



**WACO ISD EDUCATION FOUNDATION
COVER SHEET – PART II
Application for Grant:
2026-2027 Funding Cycle**

Assigned Grant Proposal #: _____

Project Title: _____

Grade Level(s): _____ # of Students DIRECTLY involved: _____

Subject Area(s): _____

Amount Requested: \$ _____

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 | Extended Education for Staff |
| Enhanced Programming for Advanced Students | Emphasis on Student Performance |
| Fine Arts | STEM |
| Literacy | Enrichment |

Grant Proposal: Micro-Foundry #10

Total Requested Amount: [\$5,500]

Primary Focus Area: Creative Classroom Project

1. Rationale

The **Micro-Foundry** initiative aligns directly with the Waco Education Foundation's focus on Creative Classroom Projects. By bridging the gap between the Fine Arts and Science (STEAM), this equipment will transform the traditional classroom into a laboratory of innovation.

District/Campus Alignment: This project supports the goals of the campus by increasing student engagement and providing career-readiness skills. Currently, our art department lacks the infrastructure for glasswork due to the high electrical and space requirements of industrial kilns. Micro-foundries allow us to:

- **Democratize high-tech art:** Provide expensive-looking results through affordable, accessible technology.
- **Scientific Integration:** Address Texas Essential Knowledge and Skills (TEKS) related to thermal energy and chemical properties in a hands-on environment.
- **Efficiency:** Unlike traditional kilns that take 12–24 hours to fire, microwave kilns produce results in 10–20 minutes, allowing for immediate feedback and interactive learning.

2. Goals

The primary objective of the Micro-Foundry is to provide students with a tangible intersection of art and physics. Specific goals include:

- **Technical Mastery:** 90% of participating students will successfully demonstrate the ability to calculate Coefficient of Expansion (COE) to ensure glass compatibility.
- **Artistic Production:** Each student will design, fire, and finish at least three distinct glass pieces (fused, slumped, or jewelry-based).
- **Cross-Curricular Literacy:** Students will be able to explain the thermal process of glass transition and the safety protocols required for high-heat manufacturing.

3. Plan of Operation

Project Description: The project involves the installation of a fleet of dedicated microwave stations and specialized microwave-safe kilns. Students will move from "design to shine" within a single class period.

Community/Parental Involvement: We could host a "Family Fire Night" where parents are invited to the studio to see the technology in action and collaborate with their students on a small glass project. Local artisans will be invited as guest speakers to discuss careers in glass blowing and industrial design.

4. Communication & Dissemination

We are eager to celebrate the support of the Waco Education Foundation:

- **Foundation Recognition:** We invite Foundation members to our "First Fire" ceremony.
Internal Dissemination: We will produce a segment for **WISD-TV** showcasing the "Science of Art."
- **Professional Development:** Results and curriculum maps will be shared during District Staff Development days to encourage other campuses to adopt "Micro-Foundry" modules.

5. Evaluation

Success will be measured through:

- **Portfolio Assessment:** Rubric-based grading of the finished glass pieces focusing on technical execution and artistic intent.
- **Pre/Post Testing:** Assessment of student knowledge regarding thermal expansion and safety protocols.
- **Student Survey:** Qualitative data regarding student engagement and interest in STEAM-related fields following the project.

6. Long Term Implications

The Micro-Foundry is designed for **sustainability**. Unlike consumable-heavy projects, the microwaves and kilns are durable goods that will serve hundreds of students over several years.

- **Ongoing Funding:** After the initial grant, the Art Department's annual budget will cover recurring glass supply costs.
- **Skill Scaling:** The success of this module can serve as a pilot for a district-wide expansion into more advanced jewelry and small-scale manufacturing curriculum.

7. Key Personnel

Role	Qualifications	Responsibilities
Project Lead (Art Faculty)	10+ years in Fine Arts; Safety Certified.	Curriculum design, studio management, and safety oversight.

Students	Learned safety requirements in the classroom environment before handling materials.	Students will be responsible for the proper clean up and handling of glass and other materials used.
Campus Admin	Principal/Assistant Principal.	Logistical support and facilities coordination for microwave installation.

Waco Education Foundation

Grant Budget Form

Assigned Proposal #	10
Project Title:	Micro-Foundry
Number of Students Served by Grant:	900

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						
12	Thinfire Kiln Shelf Paper	Y	\$ 720.00			\$ 720.00
12	fusible glass sheets	Y	\$ 1,000.00			\$ 1,000.00
6	jewelry making kit	Y	\$ 600.00			
						\$ -
						\$ -
						\$ -
total Consumable Supplies			\$ 2,320.00		\$ -	\$ 2,320.00

Technology						
						\$ -
						\$ -
total Technology			\$ -		\$ -	\$ -

Long-Term Supplies / Equipment (items that will last beyond the grant year)						
6	Microwave	Y	\$ 1,800.00			\$ 1,800.00
18	Large Microwave kiln	Y	\$ 900.00			\$ 900.00
12	Medium Microwave Kiln	Y	\$ 480.00			\$ 480.00
						\$ -
						\$ -
						\$ -
total Long-Term Supplies			\$ 3,180.00		\$ -	\$ 3,180.00

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
		\$ 5,500.00	6.111111111	\$ -	\$ 5,500.00