

WHAT IS INVENTURE?

Cobb County ALP program is excited to offer an opportunity to collaborate with Georgia Tech through their InVenture Prize competition. InVenture Prize is an invention competition for Georgia Tech undergraduates. Hundreds of teams are considered for the final Inventure Prize competition, but only six teams earn a spot on the televised program shown on GPB in the spring.



WHO CAN PARTICIPATE?

High School students from around the state of Georgia compete in the InVenture Challenge, a spin-off of InVenture Prize tailored to their level. Georgia Tech looks forward to growing the program to include younger grade levels.

The 2015 InVenture Challenge competition included four Cobb County Target programs. This unit of study is recommended for 5th Grade Target students; however it would also be appropriate for schools with 4/5 combination classes. In February of 2015 each school hosted their own preliminary competition which was judged by local engineers, administrators, teachers or high school students. The elementary schools used a modified version of Georgia Tech's high school InVenture Challenge rubric to determine the top 3 teams from each school who ultimately competed against each other at the InVenture Challenge expo-style competition at the Klaus Engineering Building. Engineers, Professors and Georgia Tech Engineering students were among the judges who listened to each team's "pitch," asked questions about their device, the problem it solves and how well each team considered the users' needs when designing their product. Awards were given to:

- Top 10 teams among the combined elementary and high school levels. Each person received a medal.
- People's Choice Award – Visitors to the competition could text the number of their favorite team to vote for them.
- 1st, 2nd and 3rd place teams for elementary division. 1st place received a plaque and a week at summer camp at CEISMC on Tech's campus.

Georgia Tech offers support to schools throughout the year as students work through the design process. Specific details will be determined each year based on the number of schools competing, grants and staff availability. In the past the support has included:

- Trip to Senior Capstone Project on Tech's campus to view engineering students' projects/ pitches.
- Student groups Skype with Georgia Tech professors to get feedback on their pitches and ideas.
- Support for the final teams attending the InVenture Prize Competition in the spring. *Teams moving on to finals will have to submit a 30 second video and the teacher will complete an online form to register the teams.*
- Supply and/or travel reimbursement, funding permitting

Rules of InVenture Competition

It is important that schools participating in Inventure Challenge follow the same guidelines to make the competition equitable to all student teams. While teachers may assign InVenture-related activities as homework, the following are parts of the process **that must be done at school:**

- **Prototype:** Students may need assistance with special tasks using electrical equipment such as drills and saws and this may be done at home; however, the actual creation of the prototype must be done in the classroom.
- **Tri-Board:** Students will complete the required writing on the tri-board in the classroom. The actual creation of the tri-board must also be done at school.

****Teams may not spend more than \$25 on their prototype.***

The InVenture competition addresses all of the ALP standards and was well-received from students, parents and administrators. It is a unique opportunity for students to use their divergent thinking to solve real-world problems that are important to them. It requires them to use their executive function skills to plan, use class time well and create the product and other required elements according to the proposed timeline.

Cobb County is fortunate to have a world-class engineering school in our backyard who wants to collaborate with younger students to introduce them to the world of innovation. The curriculum presented in this guide is just that...a guide as to what terminology and steps in the design process that will help students develop their device. It would be difficult to do every single activity in these lessons, but it is important to understand the design process embedded in the lessons.

Here are video links from the 2015 InVenture program:

<https://www.youtube.com/watch?list=PLJ3LDNHg8nlNDDUEw-bYeMmcw-Aju7K9R&v=XIPSLPJMkZo>



<http://www.news.gatech.edu/2015/03/30/inventure-younger-generation>



<http://cobbcast.cobbk12.org/?p=9604>

