

Technology Committee

February 6, 2018 Technology Plan Update

2017-2018 Superintendent Goal

Creating, presenting and gaining approval of a <u>long-term</u> <u>technology plan</u> including the completion of a hardware/device study and sustainability/replacement cycles with associated costs at the <u>March 20th</u>, 2018 Board of Education meeting.







Strategic Plan 2015-2020

MISSION

To inspire a passion for learning that empowers all students to achieve personal excellence

VISION

Students will achieve personal excellence when everyone demonstrates:

- Commitment to continuous improvement
- High expectations for academic, social. emotional and behavioral growth
- Effective collaboration, communication, critical thinking and creativity
- · Ownership, responsibility and accountability for growth and development

GOALS

- Continuous Student Growth & Achievement
- Supportive Learning Environment
- · High Quality Workforce
- · Family and Community Partnerships
- · Efficient and Effective Use of Resources

CORE VALUES/COMMITMENTS

We believe students learn in different ways and at different rates.

We believe it is our responsibility to guide students towards self-sufficiency, ownership, responsibility and accountability for their own learning.

We believe in providing a safe and secure environment in order to foster a community of collaborative learners.

We value continuous improvement through teamwork, collaboration and shared leadership at all levels.

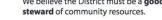
We believe a high quality staff is essential to a high-achieving school system.

We believe that corroborative partnerships and effective communication among the community, home and school accelerates student success.

We believe the District must be a good steward of community resources.

Alignment to Goals:

- Continuous Student Growth & Achievement
- Family & Community Partnerships
- Efficient and Effective Use of Resources



Antioch School District 34

Elementary School Antioch, IL 60002

Antioch

Hillcrest Elementary School

Oakland **Elementary School** 847-838-8601

W.C. Petty Elementary School 850 Highview Drive

Antioch Upper Grade School 800 Highview Drive



Main Components of Technology Plan:

- Current State & Infrastructure
- Device Selection & Replacement Cycle
 Device Study
- Financials
- Curriculum Integration
- Professional Development
- Communication

Tonight's Topics



D34 Device Study								
Device	Cost of Device Ownership/Year	Purchase Price	Lifespan	Capabilty	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)	\$180-\$287	\$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 \$125 - \$175	Standard iPad \$329 w/case iPad Pro \$875 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

D34 Device Study



Current Student Device Inventory

(as of 1/31/2018)

Total iPads

1283

Total PC Laptops

1044

Total MAC Laptops

237

Total Chromebooks

60

Latitude 3330	308
Latitude 3340	450
Latitude E5530	108
Latitude E5540	154
Samsung 900X3N-K02	24
13" MacBook Air A1466	237
iPad2	533
iPad4	293
iPad Air	327
iPad Air 2	90
iPad 2017	40



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4 years old - currently evaluating the use in buildings

7 years old - iOS 9 (current is iOS 11)
Will be replaced this summer due to
iOS limitation



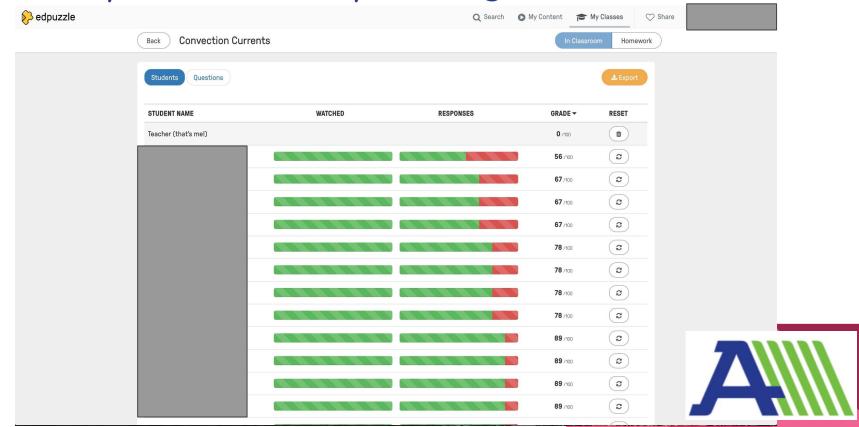
Technology Committee Plan

The Antioch School District's 2017 - 2022 Technology Plan will serve to:

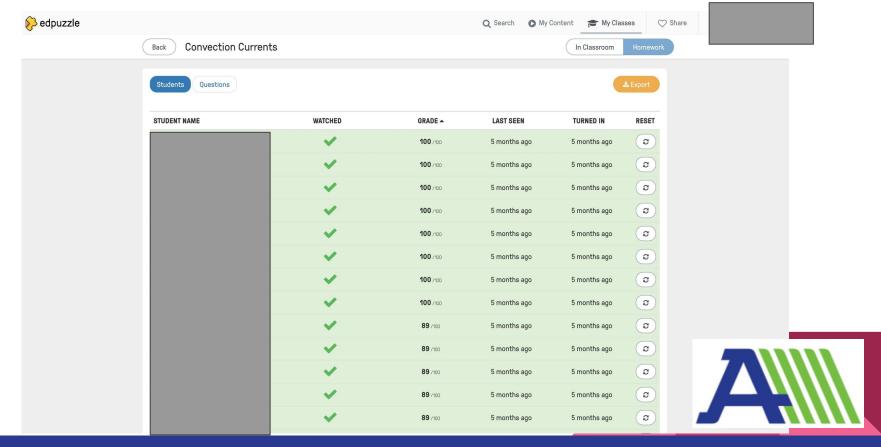
- Provide more accessible technology for every student.
- Provide professional development strategies to enable stakeholders to use technology as a tool to enrich student learning.



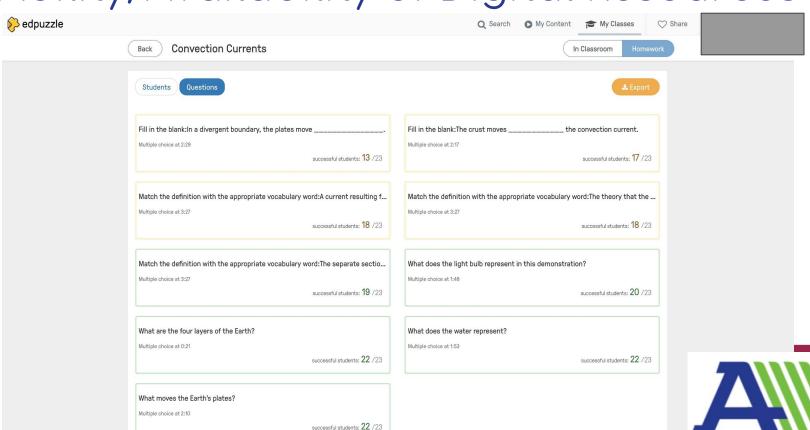
Ability/Availability of Digital Resources



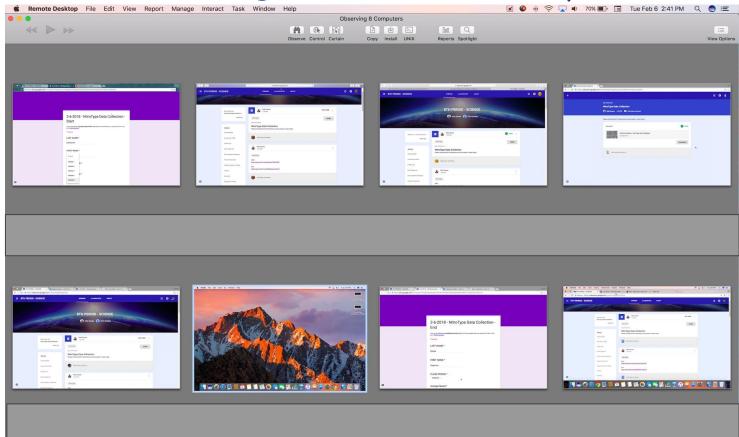
Ability/Availability of Digital Resources



Ability/Availability of Digital Resources



Student Progress & Security Monitoring



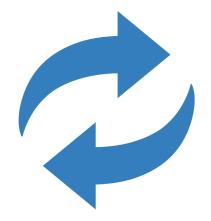


Student Feedback

- Always Available/Accessible, Maximize opportunities
 - Teachable Moments, Productivity
- Dynamic Learning Experience
 - Logging in, Device Performance, Workflow & Pace of Class
- Collaboration
 - Everyone can contribute to group work simultaneously (Google Doc, etc.)
- More Comprehensive Understanding
 - Creating a better learning experience by utilizing programs and digital tools to maximize student understanding

Replacement Cycle

- The replacement cycle will be built in with the rollout of the district's 1:1 program, beginning with the 2018-2019 school year.
- Replacement cycles are dependent upon Operating System (example iPad 2s)
- Classroom desktops and labs will be phased out





Financials

- Technology Department has (5) Three-Year Technology Equipment Loan for the Infrastructure Rebuild of 2014-2015
 - Two will be paid off this fiscal year totaling \$50,000
 - Cisco Core Equipment
 - Virtualization Servers
 - Two will be paid off next fiscal year totaling \$55,000
 - Fiber SAN
 - KACE Management System
 - One will be paid off in FY20 totaling \$106,000
 - Staff Laptops
- The district is utilizing an e-Rate consultant to utilize more of the e-rate funds, which will help finance the technology needs of the district
- Technology grants are being researched

Approximate Cost of 1:1 Implementation Years 1-6

Example:

- Standard iPads K-2
 - About \$40,000 per year, 6 year replacement cycle, trade in
- Standard iPads 3-5 w/Keyboards (Take Home)
 - About \$45,000 per year, 6 year replacement cycle, trade in value
- Macbook Air 13" 6-8 (Take Home)
 - About \$125,000 per year, 6 year replacement cycle, trade in value



Approximate Cost of 1:1 Implementation Years 7-12 w/20% Trade In

Example:

- Standard iPads K-2
 - About \$32,000 per year, 6 year replacement cycle, trade in
- Standard iPads 3-5 w/Keyboards (Take Home)
 - About \$36,000 per year, 6 year replacement cycle, trade in value
- Macbook Air 13" 6-8 (Take Home)
 - About \$100,000 per year, 6 year replacement cycle, trade in value



Another Option: Approximate Cost of 1:1 Implementation Years 1-6

Example:

- Standard iPads K-2
 - About \$40,000 per year, 6 year replacement cycle, trade in
- Macbook Air 13" 3-8
 - About \$250,000 per year, 6 year replacement cycle, trade in value
- OR iPad Pro 10.5" w/Keyboard 3-8
 - About \$270,000 per year, 6 year replacement cycle, trade in value



Approximate Cost of 1:1 Implementation Years 7-12 w/20% Trade In

Example:

- Standard iPads K-2
 - About \$32,000 per year, 6 year replacement cycle, trade in
- Macbook Air 13" 3-8
 - About \$200,000 per year, 6 year replacement cycle, trade in value
- OR iPad Pro 10.5" w/Keyboard 3-8
 - About \$216,000 per year, 6 year replacement cycle, trade in value



Draft Implementation Timeline

- 2018-2019
 - K-2: New iPads, 1:1 in classroom
 - o 3-5: Redistribute District iPads for 1:1 in classroom
 - o 6-8: Redistribute District Laptops for 1:1 in classroom
- 2019-2020 (New K-5 structure)
 - No change Minor device upkeep
- 2020-2021
 - K-2: No Change
 - o 3-5: New iPads w/Keyboards, 1:1 Take Home
 - 6-8: New Laptops, 1:1 Take Home
- 2021-2024
 - No change Minor device upkeep
- 2024-2025
 - K-2: Replacement of iPads
- 2026-2027
 - o 3-5: Replacement of iPads
 - 6-8: Replacement of Laptops



Summary (Numbers are Raw)

- Approximate Annual Cost (6 Year) = \$189,000
 - Technology Fee (based on 2800 student avg at \$50): \$140,000
 - District Contribution: \$49,000
- Replacement Cycle = 6 Years per Device
- Increase in Technology Fee to \$60 (\$50 device, \$10 student insurance - self funded)
- Average Student Device Purchase Budget over last 3 years = \$158,755
- What about Free/Reduced?
 - IT budget will always have a line item to supplement the needed income for the 1:1 program. This is affordable based on the normal student yearly purchases and the payoffs of major loans



Thank You for your support of Antioch 34!

Board Discussion

