La Grange School District 105

Technology Report
April 22nd, 2024

Tech Planning Committee – Members

Committee Members	
Martin Almeida – IT Software Security Specialist	Jim McMahon – Database and Systems Administrator
Susan Calder - Coordinator of Teaching & Learning	Trish Murphy – Director of Technology
Katie Courtney – Gurrie Teacher	Amy Read – Spring Ave. Principal
Israel Diaz – Desktop Technician	Becky Stang - Spring Ave. Teacher
Priscilla Drenning – Ideal Teacher	Tracy Renaghan – Library Media Specialist
Barb Hobe- Library Media Specialist	Madison Wagner - Library Media Specialist
Joanna Marek – Library Media Specialist	Bethany Walsh – Library Media Specialist

Technology Planning – Discussion

- During the 2023-24 school year we focused on our growth opportunities that presented in both Classroom and Environment domains; these areas continued to be a primary focus during our technology planning process
- Greatest Areas of Need (GAN):
  - Classroom: Teacher use of the 4Cs (Communication, Collaboration, Critical Thinking and Creativity) and Digital Citizenship
  - Environment:The 3Ps (Policies, Procedures and Practices) and Professional Learning

Technology Planning – GAN Discussion

- Classroom: Teacher use of the 4Cs (Communication, Collaboration, Critical Thinking and Creativity) and Digital Citizenship

Priority Data Point(s)	Actionable Goal (measurable & time-bound)	Actions to support goal (Insights)
Teacher use of the 4c's- Communication, Collaboration, Creativity and Critical Thinking	Prioritize a focus on Digital Classroom Management for the 2023-2024 school year. This is important before effectively moving student 4Cs forward and it is aligned to the Strategic Plan Goal SEL Supportive Culture (RC and PBIS).	Analyze Strategic Planning Committee's Needs Assessment Results from 2022-23 Feedback Loop- Logical Consequences and develop next steps Teaching students to responsibly utilize technology (digital citizenship), this also includes teaching staff about tools that we have which will help them with classroom management such as Hapara

Technology Planning – GAN Discussion

- Environment:The 3Ps (Policies, Procedures and Practices) and Professional Learning

Priority Data Point(s)	Actionable Goal (measurable & time-bound)	Actions to support goal (Insights)
Professional Development	Investigate opportunities to embed technology PD more naturally; (i.e into C&I adoptions, SIOP etc.) ensuring it aligns with the strategic plan priorities.	Work with the district strategic planning professional development committee as they begin working with the Learning Forward standards during the 2023-2024 school year. Utilize Feedback Loop Process to develop next steps with PD Committee for 2024-2025 School Year

Technology Planning – Discussion

National Educational Technology Plan (NET)

- Released by the U.S. Department of Education for the first time since 2016
- Focus on :
  - Digital Access Divide
    - Maps to Content
  - Digital Use Divide
    - Maps to Students
  - Digital Design Divide
    - Maps to Teachers

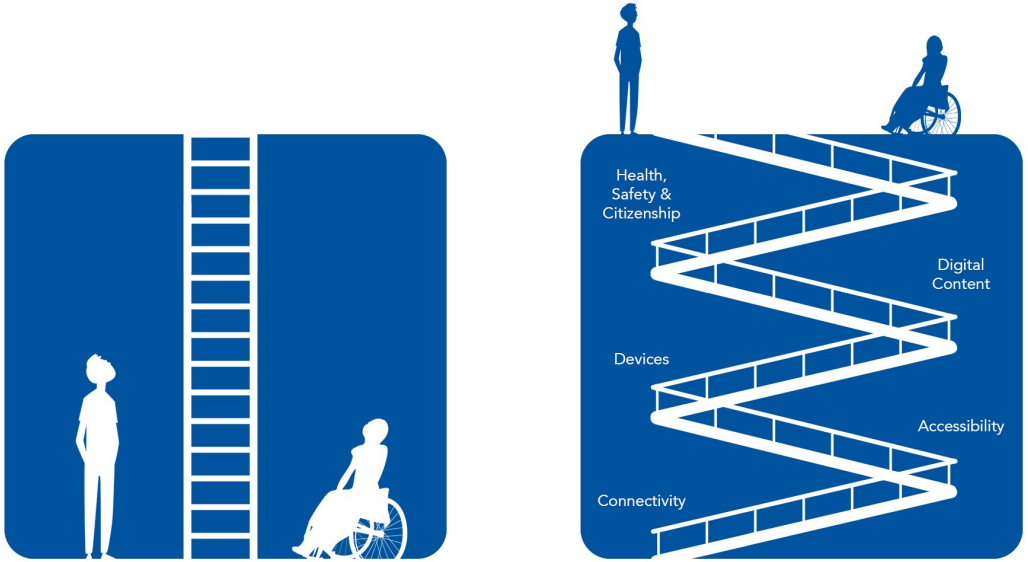
* https://tech.ed.gov/netp/introduction/

Technology Planning - NET

“The Digital Access Divide stands between those students and educators who have equitable, sustainable access to connectivity, devices, and digital content and those who do not. This also includes accessibility and digital health, safety, and citizenship.

For all learners to have the deep, complex, active learning experiences described above.”

https://tech.ed.gov/netp/digital-access-divide/



Closing the Digital Access Divide

Technology Planning - NET

"The **Digital Use Divide** stands between those students who are asked to use technology for creation, exploration, and critical analysis and those who are not.

A divide exists between those students who regularly encounter opportunities to leverage technology in **active**, **critical**, and **creative** ways and those whose experiences with technology in their learning are limited to more passive expectations of use. Some students experience a school year full of critical media analysis, video and podcast creation, real-world data collection, connections with remote content area experts, and authentic opportunities to share their learning with global audiences."

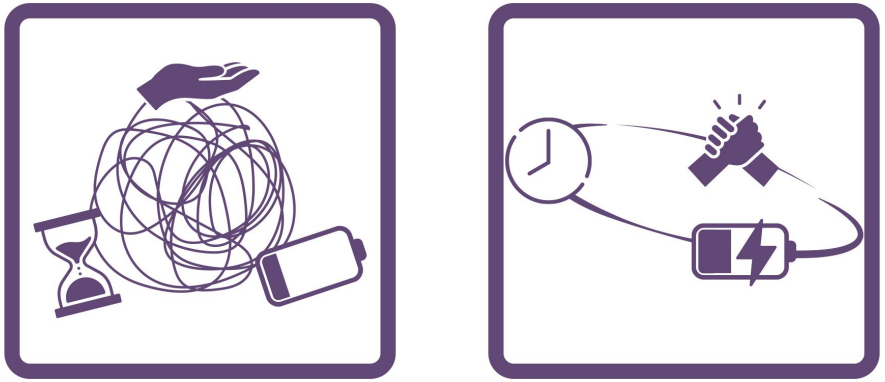
https://tech.ed.gov/netp/digital-use-divide/

Closing the Digital Use Divide

Technology Planning - NET

“The **design divide** is between and within those systems that provide every educator the time and support they need to build their capacity with digital tools and those that do not. While socio-economic status has historically been a predictor of where schools and school systems may fall on either side of the use and access divides, the same is not true of design. Absent vision and sustained support, effective learning design using edtech can vary between neighboring classrooms within a school, schools within a district, and districts within a state.[74] [75] [76]”

https://tech.ed.gov/netp/digital-design-divide/



Closing the Digital Design Divide

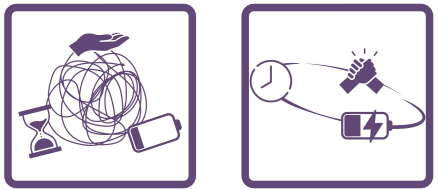
Tech Planning Committee Activity

- **How to overcome the Digital Divide?**
- **How are we doing in D105?**
- **Are we planning appropriately?**
- **Compared and contrasted our plans (Tech and Strat) to the National Plan**

Tech Planning Committee Activity - Results top 3 priorities

- **Teacher:**
  - Design and sustain systems that support ongoing learning for new and veteran teachers and administrators, providing them with the time and space needed to design learning opportunities aligned with the Universal Design for Learning (UDL) Framework (**Note-The Universal Design for Learning framework seeks to engage all students with accessible, relevant, and meaningful learning*).
  - Provide educators and administrators with professional learning that supports the development of digital literacy skills so that they can model these skills for students the broader school community.

- **Student:**
  - Review subject area curricula or program scopes and sequences to ensure that student learning experiences build age-appropriate digital literacy skills through active technology use for learning



Closing the Digital Design Divide

Closing the Digital Use Divide

Current Technology Plan - C&I Status

Deployment of Technology into Classrooms
1: 1 Chromebooks (1-8) *Note-Touchscreen 6-8
1:1 iPads (Kindergarten)
Document Cameras
Interactive Whiteboards

Integration of Technology throughout C&I
Assessment (IAR, MAP, ISA, Access, FastBridge, CogAT)
Collaboration (Google Apps for Education)
Communication (Zoom, Google Meet)
ELA (Read180, Newsela, RAZkids, iXL)
Fine Arts (MusicPlay Online, Flat for Education, Adobe Creative Cloud)
LMS (Google Classroom, Seesaw)
Math (iXL, ALEKS, Math180, Exemplars)
Multimedia (WeVideo, EdPuzzle)
PE (FitnessGram)
Science (DiscoveryEd, Mystery Science, PebbleGo, BrainPop, Newsela)
Social Studies (DiscoveryEd, PebbleGo, BrainPop, Newsela)
STEAM (Project Lead The Way, VEXcode, Tinkercad)

Current Technology Plan- Community Status

Projects	
Destiny Web Based Library System- Introduced 2010, e-books added 2013, cloud based 2024	Electronic Report Cards - Introduced Spring 2020 (Gurrie only)
Gurrie PowerSchool Parent Portal - Introduced 2006	Health Office Student Visit Tracking - Introduced in PowerSchool 2010
Intermediate and Middle School Assignments Posted Online - Gurrie 2005 and Intermediate 2006 via Google Classroom	Parent Computer Classes - Introduced 2015
Parent Teacher Conference Online Registration - Introduced 2018	PowerLunch - Introduced via PowerSchool 2009
Raptor Visitor Management System - Introduced 2020	Revtrak (online payments) - Introduced 2014
Secure Document Delivery System - Introduced via ParentSquare 2021	School to Home Communication - Migrated to ParentSquare 2021
Student Online Registration - Introduced 2020, Upgraded 2023	Website Redesign - Upgraded 2021

Current Technology Plan - PD Status

Ongoing Professional Development and Support
Technology Conferences - IdeaCON (Formerly ICE - Illinois Computing Educators)
Technology PD Website - Videos and Articles
Instructional Technology Training - Embedded into curriculum adoption and implementation

Current Technology Plan- Deployment Status

Network/Infrastructure or Support Related Projects	
Backup Solution- Implemented Veeam 2018	Copiers/MFPs - 12 Refreshed 2023
Cybersecurity Platform- Crowdstrike Implemented 2024	Data Warehouse - Implemented Frontline Student Analytics 2023
Desktop Management System - Ivanti Implemented 2015	File Server upgrades - cycle established
Google Workspace for Edu - Implemented 2024	LAN Infrastructure - Upgraded 2018/2019 via eRate
Network Storage - Upgraded MDF 2018 and other locations 2019	Security Cameras - implemented 2013/Upgraded 2020
Strategic Plan Management System and Data Dashboard - Envisio Implemented 2024	Technical Support - Tech Department 4.5 FTE
Technology Replacement- cycle established	Telephony System - CCM Upgraded 2021 and Moved to Managed Service
Ticket Tracking System - Implemented 2008	UPS Systems - Upgraded 2020
Wireless Network- Upgraded 2017 via eRate	

Pilot

- Grade 6-8 Touchscreen Chromebook Pilot:

Summary:

The first goal of this pilot is to determine how supportive a touchscreen device is for student learning in D105. The second goal of this pilot is to begin to determine if/which touchscreen device would enhance classroom instruction (staff).

Anticipated Student Goals/Outcomes (based around 4Cs):

1. **Increased interactivity and collaboration**: Touchscreens allow for more natural and intuitive interaction with digital content, which can promote greater collaboration and participation among students. For example, students could work together on a touchscreen to solve a problem, annotate a document, or brainstorm ideas.

2. **Improved creativity:** Touchscreens allow for more fluid and expressive input, which can promote creativity and innovation. For example, students could use a stylus to draw, sketch, or take notes in a more natural and expressive way.

3. **Enhanced accessibility:** Touchscreens can be a more accessible option for students who may have difficulty using a keyboard or touchpad. For example, students with fine motor skill challenges may find a touchscreen easier to use.

4. **More engaging learning experiences:** Touchscreens can make learning more engaging and interactive, which can help students stay motivated and focused. For example, interactive simulations and digital manipulatives can provide a more immersive and hands-on learning experience.

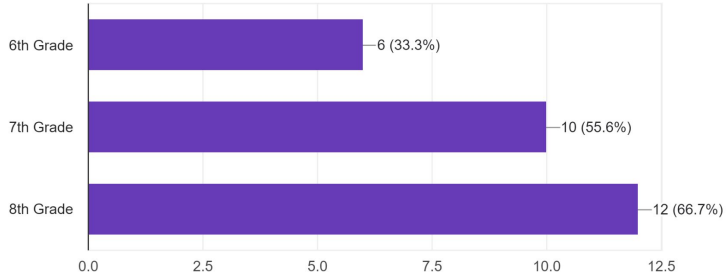
Pilot- Staff Feedback

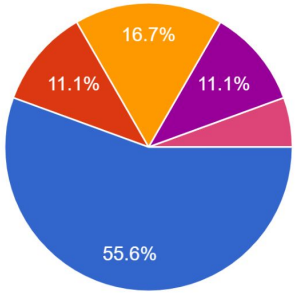
- Grade 6-8 Touchscreen Chromebook Pilot:

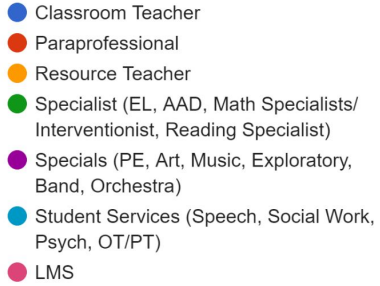
1

Grade Level (Check all that apply)

18 responses



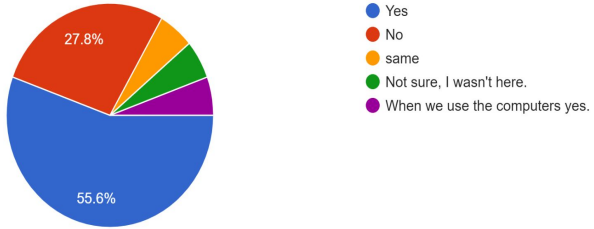




Pilot- Staff Feedback: Educational Impact

Student Engagement: Have you noticed an increase in student engagement since the introduction of touchscreen Chromebooks?

18 responses



Student Engagement: What evidence supports your response to the question above?

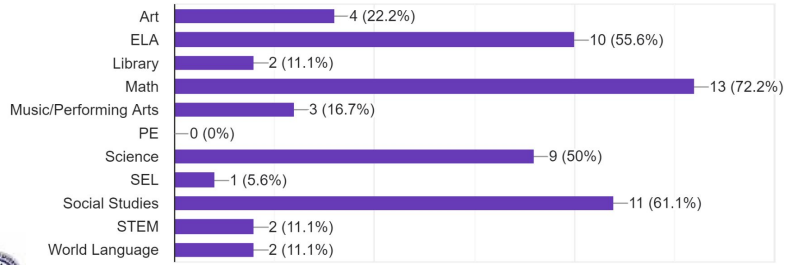
- Students often use the touchscreen to show their work in math, and they seem to enjoy being able to do this on the screen rather than a piece of paper or dry erase board.
- Students (almost) immediately were able to navigate the device in a way that best supported their learning.
- Enhanced usage, utilizing the touchscreen for assignments and improved navigation
- Touch screen makes it easier to graph, annotate text, ect...

Student Engagement: How have you utilized the touchscreen devices differently than previous devices?

- notes in more classes and using kami
- They utilize the touchscreens more for math. Students can show work on math assessments
- It helps with collaboration, especially when students are helping each other.
- Students are better able to use them on non-desk surfaces, like the ground or their laps when flipped all the way back, so they are more portable and useful during small group and partner work.
- The touchscreen has made zooming in on documents, maps, etc. easier than in the past.

Student Engagement: What subject areas are you primarily using them? (check all that apply)

18 responses



Pilot- Staff Feedback: Educational Impact -IEPs

IEPs: How have the devices supported students with special needs or learning differences? Are there specific features that have been beneficial?

- writing notes there are more options for individual students needs: using stylus, typing or touch screen choices with some activities
- Yes, touchscreen allows students to scroll much quicker without the mouse.
- access to typing and voice to text
- Again, the choice of how to use the device is really helpful for all students.
- The touchscreen has been beneficial for those students who might struggle with utilizing the keyboard.
- It is easier for me to assist a student if they fall behind during class while trying to navigate a website or program with several steps. I am able to quickly get them where they need to be and caught up using their touchscreen.
- Students like to relax with the coloring option on it. Google Read and Write has been useful as well. If students like to write, but their penmanship is not legible it is easier to use the touchscreen where it turns it into a typed text.

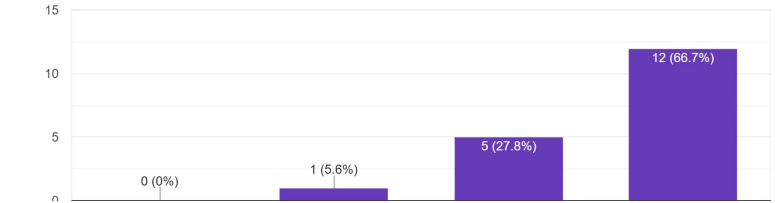
Personalized Learning: Have you been able to tailor lessons to individual student needs more effectively with the touchscreen Chromebooks?

18 responses

Pilot- Staff Feedback: Device/Support

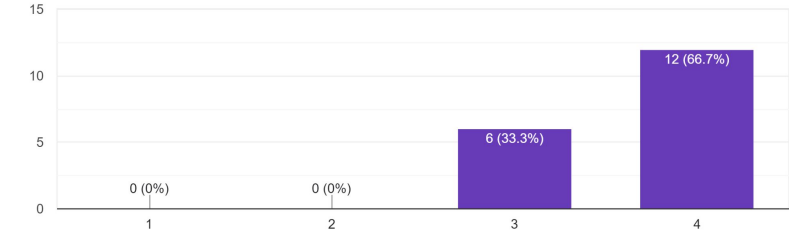
Reliability: How reliable are the touchscreen Chromebooks in terms of hardware and software performance?

18 responses



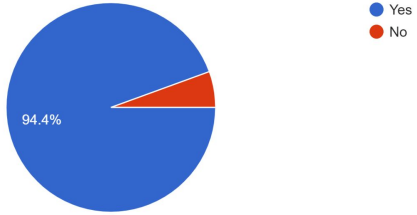
Durability: Have there been issues with physical wear and tear?

18 responses



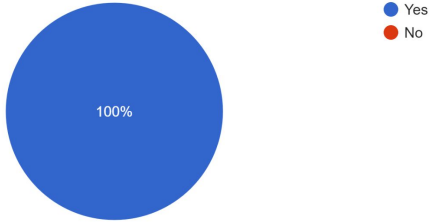
Battery Life: How long does the battery last under regular classroom use? Is it sufficient for a full day of teaching and learning?

18 responses



Technical Support: Is there a responsive technical support system in place for students?

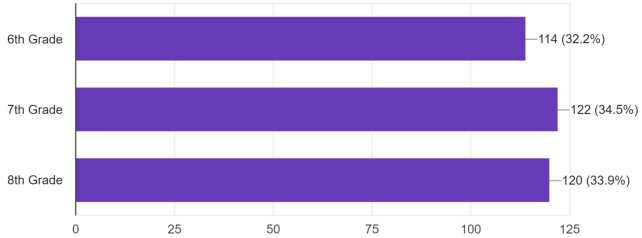
18 responses



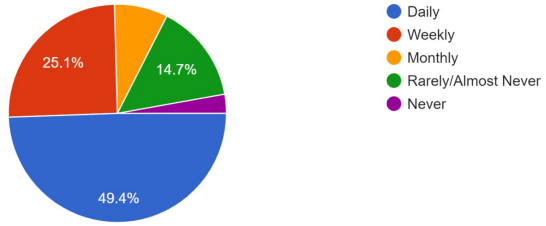
Pilot- Student Feedback

- Grade 6-8 Touchscreen Chromebook Pilot:

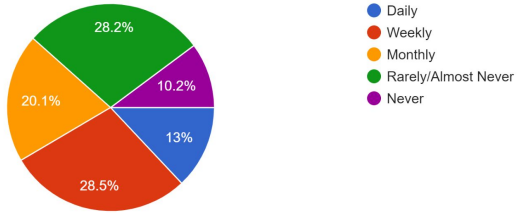
Grade Level
354 responses



How frequently are you utilizing the touch feature?
354 responses



How frequently do you use the convertible feature? (flip the screen behind to turn it into a tablet or turn it into a tent)
354 responses



Pilot- Student Feedback: Educational Impact

- **Student Engagement:** How have you utilized the touchscreen devices differently than previous devices in class?
  - I like the keyboard feature on the touch screen format. I can enlarge the screen to do math programs or multiple choice questions. It's also easier to drag images or arrows when needed.
  - I use the touchscreen to zoom in or do Membean, I also use it for easy access to tabs.
  - It helps make things like doing the work on IXL or making it more comfortable for me to use. Overall it just makes things easier than before.
  - I like how instead of having to drag with the trackpad, instead you can drag it with your finger. Also you can click with your finger instead of using the trackpad.
  - You could use the touch screen to show your work on the computer and you could draw and write with your finger instead of just using the mouse.
  - I sometimes used the touchscreen when i'm on the floor and i fold it also I use it when answering questions.
  - I have been more careful with this chromebook than the ones I've had before because this is a touch screen computer.

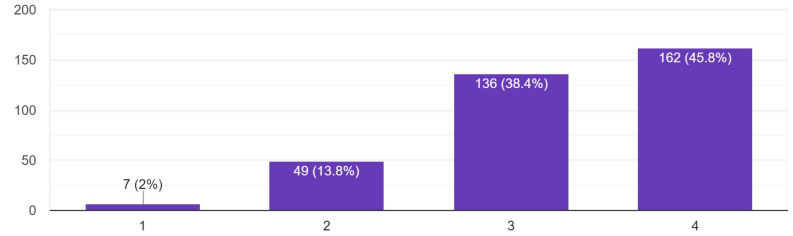
1.

- **Collaborative Learning:** Has the touchscreen Chromebooks helped you collaborate with your classmates differently? Are there specific apps or features that have been particularly useful?
  - These touchscreen Chromebooks help me collaborate with my classmates differently, and the most useful features are the keyboard and the fact that you can use your stylus and write with it.
  - It has helped with getting somewhere easier. Especially with getting to the same page as everyone is on.
  - We can write or do math equations and we can flip it into a tent if we want nobody to see our answers or do want share or work
  - Definitely the "Chrome Canvas" app, you can design and draw many things way easier than on your mouse pad, and you can use your finger to trace things.
  - A specific app that has helped me is the chrome canvas app. It's helped me solve math problems while I'm doing Aleks a math program for school. I can use my stylus on the touch screen to write down equations on the chrome canvas.
  - Yes, the touch screen has been very helpful when we are working in partners because if I'm already typing on my keyboard and my partner needs to click on something, they can use the touchscreen.

Pilot- Student Feedback: Device/Support

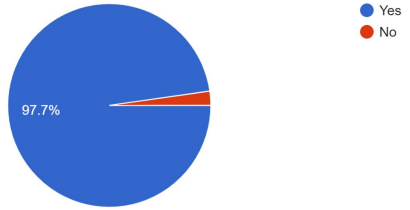
Reliability: How reliable are the touchscreen Chromebooks in terms of hardware and software performance?

354 responses



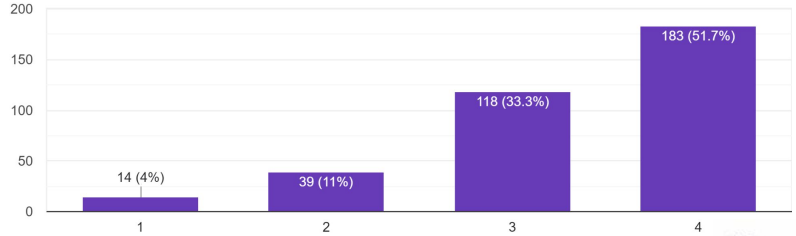
Battery Life: Does the battery last you the full school day?

354 responses



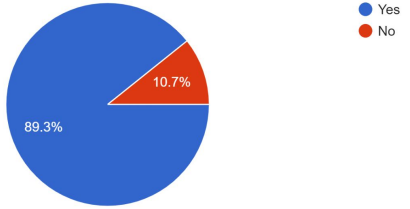
Durability: Have there been issues with physical wear and tear?

354 responses



Technical Support: Is there a responsive technical support system in place for students?

354 responses



Touchscreen Device- Recommendations 2024-25

- Continue purchasing the Touchscreen Chromebook devices as a part of Chromebook replacement cycle
  - Feedback from pilot met the pilot goals around the 4Cs; especially around Increased interactivity and collaboration
  - Feedback indicated there was an increase in accessibility
  - Help Desk data indicates a major decrease in the number of overall repairs and especially screen repairs due to the durability of the “Gorilla Glass”
  - Minimal price difference between the non-touch and touchscreen devices (approx. $20 per device)
    - Grade levels that would then be touch for the 2024-2025 school year would be 3rd-8th grade.
    - Grades 1-2 would continue to have the non-touch devices for the 2024-25 school year.

Looking Forward: 2024-2025

Major Areas Being Addressed (2024-2025 school year)	
Network Infrastructure Replacement	Purchase consistent with tech plan's 5 year replacement cycle, focus on LAN and Wireless hardware that is End-Of-Life and End-Of-Support.
Professional Development	Enhance learning through teacher PD and align with strategic planning goals.
Purchase Replacement Student and Staff devices	Purchase consistent with tech plan's 3 year replacement cycle of student Chromebooks 5 year replacement cycle of iPads and staff devices.
Renewal of Microsoft Licensing, Cisco Meraki, SmartNet and Tech and EdTech Software	District wide renewals are necessary each year to maintain licensing compliance and provide support.
Servers/Storage Solution	Purchase to keep up with data storage/consumption needs and consistent with tech plan's 5 year replacement cycle, focus on hardware that is End-Of-Life and End-Of-Support.

Proposed 2024-2025 Budget

- The FY24-25 Technology Budget proposed is $1,121,081
- This budget includes an increase of $129,871 over the FY23-24 approved budget; areas addressed beyond FY23-24 are:
    - Infrastructure upgrade of outdated switches, e-rate C2 eligible items. These C2 items, internal connections are only available once every 5 years. D105 is responsible for only $86,671 of the $300,214 refresh, e-rate will cover the additional $213,543.
    - Addition this year of Crowdstrike Cybersecurity solution at $37,961 to improve cybersecurity posture
- This budget again includes the EdTech Software line items from the Curriculum and Instruction (C&I) Budget to the Technology Budget which re-allocates $221,650 from C&I to Technology.

Technology Plan -Historical Budget

2024-2025: Requesting $1,121,081

Budget Year	Proposed Tech Plan Budget	Actual Budget	Budget Year	Proposed Tech Plan Budget	Actual Budget
2007-2008	**$900,000**	**$840,000**	2016-2017	**$581,400**	**$581,400**
2008-2009	**$590,000**	**$590,000**	2017-2018	**$657,300**	**$657,300**
2009-2010	**$622,500**	**$622,500**	2018-2019	**$733,256**	**$733,256**
2010-2011	**$525,000**	**$502,600**	2019-2020	**$733,256**	**$733,256**
2011-2012	**$768,200**	**$768,200**	2020-2021	**$619,000**	**$619,000**
2012-2013	**$757,800**	**$703,366**	2021-2022	**$765,106**	**$765,106**
2013-2014	**$709,900**	**$709,900**	2022-2023	**$765,106**	**$766,478**
2014-2015	**$615,000**	**$615,000**	**2023-2024***	**$1,038,798.03**	**On Budget So Far**
2015-2016	**$581,400**	**$581,400**	**2024-2025**	**$1,121,081**	**Proposed**

**Note- This year $221,650 of existing EdTech Software Licensing Budget was re-allocated from the Curriculum and Instruction Budget to the Technology Budget.*

Going Forward…Student Results

- **Continuing to monitor results next year:**
  - **Student Progress Data**
  - **D105 Surveys**

Questions?