Future State

JCPS ARMAC Presentation
Digital Transformation

Identify The Research

Kentucky Education Technology Master Plan

*Source: U.S. Department of Educational Technology
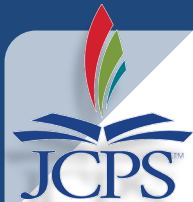
Identify The Issue / Need Problem Statement

JCPS does not have a system in place to address the three components of the digital divide, which include 1:1 instructional devices, Internet access, and digital content. Without a sustainable system for providing technology resources and supports, digital inequities for students, staff, and families are perpetuated. Digital inequity hinders engagement, innovation, and authentic learning experiences for ALL JCPS students and staff.

3rd Level: Student Agency

2nd Level: Classroom Uses (higher / lower)

1st Level: Access to Devices, Software, Internet, Infrastructure
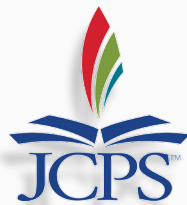
Access Gap

Closing the JCPS Digital Divide for ALL JCPS Students

Everyone:1

Anytime / Anywhere
Internet Access

Software
Align Digital Content
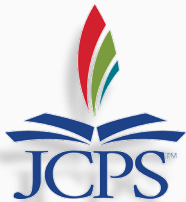
Digital Privacy, Safety,
& Security

Communication

Digital Transformation
Infographic

Digital Transformation
Handbook

Digital Transformation
Blueprint

Digital Transformation
Website

Everyone:1 - Student Instructional Devices

Current State

Student Instructional Device Replacement Cycle

- Student access is dependent on school funding and priorities
- Positions often take precedent over student devices
- Inequitable student access across JCPS schools
- Unlimited / random student device requests is not an effective / sustainable model

Shared Responsibility Model

- There is not a shared responsibility model in place
- There has not been consistent best practice guidance across all schools for a successful digital transformation

Future State

Identify the Need:
Provide ALL JCPS students a mobile instructional device for anytime / anywhere access

Why: Equity across schools. Closes the access and opportunity gap for all JCPS students
How: Systemic replacement cycle based on a 4 year refresh
Who: JCPS District and Schools

Identify the Need:
Implement a Shared Responsibility Model Between the District, School, Student, and Family

Why: A shared responsibility is Imperative for a sustainable digital conversion
How: Digital Transformation Blueprint based on best practices
Who: Students, staff and families

Review Date:

Future State : Everyone:1 - *Student Instructional Devices*

SMART Goal (Step 8) *How will we know that we are making progress?*	Key Risks (Step 7) *What may stop us from getting there?*
• Provide ALL JCPS students a mobile instructional device for anytime / anywhere access • Implement Shared Responsibility Model that includes Student Device Care	● Sustainable funding ● Digital transformation culture shift ● Breakdown in shared responsibility model ● Student device care / responsible use ● Chromebook availability

Key Actions (Steps 5 & 6) *What does it take to get from current to future state? What are the potential resources needed?*

Action	Resources	Responsible	Due Date	Status	Progress Notes
Life Cycle Management / Refresh Cycle		Belcher / Pierce		🟨	[Link to Project Plan](#)
Device Care - Shared Responsibility Model		Belcher / Pierce		🟨	Link to Project Plan
Maintenance - Repair Requests		William / Raghu		🟥	Link to Project Plan
Inventory Management		William / Raghu		🟨	Link to Project Plan
Device Surplus		TBD		🟥	Link to Project Plan

Internet Access - Anytime / Anywhere
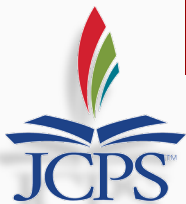
Current State

JCPS Network Infrastructure (On Premise)

- Invested $24 million on school / district network upgrade since 2019. JCPS portion $3.6 Million
- Upgrades included WiFi coverage, redundancy, user based authentication, network analytics, and enhanced security
- Continue to improve the end user experience for students, staff and guests
- Transitioning to cloud based technology applications

Anytime / Anywhere Internet Access (The Last Mile)

- Student Internet access is dependant on student home life or district issued hotspot
- Lack of Internet access at home creates student access / opportunity gaps
- Transitioning from hotspots to LTE enabled Chromebooks. Hotspots are difficult to manage and often are not dedicated to instruction use in the home

Future State

Identify the Need:
Maintain a Safe, Secure and Reliable Network Infrastructure (On Premise)

Why: Seamless technology end user experience
How: Leverage Erate with funding match
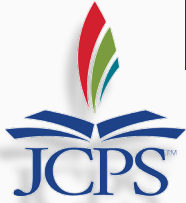Who: All students, staff, and JCPS guests

Identify the Need:
Identify the Need : Provide Anytime / Anywhere Student Internet Access (The Last Mile)

Why: Provides equitable access ANYTIME / ANYWHERE
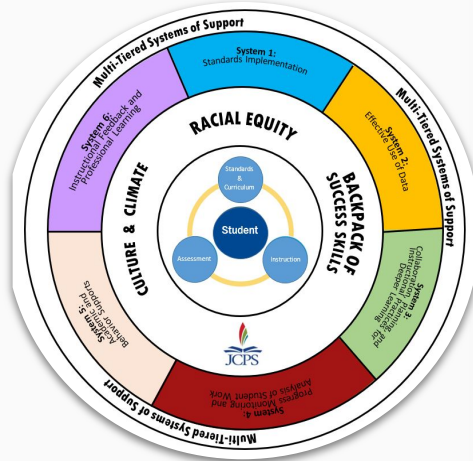How: Provide LTE (WiFi) enabled student instructional devices
Who: All JCPS Students

Software - Align Digital Content

Current State

Blended Learning Model

● Dependant on basic technology needs being met in all schools for all students
● Implementation Phase

Digital Content and Resources

● Multiple software purchases are made with similar use cases which creates a security risk, inability to manage on various levels, increased expense, additional contracts / DSA, inability to support the platforms, and creates instructional inequities through inconsistency.

Future State

Identify the Need :
Provide Blended Learning Opportunities

Why: We boldly and unapologetically believe that "one size fits all" instruction does not work and that every JCPS student deserves their perfect blend, or "smoothie," in order to excel.

How: Effectively leverage our district's core digital content, engagement, and creation tools within a blended learning model utilizing variables such as pace, place, path, and time

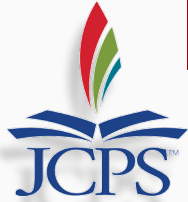Who: IT3 Innovation Team, Teaching & Learning, teachers and support staff

Identify the Need:
Aligned Instructional Digital Content

Why: Improves efficiency, expense and educational outcomes
How: Provide recommended quality digital content and resources to schools
Who: Software approval process distributive model

Digital Privacy, Safety and Security

Current State

National Institute of Standards and Technology (NIST) Cybersecurity Framework

- Implementation Phase
- Do not have an evidence based system to provide documentation

Information Technology Policy and Procedures

- Information Technology policies were approved by the JCPS Board of Education
- Information Technology procedures are being finalized that support approved policies

Future State

Identify the Need:
Adhere to National Institute of Technology (NIST) Cybersecurity Framework

Why: Helps better understand and improve cybersecurity risk
How: Follow and document NIST framework guidelines
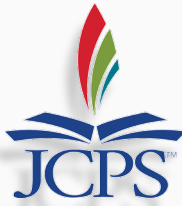Who: JCPS, Internal Audit Department, & IT3

Identify the Need :
Finalize JCPS Information Technology Policies and Procedures

Why: Provides guidance and consistency of best practices
How: Follow board approved policies and procedures
Who: JCPS & IT3

Budget

Current State

Budget Requests

- JCPS has recently invested heavily in technology
- One time stimulus funding provided additional support
  - 70K Student Chromebooks
  - 12K Hotspots
  - Interactive Panels for ALL JCPS Classrooms
  - $24 million network upgrade - JCPS portion $3.6 million with Erate assistance
- There are some Technology Future State basic needs not included as recurring budget items. See recommendation on the next slide.

Technology Replacement Cycle

- There is currently not a consistent replacement cycle for some technology basic needs
- Tech equity for students is based on school budget and priorities

Future State

Identify the Need:
Provide a Sustainable Operating Budget for Technology Basic Needs

Why: Provides consistency, dependability and budget planning
How: Establish a recurring operating budget. Redistribute funding areas that can be offset by a digital transformation such as paper, printers, copiers, textbooks, etc. Focus school allocated KETS funds on technology basic needs.
Who: JCPS District and Schools

Identify the Need :
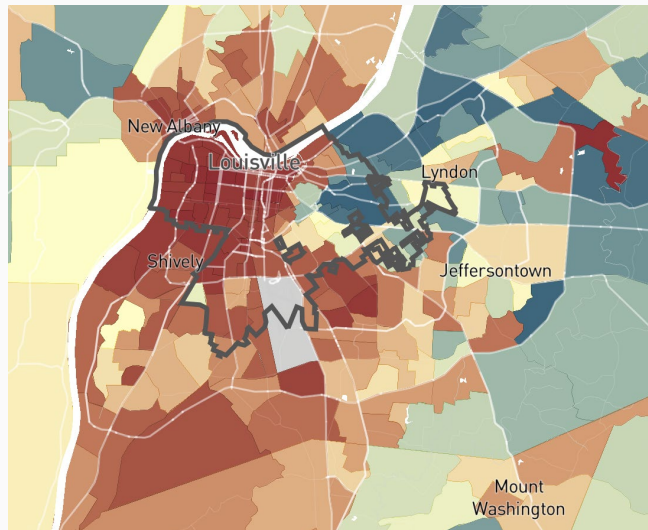Centralize a Technology Replacement Cycle for Funding, Distribution, and Allocation

Why: Ensures basic technology needs for students are priority
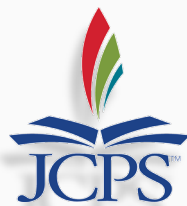How: Centralized replacement cycle
Who: JCPS District and Schools

Addressing the Opportunity Gap and Digital Divide

The Opportunity Atlas

Jefferson County age 35 Income in correlation to the digital divide

Questions?

Thank you!

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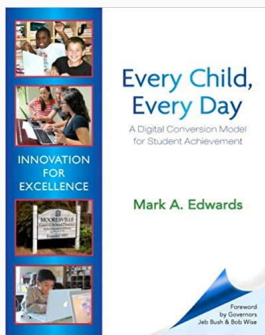
Katie Punsly
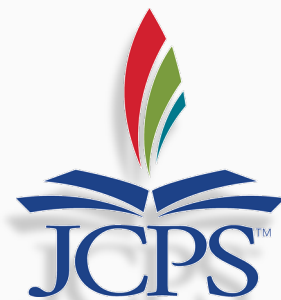
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Resources