

STEM Grant Guidelines and Application 2024-2025

The KC STEM Alliance is pleased to announce the availability of grants to support educational STEM initiatives in the following counties: Johnson and Wyandotte in Kansas; and Cass, Clay, Jackson and Platte in Missouri. Grant amounts will vary depending on the number of students to be served in the district/school; typical grants range from \$1,000 - \$5,000 per grant request. Your school district/school is invited to submit a grant proposal to support the implementation of new/increased STEM activities taking place during the 2024-2025 academic school year (including summer 2025 activities to include teacher training, however, not summer camps) or to prepare for the 2025-2026 upcoming academic year.

Our Funding Priorities:

Eligible recipients include: public schools, private and charter schools that serve low-income students and/or traditionally underserved communities or marginalized populations. For the purpose of this grant, low-income schools are defined as those serving a population of at least 40% of students eligible for free or reduced lunch. Underserved/marginalized populations are defined as females, minorities, and/or students with disabilities.

Funds for this initiative originate from the generosity of multiple funders to KC STEM Alliance, including the Ewing Marion Kauffman Foundation, Black & Veatch, Burns & McDonnell, Oracle Cerner Charitable Foundation, Commerce Bank, Cyderes, The DeBruce Foundation, Evergy, Garmin, Google Fiber, Honeywell and Missouri University of Science & Technology, SS&C and US Engineering.

The grant is designed to give public school districts, and private and charter schools flexibility in looking at areas of greatest need and requesting funds to meet those needs. Ideas for projects or initiatives could include:

- STEM professional development and training for teachers
- Curriculum, supplies, or other STEM-related teacher resources
- STEM after-school programming ongoing programs
- Project Lead The Way (PLTW) training for teachers
- Other educational STEM initiatives to increase capacity, access & equity

Terms of the Grant:

- Application deadline: STEM grant requests are now being accepted for new 2024-25 activities
 (including summer 2025 activities like teacher training). The deadline to apply is Nov. 10, 2024
- 2. Districts applying for multiple school sites should complete one application per district and list the amounts requested per school in the form below (Question 3a).
- 3. All purchases funded by this grant must be completed by June 30, 2025.
- 4. Funds will be distributed following review, award notification and upon receipt of an invoice from school district or fiscal agent. A sample invoice will be emailed along with grant award notification. Note: Checks will be mailed to the district accounting office or fiscal agent.
- Grantees must submit a final report to the KC STEM Alliance no later than 5:00 pm on July 31,
 2025 detailing use of funds. A grant report template will be distributed to all grant recipients prior to this date.
- 6. Grantees agree to participate in data collection and evaluation activities conducted by KC STEM Alliance, including submission of student demographic information, including gender, race/ethnicity and grade levels.
- 7. Grantees who do not submit necessary final forms and data jeopardize eligibility for future grants.

Grant Application Form

Please fill out the form below and email it along with a budget worksheet to a.corrao@kcstem.org

Districts may complete one application for multiple schools.

1. General District Information

a. Name of District or Private/Charter School: Turner USD 202

b. Mailing Address: 1800 S. 55th Street, Kansas City, KS 66106

c. Primary Contact and Title: Leah Coffman STEM Teacher and Math Interventionist

d. Primary Contact's Email: CoffmanL@turnerusd202.org

e. Primary Contact's Phone: 913-288-3463

f. Website Address: https://www.turnerusd202.org/our-schools/turner-elementary

g. Federal EIN Number: 48-0679018

2. About Your District/School:

a. Superintendent's Name: Dr. Jason Dandoy

b. Superintendent's Email: dandoyj@turnerusd202.org

c. Fiscal Year (to/from): July 1 to June 30

d. District/Fiscal Agent Accounting Contact Name (e.g. bookkeeper, accounting manager):
 Laura Castillo

e. Accounting Contact Email: CastilloL@turnerusd202.org

f. Accounting Contact Mailing Address: 800 S 55th Street, Kansas City Kansas 66106

g. District Free and Reduced Lunch Percentage: 79%

3. About Your Request:

a. List each school for which you are requesting funding and the total amount for each site:
 Turner Elementary

b. Total Amount Requested from KC STEM Alliance (including all schools/sites): \$4200

c. Duration of Proposed Program/Project: 5+ years

d. Total Program/Project Budget: \$9180

- e. Revenue Mix for Proposed Program/Project (list primary source(s) of revenue (e.g. grants, private, gov.) and their percentages to total 100%: BK5K Grant \$4,980 (54%) KC STEM Alliance \$,4200 (46%)
- f. Proposed Program's Primary Target Audience (e.g. girls ages 7-14; underserved high school students):
 - Turner Elementary, is one of four elementary schools in the Turner School District (Kansas City, Kansas), has over 600 students. Turner School District serves a very diverse community, both culturally and socioeconomically. We are a Title I school district, with about 80% of our students qualifying for free and reduced school meals.
- g. Number of people to be served by this program/project: 400+ students each year 2nd-5th grade classes
- h. Counties in which program will be offered: Wyandotte
- i. Primary racial/ethnic group to be served: Turner Elementary serves over 600 students, each of which would be impacted annually by new equipment in the STEM classroom. We are a Title I district with almost 80% of our students qualifying for free and reduced school meals. We are also culturally diverse (50% Hispanic, 29% White, 13% African American, 8% Other) and serve many students with special needs.

4. About Your Program

a. Provide a brief description of your STEM program(s) for which you are requesting funding support. If requesting for multiple school sites, describe each program.

Turner Elementary is located at 55th Street and Metropolitan Avenue and provides education to preschool through 5th grade students. Leah Coffman is a STEM teacher and Math Interventionist. She has been a teacher at Turner Elementary for 20 years. Turner Elementary is unique from the other elementary schools in that it has a STEM program that all students in kindergarten through 5th grade participate in. It is treated as a "specials", or elective, class that students visit on a rotation schedule. When students attend STEM, it is a 55-minute class where they learn about coding, the engineering design process, STEM careers, and participate in many engaging STEM challenges throughout the year. This class allows students to think differently, experiment, fail, try again, and feel the success of solving problems.

https://keyirobot.com/pages/module

We would like to get a complete class setup of ClicBot modular robots. These allow students to combine the parts in thousands of ways to create a robot that they can

program for unique tasks. ClicBots are attractive and highly engaging to people of all ages. The reviews tout their ruggedness and ease of operation for kids as young as 8 years old.

b. Provide a brief description of how your program aligns with KC STEM Alliance's priority of funding STEM opportunities for the underserved.

Being a large school district in a low-socioeconomic community, our options for funding programs like a STEM lab are limited. Ms. Coffman has exhausted many resources to be able to provide materials, technology, and resources for students to utilize in the STEM lab. She has applied for and received many grants and donations over the years. Despite the honor of receiving these grants and donations, the Turner Elementary STEM classroom is behind in equipment, technology, and materials compared to STEM programs in more affluent communities where the funding for such activities is greater than in our district.

We want our students to have the same level of access and experience as students in neighboring districts, and so it is important for us to be able to receive grants such as this one that would allow us to buy more equipment and materials for students to learn in our STEM classroom.

c. Describe the program's goals, objectives and measurements for success.

Children are very creative and imaginative by nature and ClicBots are designed to be fun and creative. They can also help children develop logical thinking and problem-solving skills. Measurement and sequencing is reinforced over and over when coding a robot to move in their space. ClicBots teach the basics of programming through the process of assembling and operating the robot. It has a simple drag-and-drop programming interface that allows users to customize how each command works. ClicBots also understands Python for older kids who are ready for coding language. This unique feature of coding progression allows for differentiation for each child. Every child will experience success and be able to build onto that success.

We want to give them the tools to blend their imagination with building and coding. We want to give them the space and opportunity to imagine, create, fail, learn, and rebuild.

We use NASA's BEST Engineering Design Process in the STEM lab.

Age appropriate rubrics will be provided to guide students in the building and programming of their projects.

d. Describe why this program is important/relevant and how it supports your overall STEM plans within your district/school.

ClicBots are very versatile and easy to use. Once students gain an understanding of how they work there are hundreds of robots they can build and program. This allows for high engagement, endless replay opportunities, and the ClicBot will grow with the students.

"At its core, ClicBot is a modular robotic construction kit. You assemble the various parts in a virtually infinite array of configurations—you can make robots that walk, roll on motorized wheels, slither like a snake, grab things with a claw and more. Your bots can respond to motion sensors and even climb walls with suction cup feet. There are instructions for around 30 different robots right out of the box, but once your kid tries a couple of those, they'll be mixing and matching parts to make their own creations." https://www.forbes.com/sites/forbes-personal-shopper/2021/04/28/clicbot-review/

- e. How will the grant funds be used (e.g. teacher stipends, instructional supplies, lunches/catering, etc.)? The funds will be used to purchase 3 ClicBot Maker kits. We were very fortunate to get a \$4,980 grant to purchase a combination of 3 Full ClicBot kits and 3 Standard ClicBot kits. Those 6 kits will allow most of one class to work in small groups to build and program their bots. Having three more kits will allow all students to be working in groups of 2 to 3, on ClicBot projects at the same time. This would be optimal as the students only come to STEM 3 times a month. I have found that groups up to 3 allow for the most engagement and learning to occur. The Maker kits also allow for access to all available ClicBot modules and coding opportunities.
- f. Provide other important details that we should know about your STEM program.

As an outstanding educator, Ms. Coffman was the first Kansas City area educator chosen to be in The Cosmosphere's Launch Learning program. Through this program, each educator undergoes personal and professional development to influence and promote teaching STEM. They also receive resources and support from The Cosmosphere's staff. You can learn more about this program and what it looks like in Ms. Coffman's classroom here.

Submission Instructions

Send your completed form, along with <u>a completed budget worksheet</u>, to Andrew Corrao <u>a.corrao@kcstem.org</u>.

Deadline for submission of grant request is November 10, 2024.

About KC STEM Alliance

KC STEM Alliance is a collaborative network of educators, business affiliates and organizations that

inspires interest in Science, Technology, Engineering and Math careers to generate a robust workforce of related professionals for our community. KC STEM Alliance connects schools, industry partners and affiliate organizations, such as <u>Project Lead The Way (PLTW)</u> and <u>FIRST</u>, by streamlining and simplifying communications for everyone involved. Further, by acting as a hub and resource for the local STEM community, KC STEM Alliance serves to allocate resources where they are needed – helping to build a more diverse and broad base of support for STEM curriculum and programs. For more information, visit <u>www.kcstem.org</u>.