

Grant Number 1248

Project Title Hexbugs: The only bugs you WANT in your classroom!

Please select the **MAIN** curriculum area your grant addresses. Gifted & TalentedDoes your grant have a technology component? (Will you have technology equipment, software, etc. in your budget?)
 No
 Yes

Primary Contact Information

First Name Jennifer

Email Jennifer.Relle@allenisd.org

Confirm Email Jennifer.Relle@allenisd.org

Last Name Relle

Phone Number 972-727-0470

Campus Vaughan Elementary

Main Subject Science - Elementary

Grade(s) 3

I have co-applicants.

Social Media

Please provide your work-related social media contact information.

Facebook

Twitter @VaughanGATE3rd

Other (please specify) <http://join.photocircleapp.com/Y5i48h>

Grant Number 1248

Campus/Student Information

Your campus: Vaughan Elementary

Will other campus' be involved/impacted by this grant?
 No
 Yes

Your grade(s): 3

Will other grades be involved/impacted?
 No
 Yes

Project Purpose

What is the problem, need or opportunity that this grant will address? Describe the impact of this project on your students.
(500 words or less.)

Shaped like an insect and roughly the size of a peanut, Hexbugs are powered by a small motor causing up and down movements of the legs so rapid, the creature appears to be vibrating across surfaces. Hexbugs use the latest technologies in their programming to avoid obstacles and create a new path. Students will be utilizing this technology as well as scientific inquiry and the engineering process to test and challenge their Hexbugs.

Project Description

How will the project or program be implemented? Describe activities and tasks.
Who is the target population and in what ways will they benefit? (500 words or less.)

The Hexbugs that I am requesting will be integrated into my GATE science and Makerspace curriculum. Students will be put into teams and assigned a challenge to complete. These robots can also be used in project -based learning (PBL), a mainstay of our GATE curriculum. The students will be afforded opportunities to make the major decisions about the functionality, designing, building of environments, team roles and more, while working with the Hexbugs.

Project Summary

Provide a brief summary for use on the Foundation's website and social media. (2-3 brief sentences)

While students are using this activity to study and apply scientific inquiry and the engineering design process, they will be learning about animals, their habitats, and other 3rd grade science TEKS. Students will use problem solving and cooperative strategies to complete challenges and test their Hexbug robots.

Allen ISD Goals/ TEKS

Which Allen ISD goals/TEKS does this project support? Provide only two or three examples.

In the Allen ISD Strategic Planning Objectives and Strategies guide it lists the following top priorities; 1)Transforming the traditional classroom into an innovative learning experience that meets the needs of the individual learner. 2)Transforming the learning environment by increasing rigor and encouraging innovation so that students become effective problem -solvers. SCI 3.6 The student knows that forces cause change and that energy exists in many forms. SCI 3.9 The student knows and can describe patterns, cycles, systems, and relationships within the environments.

Measurement

What specific measurements will be used to evaluate the effectiveness of the project? (500 words or less)

Students will be provided with Makerspace challenges to complete within a specific timeframe that include making the robots do various tasks or to solve specific problems. Students will also have the opportunity to take part in self-selected project based learning experiences as they choose. Students will be evaluated on the effectiveness of working within a group and their robot's ability to successfully complete the task assigned. Students will also evaluate their own learning experiences as they set goals for each challenge and reflect on the process of building and programming as a closure activity.

Teaching Methods

What teaching methods will be used to implement this project? (500 words or less.)

Challenges and tasks will be developed and taught to the students by the teacher, however this program is completely student driven. Clear expectations will be given to teams determined by the teacher based on learning styles and personalities.

Timeline

What is the project timeline and the date of implementation?

The Hexbugs will be implemented as soon as they arrive. Their ability to be seamlessly and meaningfully implemented into our program will last the entire school year. And with a replacement battery being the only requirement to extend the lifespan, Hexbugs will have the ability to be used for multiple years of students in the GATE Academy.

Curriculum/System Support

Explain how this idea or project enhances/supports Allen ISD curriculum or existing systems.

1) Working within a robotics program provides students with opportunities for students to use critical thinking, problem solving and team work skills. 2) Using robots will provide students with 21st century skills that will benefit them in a variety of future careers.

Budget Details ** All awarded funds will be available by September of the next school year.

Budget Item	Item Type	Unit Cost	Quantity	Total Cost
-------------	-----------	-----------	----------	------------

Budget Item	Item Type	Unit Cost	Quantity	Total Cost
5 pack Hexbug Nitro	Instructional Supplies or Resources	19.99	5	99.95
12 pack Hexbug batteries	Instructional Supplies or Resources	9.99	3	29.97

BUDGET TOTAL 129.92

Are there any additional funds available for this grant? Campus or District Funds? PTA funds? Let us know if you have or will be seeking funds from other sources to help with this project.

Additional funds? No
 Yes

Principal Approval Required

Please provide the Name and Email of your PRINCIPAL. (Not your name)

First Name	Last Name	Email Address <small>(Completed)</small>
Tonya	Jasenof	Tonya.Jasenof@allenisd.org

Applicant Signature

By entering my name below I signify that I understand that if I move within the District and have written the grant myself, I may take the grant with me to my school (as long as it is appropriate for my classes). If I have written the grant as part of a team, I will leave the grant behind with the team. If I leave AISD, I will leave the grant with the school for which I wrote the grant. As a condition of this grant, I will complete an evaluation form provided by the Foundation.

Signature Jennifer Relle

Date 01/31/2019

I certify that this would be a good use of funds for our school and this grant supports the district goals and/or our campus improvement plans. **Do NOT include any identifiers, such as: campus name, your name, teachers name or mascot **

No actions possible.

Comments

I approve of this grant proposal. Purchasing these items will enhance instruction and foster problem solving and creativity. Thanks for considering funding this grant.

State Change History

State Change Jennifer.Relle@allenisd.org
01/31/2019 20:34:42
Submitted

State Change *****
01/31/2019 20:50:57
Accepted

Grant Status

Grant Awarded Yes
 No

Award Amount 130