Sweet Home CSD Smart Schools Investment Plan 2020-2021

Vision For Technology



The District Technology Committee brings together administrators, teachers, parents and students to support the implementation of the District's Technology Initiative at least four times annually. Committee members review, modify, create and support the instructional technology plan as well as share needs advising the district on key aspects of technology use by students and staff. Their recommendations and actions seek to emulate the district's mission as it is reflected in our vision for technology:

In support of the Sweet Home Central School District's mission statement.... *Every student, one community, ready for the future. We inspire students to be innovative, self-directed, curious, compassionate, resilient and persistent life-long learners,* we believe that technology serves as a critical tool to strengthen our vision, enhancing the learning experience for both students and adults in an ever changing, dynamic society.

Students must be encouraged and guided to use technology as an integrated tool within the classroom to access information, think critically, make decisions, problem solve, collaborate and connect to the global community that surrounds them. Teachers must have access to up-to-date technology, and relevant and continuous training and technical support to enhance their own use and impact the learning outcomes for students.

We envision that technology is available to:

- assist teachers in designing assignments that are empowering—and engaging.
- provide students and teachers access to an expanding, global learning community.
- create equitable opportunities for all students to access the general curriculum while addressing their diverse learning styles.
- encourage self-direction.
- promote collaboration and increased productivity.
- refine critical thinking skills and assist with decision-making.
- foster curiosity while empowering creativity and innovation.
- provide a platform for communication and self-expression.
- provide a link between the school, home and community.
- collect information to assess and respond, enhancing learning.
- improve the effectiveness of administrative tasks.
- provide skills and proficiencies necessary for life beyond school.

Striving to build and maintain a strong infrastructure, our integrated use of technology should foster:

- personalize learning;
- the application of knowledge, curation and creation beyond the classroom;
- authentic learning;
- · responsive teaching; and
- responsible, digital citizenship

Technology is used as a tool to assist all members of the school community as they prepare for the future supporting the following actions and conditions for learning:

Every Student	One Community	Ready for the Future
 Teachers know each student individually and create learning experiences and interventions that address his or her varied needs. Students are consistently provided choices in how they learn and how they demonstrate their learning. Teachers use both reliable and accurate information to make instructional decisions that meet the needs of every student. Student learning time is flexible and includes opportunities outside the traditional school schedule. 	 Students, teachers, staff, and community residents feel connected to Sweet Home and possess a sense of belonging. Quality relationships characterized by mutual respect and understanding are in place amongst the students and staff. Every child has at least one adult with whom he/she feels connected. Teachers and students exhibit and promote understanding of cultural differences. Consistent communication regarding students' progress is provided to families. Parents are offered opportunities to participate in school events and classroom learning. 	Students have multiple opportunities to authentically explore career opportunities and construct personal plans to prepare them for life beyond high school. Students participate in learning opportunities (including service learning projects) reflecting "real world" demands and providing a meaningful, engaging and rigorous school experience. Students are self-directed - they can select appropriate tools to engage in meaningful learning independent of adult direction. The written, taught and tested curricula for every course are aligned to rigorous state and national standards of learning.

Current State of the Network:

<u>Infrastructure Level:</u>

The Sweet Home CSD continues to have in place a robust infrastructure for technology in all areas of the District. This infrastructure includes high-speed (1GB and 10GB) network switching at the Elementary, High School and Middle School buildings supporting a dense deployment of wireless access points with strong saturation (1 per classroom and multiple units in large gathering areas) in all buildings. In terms of processing speed, these access points provide 1 GB access in all buildings. Virtualization is employed at the server level, which gives us the flexibility to add server resources on an as-needed basis.

High-Tech Security:

The District has a network of over 300 security cameras and a small fleet of digital video recorders. The majority of the older cameras were replaced during the 2017-2018 school year to provide better surveillance capabilities in and around all of the district buildings. Surveillance system continues to expand. A cycle for replacement of cameras is in place.

Classroom Level:

Projectors now exist in nearly all student spaces and are on a 4-to-5 year replacement cycle. Projectors purchased during the 2016-2017 school year now need to be replaced. 325 units will be purchased to first replace these oldest units as well as additional units that will need to be replaced in the coming years.

User Level:

Prior to the 2020-2021 school year Sweet Home CSD 1:1 technology program with iPads were in place at the Elementary, Middle and High School levels and distributed to each student in grades 3-12. Almost 3000 iPads have been deployed to students with a sustainability plan that leverages the extended functional life of the devices to allow for a "rotational lifecycle". iPads deployed in the Middle school are used for 3 years before being rotated to the elementary levels. iPads deployed in the High School are used for 4 years before being rotated as spares, loaners, out-of-warranty replacements and staff use.

This year, as a result of the COVID-19 pandemic, all students, K-12 were in need of a 1:1 device to allow learning to take place in remote settings. As a result, during the 2020-21 school year iPads were purchased for grade 3 revising the rotational cycle with new iPads distributed to students in grades 3, 6 and 9. As a necessity, all other decommissioned iPads were repurposed and were put in productive use for students in K-2. Many of these devices have limited memory and battery life needing regular replacement and attention from our technology staff.

Recognizing the limited viability of these devices, during the 2021-22 school year, the District is committed to purchasing 1400 additional iPads using Smart School Bond Act (SSBA) funds, that will promote digital equity and ensure students K-12 will all have reliable working devices. This is essential given the uncertainty of the times, the need for blended learning experiences and possible the continuation of remote learning. With a fleet of viable iPad now in place K-12, moving forward, the district will be in a position to sustain student devices. Each year moving forward, new iPads will be purchased at 3rd grade (Elementary) 6th grade (Middle School) and 9th grade (High School), via a combination of local and categorical funds.

Other Notable Items:

- Teacher / administrator laptop computers at the elementary level, are headed into their 4th year of service and will be due for replacement for the 2021-2022 school year.
- Apple TV systems will be installed in all remaining elementary classrooms.
- Desktop computer use by students now only occurs in specialized computer labs.

Technology Planning:

While Sweet Home is in the final year of its three-year instructional technology plan, due to the COVID-19 pandemic, NYSED has extended the approval of a new plan until <u>June 30, 2022</u>. This allows more time to create a comprehensive plan that can reflect and address the conditions facing schools in the next three years starting the Fall of 2022.

Our current plan addressing the following goal areas, will be supported by our ongoing investment in technology:

- 1. Students will use technology to apply knowledge and skill to create and curate authentic products that promote inquiry and creative thinking while inspiring innovation.
 - Teachers will increase their use of web-based curriculum and tools, fostering
 personalized blended or self-directed learning for first instruction, intervention, and
 enrichment- tailored to the needs of the individual student.
 - Given a topic, problem or question, students will flexibly use a variety of digital tools to collect information or research while also customizing their learning in different formats.
- 2. Students and staff will use digital tools to foster more authentic, timely communication and collaboration linking students, parents, staff and others.
 - Students and staff will effectively communicate information while encouraging collaborative learning communities that contributes to their own and the learning of others.
- 3. Students will recognize the freedom and responsibility that exists in the use of technology for learning and sharing learning.
 - understand human, cultural and societal issues related to the use of technology and practice personal responsibility and safe use.
 - responsibly gather, evaluate and use digital information.
 - given a task or assignment, independently choose and access a tool without complaint or excuse, expressing productive work in a responsible way.

Strategic Actions

- 1. Continue to expand the 1:1 iPad program providing viable and reliable devices to all students K-12.
 - a. Increase the use of blended learning models within classrooms to engage students in meaningful learning.
 - b. Encourage the integration of web-based learning activities and assessments within lesson and units of study
 - c. Continue to use existing and new digital tools for student collaboration and projects.
 - d. Utilize Seesaw K-2 and Schoology 3-12 as a learning management system for communication and workflow.
- 2. Continue to ease the process for students sharing their screens by deploying Apple TV's K-12 and well as updating projectors in classrooms.
- 3. Maintain safety and security by installing, updating and replacing cameras for surveillance.

2020-2021 Smart Schools Bond Act Technology Budget

The Smart Schools Investment Plan identifies six categories for allowable expenditures of funds allocated by the Smart Schools Bond Act. The Act allows expenditures in the following categories:

- School connectivity
- Connectivity Projects for Communities
- Classroom Technology
- Pre-kindergarten classrooms
- Replacement of Classroom Trailers, and
- High-Tech Security Features.

The Sweet Home CSD was initially allocated \$1,891,997 through this act. The District's general strategy is to use the SSBA funds to support both continued development of the District's technology infrastructure, provide student devices that support the integration of technology in the classroom, as well as enhance district-wide security features. Approved SSBA spending plans in 2016-17 and 2018-19 accounted for \$748,001 of this allotment. The remaining allocation \$1,154,948 is presented in this 2020-21 allocation plan. This allocation includes an additional \$11,068 from the 25M Supplemental Loan for Non-Publics.

"As part of the 2017-2018 Budget, there was a supplemental \$25 million appropriation for districts which have plans that were submitted or approved prior to 4/15/17, have nonpublic schools and budgeted money in the School Connectivity category." http://www.p12.nysed.gov/mgtserv/documents/UpdatedSSBAFAQS 2020.pdf

Non-Public Technology Loan:

The non-public school in our district, St. Christopher School, is entitled to a portion of the funds that are spent on classroom technology. This amount of funding is calculated based on the amount of funds being spent on classroom technology at Sweet Home divided by the total number of students (public and private) that attend Sweet Home and St. Christopher School.

At \$95.55/ student, with a student population of 400 students is allotted \$38,220 plus an additional 11,068 from a 25 million dollar supplemental non-public loan. Having spent a total of \$24,340 in the previous spending plans (2016-17, 2018-19), St. Christopher School has \$24,948 remaining to spend in the 2020-21 plan.

Administrators at St. Christopher School have requested that these funds be used to purchase interactive flat panels.

The District is proposing the budgeting of the following expenditures in 2020-2021 as the final use of its allocation:

Allocation Category:	Item(s) to be Purchased	Amount
Subcategory		
Hi-Tech Security:Electronic	(500) Licensing- Video System Upgrade for each	\$75,000
Security System:	camera. This includes management software.	
Surveillance		
Hi-Tech Security:Electronic	(300) Digital surveillance cameras to be installed	\$150,000
Security System:	throughout the district, replacing existing end-of-life	
Surveillance	devices and adding coverage in critical areas.	
Classroom Technology	(1400) iPad/Case/Applecare to create a reliable 1:1	\$630,000
	technology program for all students, K-12	

Classroom Technology	(100) Laptops for Elementary Classroom Teachers- replacing outdated devices, maintaining 4 yr replacement cycle	\$125,000
Classroom Technology: Other Costs	(325) LED projectors for classroom use to replace failing projectors and provide a reserve of replacements as others go off line. This will allow formation of a replacement fund cycle for new projectors.	\$130,000
Classroom Technology: Other Costs	(100) Apple TV units/ mounting to be installed in the remaining elementary schools	\$20,000
Classroom Technology: Other Costs	Non- Public: St. Christopher School- (6) Interactive Flat Panels, hardware, stands and software (Includes \$11,068 from the 25M Supplemental Loan for Non-Publics)	\$24,948
	Total:	\$ 1,154,948

Anticipated Timeline

- January 20, 2021- Preliminary Smart Schools Investment Plan reviewed by District Technology Committee
- February 2, 2021- Preliminary Smart Schools Investment Plan presented to BOE
- February 9, 2021- Preliminary Smart Schools Investment Plan approved by BOE
- February 10- March 11, 2021 Preliminary Smart Schools Investment Plan posted for review on district website for 30 days
- March 9, 2021- BOE/Public Meeting
- March 16, 2021- BOE Approval of Final Plan, submission to SED
- March June 2021- SED Approval
- July 2021-September 2022 Procurement / Completion of Work

For any questions related to our Smart Schools Investment Plan, please contact the Superintendent of Schools, Anthony Day (aday@sweethomeschools.org) or Robert Ehlenfield, Systems Engineer (rehlenfield@sweethomeschools.org.