas	Online blended learning

Tourtellotte Memorial High School:

GSuite	9-12	N/A	Email, Google Apps, and Google Classroom
NWEA	9-12	Math, Reading, Science	Measures academic progress Fall, Winter, and Spring
Plato	9-12	All subject areas	Online courseware
Richer Picture	9-12	All subject areas	Digital portfolios
Virtual High School	9-12	All subject areas	Online courseware
Bridges	9-12	Guidance Office	Career exploration
Adobe Creative Cloud	9-12	Technology Education	Graphic design, photography, video editing
Solidworks	9-12	Technology Education	Engineering software
Pinacle	9-12	Technology Education	Video editing
Archicad	9-12	Technology Education	Architectural design software
CPM	9	Math	E-books
Quick Books	9-12	Accounting	Accounting software

Pearson's My Accounting Lab	11-12	Accounting	Online blended learning
Knowledge Matters	9-12	Business	Accounting, personal finance, sports marketing, virtual business
Micro Type	9-12	Keyboarding	Keyboarding skills
Microsoft	9-12	Business	Microsoft Office and Microsoft Money

**Pupil Services:**

IEP Direct	PreK-12	Special education software	Track IEP's and generate reports
Q-Global	PreK-12	Special education software	Psychology assessment tools
Dragon Dictation	PreK-12	All subject areas	Speech to text software for those who struggle with handwriting/typing
Snap Type	PreK-12	All subject areas	Adds text to worksheets for those who struggle with handwriting
Basc-3	PreK-12	Special education software	Behavior assessment system for children
Key math	5-8	Math	Assessment, scoring, and reporting software
CoWriter	PreK-12	All subject areas	Word prediction
Woodcock Johnson IV	PreK-12	WJscore	Cognitive processing
WIAT	PreK-12	WIAT	Reading, Math and Writing assessments



## Guiding Principles for Technology in Early Childhood Programs as Defined by the Thompson School Readiness Program Policy

### **Purpose:**

The purpose of this policy is to ensure that implementation of technology adheres to quality standards within the framework of developmentally appropriate practice.

### **Belief:**

It is our belief that early learning primarily occurs through interactions with people, hands on materials, ideas, and events, all of which are integral for developing executive functioning skills. When appropriately designed for young children, technology is an additional tool that can be used to expand their play ideas, acquire knowledge and skills, and solve problems.

### **Guiding Principles:**

The following are the guiding principles for early childhood educators and early learning programs on the use of technology:

- Incorporating technology in the classroom is a choice not a necessity
- All children should have opportunities to access technology
- Technology should be modified for the individual child to enhance his or her unique needs and development as well as being responsive to the social and cultural contexts in which they live
- Technology should be used in moderation with appropriate time limits (less than 30 minutes for ages 2-5)
- Technology should be interactive and open ended, and encourage discovery (i.e. virtual field trips, recording a story, making a book, taking a photograph) and “should never displace the role of unstructured, unplugged, interactive and creative play that research shows is the best way to learn” (U.S. Department of Education & U.S. Department of Health and Human Services Policy Brief 2016)
- Adults should work closely with students to facilitate interactions with technology and with peers
- Technology should be assessed regularly to ensure appropriateness for the young child’s physical, cognitive and social development

As outlined in the Thompson Board of Education Policy, all members of the TECC will practice safe, legal, ethical and responsible use of technology, information and resources.

### **Policy Guidance:**

NAEYC/Fred Rogers Center Position Statement on Technology and Interactive Media in Early Childhood Programs (2012)

U.S. Department of Education/U.S. Department of Health and Human Services Early Learning and Educational Technology Brief (2016)

HighScope Extensions (Volume 28, No. 1) Using Technology Appropriately in the Preschool Classroom

Thompson Board of Education Technology Safety Policy

## Guiding Principles for Technology in the Middle School

Students will focus on ethical use of technology and organize data to predict outcomes or communicate an idea. Teachers will guide students in collecting data using computational tools and transform the data into more useful and meaningful information. Students will:

- Practice safe and ethical Internet browsing
- Collaborate and share ideas with peers
- Practice and gain interest in coding and computer science
- Create projects that incorporate all curricular areas and real-life skills

## Guiding Principles for Technology in the High School

Students will use technology across all curricular areas to support, enhance, and demonstrate their learning. Students will use 21<sup>st</sup> century technology to consistently and effectively collect information from a variety of sources. Teachers will guide students to use technology in informed, effective, and ethical ways to:

- Communicate clearly and creatively
- Access, support, document, and supplement their learning
- Build knowledge, create, and problem-solve
- Broaden their perspectives locally and globally
- Personalize the pace of learning
- Share work with an audience beyond the school community
- Collaborate digitally to support learning
- Engage in learning beyond the constraints of the school building and school day

## Guiding Principles for Technology in Pupil Services

Pupil services will utilize iPads, Chromebooks, and personalized Apps in areas where traditional classroom structure is ineffective. Assistive technology will help special educators to:

- Enable students to complete lessons
- Adapt lessons to specific learning needs
- Help students interact with one another virtually
- Reinforce positive classroom experiences
- Improve functional capability of students.

## Goal 1: Support Infrastructure for Teaching and Learning

The technology infrastructure will be upgraded and maintained to support anywhere, anytime learning on 1:1 devices for students, faculty, and staff.

Strategy	Action	Led By	Timeline	Performance Indicators
Apply for E-Rate funding	Devise network upgrade project specifications	Technology Director Network Technician	2017-2018	Application acceptance and reimbursement of \$94,383
Upgrade wireless network to support 1:1 Chromebooks	Add 40 wireless access points	Technology Director Network Technician	2017-2018	Chromebooks purchased for grades 5-8 will be supported on wireless network when they are dispersed to students
Upgrade all network infrastructure to improve bandwidth and prepare for future technology	Add Aruba controller and upgrade to OS8  Add Aruba mobility master with redundancy	Technology Director Network Technician Apex Technology Group	2018-2019	Increased bandwidth  Increased wireless network connectivity  Segmented network access, new SSIDs for students and staff

	<p>Replace two core switches with redundant configuration</p> <p>Replace 26 outdated switches</p>			
Secure technology budget to implement 3-5-year replacement cycle of network hardware	<p>Replace one server every three years or as needed</p> <p>Replace switches every five years and access points every three years or as needed</p>	<p>Technology Director</p> <p>Network Technician</p> <p>Apex Technology Group</p>	2019-2020	Network performance will continue to be optimal
Complete district interactive projector rollout	Purchase and install 4 interactive projectors or updated equipment	Technology Department	<p>2017-2018</p> <p>2018-2019</p>	Install interactive projectors or updated equipment in high school to complete project
Replace older interactive projectors with newer or interactive flat panels	Purchase and replace 4 each year	Technology Department	2019-2020	Old equipment will be replaced to keep technology up to date and continue to allow teacher to integrate reliable technology into their lesson plans

## Goal 2: Develop Device Rollout Procedures and Cycle

Ensure a successful and organized rollout of 1:1 devices to support blended and personalized learning.

Strategy	Action	Led By	Timeline	Performance Indicators
Develop student and parent Chromebook orientation program	Distribute literature to parents and students containing expectations, guidelines, and repair methods  Insurance Policy  Digital citizenship class for students	Principals  Technology Director  Media Specialist  Teachers	2017-2018	Students and parents sign and return all responsible use guideline documents before Chromebooks are dispersed
Disperse Chromebooks to grades 5-8  Reallocate 50 Chromebooks to Elementary school	Chromebooks are assigned to students using the Bibliomation library inventory system  Create Google accounts for grades 3 &4	Technology Department  Media Specialist  Principals	2017-2018	Continue to increase blended learning using CPM math program, Edgenuity, and ConnectED  Implement use of Smarter Balanced interim assessments
Disperse Chromebooks to grade 9	Chromebooks are assigned to students using the Bibliomation library inventory system	Technology Department  Media Specialist  Principal	2018-2019	Increase personalized learning through Summit platform  Increase online/blended learning with Virtual High School

Disperse Chromebooks to grades 10-12  Reallocate Chromebooks to continue infusion in elementary school	Chromebooks are assigned to students using the Bibliomation library inventory system	Technology Department  Media Specialist  Principals	2019-2020	Increase personalized learning through Summit platform  Blended learning with Virtual High School  Support opportunities to embed digital portfolio requirements into classroom lessons
Begin replacement cycle for Chromebooks	Track device age with inventory software (Insight)	Technology Department	Every four years	Students will be issued new Chromebooks in grades 5 then in grade 9

### Goal 3: Professional Development for Technology

Increase professional development by taking advantage of online resources to offer more blended and personalized learning.

Strategy	Action	Led By	Timeline	Performance Indicators
Professional development integration plan for Chromebooks	Provide Chromebook and Google Docs training	Technology Director  Curriculum Director  Instructional Technology Coach	2017-2018	Teachers will continue using their Chromebooks and increase digital lessons and collaboration with Google Docs
	Provide Google Apps and Google Classroom training		2018-2019	Teachers will use Google Classroom and other Google Apps
Develop technology leaders at each school	Leaders will be selected and trained	Technology Director  Instructional Technology Coach	2018-2019	Leaders will assist other teachers and act as point of contact for integrating technology into curriculum

Develop core technology team for decision making	Attend conferences, create 21 <sup>st</sup> century classroom infrastructure  Other school site visits	Technology Department  Curriculum Director  Instructional Technology Coach	2019-2020	Bring back cutting-edge ideas and begin collaborating ideas for next three years, increase mobile learning, augmented and virtual reality solutions.
Use current student information system to its full potential	Implement parent and student portals	Superintendent  Technology Director  Principals  Vice Principals	2017-2018	Increase parent/teacher/community communication  Decrease paper consumption through online reporting
Develop student information system research team	Research various student information systems	Superintendent  Technology Director  Data Manager  Secretary  Curriculum Director  Principals	2018-2019  2019-2020	Research and recommend new student information system  Implement new student information system