Arlington Public Schools

EVERY STUDENT COUNTS
EXCELLENCE FOR ALL

APS Strategic Plan
2024-2030



Educational Technology → Digital Learning
Focus on APS Device Work Group

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Tuesday, March 24, 2026

Work Session Focus



Student Academic Growth and Success

Build a shared understanding of the Device Work Group's process

Ground device decisions within a broader digital learning strategy

Share recommendations and rationale focused on learning outcomes

From Passive Use to Purposeful Learning

Student Academic Growth and Success



Over time, we have observed more **passive or "default" use** of technology, rather than **intentional, active use** aligned to learning goals.

Why Does APS Need to Pause and Re-Align?



Student Academic Growth and Success

- We implemented 1:1 with the intention of improving student learning experiences
- Instructional guidance and systemwide expectations did not always keep pace
- As a result, schools and teachers interpreted “best use” independently
- This has led to uneven experiences for students and families

Framing



Student Academic Growth and Success

Digital devices are tools used for instruction, assessment, accessibility, and communication in K–12 education.

APS must address concerns about device use including distraction, equity, and developmental appropriateness.

Trends in Academic Outcomes



Student Academic Growth and Success

2022 Programme for International Student Assessment (PISA)

- U.S. student performance on PISA showed a sharp decline in mathematics, while reading and science remained relatively stable.
- PISA does not attribute performance changes to technology access or 1:1 devices; instead, outcomes are more closely associated with **instructional conditions**, continuity of learning, and teacher support.
- Digital **distraction** is prevalent: about 30% of U.S. students report being distracted by their own device use in math class, and PISA finds lower reported distraction in systems with cell-phone bans (a correlational finding).

Additional PISA Findings



Student Academic Growth and Success

Moderate, instructional use of digital devices is associated with higher performance in mathematics.

The purpose of device use matters more than access.

Digital distraction is linked to lower achievement.

Teacher support amplifies the effectiveness of technology.

Equity and accessibility remain critical.

From: OECD, PISA 2022 Results: The State of Learning and Equity in Education (Volume I)

Current Landscape



Student Academic Growth and Success

A Managed Ecosystem Supporting Teaching and Learning

APS has a districtwide Apple ecosystem designed for instructional use.

Teachers have **classroom management tools** within the ecosystem that support instruction and reduce off-task behavior during lessons.

Integration with core systems (Student Information System (SIS), instructional platforms, assessments) supports student access.

Built-in **safety and security controls** support managed access, monitoring, and student protection at scale.

APS is investing in **training** and internal capacity, so tools are used intentionally and consistently across APS classrooms.

Device Work Group Approach



Student Academic Growth and Success

- Inclusive Group Membership
- Focus on “What’s Best for Learning?”
- Deliberate, Structured Session Progression
- Data-Informed Decision Making

Data Sources & Stakeholder Input



Student Academic Growth and Success

- Surveys for Broad Input
  - APS surveys gathered perspectives from staff, students, and families on device usage and challenges.
- Staff Focus Groups
  - Focus groups provided qualitative insights into instructional realities and device impact in classrooms.
- Grade-Band and Principal Feedback
  - Analysis considered developmental needs and operational issues highlighted by elementary and middle school principals.

Parent Feedback: Identified Themes



Student Academic Growth and Success

What Parents Raised	How This Input Was Used
• Desire for more objective evidence related to student distraction and device use patterns	Clarified the need for clear expectations about when, why, and how devices are used, rather than relying only on preferences or self-reporting
• Concerns about amount, purpose, and consistency of device use, especially in younger grades	Emphasis on developmental appropriateness and clearer expectations across grade bands
• Requests for consideration of research related to screens, reading, and learning	Reinforced focus on using technology intentionally for learning, with clear purpose, teaching practices, and expectations
• Materials shared by parents expressing concerns about potential negative effects of device use	Helped the group understand parent concerns and consider risks when setting expectations for device use and future professional learning

Principal Feedback



Student Academic Growth and Success

- Emphasis on **developmental appropriateness** in early grades
- Need for **clear, consistent access structures** to reduce variability across classrooms and schools; including expectations for **when devices go home and when they do not** at the elementary level
- Strong focus on **operational feasibility** (storage, supervision, transitions, and routines)
- Support for access models that enable **intentional, planned use** rather than default use

Conclusions from the Work Group



Student Academic Growth and Success

- Clear agreement on the *need for* ***guardrails*** *and* ***conditions*** across grade bands
- **No overall consensus for K–2** device models
- Mixed and **conditional support in grades 3–5**, tied to limits and instructional purpose
- Stronger alignment in grades 6–12, with **non-negotiables** around use and supervision

What We Heard from Stakeholders



Student Academic Growth and Success

Essential Instructional Uses

- Devices are a key tool for writing, research, assessment, collaboration, and accessibility in learning environments.

Challenges of Device Use

- Inconsistent and non-purposeful use of devices is the primary challenge.

Need for Guidance and Flexibility

- Educators seek clear guidance to ensure purposeful device use while maintaining instructional flexibility.

Equity and Developmental Differences

- Ensuring access and addressing developmental needs is crucial for effective device integration.

Key Takeaways

Student Academic Growth and Success



- Strong desire for **clarity and consistency** in how devices are used
- Concerns about **overuse**, especially in younger grades
- Interest in balancing digital tools with **hands-on and traditional learning experiences**
- Need **clear communication** about expectations for school and home use

Research: What it Reinforces

Student Academic Growth and Success



- Technology alone does not improve learning outcomes
- Teacher capacity, clarity, and support drive impact
- Implementation quality matters more than device type

See appendix for selected research informing this work

What This Represents…

Student Academic Growth and Success

This is a shift in how APS approaches digital learning.



From default use → intentional learning

Usage Guidelines for Learning-Centered Instruction

Core Principle: Shift from passive consumption to intentional, multimodal engagement

When digital tools add value

- Support specific instructional goals, including shared digital tasks (collaborative writing feedback or coding)
- Writing, research, and multimodal learning (text, audio, visual)
- Accessibility supports and assessments

When digital tools are *not* the right choice

- Replacing hands-on, movement based, or discussion-rich learning
- Busywork, engagement-only activities or digital worksheets
- Classroom management, rewards, or unstructured time
- Tasks often more effective off device (planning, drafting, math work)
- Daily, routine video use, especially in elementary

Two Year Implementation Plan

School Year 2026-2027

PreK-K	No devices (remains the same)
Grade 1	1:2 device ratio (remains the same)
Grades 2-5	Full class sets of devices (*assigned to individual students, but stored in a charging cart*)
Grades 6-12	1:1 device ratio (remains the same)
Pilots for the school year:	**Grade level carts** in Grades 1-2 at two elementary schools **Laptops** in Grade 6-8 at one middle school

School Year 2027-2028

PreK-K	No devices
Grades 1-2	Grade level carts
Grades 3-5	Full class sets of devices (*assigned to individual students, but stored in a charging cart*)
Grades 6-12	Laptops for all students

2026-27 School Year



Student Academic Growth and Success

Grade band/model	Rationale
PreK-K No student devices	• Developmental research confirms negative impacts of early screen exposure • Teachers report little instructional need for devices at this stage • Strengthens hands-on, play-based, early literacy/early numeracy work
Grade 1 1:2 device ratio	• Responds to teacher and parent feedback about ease of use & access limitations with smaller sets • Prioritizes instructional access, *not* increased screen time • Reduced number of devices supports intentional, pre-planned use aligned to learning goals • Maintains developmentally appropriate limits while preserving class workflow
Grade 1 pilot at two elementary schools **Grade level cart for Grade 1** (*30 devices per cart will be available for targeted and essential instructional purposes only*)	• Allows teachers to use devices when truly needed • Reduces distraction and misuse at these ages • Supported by elementary principals

2026-27 School Year



Student Academic Growth and Success

Grade band/model	Rationale
Grades 2-5 Full class sets of devices (*enough for all students*) • *Devices will continue to be assigned to students for ease of instructional access and safety purposes.* • *Devices remain at school but could be sent on a case-by-case basis for a specific project.* • *External **keyboards** provided in Grade 5*	• Supports research, project-based learning, STEM, assessment, and student expression • Provides accessibility for all students, regardless of identification • Aligns with the K–12 Digital Citizenship and AI Literacy scope and sequence • Responds to survey findings: teachers want flexibility, not unlimited access • Prioritizes instructional access and safety
Grade 2 pilot at two elementary schools **Grade level cart for Grade 2** (*30 devices per cart will be available for targeted and essential instructional purposes only*)	• Allows teachers to use devices when truly needed • Reduces distraction and misuse at these ages • Supported by elementary principals

2026-27 School Year



Student Academic Growth and Success

Grade band/model	Rationale
Grades 6-8 Continue 1:1 devices	• Strongly supported by middle school teacher & principal feedback • Aligns with increased academic and digital assessment requirements • Maintains equitable access with clear and purposeful use expectations • Provides a managed digital environment to support responsible use and digital citizenship
Grades 9-12 Continue 1:1 laptops	• Aligns with college/career readiness • Supports CTE pathways, project-based learning, multimedia, and research • Responds to parent and student feedback about high-school learning needs

Pilot Grades 6-8 at one middle school
 	
1:1 Laptops
	• Aligns with current APS infrastructure
	• Supports middle school workflows and mobility needs
	• Middle school is an instructional inflection point where:
	  • Writing becomes more complex
	  • Research skills increase
	  • Students begin using HS-aligned tools (Docs, Sheets, multimedia editing)
	• Supports long-form writing more effectively

Timeline

SPRING/SUMMER 2026

Establish Guardrails & Prepare the System

- Develop division Professional Learning (PL) plan focused on purposeful, active device use
- Co-develop pilot plan with identified schools
- Adjust curriculum to reduce or replace passive digital activities (K-5/6-8/9-12)
- Establish a teacher work group focused on the development of model lessons
- Co-develop and finalize districtwide usage guidelines with school-based staff
- Set and communicate consistent expectations for storage and charging

FALL 2026

Strengthen Instructional Practice & Monitor

- Launch pilots (Grades 1-2; Grade 6-8)
- Launch PL on purposeful, active device use including *Apple Classroom* through Instructional Technology Coordinators (ITCs)
- Support the use of *Apple Classroom* and *JAMF Teacher* (elementary only) as an instructional strategy
- Assess and plan for FY28 budget (texts, physical materials, supplies)
- Begin coaching cycles and walkthroughs focused on active vs. passive use

Timeline

WINTER/SPRING 2027

Refine, Adjust, and Prepare to Scale

- Share regular pilot implementation updates with staff and families
- Assess pilot and evaluate scaling plan for 2027-28SY.
- Finalize necessary curriculum and resource modifications for 2027-28SY
- Coordinate with Information Services to finalize purchase plan of shared carts and laptops

FALL 2027

Scale, Support Transitions, and Monitor

- Implement **Gr. 1 & 2 shared grade level carts and middle school laptop rollout** with training and technical support
- Support teachers through coaching and collaborative learning teams (CLTs)
- Document coaching cycles around purposeful tech use
- Monitor implementation and change in practices through walkthroughs

Overall Recommendation



Student Academic Growth and Success

PreK-K	No devices
Grades 1-2	Grade level carts (30 devices per cart)
Grades 3-5	Full class sets of devices (*assigned to individual students, but stored in a charging cart*)
Grades 6-12	Laptops for all students

Budget



Student Academic Growth and Success

Keyboards for Grade 5 iPads

Item	Quantity	Total Cost
iPad Keyboard	2,180	$217,891.00

Carts with charging for new Elementary Model

Item	Quantity	Total Cost
Carts for Storage and Charging Devices	520	$1,092,000

Change from iPads to Laptops at One Pilot Middle School (Grades 6-8)

Item	Additional Cost per Student (iPads vs Laptops)	Total Additional Cost (iPads vs Laptops)
Laptops in 6th-8th Grade	$75	$400,607 Please refer to Appendix 3

Keys Focus Areas



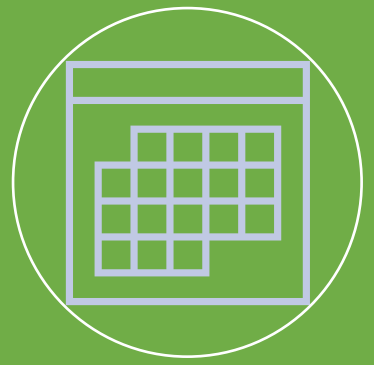
Instructional Practice

Clear expectations for purposeful, active use and when to choose digital approaches



Professional Learning

Ongoing training and coaching so teachers can use devices intentionally, not by default



Consistency and Routines

Shared norms for access, supervision, and classroom management across schools



Safety and Security

Managed use, oversight, and age-appropriate guardrails built into daily practice



Communication and Support

Clear messaging and guidance for staff and families

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Questions and Feedback

Appendix Table 1: Proposed Device Cart w/ Charging and Storage



Student Academic Growth and Success

Purpose: Support the proposed elementary device access model through shared classroom carts

Item	Quantity	Unit Cost	Total Cost
Device Carts w/ Charging and Storage	520	$2,100	$1,092,000

- **Grades 2–5:** One cart in each core and self-contained classroom

- **Total carts required:** 520
- **Average cost per cart:** $2,100

Total Estimated Cost: $1,092,000

Appendix Table 2: Current cost of iPads for All Rising 6th Graders



Student Academic Growth and Success

Projected Middle School Enrollment: 2,120 6th Graders

Current Model: iPad + Keyboard Case

Item	Per-Student Cost	Total Cost (2,120 students)
iPad	$324	$686,880
Keyboard Case	$100	$212,000
Total Cost	$424 per student	**$898,880**

Appendix Table 3:
Total Cost Comparison of Proposed Middle School Pilot Model



Student Academic Growth and Success

Cost for 6th Grade (model: iPad + Keyboard Case) without the pilot school

Item	Per-Student Cost	Total Cost (1,722 6th graders)
iPad	$324	$557,928
Keyboard Case	$100	$172,200
Total Cost (n=1,722)	$424	**$730,128**

Cost for one Pilot Middle School (model: Laptops Grades 6-8)

Item	Per-Student Cost	Total Cost (1,141 students)
Laptops for One Middle School Pilot, Grade 6-8 (n=1,141)	$499	$**569,359**

Summary Comparison

Item	Total Cost for District (iPads +Keyboards & Pilot Laptops)	Total Additional Cost (Proposed model cost - Current model cost)
iPad +Keyboards for Gr 6 students & Laptops for One Pilot Middle School (Grs 6-8)	**$1,299,487** ($**730,128** + $**569,359**)	**$1,299,487 - $898,880 = $400,607**

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