

# STEAM Update, Volume 1, Issue 1

New Ellenton Middle STEAM Magnet School

# **Operational Definition**

This past summer, the faculty of New Ellenton Middle STEAM Magnet School began diligently working on creating a statement that speaks to our mission and vision as a STEAM school. After several months of collaborating and revising, the faculty developed its operational definition.

At New Ellenton Middle STEAM Magnet School, STEAM is the intentional integration of science, technology, engineering, arts, and math in a technology-enhanced learning environment. Our purpose is to empower all students to use critical thinking and digital literacy to solve rigorous and relevant real-world problems by demonstrating the following:

- · being creative communicators
- · pursuing individual academic curiosities
- working individually and collaboratively to achieve their learning goals
  Students will be prepared to make valuable and real contributions to our local and global society.

#### **Grade Level Guarantees**

Our students are provided many opportunities at New Ellenton Middle STEAM Magnet School. It is important that they not only master the content of their courses but also the technology skills that will help them become 21st Century learners and ready them for college and their future careers.

As defined in the 2016 ISTE Standards for Students:

- By the end of 6th grade, students will possess the skills of an Empowered Learner and Digital Citizen.
- By the end of 7th grade, students will possess the skills of a Knowledge Constructor and Computational Thinker.
- By the end of 8th grade, students will possess the skills of an Innovative Designer,
  Creative Communicator, and Global Collaborator.

## STEAM Snapshots!







STEAM Mini-Clubs

S.E.E.D. Day

MTU Field Trip

#### The Great Escape

"Earth is quickly becoming uninhabitable due to pollution and global warming. The only solution is to establish a new home on a new planet. Our president needs the help of all our citizens to help us relocate. In teams, student-groups must submit a design for a rocket to transport the population to a designated planet of your choice. Once there, we will need a place to live. Student teams will also need to design a sustainable habitat for the populations to live in on the planet your team has chosen. It's a race against time and no one can be left behind. The salvation of the world is depending on New Ellenton Middle STEAM Magnet Middle School."

This was the scenario given to the NEMS's students as a part of their first quarter STEAM project. Students had to work collaboratively in order to design a rocket (using 2-Liter bottles) for transportation, select a new plant/exoplanet for habitation, and design a blueprint for the habitats humans would need for survival. Students made connections to the project and learned vital information during walls down as well through their classes. Each teacher conducted lessons in their classroom that enhanced the students' understanding of the subject matter.

#### Aiken Standard

http://www.aikenstandard.com/education/new-ellenton-middle-students-save-earth-withsteam-power/article 2d0fbe22-9c7c-11e6-9223-a3876c2e06fd.html

#### WRDW/WAGT

http://www.wrdw.com/content/news/New-Ellenton-STEAM-students-look-to-save-the-Earths-inhabitants-397449911.html











Problem?

Students conducting research and developing solutions.



# Test/Redesign

Students tested the efficiency of their rocket designs.



# Communication

Students presenting their solution to the president's selection committee.

#### **Focus on the Arts**

#### D.A.P. Grant

Our school was awarded The Distinguished Arts Program Grant from The South Carolina Department of Education in the amount of \$54,000. With this grant, our related arts department has been able to purchased needed materials and equipment (pottery wheel, steel drums, instrument repair, and a variety of sheet music). The grant has also helped the department in establishing residencies that students will be able to participate in throughout the school year: stained-glass, dance, theater, and steel drums.n Professional development has also been built into the grant. This funding will continue for three years.







# **Upcoming Events**

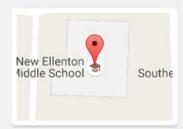
# **STEAM Advisory Board Meeting**

When

Monday, Nov. 7th, 5pm

Where

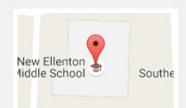
814 Main Street South New Ellenton, SC



Get Directions

# AdvancED STEM Accreditation Review Visit

When



Monday, Nov. 14th, 8am to Tuesday, Nov.

Get Directions

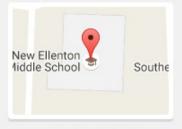
Where

814 Main Street South New Ellenton, SC

### American Education Week at NEMS

When

Monday, Nov. 14th, 8am to Friday, Nov. 18th, 3:30pm



Get Directions

#### Where

814 Main Street South New Ellenton, SC



#### About Us

onems\_steam

New Ellenton Middle STEAM Magnet School will be a school of academic excellence that fosters academic achievement through innovative teaching practices, which iwll include the infusion of Science, Technology, Engineering, Arts, and Math (STEAM), build strong community relations through the collaboration of all stakeholders, and the ongoing development of well-rounded, productive citizens.





