Boys as Makers Conference Presentations/Workshops SHAKER CAMPUS K-8

8:45-10:00

Boys Constructing Knowledge through a Theme-Based Curriculum

We will explore the transformative effects and multilayered qualities of Boys as Makers in a hands-on theme-based curriculum.

Presenters: Steve Siegel and Brady Hurley

Third Grade: Rm. 3

DESIGN TECHNOLOGY: 3D Sustainable Model Home Design and Development

Design Technology takes a new approach to the traditional furniture building methods that University School has instilled in boys for over 100 years. Boys design a sustainable home using Sketch Up 3D software. Boys collaborate with their peers to share their ideas and to develop a better understanding of how architectural design impacts our communities and the environment. Aesthetic and functional values are combined with science technology to create model homes from reclaimed wood, giving the boys a "full circle" building curriculum that is very fast paced and exciting.

Presenters: Rob Lovell-Design Technology and Kathy Osborne-7th Grade Science **Design and Makers Center**

10:30-11:45

Purposeful Design for Our Youngest Engineers

Participants will learn about two current science projects that can be adapted to Upper Elementary or Middle School activities. In these models students experience a practical design process, which include creating plans, using feedback to redesign, trials, data collection and analysis, and collaboration with peers. Participates will have fun engaging in abbreviated versions of the projects by creating their own straw rocket and "animal enrichment."

Presenters: Bob Farrell and Liz Spector

Science Lab: Rm 300-304

Crossing Barriers: Exploring Adaptive Reuse and Entrepreneurship in the City

Through neighborhood study, students gather oral history and demographics to better understand the entrepreneurial and adaptive reuse possibilities in a transitional Cleveland neighborhood. Boys combine Google SketchUp with multimedia to prepare a business proposal before a simulated zoning board.

Presenters: Priscilla Wade, William Johnson,

Room 140

7th Grade Tech Week: Stories from the Factory

An overview of **7th GRADE TECH WEEK**, when seventh graders study the changes and impacts from Agricultural Ohio to Industrial Ohio, as well as experience the production process in technology arts. The week builds on readings and activities in science, social studies, math, language arts, music, and English. It is a relevant experiential learning component in the boys' study of the production process in technology arts and design. Included in our presentation is a re-creation of the assembly line in which the boys participated.

Presenters: Sarah Lyon and Leslie Muha

Design and Makers Center