Adam - Thank you for allowing us to present the work of the Technology Committee over the past year and a half. We have collaborated in an effort to bring forward our best Long Range Technology plan to launch our district into a new era of teaching and learning. I'd like to first introduce the committee members sitting at the table with us tonight. *Allow each to introduce themselves and their role in the district.*
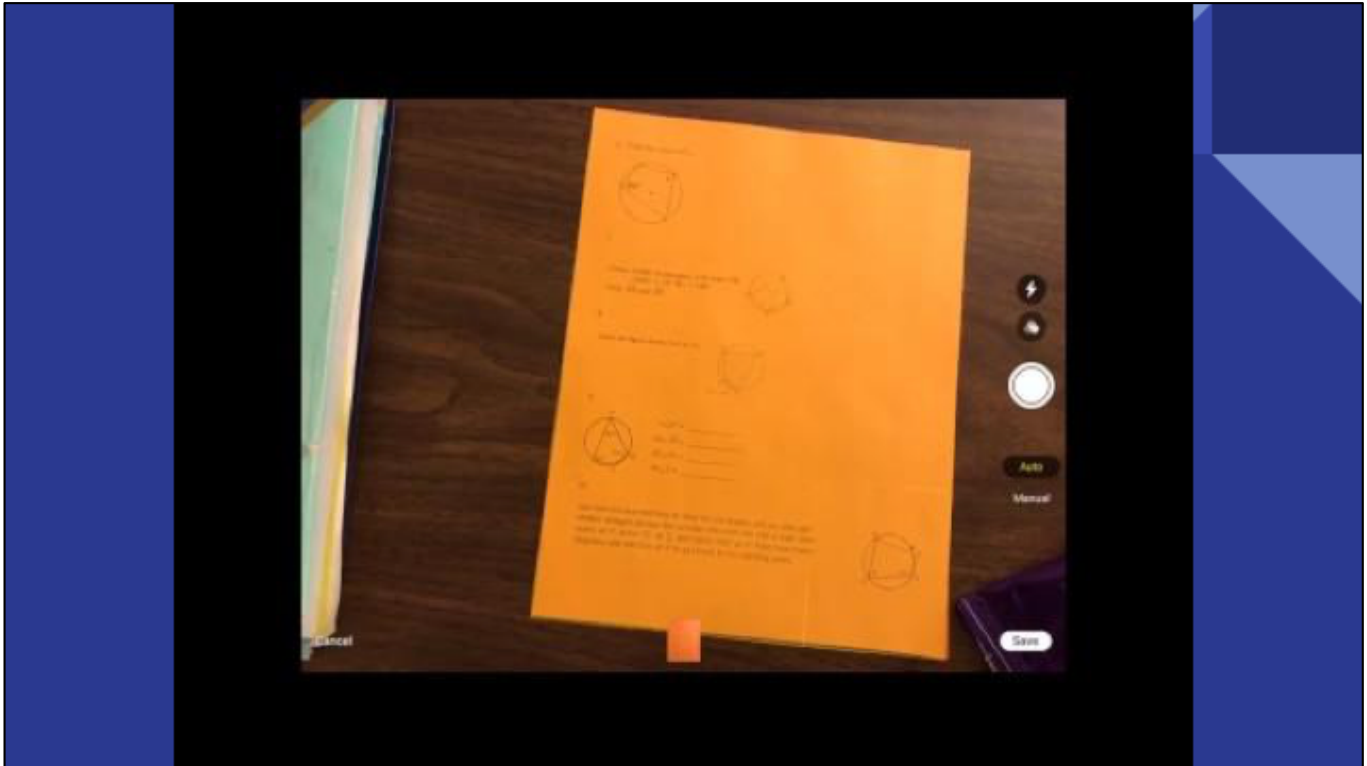
Dan - Over the past month, we have had 3 students using a comparable iPad in the classroom and at home. The following is a short video that was created by the students to showcase how they have used it.

Overview

By March 20, 2018, the Superintendent will create, present and gain approval of a long-term technology plan including the completion of a hardware/device study and sustainability/replacement cycles with associated costs.

- 2016-2017 Technology Committee convened to discuss and work on long range planning for the school district.
- 2017-2018 Technology Committee continued to work to develop a 6-year technology plan, which will be presented tonight.

Dan - At the beginning of this school year, one of Dr. Marino's goals was to create, present and gain approval of a long-term technology plan including the completion of a hardware/device study and sustainability/replacement cycles with associated costs. In February, the team presented a device study with anticipated recommendations, however as you will see we have had to make course corrections based on new developments in the technology world.

Long Range Technology Plan Goals

- Prepare our students to be contributors to the world while being responsible, safe and respectful digital citizens.

- Provide consistent communication between all stakeholders utilizing district identified platforms.

- Utilize the ISTE Standards for Students as well as the TIM (Technology Integration Model) to meet the curricular needs of all learners by promoting personalized learning through individualization and differentiation.

- Provide consistent professional development to support all stakeholders in the understanding and use of technology.

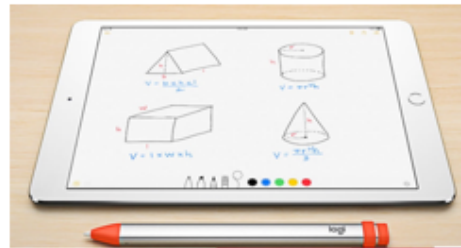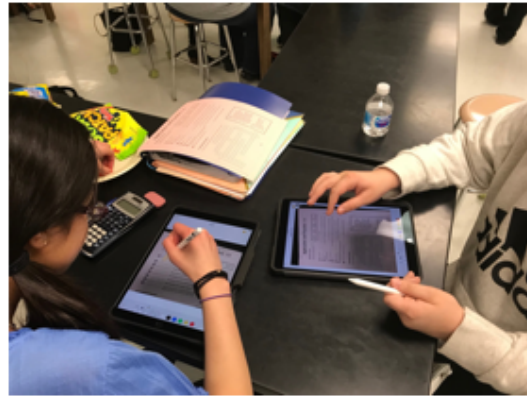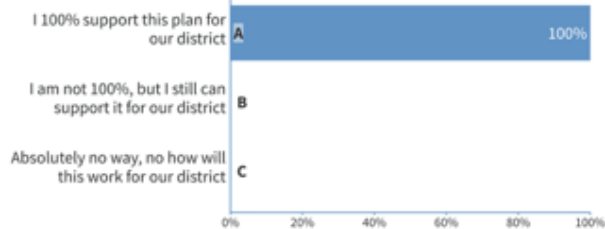- Values technology that is physically and financially sustainable.

Adam - Each of these goals will move to enhance instruction and student learning opportunities by having a dedicated iPad for every student by the start of the 2018-2019 school year. By the 2019-2020 school year, students in grades 3-8 will be taking their iPads home with them.

Sarah - The Technology Committee is recommending the 2018 iPad with Logitech Crayon for all students Kindergarten through 8th grade. Additionally, we will be putting sets of bluetooth keyboards in the Library Media Centers to be checked out.

As you saw, students were empowered to share their creativity on school assignments when sampling the iPads.

Why iPads and not Laptops?

D34 Device Study								
Device	Cost of Device Ownership/Year	Purchase Price	Lifespan	Capability	Ease of Integration in D34 Systems	Steps to Integrate into D34 Systems	Unintended Consequences	Advantages
Laptop (Apple)	$115 - $160	800 — Apple pays back 20-25% of original cost	5-7 Years	Unlimited	Current Structure.	None. Install Remote Software (Staff Machines Only)	Higher Upfront Cost compared to Chromebook & Tablets.	Longevity/Build Quality, Free Software (AirPlay, Keynote, Pages, Numbers, iMovie, Garageband, Photobooth, Remote Desktop) System Integration Compatible with Current MDM Staff Familiarity (65% of Staff currently using) System Security (No Virus Software Needed)
Laptop (PC)	$160-$257	$800	3-5 Years	Unlimited	Current Structure.	Virus Software Needed Productivity Software (Word, Excel, PowerPoint, Etc.) AirParrot Needed	Higher Upfront Cost compared to Chromebook & Tablets.	Longevity/Build Quality, System Advantages (Windows) Compatible with Current MDM
Chromebook	$133	$400	3 Years OS Support for 5 Years	Internet and App Based Only. No Local Storage Needs Internet to Operate Limited to Google Classroom (No other LMS Possible)	Internet Only Will not have access to File Server Limited by Google's Structure/Limitations Doesn't have compatible MDM in district.	Purchase of MDM, Professional Development, Curriculum Integration. Re-Evaluate the File Access to the File-Server. Current practice goes against Google's Philosophy.	Curriculum Integration Review Additional increase in IT Support. Approx. $20,000 for MDM Longevity & Build Quality is an issue. Repairs are Problematic Other Districts Experiences (CHSD117) Security/Privacy Risk (Cloud-Based Storage Only)	Cost of Purchase. Cloud-Based Only (No work lost if device is destroyed)
Tablet (Apple)	$47 - $65	Standard iPad $329 w/case — iPad Pro $675 w/case, pencil, and keyboard — Apple pays back 20-25% of original cost	5-7 Years	Unlimited (For Tablets) Needs External Keyboard Folder-Based Storage Structure	Current Structure.	None.	Limited abilities compared to a true laptop.	Well established in D34 for 7 Years. Compatible with Current MDM D34 App Library Maturity In Comparison to Laptop/Chromebooks Smaller in Physical Size Cost
Tablet (Android) Galaxy Tab S2 9.7"	$80 - $130	$399	3-5 Years	Unlimited (For Tablets) Needs External Keyboard Folder-Based Storage Structure	Limited by Google's Structure/Limitations Doesn't have compatible MDM in district.	Purchase of MDM, Professional Development, Curriculum Integration.	Loss of Current Paid Apps. $20,000 for MDM	USB Support In Comparison to Laptop/Chromebooks Smaller in Physical Size Cost

Dan - One area that has been discussed at length within the committee is the decision to purchase iPads instead of laptops. If you recall from our February 27th Board of Education Meeting, one of our sub-committees did a study on several devices and looked at the advantages and disadvantages of iPads and laptops. At that time, due to cost, we were looking at the MacBook Airs over the iPad Pros. With the new iPad for education being released with the Logitech Crayon, we can have the abilities that we wanted with the iPad Pros without the additional cost. The one area that we know is a concern is "typing" skills. This is an area that has been developing over the past 10 years based on available technology and has changed the way documents are created. No longer are we tied into "home row", as we all learned. Students are much more adaptable and are able to produce work on phones, iPads, etc. Another concern that was discussed is the skills needed to navigate a file directory. This can still be learned through Cloud based file storage, but again has been changing as technology changes. Overall, the committee feels the benefits of the new iPads outweigh the benefits from a traditional laptop. There are still plans, however, to have laptop carts with laptops available in the buildings for specific projects. These laptops will not be newly purchased, but repurposed from our current fleet.

Device Replacement Cycle

	2018/2019	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
K-2	New Apple iPads						Refresh with New Devices
3-5	New Apple iPads						Refresh with New Devices
6-8	New Apple iPads						Refresh with New Devices

Chrystal - Please view our recommended replacement cycle. Devices will follow students for the duration of the device's lifespan and their time in District 34. If there is life left at the end of the 8th grade year, it will then be assigned to a Kindergarten student the following year.

Technology Integration Specialists Provide

- Leadership and direction in developing and maintaining technology that optimizes teacher utilization and student access to technology while working with his/her immediate supervisors to assist in the effective operation of the district.

- Support to increase staff knowledge of current technologies, coaching school staff on the use of technology in the curriculum, and increasing student access to and knowledge of technology.

- Support to staff as they utilize data and incorporate technology to improve practice and refine differentiated and personalized instruction for students.

- Individual and group professional development in implementing the use of technology to differentiate and personalize instruction and promote student growth.

Kristina - The Technology Committee is recommending the addition of 2 full time Technology Integration Specialists. These 2 staff members will each be connected to multiple buildings. They will be brought on board to work with District #34 staff and students to increase knowledge of technology integration as well as provide professional development for all stakeholders and buildings.

David - In order to continue to communicate with our stakeholders, we will use the following tools. As technology evolves, we want to keep up with the times.
- Antioch 34 Technology 1:1 Webpage
- District 34 Dash Updates
- SwiftK12 for PowerSchool for Mass Communication of Email, Phone, and Text.
- District Social Media Pages (Facebook and Twitter)
- Student Handbook

Katie - Students and staff in Kindergarten, First, and Second grade will utilize SeeSaw for Schools as a tool for integrating technology to improve teaching and learning. Through Seesaw, students will create digital portfolios that are shared among the students, their families, and their teachers.

Kris - In the first half of the 2018-2019 School Year, the district will seek volunteers in grades 3-8 to pilot both Schoology and Otus. Schoology and OTUS stood out as the top two platforms preferred by the Technology Committee. Each volunteer will use Schoology for 8 weeks and OTUS for 8 weeks, and complete an assessment rubric for each platform in order to determine which platform the district will adopt for grades 3-8 for the 2019-2020 school year. This will allow for training to take place during the second half of the 2018-2019 school year to prepare teachers for full implementation. For teachers not piloting an LMS, Google or Apple Classroom may be an option to use as needed.
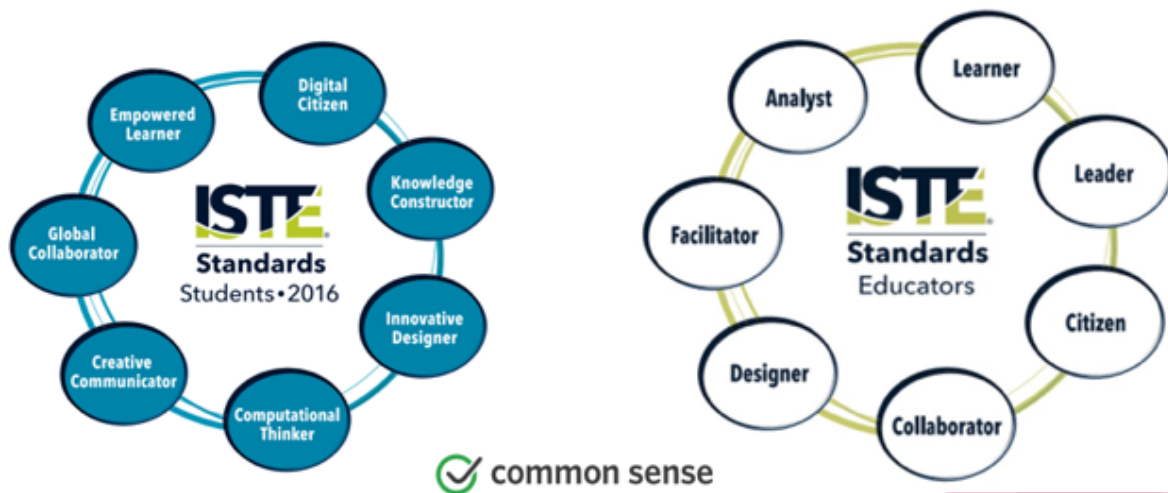
INFORMATIONAL ONLY
Cost of SeeSaw = ~$5 per student (~$4,140 per year based on this year)
Cost of Schoology = ~$8 per student (~$15,000 per year based on this year)
Cost of OTUS = ~$8 per student (~$15,000 per year based on this year)

ISTE Standards for Students and Educators

International Society for Technology in Education

Lisa - As a subcommittee, we used the ISTE standards for Educators and Students to guide us in our technology curriculum direction. One of the most important standards, Digital Citizenship, is also required by the state. After looking at a few digital citizenship curriculum options and discussing it with teachers who have used it with students, the Committee recommends Common Sense Education - Digital Citizenship lessons K-8. The lessons are divided by grade level strands (K-2, 3-5, 6-8), contain 3 units, with 5 lessons per unit. There are also virtual games that students can interact with to learn digital citizenship online. This is all provided by Common Sense Education at no cost to the district. www.commonsense.org

Professional Development

If we are to have high expectations for our students and dedicate ourselves to their success we must have the same level of commitment to our staff and their development.

Five Main Professional Development Pillars:

1. Apple Education Professional Development
2. In Building workshops during classes
3. Instructional Technology Specialists
4. Educator Showcasing
5. Student Showcasing

Mike - Professional Development is the foundation for a successful rollout. Using the district's expert educators to lead Professional Development opportunities and paired with support from Apple Education, we will showcase the success at every level to build a stronger educational technology community at District 34. The Instructional Technology Specialists will be the internal backbone of this system and instrumental in the success. We will have a scaffolded approach that builds off the initial exposure to the tools and then broadens user understanding as the foundational skills are built and familiarity with the technology is achieved. This will take hard work from the Instructional Technology Specialists and the continued support of each building. We will grow stronger together .

Strategic Professional Development Plan

Key Concerns Addressed

1. Ensuring that core competencies in use of technology are being achieved by all staff.

2. Creating a unified method of delivery for content and communication.

3. Instituting a clear system for addressing the questions and trouble shooting problems that will arise with the introduction of new technology expectations in the classroom.

Path To Success

1. Comprehensive Professional Development for all staff with targeted improvement when needed.

2. Provide simple but robust tool set used to ensure a unified method of material delivery.

3. Clearly defined system for addressing questions and troubleshooting problems will be created to quickly address the needs of the staff.

Mike-

1. **Ensuring that core competencies in use of technology are being achieved by all staff.**
   - PD will meet the needs of the staff while accounting for the various levels of expertise.
2. **Creating a unified method of delivery for content and communication.**
   - In accordance with the long range goals of the district to simplify communication all staff will be expected to use their grade level's tools as hub for distributing content and organizing communication.
3. **Instituting a clear system for addressing the questions and trouble shooting problems that will arise with the introduction of new technology expectations in the classroom.**
   - The Instructional Technology Specialists will be in constant contact/ build rapport w/ whose voice would have the greatest impact.

4. **A three part approach will be used to ensure that core competencies in use of technology are being achieved by all staff.**
   - Regular Professional Development - Using the staff development time
   - Observation - Direct observation in classrooms throughout the year will

be used to identify areas of success and improvement.
  - Coaching - The Instructional Technology Specialists will be a resource to all district staff and guide guide.
1. **Each educational ecosystem will have a simple but robust tool set -> unified method of delivery for content and communication.**
  - Content - The simplification of content delivery. We Will create symmetry of expectations and delivery.
  - Communication - By using a unified method of delivery we will reduce communication methods used by staff and stakeholders.
  - Growth - The tools will function like the trunk of a tree and new tools will be the branches that grow from it with oversight.
2. **Clearly defined system for addressing questions and troubleshooting problems will be created to quickly address the needs of the staff.**
  - Communication - The Instructional Technology Specialists will be in regular contact through "Tech Tip" emails, PD during Staff Development times, and being present.
  - Questions - FAQs addressed by web resource like flipped earning. Also, develop a self guided troubleshooting page that will walk users through the questions
  - Problems - will be addressed using the Tech Ticket to quickly respond to the needs of staff. Student issues will be addressed in each building using existing systems.

Financial Overview -- _No Increase to the IT_

Topic	Description	Cost
Devices	Apple iPads, Keyboards, Cases, Charging Stations	Approximately $920,000 -- financed over 6 years
Professional Development	Apple Education Professional Development & Training	Approximately $75,000
Staffing	2 FTE Instructional Technology Specialists	Approximately $130,000 -- salaries and benefits
Software (LMS)	Core Learning Management System utilized across the district	Approximately $5,000 in 2018-2019 Approximately $20,000 in 2019-2020

Dan - The cost of devices will be financed over a 6 year time period, with additional money being supplemented out of the annual Technology budget, device trade in and the technology budget.

Financial Projections

The link below provides a breakdown of the implementation of the hardware and also the anticipated trade-in value of the district's current hardware.

1:1 Financial Projections

Using the Student Technology Fees will cover about 55% of the 1:1 hardware costs annually. The remaining balance will be supplemented within the technology budget. This amount remains below what the district typically spends on new hardware for the students.

Dan - Read Slide

Summary

By implementing this plan, District 34 will have consistent devices across the district. This technology plan will be easier to maintain and it is also financially sustainable. The plan also assures that the devices the students use stay current and that the devices are used to promote student learning.

Adam - Read Slide