WACO ISD EDUCATION FOUNDATION
COVER SHEET – PART II
Application for Grant:
2025-2026 Funding Cycle

Assigned Grant Proposal #: 23

Project Title: Mission Makerspace 2.0

Grade Level(s): Pre-K-5th **# of Students DIRECTLY involved:** 648

Subject Area(s): Science, Reading, STEM

Amount Requested: $ 8,500

Grant Focus Area(s): In order to be considered, Waco Education Foundation Innovation Grant proposals must fall under one or more of the E4 focus areas: early childhood development, enhanced programming for advanced students, extended education for staff, and emphasis on student performance. NOTE: In addition to meeting one of the E4 focus areas above, grant readers are especially interested in creative and innovative grant requests that target fine arts, STEM, literacy, or enrichment.

(check all that apply)

- ☑ Early Childhood Development
- ☑ Enhanced Programming for Advanced Students
- ☑ Fine Arts
- ☑ Literacy
- ☑ Extended Education for Staff
- ☑ Emphasis on Student Performance
- ☑ STEM
- ☑ Enrichment

Grant Proposal #23
Mission: Makerspace 2.0

Project Description

Mission: Makerspace 2.0 aims to expand our school-wide makerspace by introducing innovative tools and technology tailored to students across all grade levels. The requested funds will be used to acquire Bee-Bots, Dash Robots, and LEGO Education Kits to introduce coding and sequencing to different grade-levels.

Rationale

The mission of school is to provide a safe, nurturing environment that empowers all students to be responsible and purposeful citizens. Mission: Makerspace 2.0 provides the opportunities to empower students to learn new skills that will help them be successful and purposeful citizens. One of our campus goals is to create a safe and supportive learning environment that advances the learning of every student. The materials requested for Mission: Makerspace 2.0 ensure that all students can be successful by meeting students where they are. Bee-Bots are great beginning coding tools that can apply to all students whereas Dash Robots can reach our students who are beginning to block coding and want to find more advanced opportunities. The Lego Education sets appeals to all learners and learning styles and creates a comforting and creative learning outlet that meets students where they are in their learning. Another goal of our campus is to improve our campus rating to ensure academic success for all students. With Mission: Makerspace 2.0, the skills developed using makerspace materials enrich the learning process and build academic success in our students.

Mission: Makerspace 2.0 aligns with the following funding focus areas:

Early Childhood Development: The very first years students are a part of Waco ISD is the foundation for which all future learning and development will occur in children. It is pivotal that their education provides opportunities for students to develop and refine their critical thinking and problem solving skills in a fun and creative learning environment. Makerspace supplies like Lego Education Kids and robots like Ozobots will provide opportunities for students to explore new tools in a safe environment. Mission Makerspace 2.0 would also help students develop confidence and learn from their successes and failures. These skills will help students become lifelong learners.

STEM: Mission:Makerspace 2.0 is a perfect way to foster innovation and creation in students with hands-on experiences that focus on science, technology, engineering, and math. Our new school already has a beautiful makerspace, but it needs the supplies to make STEM learning come to life.

Literacy: Mission:Makerspace 2.0 would allow teachers and students a creative outlet to showcase their literacy skills while increasing student engagement. The reading that occurs in the library or in the classroom can come to life with makerspace activities that relate to their learning. Imagine having students sequencing the events of *Knuffle Bunny* by Mo Lewis using Bee-Bots; imagine students playing basketball using their Dash Robots after reading a biography on Caitlin Clark; imagine students recreating the setting of their library book. The possibilities are endless. Allowing students to create in a makerspace can reinforce skills like phonemic awareness, vocabulary, fluency, written expression, and reading comprehension.

Enrichment: Mission: Makerspace 2.0 would give students an opportunity to build on the academic curriculum they are learning in the classroom. Teachers can extend their lessons beyond the classroom and give students a hands-on opportunity to make a real world connection on what they are learning. Students can enrich their learning with self-directed projects based on their interest.

Extended Education for Staff: Mission: Makerspace 2.0 will give staff the ability to experience a makerspace. Currently, our makerspace is a nice room, but with training and materials staff can receive training and access to literature materials to develop makerspace lessons they can use with their students.

Fine Arts: Mission:Makerspace 2.0 allows students to have a creative outlet through various projects. Using tactile materials such as legos allows students to have a more authentic tinkering and exploration experience.

Enhanced Programming for Advanced Students: With Mission: Makerspace 2.0, the school can organize more clubs and opportunities for students to continue their learning beyond the classroom or library. There is currently a Girls Who Code Club, but with Makerspace 2.0 we can extend new opportunities for more students. These students will develop projects on their own and be allowed to explore their own personal interests.

Goals

Our goal is to increase critical thinking, creativity, innovation, and collaboration in our school. Mission: Makerspace 2.0 will create a technology rich environment that fosters innovation through meaningful hands-on experiences. Various projects, such as narrative sequencing and book setting creation, will authentically create collaboration and creativity. Students and staff will also build other skills like perseverance, flexibility, and leadership. These skills are fundamental in helping young minds be prepared for future educational success.

Specific Goals:

- Students will learn computer science through project and problem-based activities.
- Educators will effectively facilitate student learning by following computer science design processes.
- Students will collaborate with their peers and educators to complete literacy based STEM activities.
- Students will complete STEM projects throughout the school year to be part of a STEM Community Night.

Plan of Operation

Time	Action Steps
August 2025	● Set up and organize materials in the makerspace ● Send out Google Form to teachers to survey interest and prior knowledge ● Hold initial trainings for all staff on makerspace utilization and supplies
August- September 2025	● Send out Google Form to students to gage prior knowledge ● Introduction to Mission: Makerspace 2.0 to students in the makerspace ● Grant applicants will observe staff and students. Both grant applicants will meet bi-monthly to discuss observations
October- December 2025	● Hold Bee-Bot, Dash Robot, and LEGO Education trainings to staff and students ● Practice using new makerspace materials with students ● Makerspace Club and Girls Who Code Club will begin to meet ● Teachers can request makerspace or makerspace materials. Grant applicants will organize requests with other administrators.
January-February 2026	● Grant applicants will continue to observe and meet to discuss learning challenges and address student and staff needs. ● Additional training may be required for staff and students. A Google Form will be sent out to students and staff to gauge interest and need. ● Staff will continue to facilitate learning using Mission:

	Makerspace 2.0 materials.
March- April 2026	• Students with the help of staff will work on STEM showcase items. • Grant applicants, students, and staff will collaborate on a STEM showcase for community members. • Applicants will continue to observe students and staff and discuss findings. • Monthly clubs will continue.
May 2026	• Grant applicants will report data and findings to administrators and Waco Education Foundation members. • Staff and students will fill out an end-of-the-year survey to discuss challenges and success of Mission: Makerspace 2.0.
Summer/ August 2026	• Grant applicants will review and reflect a year of Mission: Makerspace 2.0 and make necessary changes for the 2026-2027 year. • Mission: Makerspace 2.0 will continue to grow based on feedback and findings from the previous year.

Communication and Dissemination

Mission: Makerspace 2.0 will provide many opportunities throughout the school year for the Waco Education Foundation members to be directly involved and/or see this exciting project in action. The opportunities listed below also allow MIssion: Makerspace to be disseminated with the community and other district personnel.

Waco Education Foundation members have an open invitation to observe and participate in the Maker Club and Girls Who Code club in-school and after school meetings. They are also invited to visit when the makerspace is being used by all students and staff throughout the school year.

Photos of students' work can be posted on campus, district, and foundation social media outlets.

Invitation for members and district personnel to attend end of the year STEM showcases that can also be covered by Waco ISD- TV.

Invitation for Waco Education Foundation members and district personnel to visit our campus and interview students and staff throughout the year to be featured on Waco ISD- TV.

Evaluation

Mission: Makerspace 2.0 will be evaluated through qualitative measures with students and staff. Before introducing Mission: Makerspace 2.0 to staff, a Google Form will be sent out to assess staff expectations and prior experiences with a makerspace. Students will also respond to a Google Form to assess their knowledge. The data gained from these forms will determine what makerspace lessons and training.

Between September and May, applicants will observe both staff and students on how they use the makerspace and its materials. Applicants will take notes through a Google Doc and meet to discuss any changes that need to be made to ensure Mission: Makerspace 2.0 is meeting its goals. Applicants will also meet with administrators to get feedback on Mission: Makerspace 2.0.

At the end of the year, another Google Form will be sent to students and staff to evaluate the success and effectiveness of Mission: Makerspace 2.0. Students will also be evaluated on their STEM showcase projects and how it affected student achievement.

Long Term Implications

Mission: Makerspace 2.0 will be able to increase critical thinking, creativity, innovation, and collaboration skills within our school with both students and staff. Mission: Makerspace 2.0 will create a technology rich environment that fosters innovation and a love of learning new technology. The skills learned through Mission: Makerspace 2.0 will be ones that students can use throughout their life.

The requested materials will allow Mission: Makerspace 2.0 to continue beyond the 2025-2026 grant year. This will allow numerous students and staff to experience a makerspace and all its capabilities.

Key Personnel

Lead Applicant #1- Librarian

Qualifications
EC 4-8 Generalist
Master of Library Science with a School Librarian Certification (graduation in May 2025)
10 years teaching experience

Responsibilities

- Planning activities using the makerspace that are curriculum and/or literacy based
- Facilitating a student-learning space in the makerspace and library
- Mentoring students and staff on the use of the makerspace and their projects
- Providing knowledge on equipment and providing resources to students and staff

Lead Applicant #2- MCL and Teacher

Qualifications
Master of Education
EC - 6th Generalist
20 years teaching experience

Responsibilities

- Planning activities using the makerspace that are curriculum and/or literacy based
- Facilitating a student-learning space in the makerspace and library
- Mentoring students and staff on the use of the makerspace and their projects
- Providing knowledge on equipment and providing resources to students and staff

Budget Narrative and Justification

Technology

Bee Bot and Bee Bot Materials

Bee Bots are programmable floor robots used to teach beginning computer science. Bee Bots are easy for younger children to operate and will teach them how to sequence and problem-solve. The items requested include 12 Bee Bots, Bee Bot activity mats, and two docking stations to recharge all of the Bee Bots at one time.

Dash 12-Pack

The Dash robot is a programmable robot that appeals to upper elementary students grades 3-5. Students can program the Dash robot using block code on their laptops or iPads to make the Dash complete certain tasks. The Dash robot will keep upper elementary students engaged and learn basic block coding while also connecting to the curriculum. The Dash robot already has online tutorials for teachers and students to connect with different popular stories that will encourage collaborative learning. The 12 pack of Dash robots will work with an entire class of students to keep them engaged. Also included on the grant are supplies like the Gripper Builder Kit and the Sketch kit to enrich student learning in the arts and engineering.

Long- Term Supplies

Bee- Bot Card Mat

The Bee-Bot Mat will allow teachers to create obstacles and challenges for all Bee-Bot users so that students can work collaboratively on accomplishing Bee-Bot tasks.

STEAM Park by Lego Education

The STEAM Park is a perfect LEGO material that inspires younger elementary students to create, explore, and investigate the world of early science, technology, engineering, art and math through creative play. Students can create a STEAM park with moving rides, fun games, and scenes using the LEGO bricks, gears, tracks, pulleys, boats, and figures. The set also includes building inspiration cards and lessons free for teachers to download.

LEGO Education SPIKE Essential Set

The LEGO Education SPIKE Essential Set is a cross-curricular STEAM solution for elementary education perfect for upper elementary students grades 3-5. It includes standards-aligned STEAM learning units with different building elements to help them solve problems through storytelling. The SPIKE Essential lessons are also aligned with ISTE and CSTA standards with free classroom resources and professional development

for teachers and staff. Students can also use the LEGO Education Spike App to build their stories which builds their computer science skills while also using tactile learning.

Dash Gripper Kits and Sketch Kits

These kits help enhance the Dash bots capabilities allowing students to be more creative with the Dash bots movements and actions. This directly aligns with how Mission: Makerspace 2.0 supports the fine arts and enriching advanced students.

Makerspace Literature

The grant is requesting two books that would be used with and for students and staff. Staff literature is a guid for deciding makerspace projects, and learning the makerspace process. These books will be put into a resource library within the makerspace area.

Waco Education Foundation

Grant Budget Form

Assigned Proposal #	23
Project Title:	Mission: Makerspace 2.0
Number of Students Served by Grant:	648

Qty	Budget Item	Verify Vendor (Y or N)	$ Requested from the WISD Foundation	Other Secured Source	$ from Other Source (if applicable)	Total Amount
	Consumable Supplies					
						$ -
						$ -
						$ -
						$ -
						$ -
						$ -
	total Consumable Supplies		$ -		$ -	$ -
	Technology					
12	Bee-Bot	Y	$ 1,119.40			$ 1,119.40
2	Bee-Bot Docking Station	Y	$ 159.90			
1	Dash 12-Pack	Y	$ 1,795.00			$ 1,795.00
	total Technology		$ 3,074.30		$ -	$ 2,914.40
	Long-Term Supplies / Equipment (items that will last beyond the grant year)					
12	Bee- Bot Card Mat	Y	$ 959.40			$ 959.40
3	STEAM Park by Lego Education	N	$719.85			
10	LEGO Education Spike Essential Set	N	$ 3,299.50			$ 3,299.50
4	Dash Gripper Building Kit	Y	$159.96			$ 159.96
4	Dash Sketch Kit	Y	$ 159.96			$ 159.96

1	Rev Up Robotics (book)	Y	$ 38.99			$ 38.99
1	Makerspaces in School	Y	$ 16.46			$ 16.46
1	Your Starter Guide to Makerspaces	Y	$ 24.99			$ 24.99
1	No Fear Coding, 2nd Ed	Y	$ 38.99			$ 38.99
	total Long-Term Supplies		$ 5,418.10		$ -	$ 4,698.25
	Contracted Services					
						$ -
	total Contracted Services		$ -		$ -	$ -
	Personnel					
						$ -
	total Personnel		$ -		$ -	$ -
	Travel / Other					
						$ -
						$ -
						$ -
	total Other		$ -		$ -	$ -

Totals	**Total Requested from the WISD Foundation**	**Foundation Cost Per Student**	**Total from Other Sources**	**Total Cost of Project**
	$ 8,492.40	**13.10555556**	**$ -**	**$ 7,612.65**