



**Office of Digital  
Teaching & Learning**

# **Technology Review Townhall**

11 APRIL 2022



# WELCOME

Russell Deneault  
Director of Technology  
Creighton School District  
Vice President, AASBO



Kelly Krusee  
Program Manager  
Office of Digital Teaching & Learning  
Arizona Department of Education



# MEETING OBJECTIVES

- First gathering introductions, review of purpose and goals
- Participants will learn about:
  - Office of Digital Teaching & Learning strategy
  - Potential programs and services available to LEAs
- Gather feedback, input from participants



# TECHNOLOGY TOWNHALL GOALS

Monthly townhalls to learn about technology solutions for Arizona LEAs.

Participants provide input, feedback on potential solutions.

Participant feedback used in development of solutions.



# TODAY'S AGENDA

Welcome, Introductions and Overview  
Office of Digital Teaching & Learning Strategy  
Cybersecurity  
Enterprise Computer Hardware Program  
Device as a Service  
Closure and next steps





**Office of Digital  
Teaching & Learning**

# Strategic Plan



# ARIZONA DEPARTMENT OF EDUCATION

## STRATEGIC PLAN: 2022-2026

**Priority #1: Student Equity and Achievement**

**Priority #2: Educator Recruitment and Retention**

**Priority #3: Safe and Healthy Schools**

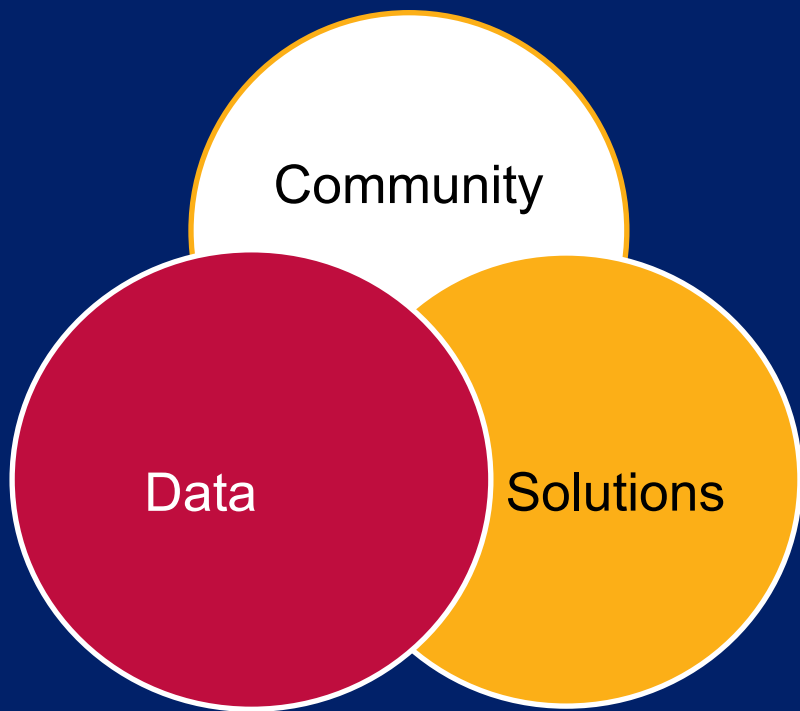
**Priority #4: Strategic Funding**

**Priority #5: Strategic Data Use**



# OFFICE OF DIGITAL TEACHING AND LEARNING

## STRATEGIC PLAN: 2022-2023



1. Build **Community** with Local Education Agencies and solution experts
2. Gather **Data** / Measure Progress
3. Facilitate Technology **Solutions and Resources**

**Student Equity and Achievement**  
**Educator Retention**  
**Safe Schools**  
**Strategic Funding**  
**Strategic Data Use**





# STRATEGY

## COMMUNITY

- Engaging Local Education Agencies and solution experts in Communities of Practice
- Facilitating knowledge sharing
- Facilitating training opportunities for Local Education Agencies, families and students
- Economies of Scale

## DATA COLLECTION AND ANALYSIS

- Identifying and tracking metrics of success: Key Performance Indicators
- Developing evaluation instruments for Local Education Agencies to use for their internal evaluation practices
- Continuous evaluation of opportunities that drive solutions

## SOLUTIONS

- Digital Devices
- Connectivity
- Digital Skills
- Data and Security
- Policies and Procedures
- Classroom Innovation
- Digital Transformation



# DIGITAL DEVICES

## Data Analysis and Findings:

- 60% of respondents lack a refresh plan for instructional devices
- 87% is the average of student and teacher devices that are no longer covered under manufacturers' warranty
- 71% of respondents lack a refresh plan for student devices
- 89% is the average of student devices that are not fully protected from losses or theft
- 66% of respondents have a one-to-one program
- 68% of respondents use Chromebooks for their student allotted devices

## Potential Solutions:

- Statewide contract negotiation for devices at lower costs. *Device as a Service.*
- Proof of Concept of white glove services, refresh plans, support. *Device as a Service.*
- Distribution of Standards for "How to Develop a Device Replace Plan"
- Shared support services. Device protection from damages, losses or theft

**Student Equity and Achievement Strategic Funding**



# CONNECTIVITY

## Data Analysis and Findings:

23% of Arizona K12 students lack broadband at home (source: Education Superhighways)

64% respondents do not currently collect student connectivity data and therefore do not have ways of identifying connectivity needs at home

75% Some Local Education Agencies (in rural areas) estimate that up to 75% of their students lack connectivity at home

## Potential Solutions:

Contract negotiations with vendors / economies of scale



Broadband and Final Mile projects



E-rate Optimization



Alternative connectivity solutions



**Student Equity and Achievement  
Strategic Funding**



# DIGITAL SKILLS

## Data Analysis and Findings:

- 31% of all respondents indicated that they had little or no training for instructional staff in digital teaching and learning.
- 74% of respondents need to improve their level of digital support to students with special needs
- 30% of respondents have not provided training on digital citizenship to their students

**How Curriculum Staff assess their Instructors' knowledge of Technology and Computer Science Standards:**

	Comp. Science Standards	Education Tech Standards
<b>Very familiar</b>	<b>3.88%</b>	<b>2.91%</b>
<b>Somewhat familiar</b>	<b>42.72%</b>	<b>54.37%</b>
<b>Not at all familiar</b>	<b>53.40%</b>	<b>42.72%</b>

## Potential Solutions:

- Training Sessions and Webinars in:
  - Digital Citizenship
  - Computer Science Standards
  - Education Tech Standards
  - Others

State Support Resources

Communities of Practice

Knowledge Repository

**Student Equity and Achievement  
Educator Retention**



# DATA AND SECURITY

## Data Analysis and Findings:

- 28% of respondents have never risk assessed or were unsure when their last assessment was
- 66% of respondents have not conducted a recent professional risk assessment
- 11% of respondents need help to implement allow lists / deny lists
- 26% of respondents lack any measures to reinforce CIPA compliance
- 31% of respondents lack Data and Security training for their teachers and staff
- 59% of respondents that offer data and security training to their teachers and staff do so at a cost. Some of them find the cost to be too high.



## Potential Solutions:

Security standards. CIPA compliance



Solutions for security at home



Shared security services (risk assessments, protocols)



Contract negotiations for data privacy and security solutions. Economies of scale

**Safe Schools  
Strategic Funding**



# POLICIES & PROCEDURES

## Data Analysis and Findings:

36%

of respondents have not fully adopted and implemented board-approved policies for digital learning

20%

of respondents have not started the work on drafting or documented policies for digital learning

## Potential Solutions:

Build a library of policies, procedures and common practices

Monthly Seminars with pertinent topics, presented by guest expert speakers to discuss relevant subjects

Communities of Practice: focus on the improvement of practice with members who share expertise and passion for a designated topic

**Safe Schools  
Educator Retention**



# CLASSROOM INNOVATION

## Data Analysis and Findings:

- 20% | respondents do not have digital content available for classroom and home use
- 17% | respondents lack board approved policies for the selection of digital content
- 60% | respondents lack a process in place to ensure digital content aligns to state standards
- 33% | respondents do use Extended Reality in the classroom



## Potential Solutions:

- State-wide and localized negotiations for the acquisition of digital content and classroom technology at lower cost 
- Communities of Practice or Knowledge Groups to connect educators to resources and area experts in digital teaching and learning 
- Monthly Seminars with pertinent topics, presented by guest expert speakers to discuss relevant subjects
- Innovation: Virtual Reality / Extended Reality, Learning Management Systems, Learning Object Repository, Shared Content.

**Student Equity and Achievement  
Strategic Funding  
Educator Retention**



# DIGITAL TRANSFORMATION

## Data Analysis and Findings:

*It would “be beneficial just to know how other districts manage [their devices and digital learning].”*

*“We are dealing with [challenges in students’] behavior and learning loss. After we get this under control, we will focus more on technology integration.”*

*“Digital learning is a result of COVID and when COVID goes away we will go back to normal.”*

## Potential Solutions:

Communities of Practice

Digital Transformation

- ADE Cloud Innovation Center to engage local education agencies
- Extended Reality
- Enterprise Solutions including Learning Management Systems and Learning Object Repositories
- Innovation across all workstreams

Transformational practices

**Student Equity and Achievement**  
**Strategic Funding**  
**Educator Retention**







# Office of Digital Teaching & Learning

**Published Strategy:**

**<https://bit.ly/373tdXb>**





# Office of Digital Teaching & Learning

**Public Dashboard:**

**<https://bit.ly/3x69SQb>**





# Office of Digital Teaching & Learning

**Full Analysis:**

**<https://bit.ly/3IQVBsv>**





# Office of Digital Teaching & Learning

## Cybersecurity

*Ryan Murray*

*Deputy Director/Deputy State Chief Information Security Officer,  
Arizona Department of Homeland Security*



# Cyber Resources for Local and Tribal Governments



- Anti-Phishing / Security Awareness Training (SAT)
- Advanced Endpoint Protection (AEP)
- Multi-Factor Authentication (MFA)
- Web Application Firewall (WAF)

## Coming in FY23

- Asset Management and Remote Patching
- Security Assessments
- K-12 Education!

<https://aset.az.gov/programs/cyber-resources-local-and-tribal-governments>



# Office of Digital Teaching & Learning

## Breakout Group Discussion: Cybersecurity

- Is there potential with this program? Are there benefits to LEAs with this program?*
- What are the pros and cons?*
- What does ADE/Az Department of Homeland Security need to know?*





# Office of Digital Teaching & Learning

## Enterprise Computer Hardware Program ECHP

*Lindsey Daberko, Project Coordinator, AZ Strategic Enterprise Tech (ASET) Office, ADOA*

*Eric Bell, LAN Supervisor, AZ Strategic Enterprise Tech (ASET) Office, ADOA*

*Erick Tanchez, LAN Supervisor, AZ Strategic Enterprise Tech (ASET) Office, ADOA*



# Enterprise Computer Hardware Pilot Program

ADOA-ASET

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# Goals/Objectives

- Reduce cost by obtaining superior unit pricing



- Ability to reduce lead times ✓

- Reduction in time spent on imaging and tagging

processes ✓

- Local Inventory Warehousing based on forecasting



# Pilot Success

- Reduction of lead time from 3-6 months to approximately 11 days
- On average, ADOA has seen an 18% improvement in cost savings
- Additional cost savings (resource time)

# Chromebook Survey

- What are the current needs of the Local Education Agencies?
- Looking to gather specification requirements to drive Notebook cost down
- Current Notebook cost
- Additional servicing needs (i.e. imaging services, asset tagging, white glove service, warranty, etc.)

# Questions & Feedback

# **Device as a Service DaaS**

*Karina Jones*

*IT Strategy & Communication  
Deputy Associate Superintendent  
Arizona Department of Education*



# WHAT THE DATA SAYS

- **68** percent of student devices are Chromebooks.
- Over **70** percent of LEAs lack a refresh plan for student devices.
- Over **70** percent of LEAs lack either extended warranties or accidental damage protection, mechanisms that help maintain the operability of student devices.
- Over **30** percent of respondents have not provided any training on digital citizenship or digital literacy to their students.
- LEAs broadly ask for increased capacity in technology support.



# DEVICE AS A SERVICE

- **Includes:**
  - Device
  - Computer Case
  - White Glove Services: asset tagging and preparation
  - 3yr Accidental Damage Protection
  - 3yr On Site Break Fix: technical support
  - Professional Development (training)
  - Device Data Analytics (device usage reports)



# DEVICE AS A SERVICE

				Device	Google	SUB TOTAL	Case	3yr ADP	3yr Onsite Fix	White Glove	Delivery	TOTAL
HP	11EE G8	Clamshell	11.6 NT	\$ 225.50	\$ 33.34	\$ 258.84	\$ 19.21	\$ 43.74	\$ 37.50	\$ 11.25	\$ 7.50	\$ 378.04
HP	11EE G9	Clamshell	11.6 NT	\$ 258.50	\$ 33.34	\$ 291.84	\$ 19.21	\$ 52.85	\$ 37.50	\$ 11.25	\$ 7.50	\$ 420.15
HP	x360	Convertible	11.6 Touch	\$ 379.50	\$ 33.34	\$ 412.84	\$ 22.20	\$ 70.16	\$ 37.50	\$ 11.25	\$ 7.50	\$ 561.45
HP	Fortis14	Clamshell	14 NT	\$ 291.50	\$ 33.34	\$ 324.84	\$ 19.21	\$ 56.50	\$ 37.50	\$ 11.25	\$ 7.50	\$ 456.80
Lenovo	100e	Clamshell	11.6 NT	\$ 247.50	\$ 33.34	\$ 280.84	\$ 19.21	\$ 47.39	\$ 37.50	\$ 11.25	\$ 7.50	\$ 403.69
Lenovo	300e	Convertible	11.6 Touch	\$ 287.10	\$ 33.34	\$ 320.44	\$ 19.21	\$ 52.85	\$ 37.50	\$ 11.25	\$ 7.50	\$ 448.75
Lenovo	500e	Convertible	11.6 Touch	\$ 401.90	\$ 33.34	\$ 435.24	\$ 19.21	\$ 65.61	\$ 37.50	\$ 11.25	\$ 7.50	\$ 576.31
Acer	C734	Clamshell	11.6 NT	\$ 269.50	\$ 33.34	\$ 302.84	\$ 19.21	\$ 53.76	\$ 37.50	\$ 11.25	\$ 7.50	\$ 432.06
Acer	R853TNA	Convertible	12 Touch	\$ 407.00	\$ 33.34	\$ 440.34	\$ 19.21	\$ 72.90	\$ 37.50	\$ 11.25	\$ 7.50	\$ 588.70
Dell	3100	Clamshell	11.6 NT	\$ 262.25	\$ 33.34	\$ 295.59	\$ 19.21	\$ 44.65	\$ 37.50	\$ 11.25	\$ 7.50	\$ 415.70
Dell	3100	Clamshell	11.6 NT	\$ 398.74	\$ 33.34	\$ 432.08	\$ 19.21	\$ 61.96	\$ 37.50	\$ 11.25	\$ 7.50	\$ 569.50
Dell	3100 2n1	Convertible	11.6 Touch	\$ 329.60	\$ 33.34	\$ 362.94	\$ 19.21	\$ 53.76	\$ 37.50	\$ 11.25	\$ 7.50	\$ 492.16
Samsung	11	Clamshell	11.6 NT	\$ 176.00	\$ 33.34	\$ 209.34	\$ 19.21	\$ 36.45	\$ 37.50	\$ 11.25	\$ 7.50	\$ 321.25
Samsung	14	Clamshell	14 NT	\$ 269.50	\$ 33.34	\$ 302.84	\$ 19.21	\$ 51.94	\$ 37.50	\$ 11.25	\$ 7.50	\$ 430.24
Samsung	14	Clamshell	14 NT	\$ 361.90	\$ 33.34	\$ 395.24	\$ 19.21	\$ 51.94	\$ 37.50	\$ 11.25	\$ 7.50	\$ 522.64





# BREAKOUT DISCUSSION

- What benefit do you see in the Device as a Service model for your district / school?
- Which services would you include for student devices? Explain your answer.
- What do you think of the pricing sheet here presented?



# **Closing**

*Process Check-in*

*Next meeting time*

*Thank you!*



**Thank you!**

