

# Monroe Township School District

# TECHNOLOGY PLAN 2024-2029





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### MTBOE Board Members

NAME	TITLE
Ms. Katie Fabiano	Board President
Ms. Carmen Alvarez	Board Vice President
Ms. Gazala Bohra	Board Member
Ms. Gail DiPane	Board Member
Mr. Peter Piro	Board Member
Ms. Kate Rattner	Board Member
Ms. Usha Sharma	Board Member
Mr. Peter Tufano	Board Member
Mr. Charles Zeichner	Board Member
Dr. Amanda Peck	Jamesburg Representative





### District Administration

NAME	TITLE
Dr. Chari Robynne Chanley	Superintendent of Schools
Dr. Adam Layman	Assistant Superintendent of Schools
Ms. Laura Allen, CPA	Business Administrator & Board Secretary
Ms. Fazneefa Roopa	Assistant Business Administrator
Mr. Steven Barandica	Director of Athletics & Cocurricular Activities
Mr. Gerald Tague	Director of Facilities & Grounds
Mr. Eliot Feldman	Director of Information Technology
Ms. Jeanie Corallo	Director of Falcon Care & Early Childhood Education
Ms. Kristine Christie	Director of Human Resources & Compliance
Ms. Donna Marter	Director of Transportation
Mr. Zachary Morolda	Director of Innovative & Community Programs, Equity & Careers Technology
Ms. Marietta Ruela	Director of Pupil & Personnel Services
Ms. Cindy Sue Schaller	Director of Food Services
Mr. Edward Selby	Director of Security & Residency





# Technology Staff

NAME	TITLE
Mr. Eliot Feldman	Director of Information Technology
Ms. Karen Rucando	Secretary   Information Technology
Mr. Christopher Gross	Network Operations Manager   All K-5 Schools
Mr. Christopher Tagliaferro	Network Operations Manager   Monroe Township Middle School
Mr. John Mazzola	Lead Workstation Specialist   Monroe Township High School
Mr. Daniel Pecorino	Network Specialist   Monroe Township High School
Mr. Paul Perschilli, Jr.	Data Specialist   Mill Lake & Woodland Elementary Schools
Mr. Michael Cordero	Workstation Specialist   Applegarth & Oak Tree Elementary Schools
Mr. Ryan Flohr	Workstation Specialist   Monroe Township Middle School
Mr. Alan Lanzetti	Workstation Specialist   Monroe Township High School
Ms. Angela Minton	Workstation Specialist   Monroe Township Middle School
Mr. Eneudy Perez	Workstation Specialist & Webmaster   Brookside & Barclay Brook Elementary Schools
Mr. Eric Silverman	Educational Technology Facilitator





### Our Vision

Monroe Township School District's **Technology Vision** is to provide ALL students with a knowledge and skillset in which they can excel in a technology-driven world.

By supplying a digital universe which consists of next-generation web-enabled equipment and a digital-centric curriculum, we feel our students will be prepared for the dynamic technology landscape of the future.

#### Our Vision's key elements are listed below:

- Provide students with devices based on educational goals, student achievement and budget considerations.
- Maintain a network which is reliable, fast and secure.
- Protect our staff, students' and parents' personal data and maintain a private, secure networking environment.
- Supply our staff and students with proper training, guidance and technical support.
- Continue to develop a curriculum for our learners which inspires the skills and knowledge needed for innovative thinking and digital fluency.







#### **OVERVIEW**

The district's network is made up of over 10,000 devices including routers, switches, servers, laptops, Chromebooks, iPads, printers and more. Each building has its own network which connects to the main router at Monroe Township High School. The network's LAN is considered a hub and spoke setup where all buildings (spokes) connect to a main hub (MTHS).

Each building and classroom are Wi-Fi accessible and nearly 5,000 devices connect to the wireless network infrastructure daily. The district hosts over 300 access points which supply network connectivity to all buildings.

In the summer of 2023, the district installed a new VOIP phone system. We have also recently upgraded our network bandwidth to 1 GB between buildings and 7 GB to the internet.







#### INTERNET

- The district is contracted with Comcast Enterprise Services for both internet and phone. The most recent renewal was signed on 1/2022 and will run through 1/2025. The district has used Comcast as its provider for the last several decades.
- Our current pipeline to the internet is 6,000 Mbps which has proven to be more than enough bandwidth for our district over the last two years. Our baseline on a given day ranges from 800 Mbps to 2000 Mbps district wide.
- Although the FCC recommends at least 1 MB per student/staff in a
  particular building, we have not seen our traffic come close to this
  ratio at any individual location. Even so, it is important to explore
  increasing bandwidth at the next renewal phase in 2025, especially if
  there are plans to increase student device usage in the next five
  years.
- As noted in the chart on the next page, six of our sites share internet resources. They are Applegarth/Oak Tree, Barclay Brook/Brookside, and MTHS/MTMS.







#### **INTERNET (CONTINUED)**

#### **EXTERNAL INTERNET SPEEDS PER BUILDING**

BUILDING	# OF STAFF /STUDE NTS	SPEED IN 2020	SPEED 2021- PRESENT	SPEED/PER PERSON
Applegarth/Oak Tree (Shared)	1188	200 Mbps	900 Mbps	.76 Mbps
Barclay Brook/Brookside (Shared)	949	200 Mbps	1000 Mbps	1.05 Mbps
Central Office	30	200 Mbps	200 Mbps	6.67 Mbps
Mill Lake	612	200 Mbps	1000 Mbps	1.63 Mbps
MTHS/MTMS (Shared)	5143	6000 Mbps	6000 Mbps	1.17 Mbps
Pupil Personnel	10	100 Mbps	500 Mbps	50 Mbps
Woodland	303	200 Mbps	1000 Mbps	3.3 Mbps



#### **PHONES**

In the summer of 2023, the district performed a major upgrade as the entire district phone system (digital) was replaced with an **Alcatel Lucent VOIP system**. The upgrade consisted of not only new phones, but a new extension system, switches and in some cases new cabling. The new system should last the district 10-15 years (or perhaps longer).

The modern VOIP system has given the district the following abilities which were not available on the old digital system.

- Redundancy across the entire system in case of power failure
- Ability to troubleshoot system remotely
- Upgraded phones with added capabilities such as directory search
- Extension dialing between buildings
- Automatic E-mail and phone call to specified parties when a 911 call is made
- Upgraded cabling to use Cat 5e which ties into current network allowing for easy troubleshooting and faster speeds
- Clearer sound as data is transported via VOIP
- Porting of POTS lines into new system





#### **PHONES (CONTINUED)**

#### PHONE DISTRIBUTION FOR DISTRICT

BUILDING	CLASSROOM PHONES	OFFICE PHONES	TOTAL PHONES
Applegarth	43	17	60
Barclay Brook	35	15	50
Brookside	43	15	58
Central Office	3	36	39
Mill Lake	54	17	71
MTHS	164	55	219
MTMS	135	46	181
Pupil Personnel	1	9	10
Oak Tree	56	15	71
Woodland	33	21	54
TOTALS	610	246	856





#### DISASTER RECOVERY PLAN

In February of 2023, the district's Technology Department completed an 80-page **Disaster Recovery Plan** which overviews the backup and recovery processes of the network. It includes servers, network routing and switch components, firewall, phone systems and more.

The goal of the document was two-fold: 1. To gather a list of all critical systems to the network and 2. To supply easy-to-read documentation and resource material to technology staff if the need should arise to implement recovery. The plan will be updated on a yearly basis by the IT Department.

Monroe Township School District

#### INFORMATION TECHNOLOGY DISASTER RECOVERY PLAN

Prepared Date:

February 8, 2023

Revision Date:







#### DISTRICT

- The district currently owns roughly 7,000 devices for student use. MTHS has a 1-to-1 initiative, while the K-8 schools use Chromebooks, iPad and laptop carts.
- Devices are refreshed every 5-to-9 years depending on many factors including device type, make, model and curriculum function. For instance, Chromebooks tend to last about 5 years and need refreshing within that time frame to keep up with software requirements. Windows and Macintosh devices seem to last a little longer as they are more robust.

\*Data as of 9/1/2024

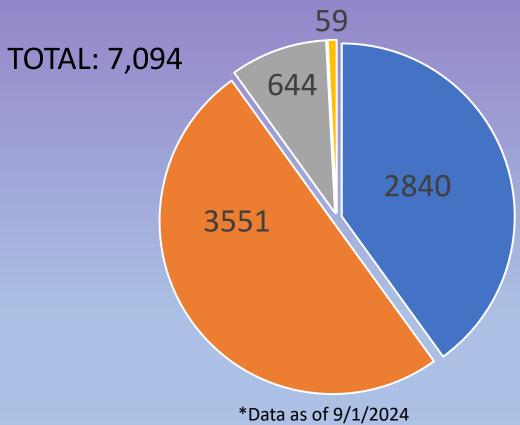






#### **DISTRICT**

**STUDENT DEVICES (DISTRICT WIDE)** 



■ Chromebooks ■ iPads ■ Laptops ■ Desktops





#### **GRADES K-5**

- In school year 2019-20 the district phased out the purchasing of laptops (Windows or Macintosh) for K-5 students and went strictly to Chromebooks and iPads.
- Currently, there are 1,547 Chromebooks, 686 iPads and 79 laptops at the six elementary schools. Most devices are housed in carts which are scattered throughout the buildings.
- With 2,431 students housed at those schools, the goal over the next five years will be to replace out-of-date devices which can no longer receive updates and continue the advancement toward a 1.0 ratio of devices per student.
   Meeting this ratio will be dependent on budget constraints and other factors.

\*Data as of 9/1/2024

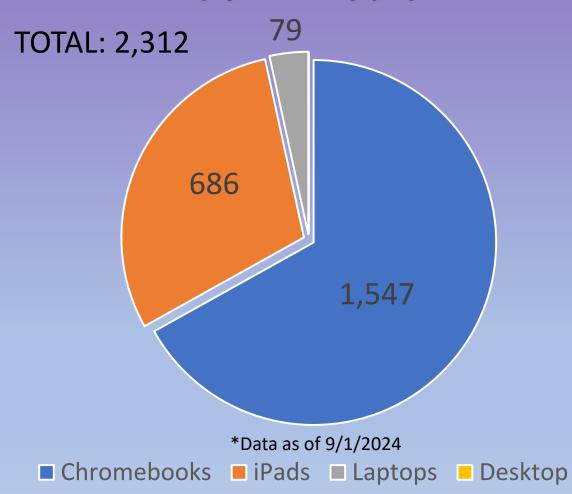






**GRADES K-5** 

**STUDENT DEVICES K-5** 







#### **GRADES K-5**

#### NUMBER OF STUDENT DEVICES PER SCHOOL

SCHOOL	TOTAL DEVICES	CHROMEBOOKS	iPADS	LAPTOPS	STUDENTS
Applegarth	366	261	105	0	372
Barclay Brook	250	87	163	0	331
Brookside	448	234	169	45	433
Mill Lake	447	378	69	0	460
Oak Tree	408	275	133	0	574
Woodland	393	312	47	34	261
TOTAL	2,312	1,547	686	79	2,431

\*Data as of 9/1/2024







#### **GRADES K-5**

Recommendations are based on several factors including:

- Student enrollment
- Age of current devices
- Available budget for given year

#### **ESTIMATED NUMBER OF CHROMEBOOKS PURCHASED BY YEAR**

SCHOOL	2024-25	2025-26	2026-27	2027-28	2028-29
Applegarth	80	60	60	60	90
Barclay Brook	30	30	60	30	60
Brookside	155	60	60	60	30
Mill Lake	11	60	60	90	60
Oak Tree	74	60	60	90	60
Woodland	0	60	60	90	60





#### MONROE TOWNSHIP MIDDLE SCHOOL

The Middle School houses the largest fleet of Chromebooks in the district with a total of 1,293. It also has a small fleet of iPads (203), Laptops (60) and Desktops (31) for a total of 1,587 devices.

With 1,679 students enrolled at MTMS the goal **over the next five years** will be to replace out-of-date devices which can longer receive updates and continue the advancement toward having a 1.0 ratio of devices per student. Meeting this ratio will be dependent on budget constraints and other factors.



\*Data as of 9/1/2024

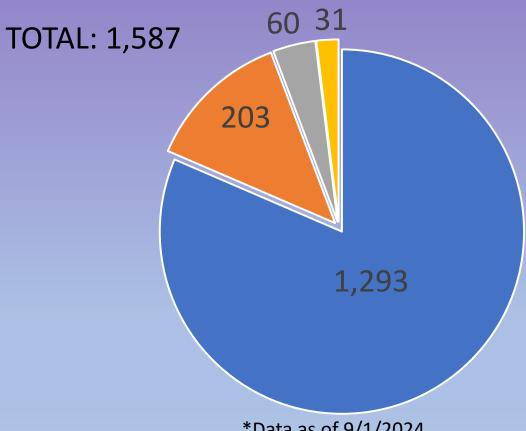






#### **MONROE TOWNSHIP MIDDLE SCHOOL**

#### **STUDENT DEVICES (MTMS)**



\*Data as of 9/1/2024

■ Chromebooks
■ iPads
■ Laptops
■ Desktop







#### **MONROE TOWNSHIP MIDDLE SCHOOL**

#### NUMBER OF MOBILE STUDENT DEVICES PER SCHOOL

SCHOOL	TOTAL DEVICES	СНКОМЕВООКЅ	iPADS	LAPTOPS	DESKTOPS	STUDENTS
MTMS	1,587	1,293	203	60	31	1,679

\*Data as of 9/1/2024







#### MONROE TOWNSHIP MIDDLE SCHOOL

Budget recommendations are based off several factors including:

- Student Enrollment
- Age of current devices
- Available budget for given year



#### **ESTIMATED NUMBER OF CHROMEBOOKS PURCHASED BY YEAR**

SCHOOL	2024-25	2025-26	2026-27	2027-28	2028-29
MTMS	500	200	200	200	200

\*Data as of 9/1/2024

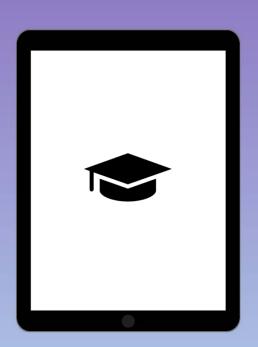






#### MONROE TOWNSHIP HIGH SCHOOL

- In 2011-12 the district initiated its first 1-to-1 student device project, the Monroe Township High School iPad Initiative.
- The district has refreshed the MTHS student iPad fleet on a three-year cycle including refreshes in 2012, 2015, 2018 and most recently in 2021.
   Over the last year, administration has decided to move the refresh cycle to 4 years as this will save the district an estimated \$2 million over a 12year period.



 The next refresh of the iPads will therefore take place for school year 2025-26 and continue every four years thereafter. As in the past, part of the refresh process is to sell (auction) the old iPads. Statistics regarding district technology sales can be found on page number 64.

<sup>\*</sup>The 2012 refresh occurred due to a larger hard drive being needed to store textbooks on the iPad.

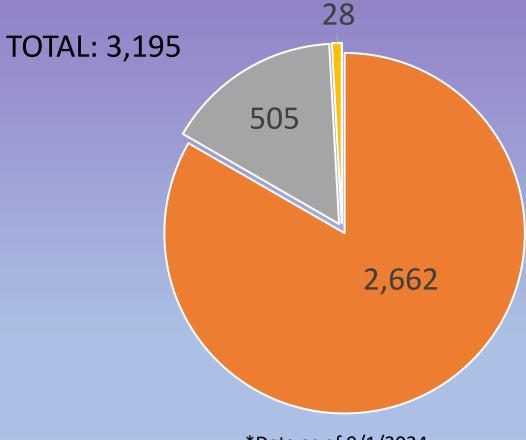






#### **MONROE TOWNSHIP HIGH SCHOOL**

**STUDENT DEVICES (MTHS)** 



\*Data as of 9/1/2024

■ Chromebooks ■ iPads ■ Laptops ■ Desktops

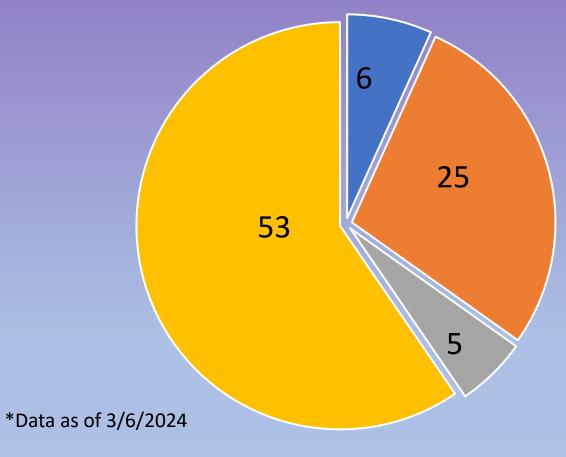






#### MONROE TOWNSHIP HIGH SCHOOL

iPad Repairs for School Year 2023-24



- Minor/Misc. Damage Dead Display
- Lost or Stolen
- Cracked Glass





# Student Devices MONROE TOWNSHIP HIGH SCHOOL

### MTHS iPAD REFRESH HISTORY (WITH 2025-26 PROJECTIONS)

YEAR	STUDENTS	COST
2011-12	1,758	\$1,763,816.56
2012-13	1,880	\$1,316,000.00
2015-16	2,083	\$1,501,953.50
2018-19	2,333	\$1,637,636.06
2021-22	2,499	\$1,608,231.80
2025-26	2,700 (estimate)	\$1,619,012.00





#### **DISTRICT**

#### **CHROMEBOOK REPORT**

DEVICE MODEL	QUANTITY	END OF AUTO UPDATE
Acer Chromebase 24	6	6/1/2021
HP Chromebook 11 G5	53	6/1/2022
Acer Chromebook 15	2	6/1/2022
HP Chromebook 11 G6	378	6/1/2027
HP Chromebook x360 11 G1	2	6/1/2027
Chromebook 3100	1568	6/1/2029
ASUS Chromebox 4	1	6/1/2030
Chromebook 3110	503	6/1/2031
HP Chromebook x360 11 G4	1	6/1/2031
Dell Chromebook 3120	780	6/1/2031

\*Data as of 9/1/2024

Chromebooks should be replaced when "End of Auto Update" is reached.







### Staff Devices

- There are approximately 1,357 staff devices which include 775 Laptops (Windows and Apple), 432 iPads and 135 desktops.
- Typically, the district refreshes staff laptops every 5-7 years as we have found that most devices last this amount of time. In the past the district has refreshed staff devices in a multi-year scenario.
- iPads are refreshed at MTHS every eight years and the K-8 schools purchase iPads from their school budgets when funds are available. iPads are not considered a mandatory tool of instruction for K-8 staff.

#### **LAPTOP REFRESH SCHEDULE**

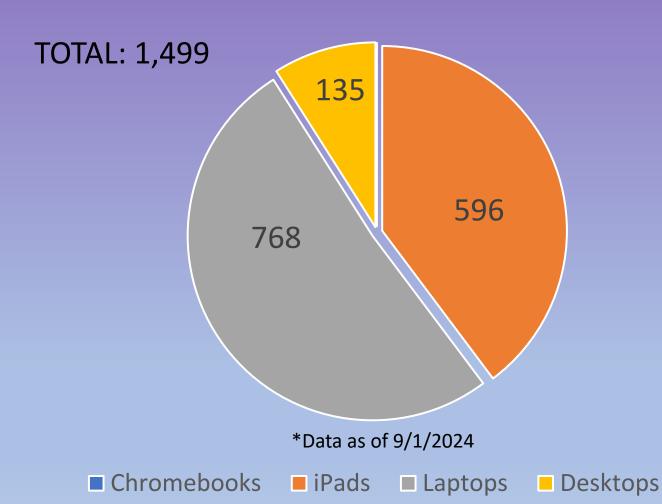
BUILDING/DEPARTME NT	LAST REFRESH	ESTIMATED NEXT REFRESH	ESTIMATED REFRESH COST
K-5 Schools (300 laptops)	2021 and 2022	2026, 2027	\$375,000
MTMS (210 laptops)	2021,2022,2023	2026, 2027, 2028	\$262,500
MTHS (200 laptops)	2020	2027, 2028	\$356,800
Special Services	2020, 2021, 2022	2025, 2026, 2027	\$62,500





### Staff Devices

#### **STAFF DEVICES (DISTRICT)**





### Staff Devices

As part as the MTHS iPad Initiative, teaching staff members at MTHS also receive an iPad. The refresh for this device is every 6-to-9 years depending on budgeting factors. The latest refresh was during the 2021-22 school year where close to 230 iPads were distributed. Included in the purchase is AppleCare and a case.

#### MTHS Staff iPad Purchase Data

REFRESH YEAR	QUANTITY	PRICE
2021	230	\$124,878
2029	250	\$140,000

iPads for K-8 teachers are purchased at the discretion of the building principals. As of 1/12/2024, there were 215 iPads assigned to K-8 staff members. These devices are currently not scheduled for refresh.



#### **DEPARTMENT FOR CAREERS TECHNOLOGY**

The Monroe Township School District Department for Careers Technology encompasses all curricular and cocurricular programs designed to equip students with authentic 21st-century career readiness, life literacies, and key skills. This department is inclusive of all practical arts programs, grades K-12.

Curriculum and instruction is driven by our ability to maintain appropriate practical and instructional technology that aligns with the standards/expectations of the 21st-century educational and professional arenas. Instructional staff (and relevant support staff) are expected to infuse technology into their daily practice, which includes, but is not limited to:

- Access/utilize appropriate industrial software/hardware
- Ongoing system management and maintenance to maintain curricular alignment.
- Regular service/support to ensure students/staff have access to functioning technological assets.
- Weave life literacies (digital citizenship) into all curricular modules
- Demonstrate appropriate care of district technological assets.





# DEPARTMENT FOR CAREERS TECHNOLOGY (Continued)

#### **Curricular/Co-curricular Programs | Technology Utilization**

- Business Education | Hardware, Software, Business Simulations, Dual-credit Learning, Professional Software, Research, General Office Applications
- Family & Consumer Sciences | Early Childhood Education, Culinary Arts Instructional Management, Fashion & Design Instructional Management
- Industrial Arts / Technology Education | Vocational Equipment, Computer Aided Design, 3D Printing, Plotting, Civil Engineering (Surveying), Computer Science, Robotics, Industrial Engineering, Project Lead the Way Curriculum/Learning Management, Television/Media Production (Studio Equipment & Production Software)



# DEPARTMENT FOR CAREERS TECHNOLOGY (Continued)

#### CURRICULAR/CO- CURRICULAR PROGRAMS | SOFTWARE UTILIZATION

**Arduino** 

Autodesk AutoCad

**AutoDesk Inventor** 

**AutoDesk Revit** 

AutoDesk Fusion 360

Robot C 4.x

West Point Bridge Builder (download

new yearly)

NI Multisim

Xilinx Vivado Design Suite (Multiple

Installs)

MD Solids Installer

MakerBot Print

MakerBot Desktop

PLTW Software Page |

https://www.pltw.org/pltw-software

America's Army Education

Virtual Tensile Tester

**AMT SSA 1000** 

Logger Pro 3

Sketchup Pro

Vernier Graphical Analysis

VEXcode V5

Hi-Tech C51-Lite

Hi-Tech C Compiler for PIC-10-12-16

MCU

Robo Code

Digilent Software

NotePad++

Android Studio

Java JDK

Kite Student Portal PLTW



#### **ENGLISH LANGUAGE ARTS**

The 2023 NJSLS for English
Language Arts include the use of
technology to research, produce
writing, and demonstrate
learning through multimedia
projects. Students in English
Language Arts classes meet the
requirements of the NJSLS by:



- Conducting developmentally-appropriate research projects in which students learn to evaluate and cite sources.
- Engaging in all steps of the writing process and leveraging technology to support and enhance writing.
- Present knowledge and information through multimedia projects that leverage one or more mediums.



#### **ESL/Bilingual Education**

As our multilingual learner population grows, our curriculum will evolve to meet students' linguistically and culturally diverse needs. Technology is used in a myriad of ways to support learners, including:

- Facilitate communication through translation apps
- Build background knowledge by making connections.
   between students' experiences and culture and new content
- Support teachers in implementing SIOP strategies, ensuring language is learned through content.
- Providing individualized learning support through various applications and tools that support second language acquisition.



#### **MATHEMATICS & COMPUTER SCIENCE**

Over the next five years the Mathematical and Computer Science curricula will continue to utilize instructional technology to enhance critical thinking skills as students gain a deeper understanding of the concepts in the NJ 2024 Student Learning Standards. Lessons will include the use of appropriate resources to investigate and model mathematics concepts for differentiation such as:

- Incorporating applications such as Desmos to enhance inquiry-based learning.
- Utilizing publisher digital resources: visual learning animations, interactive modeling application videos, progress monitoring tools, differentiated individual practice, etc.
- Using programs that individualize instruction to support struggling learners.
- Engaging students with real-world applications in the study of computer science to allow students to cultivate an in-depth understanding of coding, analyzing, and writing within programming.
- Investigating curricula expansion potential for mathematics and computer science programs.



### **MEDIA SERVICES**

In the next two years, each district media specialist will engage in curriculum revisions that synthesize media literacy mandates, content area topics and themes, and instructional technology to provide comprehensive instruction and application in:

- Accessing and evaluating valid, reliable sources of information
- Distinguishing between facts and opinions.
- Utilizing multimedia tools, including infographics to understand and convey information.
- Synthesize multiple sources to understand nuances of complex topics.





## MTSD ENRICHMENT SERVICES GENERAL & ADVANCED

The MTSD offers 12-month enrichment services to all learners. Our programs include learning opportunities for students qualifying for our advanced enrichment services. All enrichment programs are extensions of curricular programs and utilize all curricular, technological resources. Additionally, MTSD Enrichment Services rely on the use of registration software, payment management services, and student management services to operate our programs.





# **CUITTICULUM**MUSIC & ART PROGRAMS

In the upcoming years, the music and art programs will strive to further expand integrating technology seamlessly into classes and ensembles while aligning with state standards.

#### **Goals include:**

- Keeping up to date with the latest digital programs for our art classes including adobe to master the art of visually communicating through detailed layouts.
- Further integration of communication using technology such as video conferencing to have guest artists from all around the world be able to sign in to listen to ensembles.
- Use the most appropriate digital tools to compose, edit, and arrange music at all grade levels.
- Engaging students in real-world applications of many technology driven arts concepts that fit the needs of 21st century arts education.



### SCIENCE

In our science department we strive to enhance student learning outcomes and prepare students for success in both academic and professional realms. A key component of this involves strategic use of technology while delivering quality standard-driven instruction.

Over the next several years we hope to expand on many areas including:

- Further integration of technology into science instruction to facilitate interactive learning experiences that foster inquiry, collaboration, and critical thinking skills. This will include the expanded adoption of digital resources, simulations, and virtual reality tools to supplement traditional classroom instruction.
- Expand the use of online lab tools to provide students with opportunities to conduct experiments remotely. This will enable access to laboratory experiences beyond the constraints of physical facilities, promoting equity and flexibility in learning.



## **SCIENCE (Continued)**

Investigate further the use of statistical analysis tools and software
packages that enable students to analyze and interpret large
datasets that can be found within science. By using this technology
students can engage in performing statistical tests, create graphs and
charts, and drawing meaningful conclusions from their data. This
cultivates essential data literacy skills and prepares students to
critically evaluate scientific claims and findings in both academic and
real-world contexts.





# **CUTTICULUM**SOCIAL STUDIES

Over the next several years the social studies department will strive to further expand integrating technology seamlessly into instruction, fostering critical thinking, digital literacy, and career readiness skills among students while aligning to all state standards and mandates.

### The long-term goals include:

- Expanded access to electronic primary and secondary sources through curated online databases and archives, enabling students to engage in historical research and analysis.
- Further integration of interactive mapping tools and digital simulations into social studies curriculum to enhance spatial awareness, geographical literacy, and historical understanding.
- Foster responsible digital behavior and ethical use of information through discussions on digital rights, privacy, and intellectual property rights.
- Engaging students in real-world applications of social studies concepts, such as analyzing historical trends in economics, politics, and society, to prepare students for diverse career pathways.







# **CUITTICULUM**WORLD LANGUAGE

Students in World Language build cultural competency by honing their reading, writing, speaking, and listening skills through a study of culture. As students transition from foundational skills in earlier classes to application of language skills in higher level courses, they utilize technology to:

- Research issues and their impact upon different regions and cultures (example: climate change).
- Access culturally authentic resources, including news outlets, government websites, museum's digital curations, podcasts, and music.
- Remove barriers to connecting with students in classrooms around the world and hear from experts in various fields who work outside the U.S.







### **CORE WEB APPLICATIONS LIST**



#### Adobe Creative Cloud - Grades K-12

Adobe Creative Cloud is used primarily by elective class students and office employees. Photoshop and Illustrator are the apps that students primarily use, and employees use it for its PDF abilities.



#### Atlas - Grades K-12

Curriculum management system to help ensure standards-alignment, curricular mandates are met, consistency between classrooms and schools, and other QSAC compliance measures.



### **AutoDesk – Grades 9-12**

Autodesk offers a range of software solutions tailored for K-12 schools, with a primary emphasis on educational tools geared towards design, engineering, and fostering creativity among students.









### **CORE WEB APPLICATIONS LIST**



**BookFlix – Grades K-3** 

Database of paired storybooks and nonfiction for use in classrooms, the media center, or individual student use at school or at home.



Clever - Grades K-8

Clever is our single sign-on portal for grades K-8. This allows students to log in once, and get direct access to sites such as Study Island, Savvas, BrainPOP etc.



**CommonLit – Grades 3-12** 

Standards-aligned text to supplement units of study. Texts are leveled to support differentiation. Specific skills can be targeted.



**Destiny – Grades K-12** 

Collection management system for the district media centers. Students can search for books, place holds and check out books, as well as write book reviews.







### **CORE WEB APPLICATIONS LIST**



**EBSCO Host – Grades 6-12** 

EBSCO Host contains age-appropriate databases that support the research process. Media specialists collaborate with classroom teachers to conduct introductory and refresher lessons.



**Ellevation – Grades K-12** 

Student management system and information distribution for multilingual learners.



**Ellevation Strategies – Grades K-12** 

Job-embedded professional learning source to support staff in teaching multilingual learners.





### **CORE WEB APPLICATIONS LIST**



### **Google Education Suite – Grades K-12**

The Google Education Suite is widely used by the K-12 students. Students and staff create and collaborate in the main applications (Drive, Docs, Sheets, and Slides). In addition to this, our K-8 classes leverage the learning management system, Google Classroom. Our New Staff Orientation heavily leverages the Suite as well.



### iMovie and Clips - Grades 9-12

Video producing apps used by students for class projects.



### **LinkIt – Grades K-12**

Data management system to track student progress. Intervention management system for students identified for Tier 2 or 3 support.







### **CORE WEB APPLICATIONS LIST**



Math IXL – Grades K-12

Pilot program for 2024-25. Gain fluency and confidence in math as IXL helps students master essential skills at their own pace through fun and interactive questions, built in support, and motivating awards.



### McGraw Hill/Connect Ed – Grades K-12

The McGraw Hill/Connect Ed website is used for science, social studies, and math across multiple grade levels K-12. In addition to that, we have Music, Economics, and Health textbooks on this site as well.



### **NWEA MAP Fluency – Grades K-8**

Foundational reading skill and oral reading fluency assessment used to drive classroom instruction and monitor student developmental reading progress.







### **CORE WEB APPLICATIONS LIST**



**NWEA MAP Growth – Grades K-12** 

Benchmark assessment tool for ELA and Math. Drives classroom instruction. Serves as a data point in monitoring overall student progress.



Office 365 - Grades K-12

The Office 365 suite offers online and software versions of Word, Excel, PowerPoint and Outlook. E-Mail and contact system for staff and students is housed in Outlook. Students and staff can use these systems for creation and collaboration.



Quill - Grades 9-12

Targeted grammar and language skills support to improve writing. Specific lessons are embedded into the Pre-AP I and Pre-AP II curriculum.







### **CORE WEB APPLICATIONS LIST**



ReadWorks - Grades 9-12

Standards-aligned text to supplement units of study. Texts are leveled to support differentiation. Specific skills can be targeted, and texts are available for all content areas.



### Realize MyView Literacy – Grades K-5

Digital platform that supports and supplements the print versions of our core literacy program.



Rockalingua – Grades 3-5

Supplemental resource for elementary world language classrooms containing songs and practice activities.







### **CORE WEB APPLICATIONS LIST**



Savvas - Grades K-12

Savvas Learning houses our K-8 Math and Accelerated Math textbooks. It also contains K-5 My View Literacy (our reading program) and Grade 4 Social Studies. Students can read, practice, and test while teachers plan, create, and check for understanding.



### Scholastic Platforms - Grades K-12

This is an addon for classes that subscribe to Scholastic Magazine. Staff and Students can log in to see a digital version and supplemental activities.



### Schoology - Grades 9-12

Schoology is our Learning Management System at MTHS. Teachers can upload lessons, classwork, and exams while students complete work and check in daily on assignments. Teachers can also communicate with students easily and share multimedia content.









### **CORE WEB APPLICATIONS LIST**



### Study Island – Grades K-8

Standards-driven instruction and reinforcement at students' developmental levels in math and language arts, as determined by MAP



#### **TrueFlix- Grades 3-5**

Database of paired informational text and videos in the areas of science and social studies to support curriculum or for general student use in school or at home.



### **Turnitin - Grades 9-12**

Writing support to: Improve style, grammar and mechanics, avoid plagiarism, aid peer review, enhance writing feedback and detect AI generated content.







## **CORE WEB APPLICATIONS LIST**

APPLICATION	GRADE LEVEL (S)	SUBJECT
Adobe Creative Cloud	K-12	All
Atlas	K-12	All
BookFlix	K-3	Media
Clever	K-5	All
CommonLit	3-12	ELA
Destiny	K-12	Media
EBSCO	6-12	Media
Ellevation	K-12	ELL
Ellevation Strategies	K-12	ELL
Google Education Suite	K-12	All
iMovie and Clips	9-12	All
LinkIt	K-12	All
Math IXL	K-5	Math
McGraw Hill/Connect Ed	K-12	Science, Social Studies and Math





## **CORE WEB APPLICATIONS LIST**

APPLICATION	GRADE LEVEL (S)	SUBJECT
NWEA MAP Growth	K-12	ELA and Math
NWEA MAP Fluency	K-3	ELA
Office 365	K-12	All
Quill	9-12	ELA
ReadWorks	9-12	ELA
Realize MyView Literacy	K-5	ELA
Rockalingua	3-5	World Language
Savvas	K-12	ELA, Math, Science and SS
Scholastic Platforms	K-12	Media
Schoology	9-12	9-12
Study Island	K-8	ELA, Math
TrueFlix	3-5	Media
Turnitin	9-12	All



## Student Information System



### **GENESIS**

- Genesis is the student information system the district uses for attendance, grading, course scheduling, conference scheduling, connecting our student information to the various platforms used in district, and more. Teachers use this site daily for attendance. The high school and middle school use it to track behavior/discipline.
- Grading across all levels is completed in Genesis. Each course has a specific profile that is used for grading. On the parent end of Genesis, parents can log in to see scores for grades 6-12 year-round. Parents can view elementary report cards in Genesis as well.
- All student/staff schedules are housed in Genesis. When parents sign in, they can see which class their child is in at that moment, and/or their full schedule. On the administrative end, schedules can be changed for both staff and students. At the high school level, Genesis connects to Schoology to load proper courses.
- In addition to student data and course information, Genesis can be leveraged for lesson planning, student medical information (nurses), and bathroom log-ins. It has applications for all staff members with access across the various levels for employees.

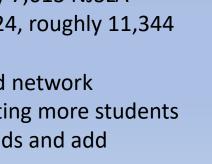






## State Testing

- The district utilizes student devices to support state mandated testing, which include NJSLA, NJGPA, DLM, CogAT and ACCESS.
- Many students (K-12) also take the Measures of Academic Progress (MAP) test during fall, winter and spring.
- The K-8 grade levels typically use Chromebooks for testing, while grades 9-12 use iPads.
- The networks at each school are robust enough to test all students at the same time, however grade levels typically test individually.
- In 2022-23, the district submitted approximately 7,613 NJSLA tests and 1,313 NJGPA tests. In the fall of 2023-24, roughly 11,344 MAP Tests were given.
- With device quantities increasing and continued network improvement, the district plans to continue testing more students at the same time. This will shorten testing periods and add instructional hours for our students.





## Virtual Learning

In various parts of the 2019-20, 2020-21 and 2021-22 school years, the Monroe Township School District loaned devices to students for virtual learning. Over 2,000 Chromebooks were supplied as students and teachers transitioned to virtual meetings instead of face-to-face classroom instruction.

The deployment and collection of the devices was not an easy task, however with proper planning and tremendous cooperation from our parents, staff and students the district was able to recover nearly 100% of all loaned devices (in some cases, this included Wi-Fi hot spots).

After gathering data regarding the loaning of our devices the district has developed the **Virtual Technology Distribution Plan** which is outlined on the following page.







## Virtual Learning

## **VIRTUAL TECHNOLOGY DISTRIBUTION PLAN**\*To be implemented if Virtual Schooling is needed\*

- 1. All students in need of a device for virtual learning will be supplied one.
  - a. Grade K-8 students will be supplied a Chromebook.
- b. Grade 9-12 students will use their already-assigned district iPads.
- 2. Parents will fill out an online form to request a device.
- 3. Devices are distributed to K-8 students at their home school.
  - a. If multiple students need a device, parents will pick up devices at their oldest child's school.
- 4. The Technology Department will keep an updated database of all devices which are loaned. Communication to parents will be made throughout the process regarding collection and pickup times.
- 5. If support is needed regarding the loaner device, parents may reach out to IT Department via the tech support E-mail address.
- 6. All parents borrowing a device will sign a waiver form via Parent Access. This documentation will explain that the device will need to be paid for in full if it is not returned.





#### **NEW STAFF**

- All new hires receive 4 hours of grade band specific technology training each school year.
- Individual and small group support is provided on an as needed basis by the Educational Technology Facilitator, staff developers, mentors, and PD trainers.

#### **2023-24 HIGHLIGHTS**

- On demand technology courses available for asynchronous learning in the PD course catalog
- Al in the Classroom, Grades 9-12
- Leveraging Technology in a Two-Teacher Classroom
- LinkIt Data Manager Training
- MAP Administration and Reports Training
- MyView Trainings
- TurnItIn Training
- IXL Trainings
- Ellevations Training







#### **LOOKING AHEAD**

In accordance with the district's strategic plan, and district, school, and staff professional learning goals we are committed to continuous alignment of all PD to the professional learning standard to ensure equitable learning outcomes for all students and staff through:

- PD opportunities driven by need
- Prioritizing equity in terms of practices, drivers, and foundations
- Supporting a culture of collaborative inquiry and utilization of technology resources to deliver high quality curriculum, assessment, and instruction







### **TECHNOLOGY COURSE SCHEDULE 2023-24**

ACTIVITY TITLE	START DATE	END DATE	ENROLLED
AI Discussions Meeting - Closed Meeting	10/6/2023	10/6/2023	1
AI in the Classroom - MTHS Only	1/31/2024	1/31/2024	20
Applegarth: Course: MyView Instruction and	1/12/2024	3/15/2024	7
Applegarth: Course: MyView Instruction and	1/12/2024	3/15/2024	12
Components Grade 5			12
Barclay Brook: PLC: MyView Grade 1	1/12/2024	3/15/2024	1
Barclay Brook: PLC: MyView Grade 2	1/12/2024	3/15/2024	10
Barclay Brook: PLC: MyView Kindergarten	1/12/2024	3/15/2024	4
Barclay Brook: PLC: Pre-school	1/12/2024	3/15/2024	6
BBS PLC 23-24: Examining myView Literacy to	1/12/2024	3/15/2024	6
Best Support ELLs and Tier 1 Student Support in the Classroom	1/12/2024	3/13/2024	U
BBS PLC 23-24: myView Barclay Brook	1/12/2024	3/15/2024	0
BES PLC 23-24:myView Exploring the Resources Grade 4	1/12/2024	3/15/2024	7
Brookside: PLC: MyView- Exploring the Resources Grade 3	1/12/2024	3/15/2024	10
Brookside: PLC: MyView- Exploring the Resources Grade 4	1/12/2024	3/15/2024	10
Brookside: PLC: MyView- Exploring the Resources Grade 5	1/12/2024	3/15/2024	9
Brookside: PLC: MyView- Implementation and Time Management Grade 3	1/12/2024	3/15/2024	0
Brookside: PLC: MyView- Implementation and	1/12/2024	3/15/2024	1
Brookside: PLC: MyView- Implementation and	1/12/2024	3/15/2024	4
Digital Art Collaborative Planning	12/20/2023	12/20/2023	2
Getting Started with MyView - Grade 4	9/28/2023	9/28/2023	3
Getting Started with MyView - Grade 4 Applegarth Morning Session	9/28/2023	9/28/2023	7
Getting Started with MyView - Grade 5 Applegarth Afternoon Session	9/26/2023	9/26/2023	9
Getting Started with MyView - Grade 5 Applegarth Morning Session	9/26/2023	9/26/2023	2
High Scope Curriculum Professional	10/24/2023	11/16/2023	4
Honors W orld History New Textbook Adoption	1/24/2024	1/24/2024	2
Leveraging Technology in a Two-Teacher	1/9/2024	1/9/2024	9
Lexia Pilot Training and Collaborative Planning	10/27/2023	10/27/2023	8





### **TECHNOLOGY COURSE SCHEDULE 2023-24 (CONTINUED)**

ACTIVITY TITLE	START DATE	END DATE	ENROLLED
LinkIt Intervention Manager for District and	2/1/2024	2/1/2024	29
Building Leaders (Remote or In Person)			
LinkIt Intervention Manager for Interventionists	2/1/2024	2/1/2024	12
MAP (MTMS): Student Goal Setting and	2/7/2024	2/7/2024	24
Building Learning Paths	2/1/2024	2/1/2024	24
MAP Fluency (PM)	10/23/2023	10/23/2023	20
MAP Training K-5 Interventionists (AM Session)	10/23/2023	10/23/2023	21
MAP: Essential Reports and Builing Learning	10/24/2023	10/24/2023	16
MTHS Course: Leveraging GENESIS and	1/12/2024	2/16/2024	43
MTHS PLC: Genesis Feedback Code	1/12/2024	2/16/2024	3
MTHS: Teaching and Learning with the iPad for Certificated Staff	9/1/2023	9/1/2023	10
MTHS: Teaching and Learning with the iPad for	9/1/2023	9/1/2023	8
MTMS: COURSE: Getting Organized with Google Apps	1/12/2024	3/15/2024	20
myView PD (SPED)	12/14/2023	12/14/2023	6
myView PD (SPED)	12/19/2023	12/19/2023	10
myView PD (SPED)	12/20/2023	12/20/2023	10
myView PD (SPED)	1/24/2024	1/24/2024	11
myView PD (SPED)	1/29/2024	1/29/2024	13
myView PD (SPED)	2/5/2024	2/5/2024	14
MyView-SPED Demo (Pre-Registration Only) -	3/27/2024	3/27/2024	9
MyView-SPED Demo (Pre-Registration Only) - BB	3/26/2024	3/26/2024	8
MyView-SPED Demo (Pre-Registration Only) - BS	3/26/2024	3/26/2024	12
MyView-SPED Demo (Pre-Registration Only) - ML	3/14/2024	3/14/2024	8
MyView-SPED Demo (Pre-Registration Only) -	3/27/2024	3/27/2024	10
MyView-SPED Demo (Pre-Registration Only) - WL	3/14/2024	3/14/2024	6
New Staff Orientation - Day 2	8/25/2023	8/25/2023	33
New Staff Orientation - Day 3	8/28/2023	8/28/2023	33
NJ Center for Tourette Syndrome & Associated	10/20/2023	10/20/2023	8
Nurses 2023-2024 Web-based PD for CEUs	1/12/2024	3/15/2024	13





### **TECHNOLOGY COURSE SCHEDULE 2023-24 (CONTINUED)**

ACTIVITY TITLE	START DATE	END DATE	ENROLLED
Nurses 2023-2024 Web-based PD for CEUs	1/12/2024	3/15/2024	13
NWEA MAP Trainings	8/2/2023	8/3/2023	19
Oak Tree: Course: Navigating MyView Reading and Writing Grades 2-3	1/12/2024	3/15/2024	17
Oak Tree: Course: Navigating MyView Reading and Writing Grades K-1	1/12/2024	3/15/2024	9
Oak Tree: PLC: MyView Grade 1	1/12/2024	3/15/2024	0
Oak Tree: PLC: MyView Grade 3	1/12/2024	3/15/2024	0
Oak Tree: PLC: MyView Kindergarten	1/12/2024	3/15/2024	0
OT/PT 2023-2024 Web-based PD for CEUs	1/12/2024	3/15/2024	11
PLC 23-24 AES/MTMS: VEX Robotics	1/12/2024	3/15/2024	4
PLC 23-24 at AES: Getting Started with MyView	1/12/2024	3/15/2024	1
PLC 23-24 at ML: Folk Music and Dance	1/12/2024	3/15/2024	1
PLC 23-24 at ML: Implementing the Savvas myView Literacy Program	1/12/2024	3/15/2024	6
PLC 23-24 at MTMS: DI through Virutal Field Trips	1/12/2024	3/15/2024	2
PLC 23-24 at MTMS: Grade 6 enVisions Math Supplemental Resources	1/12/2024	3/15/2024	5
PLC 23-24 at WL: myView	1/12/2024	3/15/2024	1
PLC 23-24 at WL: myView 5th Grade PLC	1/12/2024	3/15/2024	4
PLC 23-24 at WL: myView PLC 4th Grade	1/12/2024	3/15/2024	5
PLC 23-24 at WL: myView PLC Special	1/12/2024	3/15/2024	6
PLC 23-24: Destiny Discover Collections Supporting MyView	1/12/2024	3/15/2024	5
PLC at Woodland for 23-24: PLC: MyView	1/12/2024	3/15/2024	1
Reading Eggs Reboot	9/1/2023	9/1/2023	2
Speech Pathologists 2023-2023 Web-based PD	1/12/2024	3/15/2024	14
Summer Series: Session 1 - Overview of	8/28/2023	8/28/2023	6
enVisions Math for K-5 Paraprofessionals		0, 20, 202	Ů
Summer Series: Session 1 - Overview of myView Literacy	8/28/2023	8/28/2023	3
Summer Series: Session 2 - Overview of enVisions Math for K-5 Paras	8/28/2023	8/28/2023	3
Summer Series: Session 2 - Overview of myView Literacy for K-5 Paras	8/28/2023	8/28/2023	4
Summer Series: Session 3 - District Technology Refresher for Paras	8/28/2023	8/28/2023	11
Using MAP Growth and Fluency Together	2/6/2024	2/6/2024	10
Woodland: PLC: Envisions	1/12/2024	3/15/2024	1





## Technology Support Services

- The district technology department supports staff, students and parents with school-related technology needs. Each year, thousands of requests are handled by the department ranging anywhere from hardware issues to software and database support.
- The department serves all 10 buildings in the district and is responsible for over 10,000 devices including roughly 8,029 staff and student devices (Laptops, iPads, Chromebooks and Desktops).
- Staff support is requested via a ticket system and response time is targeted to be within 1 hour of ticket submittal. Parents and students should reach out to their child's teacher for support first, however there are times in which the department deals directly with students and parents.
- The technology department is also responsible for many hardware and software applications including the district's SIS system (Genesis), the district website, the phone system, staff/student contact system (FinalSite) and many of the online databases our staff and students use.
- The technology department maintains the district network including security of our devices and data.

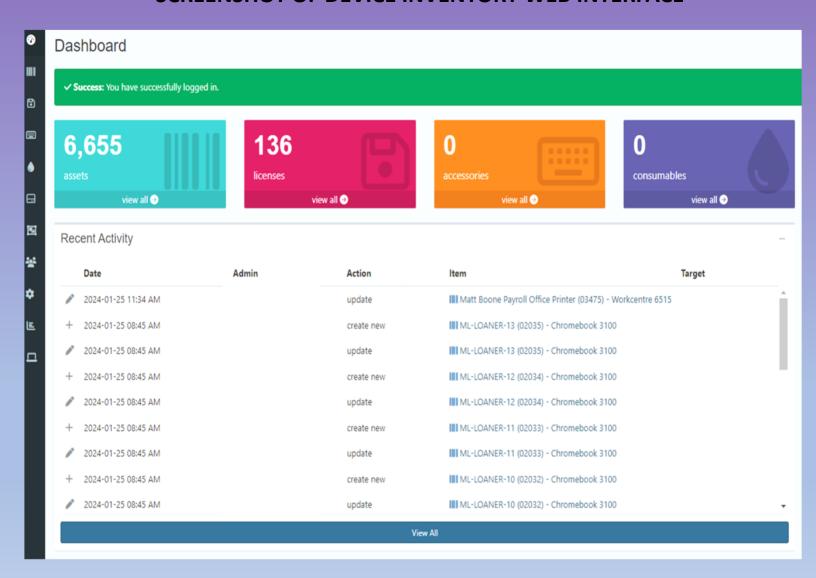






## Technology Support Services

#### SCREENSHOT OF DEVICE INVENTORY WEB INTERFACE

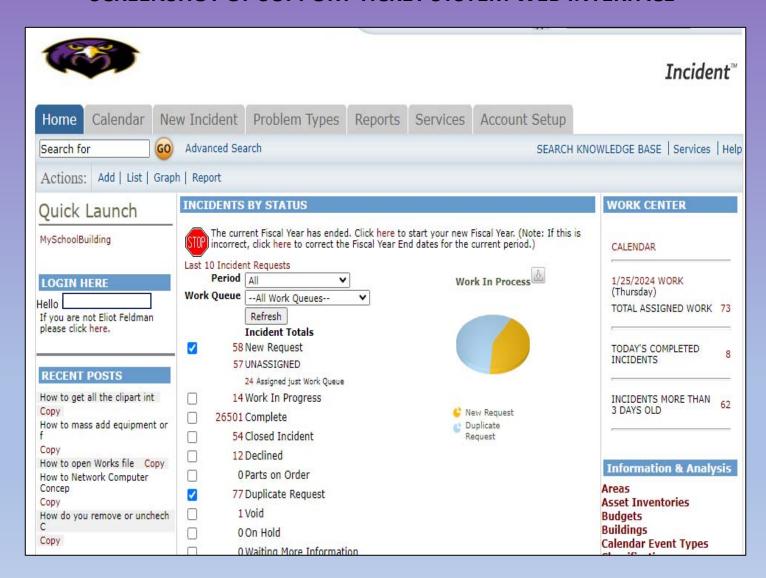






## Technology Support Services

#### SCREENSHOT OF SUPPORT TICKET SYSTEM WEB INTERFACE







# Grants & Funding EDUCATIONAL RATE (E-RATE)

Monroe Township School District applies for Education-Rate (E-Rate) each year. Typical items accepted via the E-Rate application include Internet Services, Wireless Access Points, Network Switching and Routers and in some cases the licensing for WAP and Network devices.

Over the next five years the district will continue to apply for E-Rate funding. The application process starts in January of the given year. Based on many factors, the Schools and Libraries Program of the Universal Service Fund typically allocates reimbursement to the district after services are received and any invoices to the USAC are approved.

#### **E-RATE DISBURSEMENT 2020-2022**

E-RATE YEAR	TOTAL AUTHORIZED DISBURSEMENT
2020	\$87,148.19
2021	\$62,611.20
2022	\$57,709.00





## Grants & Funding

### **TECHNOLOGY PURCHASES**

**Recent Grant Purchases Exceeding \$7,500** 

GRANT	YEAR	DEVICES	TOTAL
Title 1	2020-21	Computers	\$9,119,52
Digital Divide	2020-21	Chromebooks	\$201,642.72
CARES Act	2020-21	Chromebooks	\$23,753.00
CARES Act	2020-21	Laptops	\$26,117.00
Title 1	2020-21	Chromebooks	\$8,118.59
Title 1	2021-22	Chromebooks	\$27,233.01
Title 1	2021-22	Printer	\$13,074.64
Middle Grades	2021-22	Chromebooks	\$16,661.51
Middle Grades	2021-22	Apple Products	\$8,859.00
Middle Grades	2023-24	iPads	\$7,607.00





## Recycling & Sales

The district currently schedules device recycling pickups multiple times a year. Items that hold strong resale value are typically sold via **GovDeals.org**. Below are the recent schedules for both recycling and sales. The district plans to continue recycling and selling used equipment over the next five years.

#### **RECENT RECYCLING PICKUPS**

RECYCLING DATE	BUILDINGS
8/28/2024	All
1/4/2024	All
8/29/2023	All
10/11/2022	All
4/5/2022	All

### **RECENT DEVICE SALES**

SALE DATE	ITEMS	SALE PRICE
1/28/2024	Chromebooks, iPads, Laptops, Desktops, etc.	\$12,800
3/8/2023	Chromebooks, iPads, Laptops, Desktops, etc.	\$22,800
2/14/2022	MacBooks	\$3,860
2/14/2022	Sale of MTHS Student iPads	\$289,000





## Web Filter

- The district utilizes a cloud-based content filtering solution which safeguards our students and staff from obtrusive internet material.
- Each day **hundreds of thousands** of sites are sent through the filter giving our staff confidence that our students are viewing information which is both purposeful and safe.
- Students who take home a device, for example students at MTHS (iPads), are filtered on those devices whether they are on the district network or not. This gives added protection for our students and assurance for parents that the devices their students are given from the district are used for educational purposes.
- The district will continue to use a cloudbased filter over the next five years and continue to analyze various product vendors for pricing and scalability options. The current web filter contract is renewed on a yearly basis.





## Relationships & Partnerships

The MTSD utilizes various digital platforms/tools to communicate critical and celebratory information to the entire Monroe Township learning community. Additionally, our district relies on digital communications as foundational tool for our emergency management plans.

Most recently, the district has been utilizing digital media to generate partnerships with local organizations/business, in support of our community growth initiatives.







## District Website

The district website will be undergoing a migration in late 2024 or early 2025. The new platform will enhance overall performance and user experience. This update will improve site functionality, streamline navigation, and significantly boost mobile responsiveness.

The new site will integrate seamlessly with our staff and parent communication system, enabling the district to create more dynamic and interactive communication.

