Timberlane Regional School District
Technology Plan
2023-2028

District Technology Plan 2023-2024 through 2027-2028

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Timberlane Regional School District

School Administrative Unit #106

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2022-2023 District Technology Plan Advisory Committee

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Michael Rice	Technology Teacher	Pollard School
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Laura Shute	Teacher	Pollard School
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District Mission Statement

The mission of the Timberlane Regional School District is to engage all students in challenging and relevant learning opportunities, emphasizing high aspirations and personal growth.

Technology Vision Statement

The Timberlane Regional School District's Technology Vision is to provide an environment for students to build contemporary skills through seamless integration of technology that supports the most effective methods of learning and core instruction. Technology should enhance and build students' critical thinking, problem solving, analytical, communication, and collaboration skills while making learning more engaging. The District promotes professional development and technology integration proficiency as an essential component

of the implementation and adoption of technology that embraces the philosophy of lifelong learning.

Demographics

The Timberlane Regional School District includes a High School, Middle School, five Elementary Schools, and a Performing Arts Center. The District is part of School Administrative Unit 106 and serves the towns of Atkinson, Danville, Plaistow, and Sandown. Please visit our website at www.timberlane.net. As of October 2022, the district has 3,304 students and 650 permanent staff members.

Recent Accomplishments (2017-2022)

During the previous past years the district's technology infrastructure and integration has increased dramatically. Part of the reason for this was the global COVID-19 pandemic which forced school districts like TRSD to educate students and conduct their business remotely. This accelerated many initiatives including ensuring every student and staff member had a district assigned device to use and the adoption of several educational and business operation applications to facilitate remote learning and processes.

Among the accomplishments of the past few years include but not in limited to:

1.) The completion of the district's dedicated device initiative: Every student (Preschool - Grade 12) and staff member has an assigned district owned and maintained device.

2.) The widespread implementation of an online LMS (learning management systems) like Google Classroom which enable teachers to organize classroom communications, assignments, grading, and media sharing digitally.

3.) The district has procured many applications to assist in the ability to communicate and collaborate with students including Zoom, Kami (pdf editor), and Screencastify to name a few.

4.) The SAU central office has modernized many systems to be more efficient including moving to online documents that require signatures, the ability to access all core applications remotely and securely from anywhere by moving to cloud hosted applications.

5.) The district upgraded Internet connectivity at all schools and the central office. The district moved from slow and inefficient Comcast modems to high speed fiber connections.

6.) Upgraded network infrastructure including new firewalls, switches, and wireless access points for more robust and secure connectivity.

7.) Increased security and safety district wide by upgrading and adding to the video surveillance system and access control systems.

8.) The technology department has created many online learning resources for teachers and other staff. These resources include links to reference materials as well as short task based videos on various topics.

9.) The district and schools website were revamped to provide better access to resources for all

stakeholders.

10.) Social media accounts were created for the district and all schools (Facebook, Twitter, and Instagram) that are all administratively controlled to better communicate out to the community.

11.) Consolidated many servers in the schools with moving applications to cloud based platforms as well as implementing VM's (virtual machines). This effort also reduced our electrical draw and cooling overhead needed in the network closets.

12.) Replaced every printer and copier in the district with new leased ones and started to phase in centralized printing cloud queue printing reducing cost per page printing.



Curriculum Integration

The District Technology Plan Advisory Committee believes that in order to effectively and meaningfully integrate technology, curriculum deployment plans must drive technology use and implementation, rather than technology driving the curriculum. Technology effectively integrated will prepare students for the next levels of their education and in their future careers. Today's children today are digital natives having grown up with technology around them and in their everyday lives but this does not mean that they know how to use technology to learn effectively. This is where schools and educators need to step in and teach children the best ways to use technology to learn, understand, and grow.

When integrated properly, technology can be a very effective tool to engage students. Students learn more when they are invested in the learning process and technology can help in this regard. Students today are called digital natives in that they grew up with technology around them and are comfortable using it. With proper technology integration into the curriculum, we can teach students how best to learn with technology and get the most of it.

GOALS

1. Research and implement new LMS (Learning Management System) - The district is looking to move to a more robust and efficient LMS solution that aligns easier with required standards. Some goals of a new LMS would be to provide better audio/video support within lessons. *(2025-2026)*

2. Incorporate new modes of technology instruction at the elementary level with a mix of traditional in class instruction and teacher coaching. Coaching will involve working with core classroom teachers on the incorporation of grade appropriate technology skills/competencies within their lesson plans. (2023-2024 and beyond).

3. Continually explore new technology applications that will help aid classroom instruction. (Ongoing).



Access to Technology

An accomplished goal from the last Technology Plan was to have a dedicated device for each student (preschool to grade 12) in the district. These are primarily Chromebooks with certain cases of iPads or laptops in cases of required by an IEP or 504. Primary grades have chromebooks in the classrooms housed within charging carts. Each student is assigned a dedicated Chromebook and currently does not take the Chromebook home aside from Distance Learning Days(DLD). For DLDs, the chromebooks have an assigned protective sleeve with a power adapter in the side pocket.

For grades 6-12 each assigned student has a Chromebook that they take home with them every day. Students are given a new Chromebook at the very end of 5th grade or beginning of 6th to use for their Middle School careers. At the completion of 8th grade, they turn in their devices and get assigned a new Chromebook to use throughout their high school careers. At the completion of high school, they have the option to either keep that Chromebook or donate back to the district.

At both 6th and 9th grades, parents/students are required to sign the district's Chromebooks acceptable use and care document and also have the opportunity to purchase the district's device protection plan for insurance against most damages.

Paraprofessionals and other support staff members have dedicated chromebooks. Teachers and administrators are primarily laptop users but over the past two years the district has moved towards Chromebooks for them as the costs are significantly lower than laptops and the processing power and screen sizes are compatible with laptops. The one exception to moving to Chromebooks is special education professionals who need laptops to run required applications. Very few desktops remain in the district but are still used in engineering and coding labs at the high school and at front desk areas of each school.

The network infrastructure consists of all fiber Internet connections with 200MB throughput at each school except the high school and middle school which share a 2GB connection. Within the schools gigabit port switches and next generation WiFi (802.11ax) access points have been upgraded during the last technology plan cycle. The district also recently updated all firewalls to next generation (NG) firewalls with the capability to support remote VPN connections.

There are few physical servers left in the district as most services have been migrated to cloud based applications. The purpose of the remaining servers is only account management (Active Directory) and a few remaining File Storage shares.

All remaining laser printers are Ricoh and part of the district's new lease from starting in 2020-2021 and will more mostly phased out by the end of 2026. The district also has Ricoh MPC's in each school (multi function copiers) which use the security fobs staff have to swipe in to release from a cloud based print queue.

All core subject classrooms now have wall mounted projectors and the projectors on carts that used to be prevalent in the district are all but gone.

GOALS

1.) Continue supporting and funding a 4-5 year life cycle for the Dedicated Device Initiative program for all grades and staff. Evaluate the devices procured and costs associated with yearly. *(Ongoing)*
2.) Continue supporting and funding network infrastructure and security systems upgrades and improvements to support a 5-7 year cycle depending on technology. Evaluations will research new technologies and the costs associated with. *(Ongoing)*
3.) Continue to support and fund classroom technologies like projectors, smart boards, etc. Evaluate new products and costs associated with them. *(Ongoing)*
4.) Upgrade the backend Phone system PBX and voicemail system district wide. *(2024-2025)*



Business Operations Technology

Business operations technology is housed and/or managed at the district office. The following services are currently in use. These systems are all by in large securely hosted in the cloud which was a goal of the last technology plan. Going forward for the next five years and beyond the district will explore new technologies and techniques to enable our business operations to operate more efficiently.

- Tyler Technologies School ERP Pro - Financial and HR
- Powerschool SIS with online enrollment - Student Information System
- Mosaic - Onsite POS (point of sale) meal programs
- MySchoolBucks - Online payments for meal programs and school programs
- Pandadoc - online documentation for digital signatures and document workflows
- Microsoft Office 365 - Office applications and email hosting
- Frontline Applitrack - Posting positions and online recruitment
- Frontline Absence Management - for automated substitute notifications
- Time Clock Plus - online time and attendance management
- DocStar - online document management and repository
- Papercut - printing management
- Sharepoint - Document and workspace management
- Active Directory - Account management
- Wordpress - Website management and hosting
- Google Educational workspaces - Google suite of applications (educational version)

GOALS

1.) Align absence and time management applications to be more integrated into ERP system. This will help make the payroll process as well as the way staff puts in for paid time off more efficient. *(2024-2025)*
2.) Finish centralized printing project. The goal is to remove as many expensive laser printers as possible (in a phased approach) and move to centralized printing at the copiers in schools to promote less waste and cost per page printing. *(2025-2026)*
3.) Implement a system that will process and track professional development hours and funds expensed/available online. (2024-2025)
4.) Upgrade food service payment system to improve reporting and parent/guardian online experience around fund transfers and free and reduced applications. (2023-2024)

Technology Literacy Skills Development

Proficient technology literacy skills for staff is imperative to ensure effective utilization of technology resources. Time is always a limited resource and finding ways to work within this for technology training is a continuing effort. During the next five (5) years the district will seek ways to offer technology training in more effective and efficient ways.

Current Efforts

- Online Cyber Security training
- Technology training during Professional Development Days
- Training offered to New Teachers before school begins
- Shared Online Google Drive set up with Technology Videos and directions for various programs used within the district
- One on one or small group training with the Technology Integrator for the district
- Program training for new technology when introduced to the district

PD Opportunities

- Teachers may use Professional Development money for outside technology workshops
- Teachers have the opportunity to contact the Technology Integrator to help teach lessons using technology in their classrooms or to get PD training
- Afterschool Technology Trainings
- Access Online Videos for technology training

GOALS

1.) Explore new opportunities to share technology techniques within the classrooms using online training, before or after school sessions, parts of staff meetings, professional development days, or early release days. (Ongoing)
2.) Encourage staff to attend outside technology workshops by offering a discounted district price and also explore outside grant opportunities. (Ongoing)
3.) Technology teachers will help coach teachers integrate grade level appropriate technology into their lesson plans. (2023-2024 and beyond)
4.) Implement improved verified PD hour tracking around in house technology training. (2023-2024)
5.) Encourage teachers to complete Google Certified Educator Level 1 by providing funding for the Google Evaluation after completing the online Google training. (2023-2024 and beyond)

Communications & Outreach

The Timberlane Regional School District utilizes the use of technology to enhance communication between the school system and its stakeholders. Technology provides access for students, parents and community member involvement in the educational process. It provides opportunities for student engagement beyond the academic setting. Technology is used to inform all members of the community about relevant district and school based events. The district will continue to expand the current online and television resources as means of communication within the schools and the community to enhance learning, engage the community, share ideas, access information, and support professional growth for staff.

The following applications and tools are used for district communications currently:

- Social media (Facebook, Twitter, and Instagram). The district and each school have their own accounts in all three social media applications.
- Emails, texting, and robo phone call abilities through School Messenger to both TRSD families and staff groups.
- District and schools websites that house information such as the calendars of events, documents, departmental (transportation, food service, technology, etc) information, and postings of events and school happenings.
- The TEN (Timberlane Educational Network) cable channel that is broadcast on local cable providers in all four towns.
- In addition to the above means of communication school closings and delays are posted on WMUR as well as several Boston Channels.
- Powerschool parent and student application - This app available on both Apple and Android platforms provides information on student schedules and assignments at grades 6-12 as well as attendance and report card information for all grades.
- PickUp Patrol - An app that parents use to communicate student absences, tardiness, and school plan changes with each school.
- Livestream and Vimeo streaming services. The district uses Livestream for live events including student concerts, parent informational nights, school board and budget committee meetings and more. Vimeo is used to archive these videos in appropriate categories and provides closed captions and varied speed playback.
- Smugmug - this is an online application used to store school and district wide pictures of student centered and other events.
- Survey tools such as Thought Exchange, Google Forms, and Survey Monkey are used to provide targeted feedback on a number of areas for all TRSD stakeholders.
- Continue to enhance and improve the efficiency of communication through the development and funding of new and current tools utilized by the district. (Ongoing)

GOALS

1.) Continue to enhance and improve the efficiency of communication through the development and funding of new and current tools utilized by the district. (Ongoing)
2.) Promote more parent and student awareness around resources with district technology applications,distance learning days best practices, and online safety and security. (2023-2024 and beyond)



Budget Projections

Device Purchases by Fiscal Years - Projected Costs (2023-2028)

Below are estimated costs for hardware and device replacement during the next five fiscal years. Estimates are based on current costs of equipment.

Item	23-24	24-25	25-26	26-27	27-28
Student Chromebooks	$139,125	$150,000	$150,000	$150,000	$150,000
Staff Devices	$25,000	$25,000	$25,000	$25,000	$25,000
Classroom projectors	$66,500	$66,500	$66,500	$66,500	$66,500
Wireless Access points	$10,000	$10,000	$10,000	$10,000	$10,000
New Phone System - Backend PBX	$0	$75,000	$0	$0	$0
Student Desktops - Engineering/AV Labs	0	$25,000	$25,000	$0	$0
District Audio/Video	$30,000	$25,000	$25,000	$10,000	$10,000
Network Security (Firewalls)	$0	$0	$0	$70,000	$0
Network Switches	$10,000	$10,000	$15,000	$15,000	$15,000
Video Surveillance	$15,000	$15,000	$15,000	$15,000	$15,000