

## General Information

Grant Number	504
Project Title	LEGO Brain POWER!
Please select the <b>MAIN</b> curriculum area your grant addresses.	Gifted & Talented
Does your grant have a technology component? (Will you have technology equipment, software, etc. in your budget?)	<input checked="" type="radio"/> No <input type="radio"/> Yes
<b>Primary Contact Information</b>	
First Name	Karri
Email	karri_Decker@allenisd.org
Last Name	Decker
Phone Number	972-236-0600
Campus	Cheatham Elementary
Main Subject	Science - Elementary
Grade(s)	<input type="text" value="5"/>
I have co-applicants.	<input type="checkbox"/>
<b>Social Media</b>	
Please provide your work-related social media contact information.	
Facebook	
Twitter	@DeckerAIMClass
Other (please specify)	

## Describe details of the project

Grant Number	504
<b>Campus/Student Information</b>	
Your campus:	Cheatham Elementary
Will other campus' be involved/impacted by this grant?	<input checked="" type="radio"/> No <input type="radio"/> Yes
Your grade(s):	5
Will other grades be involved/impacted?	<input type="radio"/> No <input checked="" type="radio"/> Yes
Please select all grades that will be involved/impacted by the grant.	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6
<b>Project Purpose</b>	
What is the problem, need, or opportunity that this grant will address? Explain <b>what students will know and be able to do</b> 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.)	

The Gifted and Talented office has so graciously given the AIM classes two LEGO Mindstorm kits. The older students who have had experience with coding and robotics do well with these kits. I need LEGO building blocks to teach the K6 graders

hands on building and coding. The STEAM (Science, Technology, Engineering, Arts, and Mathematics) Movement is at the forefront, encouraging opportunities to learn through multiple facets. In regards to STEAM, I would like to create a "Makerspaces" to encourage students to use critical thinking and problem solving through the use of various books and materials. The funds provided from this grant will be used to design a mobile Makerspace from LEGO Education. LEGO books and materials will be available for use across all grade levels and in all content areas, along with access to online resources and support. With our Makerspace, students can demonstrate their knowledge of concepts in a whole new way... through designing and constructing with LEGO!

### 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.)

LEGO materials and resources will be stored in the AIM room but available to all grade levels. The vision for the Makerspace is that LEGO will be implemented in various avenues:

- o As manipulatives in math instruction,
- o building and deconstructing words/sounds in phonics,
- o constructing story settings for book/novel studies,
- o building and reenacting significant events in history,
- o constructing and experimenting with simple machines in science,
- o using LEGO's online design sites and apps to build and produce movies,
- o and many more entertaining ways to build, with education always in mind!

### Project Summary

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

LEGO Brain POWER is designed to focus upon all subjects and content areas that are taught, as well as a wide variety of TEKS and concepts within our curriculum. Socially, STEAM encourage communication, planning, and cooperation, along with learning to follow through with ideas and problem solving in everyday situations. All students will benefit from LEGO Brain POWER!!

### Allen ISD Goals/ TEKS

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

- ~ TA TEKS, K6: "(1): Creativity and innovation: The student used creative thinking and innovative processes to construct knowledge and develop digital products."
- ~ English Language Arts and Reading: K(23), 1(29), 2(30), 3(31), 4(29), 5(29), 6(28) "(23) Listening and Speaking/Teamwork. Students work productively with others in teams. Students continue to apply earlier standards with greater complexity. Students are expected to follow agreed upon rules for discussion, including taking turns and speaking one at a time (speaking when recognized, making appropriate contributions, participate in teacher, and student led discussions by posing and answering questions with appropriate detail and by providing suggestions that build upon the ideas of others, and eliciting and considering suggestions from other group members and by identifying points of agreement and disagreement."
- ~ Mathematics, K6: "(1B): Use a problem solving model that incorporates analyzing given information, formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem solving process and the reasonable solution."

### Measurement

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

Evaluation can be done in informal and formal measurements through observations, conversations, rubrics, and other measurements specific to the desired goals of the lessons. Teachers can evaluate students' abilities to use critical thinking to create products and comprehend the concepts being addressed, while the end products can be assessed for the demonstration of mastering skills, components of completion, and success at problem solving.

### Teaching Methods

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

A variety of methods can be applied when using our Makerspace; it is depended upon the skill or task that the teacher desires to accomplish. Direct instruction may be necessary if the teacher is introducing a new concept, using LEGOs for demonstration or as a manipulative. Guided or independent practice is incorporated if students are planning/building independently or in groups, while the teacher is advising or monitoring for mastery. Timelines and rubrics can be given.

### Timeline

What is the project timeline and the date of implementation?

These can be used as soon as received and throughout the year. They will be used year after year, for all grade levels.

### Curriculum/System Support

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

LEGOs are designed to focus upon all subjects and content areas that are taught, as well as a wide variety of TEKS and concepts within our curriculum. Socially, STEAM encourage communication, planning, and cooperation, along with learning to follow through with ideas and problem solving in everyday situations.

### 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
LEGO Large Creative Brick box	Instructional Supplies or Resources	59.99	2	119.98
LEGO Creative Supplement	Instructional Supplies or Resources	19.99	2	39.98
LEGO Baseplate	Instructional Supplies or Resources	7.99	5	39.95
LEGO Awesome IDEa Book	Instructional Supplies or Resources	14.99	1	14.99
LEGO Tower Bridge	Instructional Supplies or Resources	239.99	1	239.99
LEGO Ideas Book	Instructional Supplies or Resources	13.93	1	13.93

BUDGET TOTAL 468.82

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. (Not your name)**

First Name	Last Name	Email Address(Completed)
Stephanie	Logan	Stephanie_Logan@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 Karri Decker

Date 01/27/2017

### 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

I approve this grant.

### History and final disposition of application

**State Change History**

State Change \*\*\*\*\*  
01/27/2017 13:55:14  
Submitted

State Change \*\*\*\*\*  
01/28/2017 08:28:47  
Accepted

**Grant Status**

Grant Awarded  **Yes**  
 **No**

Award Amount 469