

# Technology Roadmap One to One Plan

18 December 2017



The background image shows a classroom setting. On the left, a window with vertical blinds is visible. In the center, a large screen displays a game interface with a timer showing 24:36 and various colorful icons. Several students are seated in the foreground, looking towards the screen. The room has a patterned rug and a dark wall with circular decorations.

# School could be different. School could be better.

## Meta-Analysis of 1-1 Laptops

- Increased achievement in ELA, arts, writing, math, and science
- More student centered and project-based instruction
- Improved engagement
- Improved teacher-student relationships

“For such a program to be effective...schools must focus on crafting comprehensive plans that cover everything from infrastructure to curriculum to pedagogy to professional development.”

# ROADMAP



## Concept (Dec - March)

### Idea Generation

- Requests
- Customer Pain
- Review Best Practices
- Legislation

**Key Deliverables**  
Concept Docs

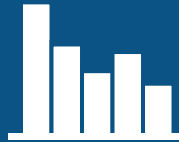


## Research (April - June)

### Assess Industry

- Benefit Assessment
- Curricular Needs
- Assessment Needs
- Funding

**Key Deliverables**  
Research Report, Supporting Documents, Definition Statement



## Analysis (July - Sept)

### Business Analysis

- Cost/Benefit
- Resources Required
- Capital Expenses
- Anticipated Outcomes

**Key Deliverables**  
Business Case, Product Requirement Document



## Develop (Oct- now)

### Strategize Tech Plan

- Technology Grouping
- Professional Development
- Curriculum
- Develop Budget
- Develop Timeline

**Key Deliverables**  
Schedule, Technology Plan Document, Forecast Budget



## Launch

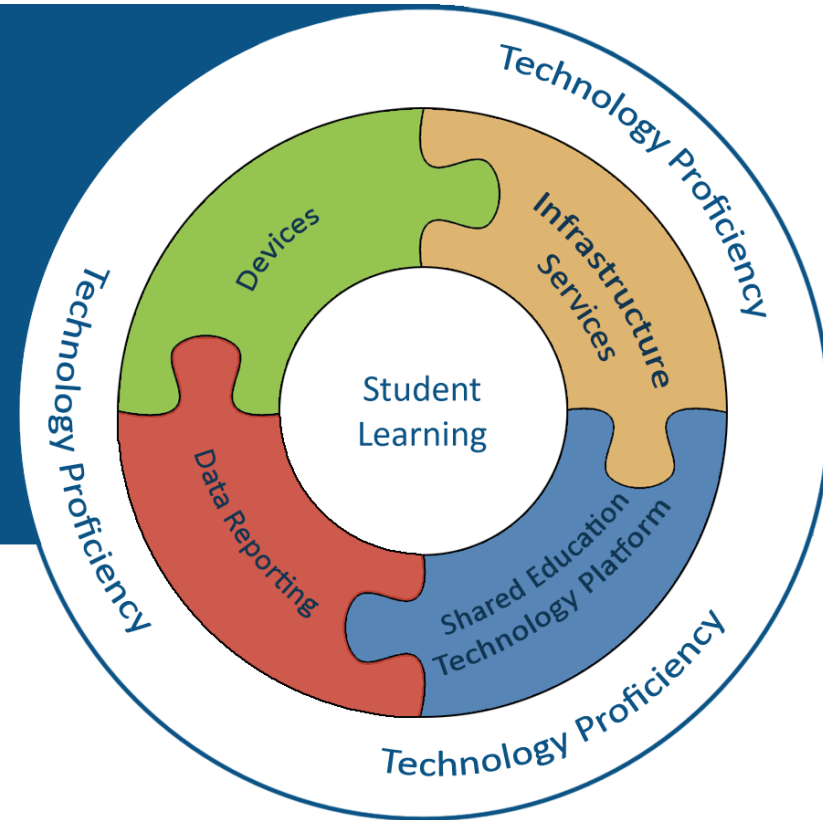
### Implementation

- Finalize Plan
- Distribute Plan
- Publish Plan
- Budget Allocation
- Training

**Key Deliverables**  
Launch Plan, Launch Budget, Student Benefit Forecast Target Launch Date

# ACADEMIC TECHNOLOGY VISION

To ensure unprecedented, world-class academic results with technology as a powerful enabler; to provide equitable, rigorous, joyful, engaging, future-ready learning to every student in every school, every day.



# VISION IN CONTEXT



## Devices

- 1: 1 Initiative
- Asset Management System
- Theft Prevention
- Adequate Resource Allocation



## Infrastructure Services

- Ubiquitous Internet Access and Network Bandwidth
- Safe and Secure Technology Environment



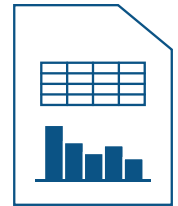
## Shared Educational Technology Platform

- Collaborative Tools
- SIS Student/Parent Portal
- Online Learning Tools



## Technology Proficiency

- Digital Citizenship
- Accelerating Innovation Cohort
- Cyber Security



## Data Reporting

- Data Warehouse
  - Self-Service Reporting
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# STRATEGIES FOR AN EMPOWERED AND ENGAGED COMMUNITY OF LEARNERS



D

KNOWLEDGE BUILDING

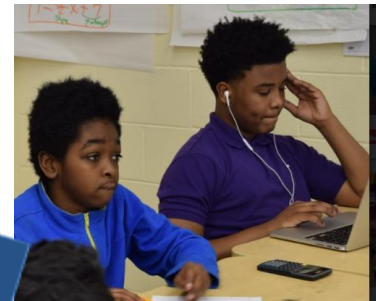
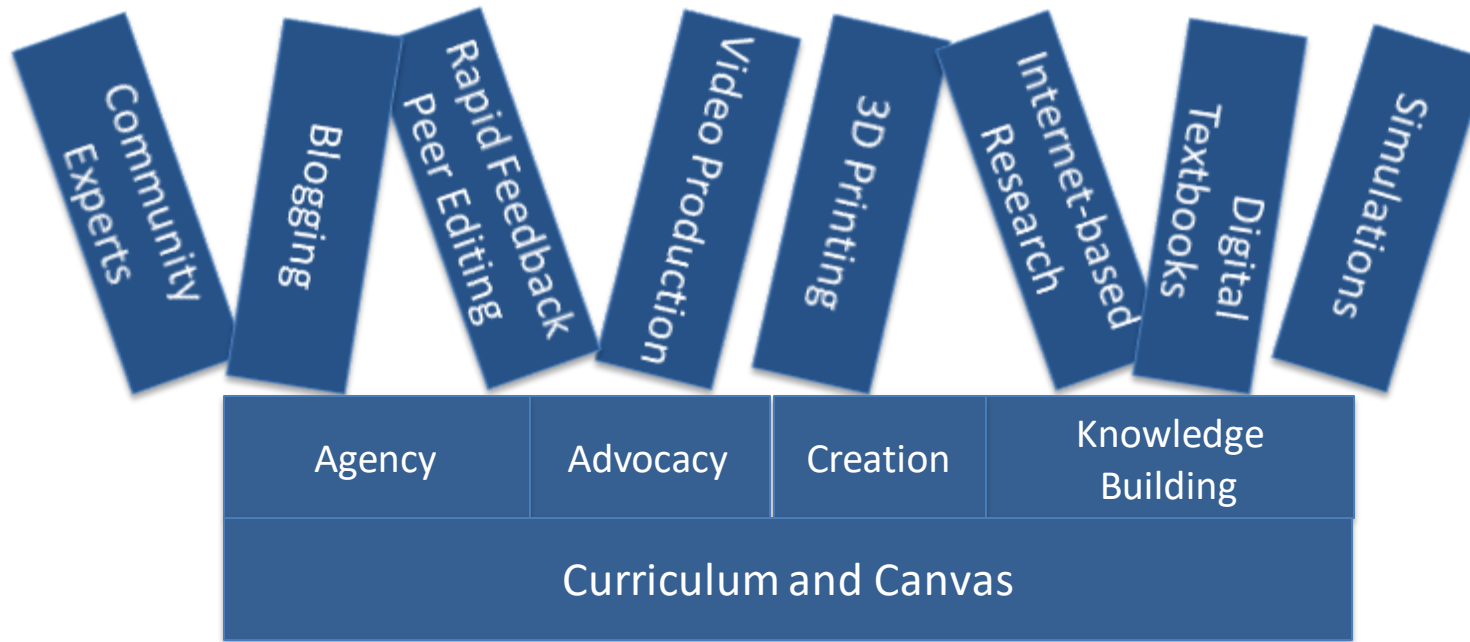


CREATION



**LOVED. CHALLENGED. PREPARED.**

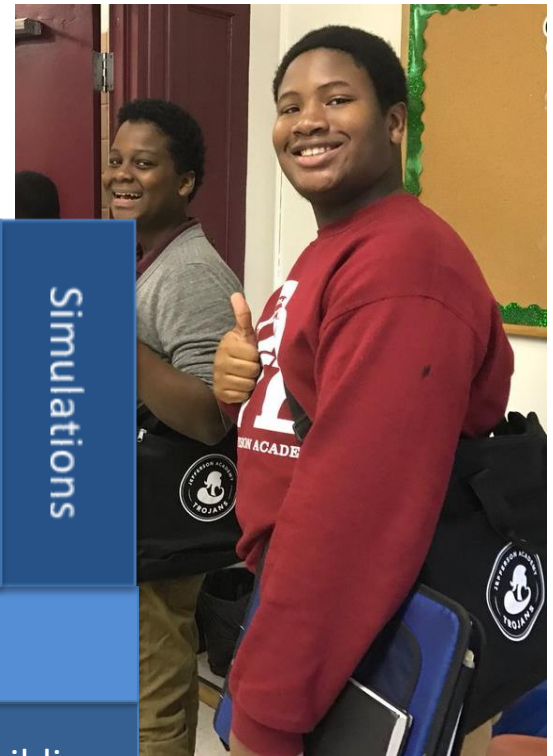
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**LOVED. CHALLENGED. PREPARED.**



Simulations	Digital Textbooks	Internet-based Research	3D Printing	Video Production	Rapid Feedback Peer Editing	Blogging	Publication	Community Experts
Computers for every student								
Knowledge Building			Creation	Advocacy	Agency			
Curriculum and Canvas								



**LOVED. CHALLENGED. PREPARED.**



# SYNERGY

## Promote Equity

- 21<sup>st</sup> Century Skills
- Distance Learning Opportunities

## Empower our People

- Shared content and planning for teachers
- Time savings for teachers

## Ensure Excellent Schools

- Improve attendance and engagement
- Better instructional decisions

## Educate the Whole Child

- Authentic pre-career opportunities
- Improved feedback to support growth

## Engage Families

- Access to classroom resources and child's progress
- Technology supports for parents

# PHASED ROLLOUT STRATEGY

Fully-Integrated Curriculum and  
Professional Development  
Support



17-18

AIC 6-8

18-19

All 6-8  
AIC 9

19-20

All 9-12  
AIC K-5

20-21

All K-5  
AIC 6-8 Step Back



Ongoing  
data collection and  
evaluation



# LEADING WITH LEARNING

**JAN-JUNE**

**Course  
Companion  
(LEAP and  
Curriculum)**

**MAR-JUNE**

**LEAP  
Leaders and  
initial LEAP  
Integration  
School  
Leaders PD**

**JUNE-AUG**

**PD Training  
Center:  
Devices,  
Platforms,  
Curriculum  
Integrations**

**AUG-OCT**

**Full LEAP  
Integration  
PD Day  
Integration  
Digital  
Citizenship  
for Students**

**OCT-JAN**

**Student  
Rollout  
Ongoing  
Instructional  
Support and  
Admin  
Coaching**



**2018-2019 Middle Grades**



# BUDGETING AND LOGISTICS

## 2018



### BUDGETING

Device Selection  
Logistics Plan in  
Place  
Contract to City  
Procurement



### WAREHOUSE AND SET UP

Storage  
Setup and  
Configuration  
Prepare Schools



### SCHOOL DELIVERY

Delivery to Schools  
OCTO Setup  
Plan for distribution  
to Students



Feb.-April

May-Aug.

Sept.-Oct.



# Device Versatility for All Content Areas

- World-facing camera
- Pen and touch integration
- Light weight
- External microphone, probes and peripherals
- Accessibility support
- Conforms to technical requirements of software in use.





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# Risks for Mitigation

- Procurement and personnel timeline
- Hiring quality technical support personnel or contractors
- Training event for principals and APs





# Appendix A

## Phase I Rollout Comparison

Strategy	Strengths	Risks
Middle School 6-8	<ul style="list-style-type: none"><li>• Schoolwide culture change</li><li>• Focused curriculum and PD support</li><li>• Relatively small numbers of schools</li></ul>	<ul style="list-style-type: none"><li>• Real needs will persist in high school, elementary.</li><li>• Equity gaps may persist due to better implementation at some schools.</li></ul>
Grade 3 and 6	<ul style="list-style-type: none"><li>• Two grade years instead of 3 to support</li><li>• SY 19-20 doesn't require as much student startup time.</li></ul>	<ul style="list-style-type: none"><li>• Older students at school feel unserved.</li><li>• Large number of elementary schools to serve before we build technical support staff and expertise.</li><li>• Multiple grade bands of LEAP support to adapt.</li></ul>
Wards 5, 6, 7, 8	<ul style="list-style-type: none"><li>• Intentional mitigation of equity gaps</li><li>• All grade bands served.</li><li>• Largest schools generally not in this group.</li></ul>	<ul style="list-style-type: none"><li>• Large curriculum and PD lift due to new work encompassing all grade bands.</li><li>• District must support two versions of everything – curriculum, PD, assessment.</li><li>• Very large number of schools.</li></ul>

# Appendix B

## Augmenting Our Devices: Key Technology

Device	Rationale and capability
Device monitoring software	Allows teachers to monitor and manage devices of the whole class in real time.
Next generation interactive panels	Allows teachers and students to wirelessly share screens on whole-class display. Also useful for distance learning.
Device tracking and/or etching	Theft and loss prevention
Assistive technology or special-needs versions of devices	Accessibility

# Appendix C

## Draft Training and Support (SY 16-17)

Time Frame	Who?	Content
February-March	Secondary LEAP Leaders	LEAP module Course Companions: Canvas power tools embedded in Unit 4 LEAP modules
April-June	Middle grades teachers	Unit 4 LEAP with Course Companions: Teachers experience key tools (Canvas) to support learning of LEAP content.
April-June	OCTO technicians and contractors	Configuration and help desk support of devices
May-June	School leaders	Rollout plan, roles, logistics, expectations
May-August	School POCs (DSL, etc.)	In-person overview of logistics plan + Canvas self-study to account for late hiring.
May-August	Technical coaches	Basic support of all schoolwide technology, full year vision, train the trainer for September teacher-facing modules.
May-August	Librarians	Digital Citizenship student-facing module and student assessment.

# Appendix D

## Draft Training and Support (SY 17-18)

Time Frame	Who?	Content
August-September	Teachers	Plan as part of LEAP Module 1
September-October	Students	Digital Citizenship training and assessment
September-April	Teachers	Monthly coaching modules led by tech coaches and librarians
October	Students	Startup training – device use and care.
August-June	Teachers	Self-study modules on key software.
August-June	Students	Course companions

# Appendix E: IRDP Outline

## Work Plan Group

Office	Participants
OTL	Dewayne McClary: Educational Technology Nicole Klues: Canvas TBD from Corie Colgan's team: Curriculum Jen Boudrye: Librarians Karen Cole
OCOO	TBD from Beulah Daniel's Team TBD from Doug Hollis' Team
OSS	TBD from Jane Spence's team TBD 1-2 principals
OCTO	TBD
OE	TBD from Liz McCarthy's team TBD from Andria Caruthers' team
OFPE	TBD from Vincent Baxter's team