

In Session with the “Oriole” Superintendent

*This week's Oriole Corner has been written by guest columnist
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STEM- Science Technology Engineering Math

Children must become critical thinkers who can take new information and become innovators to solve problems that may not yet exist. We are very fortunate to provide a high quality experience for all children in grades kindergarten through third grade to gain important knowledge in Science, Technology, Engineering, and Math. With the addition of our newly updated STEM labs at Washington and Parkview Elementary, our children are receiving a high quality education.

We have been working on solving problems through the engineering design process. Our young learners in DK-K are taking children's stories and identifying problems. They then create a solution through a design drawing. Once they have the "blueprint" to work from, they use it to build a model using various manipulatives. They test their models to see if it solves the problem and if not, they make revisions.

First and second graders are applying what they know about scientific concepts to solve problems through Engineering Design. First graders were given a challenge of designing and building a structure to block light. They created a design and then were allowed to build it using a Makerspace format with various materials. The process required them to create and adjust based on their findings. Their designs were grounded in what we explored as scientists. Second graders took their knowledge of matter relating to buoyancy and learned about the Edmund Fitzgerald and the Titanic in regards to the forces needed to sink such immense vessels. They applied their findings in small collaborative groups to design and build an object to carry them off a deserted island.

Our third grade students have been working with creating and reading blueprints to design a model and balanced vs. unbalanced forces using a glider, centered around the Project Lead the Way curriculum. They learned about the forces of flight and built and tested various glider formations. Students worked on reading blueprints and electrical flow by completing Snap Circuits. Currently, they are learning more about forces and engineering with LEGOs. They are exploring using the LEGO WeDo kits to build codeable models of LEGOs with working mechanical parts. This will lead them to completing independent challenges where they will design, build, and code the LEGOs to complete a given task.

We are very proud of the experiences that we are able to provide to our children. STEM education is a very engaging way for our children to acquire the knowledge and skills they will need to be productive citizens who will be able to make positive contributions to the world. Oriole Pride!