About the MPS Academic Technology Department

The Academic & Technology Services **primary goal** is **supporting schools and our school district in our efforts to improve student learning**. We want to **ensure that each student achieves success** and is **prepared to be an informed and involved citizen of the 21st Century**.

What is the MPS Digital Transformation?

Middletown Public Schools is working to transform our culture to promote more collaboration and innovative instructional approaches through a digital learning environment. Through a digital transformation, teachers are engaging students in a more student-centered learning environment from more traditional, teacher-centered classrooms. This instructional shift, coupled with digital tools and resources, are helping Middletown's students to improve their achievement and prepare them for success in college and careers.

What does College & Career Ready Teaching, Learning & Assessment Look Like?

- Success for all of our students
- Opportunities to learn in many different ways
- Creating students who can
  - think through problems and ask good questions
  - work together to accomplish tasks
  - support their ideas
  - evaluate ideas of others
  - communicate their ideas
  - pick the right tool for the job
  - access a full toolkit of knowledge

MPS Academic Technology Project List

- Purchase of **Instructional Resources** Needed to Support Our Transition to the Newly Developed Curriculums & Common Core State Standards
- **Replace PCs** that are on the five year replacement list, **network devices** (monitors, printers, switches, etc.) that are at end of life
- Supplement the State Wireless Bond to Support **Expanding Our Wireless infrastructure** (state & local funds are committed for this)
- **Begin Implementation of a 1:1 Laptop Initiative**, Beginning with Educators (2013-2014) and Expanding this Project to Students 2014-2018) using mobile laptop carts.

What does PARCC Tech Readiness REALLY mean?

The Partnership for Assessment of Readiness for College and Careers (PARCC) is a group of states working together to develop a set of assessments that measure whether students are on track to be successful in college and their careers. These high quality, computer-based K–12 assessments in Mathematics and English Language Arts/Literacy PARCC are based on the core belief that assessment should work as a tool for enhancing teaching and learning.

PARCC tech upgrades give us the opportunity to transform our school to places of 21st century learning. Preparing students for PARCC does not just mean ensuring there are computers for students to take the test but rather that those computers are used in ways, EACH AND EVERY DAY, for students to develop comfort and confidence.

MIDDLETOWN PUBLIC SCHOOLS
Ensuring Success for EVERY Student

More About Our Laptop Initiative & Our Digital Transformation

Technology access in our schools is an important investment in our children's future! Investment in our students must include access to technology that will improve instruction and prepare our students for success in a global economy.

Our Laptop Timeline

We have included this planning in our Capital Improvement Program. Mobile laptop carts will be distributed across all grade levels to expand access to technology. Implementation during years 2 & 3 will increase our access to a 2:1 ratio. Year 4 will improve access to specialized instruction & co-curriculars areas.

	Year 1	Year 2	Year 3	Year 4
Staff	200 laptops			
Students K-3		2 carts	14 carts	2 carts
Students 4			4 carts	2 carts
Students 5-6			8 carts	2 carts
Students 7-8			8 carts	2 carts
Students 9-12			8 carts	2 carts

What type of devices will MPS Purchase?

Devices have been determined by level. (see right). All devices are laptops with a touch screen and were built specifically for education.

They cost per unit range from $540—$1,170 and the (accidental drop) warranty will be extended to 3 years.

Elementary Device

Intel Classmate Convertible NL4

Secondary Device

A-360 Convertible

Staff Device

HP Elite Book Revolve 810 G2 (intel core i5)

What does Our Commitment to this Digital Transformation Look Like?

- **Digital learning is necessary** to approach higher levels of critical thinking set forth in new college & career ready standards

- **Digital testing requires digital learning**—using technology to take a high stakes test must have significant opportunities prior to the test, and the teacher must support this shift in instruction

- **Instructional goals and needs must be paramount in long range technology planning and purchases**—innovative instructional approaches must be supported

- School leaders must **prioritize investments in infrastructure for teaching, learning and assessment**

Taken from SETDA, State Educational Technology Directors Association

MIDDLETOWN PUBLIC SCHOOLS
Ensuring Success for EVERY Student

About the Innovation Classrooms and our van Beuren Charitable Foundation Request

The goal of our request is to ensure that **every child has access to high quality and engaging instruction through an innovative digital learning environment**. This award would allow us to **advance our transformation to digital learning** in a more efficient time frame while **building district capacity and sustainability, access and equity** through the focus areas of math and science.

Innovation Classrooms Project Description

- Each **school will have a team of Innovation Classroom Leaders** who have participated in digital learning professional development.
- The **team of Innovation Classroom Leaders will provide job-embedded professional development to their colleagues**, focusing on science, technology, engineering and math content areas.
- **Instructional curriculum units** (focus areas of math and science) will be **supplemented with digital topics, resources, assessments, and projects** in support of a transformation of classroom instruction (**supported through innovation leaders and the professional development that they provide**). This work will be **documented in an online catalog**.
- A district wide **Digital Learning Advisory Committee** will be established to inform and sustain this transformation.

How does an INNOVATIVE DIGITAL LEARNING ENVIRONMENT impact our students?

- Success for all of our students
- Opportunities to learn in many different ways
- Creates students who can
  - think through problems and ask good questions
  - work together to accomplish tasks
  - support their ideas
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SUMMARY of REQUEST

- Innovation Teachers stipends
- Innovation Teacher substitutes & summer rate for professional development
- Professional Development Consultant for Digital Transformation
- Equipment to for Innovation Teacher Classrooms (teacher use & student use)
- STEM supplies and professional development with focus area of grade 5 (pltw)

Why is this a critical need?

The premise of this request is **based upon data collected** through our **development of our district technology plans, our strategic plans and an administrative digital readiness survey** (completed only by building principals). The administrative survey provided baseline data confirming that there are **significant gaps with our digital learning environments, specifically in the areas of twenty first century skills that support classroom instruction, teacher technology applications and mastery and professional development experiences and models**.

Our request supports the essential components necessary to address these critical needs, close our gaps, and transform our classrooms into innovative digital learning environments.

What are the expected student outcomes of the Innovation Classroom Initiative?

The transformation of our culture to promote more collaboration and innovative instructional approaches through a digital learning environment **will result in key outcomes and success for our students**. Research now tells us that properly implemented educational technology can substantially improve student achievement and success. **The expected measureable student outcomes are listed below:**

◊ This impact will be measured by an **increase in our state assessment results** and **our local screening assessment** (both administered digitally) as a result of our collaboration and innovate approaches. (content areas of math, science and English)

◊ We will also see an **increase in our classroom common assessment results**. These performance based assessments will be produced digitally by our students. The results will be stored in an online, digital portfolio system.

◊ We will see an **increase in student engagement** and therefore a **reduction in absences and disciplinary actions**. Ultimately, we will also see a **decrease in our drop out rate and an increase in our graduation rate.**

◊ We will see an **increase in learning productivity** and therefore an **increase in course completion** (decrease in the failure rate).

What are the key implementation factors of INNOVATIVE DIGITAL LEARNING ENVIRONMENTS?

INSTRUCTION:

technology integrated through common units, online collaboration, daily searches, virtual fieldtrips, etc.

EMBEDDED STEM (science, technology, Engineering & Math) *provide K –12 relevant education while exposing students to tomorrow's world, today*

COLLABORATIVE TIME, PROFESSIONAL DEVELOPMENT & COACHING *for all staff*

ONLINE INSTRUCTIONAL MANAGEMENT SYSTEM(S) *hybrid classrooms, flipped classrooms, e-portfolio*

CYBER SAFETY & DIGITAL CITIZENSHIP   **ONLINE ASSESSMENTS**

TECHNOLOGY ASSISTED INTERVENTION

USE of TECHNOLOGY TO IMPROVE PARENT & COMMUNITY ENGAGEMENT

ONLINE COLLABORATION & GAME-BASED LEARNING

ONLINE CURRICULUM RESOURCES *web 2.0 tools, interactive, e-texts, etc.*

Innovative Classrooms: Leading the Way for Digital Learning through Research Based Strategies

(Project RED research)