# INNOVATE STEM NEWSLETTER

**BROWN MIDDLE SCHOOL STEM INNOVATION PROGRAM-MARCH/APRIL 2020** 



## **BMS STEM THEME**

Building an inclusive and diverse community BeltLine for a secure, affordable, and healthy environment one APPlication at a time.

STEM Program Support Specialist: Tamika N. Ball, Ph.D., Editor

STEM Teacher Leader Team: Mylecia Sims, Justin Crowder, Saundra Echols

#### **BMS Administration:**

Tiauna Crooms, Principal Patricia Glover, 6th grade Assistant Principal; Jameka Fields-Rhodes, 7th grade Assistant Principal; Danny Smith, 8th grade Assistant Principal

## **BMS STEM INNOVATION PROGRAM BRIEF**

#### BMS Morning News 2.24.2020



## GA DOE MIDDLE SCHOOL STEM CONTINUUM MONTHLY FOCUS

STEM Continuum #5

#### **Student Rigor & Relevance and Instructional Quality**

Learning occurs at the adaption level on a regular basis. Classroom instruction is predominately student centered and students have the competence to think in complex ways and apply the knowledge and skills they have acquired. When confronted with perplexing unknowns, students create solutions and take action that further develops their skills and knowledge.

#### Propositions Project: Overview



#### STEM Continuum #12

STEM Curriculum: Project/Problem-Based Learning

Long-term projects/problems are implemented throughout the school year that are standardsbased, interdisciplinary, and engage students with real-world problems in their community.

## Middle School Project: Balloon Car



## BMS STEM INNOVATION PROGRAM TWITTER SNAPSHOTS

@BMS\_STEMAhead @APSBrown scholars are sharing their inventions during today's
@CEISMC @GeorgiaTech
@GT\_GoSTEAM K12 InVenture
Prize State
Finals...#FullSTEMAhead
@CogniaOrg @STEMGeorgia
@apsupdate @BMSPrinCrooms
@MissRoss\_BMS

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@EcholsMusicBMS

2020 GoSTEAM InVenture Prize STEM Continuum #12 STEM Curriculum: Project/Problem-Based Learning Thank you @GeorgiaAquarium for kicking off our ``Genome Project w/ our 6th grade @BMS\_STEMAhead @APSBrown STEM SS class... © © s are ready to evaluate our local ``quality for @DollAvant Aquagenuity through our @AtlantaBeltLine PBL @STEMGeorgia @CogniaOrg @PBLWorks @BMSPrinCrooms

GA Aquarium Water Genome

Project

STEM Continuum #5

**Student Rigor and Relevance** 

and Instructional Quality



PBL Planning with Science & Social Studies <u>STEM Continuum #12</u> STEM Curriculum: Project/Problem-Based Learning

## **BELTLINE INSTRUCTION**

STEM Cohort Feature of the Month <u>Class</u> 6th Grade Social Studies <u>Teacher</u> Toneeka Douglas <u>PBL Partner</u> Georgia Aquarium Aquagenuity

#### **Driving Question**

How does water run-off affect structures expanding around the beltline?

#### STEM Content Focus Question

How can we connect air quality to issues with flooding and areas of standing water?

#### **Social Studies Standards**

SS6G2: Explain the impact of environmental issues in Latin America SS6G3: Explain the impact of location, climate, distribution of natural resources, and population distribution on Latin America

#### Engineering Design Process Element Display

Students will test the water quality around the Atlanta BeltLine and determine if environmental issues such as those found in Latin America and structural expansions along the Atlanta BeltLine impact the outcome of the testing.



## **MONTHLY STEM INSTRUCTIONAL ARTICLE**

## Creating a Culture of Youth as Co-Researchers: The Kickoff of a Year-long STEM Pipeline Program

high school students

Farrah Jacquez, Lisa Vaughn, Alicia Boards, Jody Wells, Kathie Maynard

stem pipeline

stem education



stem curriculum

cbpr

youth participatory research

#### Creating a Culture of Youth as C...

www.jstemoutreach.org

adolescents

By Farrah Jacquez, Lisa Vaughn & 3 more. We describe engaging youth in a STEM pipeline program based on principles of youth participatory action research and community-based participatory research.

action research

community-based participatory research

## BMS STEM INNOVATION PROGRAM PARTNER SHOUT-OUT





eorgia Center for Education Tech

<u>National Coalition of 100 Black</u> <u>Women</u> Girls Drone Team and Competition <u>Georgia Aquarium</u> Water Genome Project <u>CEISMC</u> InVenture Prize State Competition

## **DIGITAL STEM COMING ATTRACTIONS**

Checkout the Georgia Aquarium Live Webcam



Underwater Puffin Webcam | Ge...

www.georgiaaquarium.org

Watch our Puffins and Sea Birds from this unique perspective, underwater at Georgia Aquarium in our Cold Water Quest Gallery.

#### Take a Virtual Field Trip with Discovery Education



Virtual Field Trips | Discovery Ed...

www.discoveryeducation.com

Take your students beyond the classroom walls and into some of the world's most iconic locations for rich and immersive learning experiences. Learn more!

Try some STEM-Works for Interactive Simulations

**STEM-Works - Activities** 

stem-works.com



## LET'S CONNECT

@BMS\_STEMAhead

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