

Finalist Executive Summary: Maker 13

The Maker Mobile and Maker13 wants to give people and other small businesses in Southern Indiana access to new technology and equipment that they otherwise would not have the opportunity to use. This could be due to the cost of the machine, training, or not knowing if the product is feasible. By gaining access to this technology, it will spur on innovation through individuals and other small businesses, create an interest in advanced manufacturing, give artisans the tools they need to design and create, and development a labor force for the surrounding businesses.

The Maker Mobile is the mobile aspect of the business that goes out in to the community to present a modified race car trailer turned in to a futurized shop class loaded with 3d printers, lasers, cnc equipment and more. We know that rural communities and many schools have done away with shop class and home economics which has prevented young people from learning about applications and equipment that are being used out in the world today. Our approach with the mobile lab is to impact and educate more of the community on future tools that they may come in contact with. We also teach people how to engage in using these tools without expensive 4-year degrees, if that is not the right path for them.

Maker13 is the physical location that the Maker Mobile launches from. Maker 13 is a full community workshop with staff and community partners who are all there to support small business, entrepreneurs, crafters, and hobbyist alike.

Through regional grants for the mobile outreach, over the past 1 year, the Maker Mobile has visit 48 schools for onsite field trips, 8 regional fairs and community festivals, and 2 major STEM competitions (VEX World Finals and the SkillsUSA National Finals) for a total exposure/engagement of 42,000 students and families. Since its inception over 500,000 individuals have seen the Maker Mobile from repeated visits to the international finals mentioned above to all major Maker Fairs east of the Mississippi River.

Maker 13 currently has 145 active members and in the past 1 year has taught 514 safety and usage classes as shown in Table 1. Many members do take multiple classes, and community members do not have to become members to learn take the classes. Of the members who keep sustained memberships, we have logged 5,872 machine hours on the equipment inside the shop.

As we move forward in our operation, we are seeking to be more intentional in reaching and connecting with women and families. We plan to do this by providing the education and support needed to improve their livelihood and trajectory in to the future work force. This future workforce may be one they are employed at, or one they create themselves.

The programming proposed for this grant is to create a new pathway for women owned businesses and non-profits to gain access to equipment and training needed. Over a 2-year period, we plan to have four groups, of 15 women each go through equipment training and access. The intent is to grow them to a self-sustainable level for their small business, craft, or non-profit. This will include not only the physical skills to run the equipment, but also business skills to maintain and create that self-sufficiency.

In parallel with these direct actions to the 60 women, we plan to visit 40 schools for onsite field trips. These onsite field trips average 250 students for a total of up to 10,000 students who would be exposed to applications that their schools are teaching. Exposure to the concepts on the trailer is only part of the programming. Connecting the students to clubs, class pathways, regional organizations, or manufacturing companies is also part of the programming. Each student leaves the experience with something they had a hand in making and the encouragement to think big and outside of the box to create amazing things.