

General Information

Grant Number	476
Project Title	STEM/Robotics
Please select the MAIN curriculum area your grant addresses.	Career & Technology
Does your grant have a technology component? (Will you have technology equipment, software, etc. in your budget?)	<input type="radio"/> No <input checked="" type="radio"/> Yes
Primary Contact Information	
First Name	Kevin
Email	kevin_lidington@allenisd.org
Last Name	Lidington
Phone Number	972-727-0340
Campus	Curtis Middle School
Main Subject	Instructional Technology
Grade(s)	<input type="checkbox"/> 7 <input checked="" type="checkbox"/> 8
I have co-applicants.	<input type="checkbox"/>

Describe details of the project

Grant Number	476
Campus/Student Information	
Your campus:	Curtis Middle School
Will other campus' be involved/impacted by this grant?	<input checked="" type="radio"/> No <input type="radio"/> Yes
Your grade(s):	7,8
Will other grades be involved/impacted?	<input checked="" type="radio"/> No <input type="radio"/> Yes

Project Purpose

What is the problem, need, or opportunity that this grant will address? Explain **what students will know and be able to do** as a result of this project and/or how a problem will be addresses and/or how a situation improved because of the grant. (500 words or less.)

Curtis Middle School has an active and growing Robotics program. In fact, it has grown so much that we have more students in our classes and Robotics Club than we have resources for them to utilize! Thanks to the support of the Foundation, campus budget support and donations from several parents, we were able to purchase the VEX robotics kits which are necessary for students to learn to build, program and work with robots. The Foundation grant, which we were awarded in 2014-15, allowed us to achieve our original goal of increasing student interest in robotics and STEM subjects. We have also experienced a fast and substantial increase in our robotics club and classes. They have grown by 200% in one year. Due to this growth, we want to provide our Curtis students with more VEX kits - reducing the number of students that work on one kit from 6 to 4. Our purpose is to provide our students with an in depth and quality experience with robotics while at Curtis and to inspire them to continue to take STEM related classes as they head into high school.

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.)

With the help of this grant I will be able to purchase 12 additional VEX kits; I hope to be able to keep classes small enough to really give students hands on experience where they're engaged in creating a robot

to do certain tasks and functions. Not only will they be creating a robot, but they will also learn the programming side of how to make the robot perform certain tasks. Through this experience, students experience more options and may then decide to take programming classes at AHS. (I am actively pursuing other grant funds (Walmart, TI, etc.) to help expand our resources.)

Allen ISD Goals/ TEKS

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

- 1) TEKS: Sub-chapter O. Science, Technology, Engineering, and Mathematics TEKS §130.361 thru §130.374
- 2) Allen ISD Goals: Career Portals goals in Science, Technology, Engineering and Math Resources.
- 3) Allen ISD will cultivate innovation in education that empowers all learners to realize their full potential.

Measurement

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

Much of my measurement comes through classroom observation, student enthusiasm, the number of students willing to stay after school to be a part of the Robotics Club, and the large number of students willing to give up weekend time for robotic competitions. This is a hands on project to which it is easy to evaluate their progress in creating these robots.

Teaching Methods

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

Methods include direct instruction (I show them myself the breakdown of the robot itself - parts, pieces, controllers, program itself, how the field is used, etc.) Students also teach each other as they work on their plans to create a robot to perform a specific task. Once they have their plans, I observe and coach them as they progress through this task. We have been very fortunate to recruit several engineers as volunteers for our classroom; they interact with the students weekly and offer guidance and suggestions - always allowing and encouraging the students to problem solve themselves.

Timeline

What is the project timeline and the date of implementation?

Both 7th and 8th grade students participate and the class is offered in the Fall and Spring. Resources will be purchased in September, as soon as the funds are available. The club meets in the fall, winter and early spring.

Curriculum/System Support

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

Allen ISD promotes STEM education and sees the importance of classes that support engineering, STEM and robotics - fields of study that will provide many jobs in the future. This class gives middle school students the edge going into high school, being better prepared to take those challenging high school classes.

Budget details

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

Budget Item	Item Type	Unit Cost	Quantity	Total Cost
VEX IQ Classroom Bundle - 12 Robots	Instructional Supplies or Resources	3499.99	1	3499.99

BUDGET TOTAL 3,499.99

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

Signature page and principal contact

Principal Approval Required

Please provide the Name and Email of your Principal

First Name	Last Name	Email Address(Completed)
Sonya	Pitcock	sonya_pitcock@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		Kevin Lidington
Date		03/01/2016

Principal's approval form

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
This would be great use of funds for our campus.

History and final disposition of application

State Change History	
State Change	***** 03/01/2016 10:56:50 Submitted
State Change	***** 03/01/2016 11:37:41 Accepted
Grant Status	
Grant Awarded	<input type="radio"/> Yes <input type="radio"/> No
Award Amount	3500