



Technology

Strategic Plan

YELM COMMUNITY SCHOOLS

2020-2021

Executive Summary

The purpose of the Technology Strategic Plan is to leverage technology to advance the District's mission. This strategic plan is the culmination of an in-depth process that involved strategic thinking, research on technology, education trends, and discussions about technology needs with principals, teachers, and support staff. It provides direction and sets priorities for technology in our district.

The strategic plan is a partnership with the board, departments, support staff, principals, and teachers with the focus on student development. This approach will help us stay aligned with District goals while accomplishing reliability, integrity, and adaptability with technology trends.

The steps taken to develop and update the Technology Strategic Plan included an inventory of our technology ecosystem and collaborating with various teachers, IT staff, support staff, and peers from surrounding districts. The technology budget and technology staffing/resources were benchmarked and compared to services. The Technology Director met with all of the principals to discuss current needs, improvements, and future vision of technology in their schools. The Technology Director also met with IT directors from other districts to compare how technology is leveraged.

Technology Vision and Mission

Vision:

Leverage technology to shape and build our District's technology ecosystem that will produce the best results for our students and educators.

Mission:

To provide the highest quality of customer service to everyone, every time.

Technology Plan

The Technology Strategic Plan has the following three sections:

- I Infrastructure & Digital Bandwidth**
- II Standardizing Hardware & Services**
- III 2020-2021 Action Plan**

SECTION I

Infrastructure & Digital Bandwidth

Network Infrastructure:

The District made significant switch and routing upgrades this past year. We have upgraded our core routers and our layer 3 equipment. We just finished upgrading our fiber connections at each building internally to provide 10 GBPS to the classroom. This fiber work also enabled us to support our staff and students remotely.

With online curriculum being the norm and moving to the cloud, we will have expanded our bandwidth to support every student utilizing online curriculum. To stay current with today's standards we have started utilizing a hardware replacement standard. We are working on creating a "Lifecycle" for our core and backbone networking hardware.

Wireless Infrastructure:

Upgrading the District infrastructure to 10gbps has tremendously helped our wireless infrastructure. In preparation to handle more data, we had to upgrade our wireless controllers. By moving our wireless controllers to a virtual environment, we are now able to utilize full bandwidth capabilities. After we upgraded our controllers, we were able to upgrade the Wireless Access Points for the entire district. That being said, during our closure we were able to support wireless connections at our parking lots at designated buildings for students to connect from a vehicle.

Core Infrastructure:

The core infrastructure is the main distribution point for the District network services including domain authentication, internet, backup, etc. It also houses the District's shared folders and many other applications. We started the upgrade of the core infrastructure in the fall of 2018. The District replaced and virtualized all the core servers for the domain at each secondary school. We just recently centralized all network services to our core. This has drastically improved efficiency and reduced troubleshooting time.

Digital Bandwidth:

Bandwidth is the bit-rate of data transmission. Think of it as a highway and we are limited by the amount of lanes for traffic to flow. The more lanes we have, the more traffic you can move from point A to point B.

SECTION II

Standardizing Hardware & Services

Lifecycle:

The District started the device lifecycle program. Student devices are placed on a 6-year replacement cycle. Staff laptops and desktop computers are also on a 6-year lifecycle.

Laser Etching:

Each student and teacher device have the District logo etched on the lid of the device.

Inventory:

The district's plan is to order 1,000 new Chromebooks each year. Inventory of all staff and student devices is maintained in WASP, our cloud inventory system.

Chromebook Cart Wiring:

For new purchases of a Chromebook cart and Chromebooks, our vendor will wire the cart and install Chromebooks in the cart for our District.

Student & Teacher Laptops “The Mobile Teacher”:

A “mobile teacher” has the ability to roam the room, interact with a projector screen and save what is linked on the board to his or her laptop. There is also the ability to view what the student is looking at on the teacher's device and share a student's screen for presentations. We are working to provide all of our teachers the proper tools and equipment to work remotely efficiently and effortlessly.

Standard Laptop and Desktop Hardware & Software Configurations:

Our District operates in a Windows and Microsoft environment. All Windows devices in our District are now on Windows 10.

Teacher and Staff Apple/Mac computers:

Apple/Mac computers are being replaced with a standard laptop or desktop when they reach end of life. We try to repair existing Apple/Mac computers with parts or service that we can provide in-house. Apple/Mac computers that require parts or service to be ordered or placed, will be replaced with a standard laptop or desktop. Currently, we have just under 100 MAC devices that will need to be replaced this year.

SECTION III

2020-2021 Action Plan

1. Support remote technology for our district.
 - Chromebook order of 1,000 - Support 1:1 K-12
 - Destiny – This manages all of our student devices and our check-in/out student devices process
 - Bombgar – Remote assistance for teachers and students while they are at home
 - Zoom – Core 4 engagement tool for staff and students
 - Webcam order – About 400 to support teachers
 - WAVE Cell-App – Gave the ability for teachers to call parents with personal cell phones and the call shows up as the main school number.
 - VPN – Access to all network files while working from home
 - Web filter – Helps ensure we are keeping our students safe when they are at home browsing the internet on district devices.
 - Lightspeed Classroom – Provides the ability to screen share and manage Chromebooks
 - Classwork Zoom – Provides ability for teachers to monitor student progress in Google Classroom
 - ScreenCastify – Teachers ability to make recordings for students
 - Adobe Sign – Ability for e-signatures
 - REV – Closed captioning for Zoom and our hearing impaired families and students.
 - Offline Mode – For students without internet at home
2. Continuous upgrades to our network infrastructure to support technology that is both remote and in-person.
 - ERATE – Federal funding to help purchase new infrastructure equipment and wiring needs.
 - Curbside WiFi at designated buildings
 - Student test accounts for teachers to log in and test what a student would see.
3. Bond Safety & Security enhancements
 - Security camera deployment
 - Door access controls
 - Building technology purchases
 - Design of classroom technology and placement
 - Fiber, data runs and pathways
4. Data Center Move
 - Planning and coordinating with all vendors and subcontractors
5. Transportation security enhancements
 - Security camera deployment
 - Door access controls
 - Fiber, data runs and pathways