BALTIMORE COUNTY PUBLIC SCHOOLS

DATE: November 19, 2013

TO: BOARD OF EDUCATION

FROM: S. Dallas Dance, Superintendent

SUBJECT: REPORT ON THE NORWOOD-HOLABIRD PREK-8 STEM PROGRAM

ORIGINATOR: Karen Blannard, Assistant Superintendent, Elementary Schools, Zone 5

RESOURCE PERSON(S): Verletta White, Chief Academic Officer

INFORMATION

That the Board of Education receive an update on the Norwood-Holabird PreK-8 STEM Program.

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Attachments:
Executive Summary
PowerPoint Presentation
Executive Summary
Report on the Norwood-Holabird PreK-8 STEM Program

The Baltimore County Public Schools (BCPS) initiated planning for the Norwood-Holabird STEM program in January 2013. The goal was to provide a PreK-8 continuum of learning, where Norwood (grades PreK-3) and Holabird (grades 4-8) schools share the same mission and vision with a strong focus on Science, Technology, Engineering and Mathematics (STEM) learning opportunities for all students. This community-based magnet program was designed to expand opportunities for more Dundalk area students, and serve as a direct feeder program into Dundalk High School programs.

In January 2013, following school community meetings, parent input was utilized to plan for facility and programming upgrades to enhance instruction and promote student safety.

In June 2013, a four day summer institute was designed for all staff at Norwood and Holabird schools. Summer professional development opportunities included:

- Building a STEM mindset for teaching and learning.
- Developing a rigorous and responsive classroom learning environment.
- Emphasizing transdisciplinary planning - Engineering is Elementary (PreK-Grade 5).
- Implementing Issues Investigations Training.
- Conducting “Project Lead the Way” readiness training at UMBC on design and modeling and robotics engineering.
- Facilitating Lego training modules on simple machines, motorized mechanisms and STEM robotics.

Key initiatives implemented in the 2013-2014 school year have had both a positive and significant impact on student learning. Students are investigating global issues and engaging in complex questions to develop solutions to address real world problems. Students are working in teams to think critically and creatively to design better solutions for existing global issues in a personalized learning environment. Teachers are planning across content areas and vertically to ensure this STEM-based approach to learning is evident in all classrooms and grade levels and supports existing instructional programs at Dundalk High School.
BLUEPRINT 2.0
BCPS TEACHING AND LEARNING FRAMEWORK
Facility Upgrades to Enhance Instruction 2013-2014

**Norwood**
- PK-3 STEM Lab
- Reduced use of portable classrooms
- TV Studio 2 GO

**Holabird**
- Security Improvements
- 2 Gateway To Technology Labs
- 4/5 wing separation
- Elementary drop off
- 4/5 Playground
- 4/5 Library
- TV Studio 2 GO
STEM Initiatives

- Rigorous Instruction
  - Engineering is Elementary
  - Lego Robotics
  - Gateway to Technology
  - MD Green School Initiatives
  - Issues Investigations
  - Mobile Labs to Create a Personalized Learning Environment
21st Century Learning

Research and Collaboration

Critical Thinking and Problem Solving
21st Century Learning

Creativity and Innovation

Initiative and Self-Direction