

## Caldwell Bright Ideas Winners with Grant Descriptions:

### **Freda Parker**

**Fun with Robotics** - In order to prepare students for their future, a school needs a curriculum that adapts to current career trends. Using Ranger Robots, especially in the Engineering Academy, will require students to go beyond simple robotic programming and develop skills necessary for the developing multidisciplinary branch of engineering called Mechatronics.

### **Chad Davis**

**Gamification of Gateway** - To gamify the classroom by incorporating Oculus Quest virtual reality adventures, BreakoutEDU escape room simulations, and GooseChase multimedia scavenger hunts so that our school can increase student engagement, better understand the North Carolina curriculum, and improve data from assessments due to student investment in the learning environment.

### **Amanda Bregel**

**Caldwell Proud** - Caldwell Proud inspires students to discover themselves through their roots. A substantial amount of identity is connected to home, so developing comfort and confidence in the history and daily life of your hometown is akin to learning oneself. Caldwell Proud creates confident, proactive, and creative champions for our local community.

### **Patricia Hartley**

**Squishy Circuits** - Fourth and Seventh Grade Students will learn about the study of electrically charged objects through the use of Squishy Circuits, a fun yet innovative way to understand conductivity. This project allows a hands-on approach to studying how electric circuits work.

### **Adrienne Dula**

**The Hovercraft Project** - The Hovercraft Project is an experience where students work together to build hovercraft vehicles. Teams are provided with materials and the engine of a leaf blower. Students plan, assemble, and test their vehicles. When assembled, the engine blows air into the vehicle allowing it to float across the floor.

### **Cassandra Reed**

**Virtual Reality Classroom** - I would like to utilize virtual learning in each classroom. To achieve this, I would need virtual headsets for each classroom and a cell phone for each classroom to use. I would also need a merge cube for each class. This would allow our students to experience lessons, explore environments, visit the past and much more.

### **David Brotherton**

**To cut, or not to cut!** - My class introduces middle school students to healthcare careers. Dissections are currently used as a comparison to human anatomy; but, sixth graders wielding scalpels is

problematic. Online VR anatomy programs offer an added level of individual participation and curriculum differentiation.

**Carla Ingram**

**The Big Read!** - All 9th grade students will read Alan Gratz's new novel about D-Day titled *Allies*. Through this high interest historical fiction book, read as a community, students will understand the multifaceted aspects of war by studying it in all core subjects...math, English, history, and science.

**Erin Roper**

**Orffin' Around** - This project is intended to provide opportunities for students to play barred Orff instruments.

**Jenna Bailey**

**Intaglio Printmaking for the Classroom** - I would like to develop the curriculum to teach high school art students the process of intaglio printmaking, which requires the use of a printing press. The project would include teaching printing processes like drypoint etching on plexiglass, chine-collé, and making multi-colored, multi-layered prints.