

iPrep Math

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Race to the Top - District

- Approximately \$30M from the U.S. DOE
- Designed to
 - Personalize student learning
 - Improve student achievement and educator effectiveness
 - Close achievement gaps
 - Prepare every student to succeed in college and careers

Race to the Top - District

iPrep Math Model

- 21st century personalized and blended learning environment
- 49 traditional middle schools
- Approximately 240 middle school students in grades 6, 7, and 8 per school
- Choice-driven program with voluntary participation of schools, teachers, and students
- Begins in the fall of 2013-2014
- Curriculum aligned with the goals of the Common Core State Standards
- Wrap-around services provided to students through academic and behavioral counseling programs
- College and career preparation skills provided by ConnectEDU

iPrep Math Project Staff

Project Director

4 Math Facilitators 2 Student Services CSS's

Transformation of traditional space into modern learning environments



iPrep Math Prototype





Selection of <mark>i</mark>Prep Math Learning Space

- 1800 2300 sq. ft. of contiguous space (3 adjacent 750 sq. ft. general classrooms)
- Minimal demolition preferable remove non-structural or fire-rated partitions
- Easily adapted MEP & fire protection systems are critical for cost containment
- Ground floor preferred
- Avoid displacement of specialized classrooms
- Avoid potential asbestos containing materials in building constructed prior to 1976



iPrep Math Learning Center Technology

- 2 Interactive Boards and Projectors
- 2 Desktop Computers
- 60 Classroom Laptops
- 30 Laptops for Student Check-out
- 3 Laptops for Teachers
- 1 Printer
- 3 Laptop Carts
- 1 Sound System
- 1 Television
- \$1,150 for Additional Supplies each year of the grant period

iPrep Math Construction Project Schedule



iPrep Math Learning Success Model

PREPARATION

- Teacher instruction focuses on specific learning outcomes
- Students track concept mastery and monitor learning progress

• **MEANING**

- Teachers design learning activities that are relevant and support the development of personal meaning and connections
- Students develop meaning for their learning through hands-on discovery activities and technology

• CONTENT

- Teachers provides follow-up through direct instruction, demonstrations, readings, and lecture, as needed
- Students review their activities and share their learning discoveries in a whole-group setting

• PRACTICE

- Teachers circulate to assist students and monitor student work
- Individually or in small groups, students engage in activities to practice skills learned

• PERFORMANCE

- Teachers select or create real-world based projects for students to apply the concepts learned
- Students will apply knowledge learned by selecting a project related to his/ her career and academic interests

The *iPrep Math Student will*

- Self-select to participate
- Represent a range of ability and preparedness in math
- Play a role in driving their own learning through the development of an iLAP (*individual learning action plan*)
- Demonstrate progress on his/her mastery of the curriculum standards
- Engage in peer-to-peer learning and project-based activities

The *iPrep Math Teacher will*

- Choose to participate
- Apply to teach in the iPrep Math model
- Be selected based on content knowledge, a history of effectiveness, technological ability, and a desire to engage in the iPrep Math model
- Work as a team rather than as an individual in the classroom
- Utilize data at a very high level for personalized instruction
- Participate in extensive professional development
- Engage in professional learning communities (PLC) and communities of practice (CoP)

iPrep Math Professional Development

Communities of Practice (CoP)

> Professional Learning Communities (PLC)

Job-embedded Professional Learning

Summer 2013 (15-days)

- Extensive front-load training on:
 - Team teaching
 - E-learning facilitation
 - Project-based learning
 - Personalized learning
 - Using multiple data sources to differentiate instruction
 - Formative assessment
 - Use of technology resource and platforms

Subsequent Summer PD's (15-days)

 Centered on issues and topics identified through surveys, focus groups, feedback from teachers and administrators, and analysis of teacher evaluation results

iPrep Math Competitive Priority Preference

"Middle School" has often been associated with a decline in academic achievement, performance motivation, and self-perceptions. It is a time when young adolescents are most likely to experiment with at-risk behaviors.

- National Middle School Association

- Plan to integrate public or private resources in a partnership
 - To provide wrap-around student and family supports that address the social, emotional, or behavioral needs of the participating middle school students.
- Goals focus on leveraging the home-school-community partnership:
 - Eliminating barriers to student attendance
 - Ensuring that all middle school students, including those at risk and with other special needs, have the resources and services needed to succeed.

iPrep Math Competitive Priority Preference

Training for School Counselors and Student Services providers in accordance with the American School Counselor Association (ASCA) model.

> Focuses on the design and implementation of data-informed school counseling programs that align with school improvement plans specific goals:

school safety
mental health
student achievement
graduation rates
attendance
achievement gaps.

iPrep Math Optional Budget Supplement

Personal Pathway Planning Platform through ConnectEDU in the Middle Schools

Allows M-DCPS to expand web portal to create a comprehensive *Personal Pathway Planning Platform*, through **ConnectEDU**, beginning in the middle school

> Expands access to **ConnectEDU**, which is currently being implemented in our high schools.

Middle School: Functionality and resources to engage middle school students, including age-appropriate postsecondary & career exploration

Health & Wellness and Self-Efficacy: Functionality and resources to support improved health & wellness and selfefficacy as critical factors in a student's ability to successfully navigate from k-12 to Postsecondary to Career Personal Pathway Planning Platform through ConnectEDU in the Middle Schools

> Data Dashboards & Early Warning Indicators: Data dashboards for parents, educators, and counselors to track student completion of critical planning activities associated with Pathway plans, as well as contextualize student- level data.

Postsecondary & Employer Engagement: Functionality for postsecondary institutions and employers to mentor students through the Platform in a structured environment, oriented to successful postsecondary and career transitions.

> Data Warehouse: Robust multi-source data aggregation and reporting to measure program efficacy based on both in-theclassroom indicators (i.e., Student Performance Data) and outsidethe-classroom indicators (i.e., Completion of Critical Postsecondary/ Career Planning Activities).



Personal Pathway Planning Platform through ConnectEDU in the Middle Schools

>Enables students to explore, define, and navigate integrated, multiyear pathways to postsecondary education and employment

>Builds a foundation of health &wellness and self-efficacy that will support students throughout the process.

>Model is both scalable

>Engages students in a of framework

Last Thought about iPrep Math

"The iPrep Math model will bring middle school mathematics instruction fully into the 21st century; drive student achievement in mathematics; and open up potential career pathways for students who historically have been left by the wayside, including minorities, economically disadvantaged, SWD's, and ELL's."



