

General Information

Grant Number	911
Project Title	MakerSchool- Growing an Idea that Grows Students
Please select the MAIN curriculum area your grant addresses.	Math - Elementary
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
Primary Contact Information	
First Name	Brenda
Email	brenda.fee@allenisd.org
Last Name	Fee
Phone Number	972-658-6786
Campus	Olson Elementary
Main Subject	Math - Elementary
Grade(s)	<div style="border: 1px solid black; padding: 5px;"> 1 K 2 3 4 5 6 </div>
I have co-applicants.	<input checked="" type="checkbox"/>
Social Media	
Please provide your work-related social media contact information.	
Facebook	
Twitter	
Other (please specify)	

Grant Co-Applicants

Additional Grant Applicants			
First Name	Last Name	Campus	Grade
Mavi	Dean	Olson Elementary	Media Resource Specialist

Describe details of the project

Grant Number	911
Campus/Student Information	
Your campus:	Olson Elementary
Will other campus' be involved/impacted by this grant?	<input type="radio"/> No <input checked="" type="radio"/> Yes
Please select all campuses that will be involved/impacted by the grant.	<div style="border: 1px solid black; padding: 5px;"> Anderson Elementary Bolin Elementary Boon Elementary Boyd Elementary Chandler Elementary Cheatham Elementary Evans Elementary </div>

Green Elementary
 Kerr Elementary
 Lindsey Elementary
 Marion Elementary
 Norton Elementary
 Olson Elementary
 Preston Elementary
 Reed Elementary
 Rountree Elementary
 Story Elementary
 Vaughan Elementary

Your grade(s): 1,K,2,3,4,5,6

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.)

The Olson MakerSpace, which started this year, has achieved wide-acceptance and praise from teachers and students. At staff professional development in January, teachers submitted close to 40 lesson ideas that were connected to the TEKS that they are teaching. We have written those lessons and are sharing them with the other elementary campuses through a district-developed shared drive.

We are also conducting MakerSpace Monday workshops after school once a month to collect more teacher lesson ideas. Our goal is to finish the 2017-18 school year with over 150 TEKS-driven, hands-on MakerSpace activities that our teachers can use in the library or check out for classroom use. We also plan to share every single lesson with our peers at Allen ISD's other elementary schools, complete with materials lists and task cards.

Our main problem is that we do not have enough MakerSpace equipment. Demand is so high that our teachers cannot deliver MakerSpace activities during a lesson cycle at the critical time they are needed.

We know that in order to thrive in the 21st century our students need to have highly developed critical thinking and problem solving skills along with self-initiative and a drive for success. MakerSpace gives students opportunities to:

- Take the initiative in self-directed learning
- Ask questions and seek to find answers
- Solve real-life problems
- Take risks in a safe environment that fosters a growth mindset

Our goal is to become the Allen ISD model MakerSpace school through implementation and expansion of our program. We will become a "MakerSchool" where teachers embrace this teaching method. We will share our learning and developmental activities with other campuses.

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 materials proposed, the list of project options is limitless. In some instances, specific challenges will be provided for students to solve which will then lead to further inquiry and application across multiple disciplines. In other stations, students might be provided with open-ended project options as they tinker with the tools provided. Finally, students have the opportunities to learn the basics of coding and programming using some of the resources. In all cases, MakerSpace activities will be tied to TEKS being taught in the classroom and will include a literacy component as students are asked to start an activity with a literature activity and close it with a written reflection.

Teachers can do MakerSpace activities in the library or check them out to their classrooms for short periods of time to implement in daily lessons.

Lesson development will be facilitated through Maker Monday workshops once a month where teachers will outline TEKS-connected lesson ideas for each set of MakerSpace tools. The GT Specialist and Media Resources Specialist will take teacher feedback and write the final lessons and collect materials. All materials will be published to the Allen ISD MakerSpace district-developed shared drive for use by any school.

Project Summary

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

Olson Elementary is expanding its MakerSpace with the goal of becoming a MakerSchool where teachers and students are continually looking for ways to incorporate STEM challenges and hands-on learning into daily instruction.

Allen ISD Goals/ TEKS

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

A campus MakerSpace aligns with the district mission of empowering students by cultivating innovation and supporting the following goals:

1. Transform the traditional classroom into an innovative learning experience that meets the needs of the individual learner.
2. Transform the learning environment by increasing rigor and encouraging innovation so that students become effective problem solvers.

Measurement

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

The program's effectiveness will be evaluated through student/teacher/parent feedback, the number of MakerSpace sessions taking place, and the number of new lessons developed for the MakerSpace at teacher request.

Student learning will be evaluated through photos and videos of projects, written reflections and increased performance on related TEKS based evaluations.

Teaching Methods

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

One week each month is MakerSpace week and students visiting the library participate in an activity during library time. In addition, teachers may select from our catalog of challenges (organized by grade level TEKS) for check out to the classrooms.

All learning will be self-directed, hands-on in small groups. Assessment will be done by the use of written or recorded reflections, photos and videos.

Timeline

What is the project timeline and the date of implementation?

Materials can be acquired through vendors within two weeks of approval and new lessons and activities will be added to our existing MakerSpace throughout Fall 2018 with the goal of full implementation by January 2019.

Curriculum/System Support

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

The impact on student level of problem solving and life experience cannot be measured in the scope of the state curriculum, but we are seeing profound impacts in those areas.

Additionally, MakerSpace activities and projects enrich classroom learning concepts by:

- Deepening student understanding of content through higher level questioning
- Promoting depth of thinking through creative problem solving and innovation
- Fostering collaboration and social interaction
- Relating classroom learning to real life problems
- Providing opportunities for experimentation, failure, improvement and discovery as part of the scientific process in practice.

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
Engino Discovering STEM- Simple Machines that Multiply	Instructional Supplies or	82.14	1	82.14

Force	Resources			
Magna Tiles- 100 piece	Instructional Supplies or Resources	119.99	1	119.99
Think Fun Block by Block	Instructional Supplies or Resources	14.99	5	74.95
Snap Circuits Jr	Instructional Supplies or Resources	20.99	2	41.98
Brain Flakes- 1400 pieces	Instructional Supplies or Resources	27.99	3	83.97
Keva Contraptions- 400 planks	Instructional Supplies or Resources	89.95	1	89.95
PowerClix Solids	Instructional Supplies or Resources	117.96	1	117.96
PowerClix Organics	Instructional Supplies or Resources	105.72	1	105.72
IO Blocks-Digital STEM Set	Instructional Supplies or Resources	39.99	2	79.98
K'nex Deluxe Building Set	Instructional Supplies or Resources	27.17	2	54.34
Tinkertoys	Instructional Supplies or Resources	21.94	2	43.92
Ozbots- 2 minis	Instructional Supplies or Resources	99.99	1	99.99

BUDGET TOTAL 994.89

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)
Amanda	Reyes	amanda.reyes@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 Brenda Fee

Date 02/04/2018

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 grant would make a huge impact on our Maker Space success. All students will have amazing opportunities for hands-on, critical thinking and problem solving.

History and final disposition of application

State Change History	
State Change	***** 02/05/2018 08:24:00 Submitted
State Change	***** 02/05/2018 09:41:22 Accepted
Grant Status	
Grant Awarded	<input type="radio"/> Yes <input type="radio"/> No
Award Amount	