Mid-Valley STEM-CTE HUB











MICROGRANTS

FIRST ROUND REPORT



2020 - 2021

Introduction

The Mid-Valley STEM-CTE Hub recently awarded their first round of Educator and Community-Based Organizations microgrants. With ample evidence that COVID-19 is widening the existing systemic education and inequality gaps, our aim is to partner with educators and local non-profits to develop projects that reduce barriers and support students. Through this support, students will gain more access to meaningful science, technology, engineering, math (STEM), and career and technical education (CTE) opportunities. A total of \$78,019 was awarded to fund a total of thirty-five equity-focused, STEM-CTE related projects or initiatives.

EDUCATOR AWARDS (\$19,940)

- Culinary Kits Diana Barnhart, Kings Valley Charter School
- Citizen Science Project Kate Beran, College Hill High School
- STEM Projects Danielle Blackwell, Scio High School
- Shop Tools David Crowe, Alsea Middle/High School
- Broadcast Media Project David Dunham, Philomath High School
- Digital Media Kits Jayce Giddens, Corvallis High School
- Art & Pottery Supplies Babette Grunwald, West Albany High School
- Nightstand Project Ricky Hall, West Albany High School
- Tower Garden Jessica Hanson, Philomath High School
- STEAM Thinkers Lisa Lanza, Baker Charter Schools
- Manley Jobs Blake Manley, Sweet Home High School
- Digital Photography Textbooks Amanda Miles, South Albany High School
- LEGO Robotics Inger-Lis Nielsen, Kings Valley Charter School
- Do It For The Culture T-Shirt Project Duece Phaly, South Albany High School
- STEAM Kits Audrey Richards, Sand Ridge Charter School
- Health Occupations Class Michelle Snyder, Sweet Home High School
- Student Eco & Aqua Spheres Cheri Taylor, College Hill High School
- Woodworking Kits Pamela Toman, Baker Web Academy
- Prototype Manufacturing Projects Nick Traini, Philomath High School
- Live Cooking Demos Dolly Victorine, West Albany High School
- STEM Projects Pamela Watts, Scio High School
- 3D Printing Rob Zarfas, Philomath Academy

COMMUNITY-BASED ORGANIZATION AWARDS (\$58,079)

- Carving Instructional Workshops Albany Historic Carousel & Museum, Albany
- Albany Exploration Zone Albany Parks & Recreation Department, Albany
- Maker Program Albany Public Library, Albany
- Pivot Interactive Science Program Albany Public School Foundation, Albany
- Distance Learning Support for Students Albany Public School Foundation, Albany
- · Hot Rod Kids Better Kids Club, Albany
- Watershed Discovery Kits Calapooia Watershed Council, Brownsville
- DSW in a Box Kits Discovering the Scientist Within (DSW), Corvallis
- Growing Leaders Early Learning Center Mid-Willamette YMCA, Albany
- Winter Wonderings OSU Pre-college Programs, Corvallis
- FIRST Robotics Competition team Scalawags, FIRST Robotics Team 1359, Lebanon
- Maker Tool Lending Library Silicon Box, Inc., Corvallis
- · STEM Academy at OSU, Corvallis

Educator Awards

Microgrants totaling \$19,940 were awarded to the following educators:

Culinary Kits - Diana Barnhart, Kings Valley Charter School

Project & Award:

Awarded \$1000 to purchase Culinary Tool Kits that contain all the ingredients and supplies needed to complete projects.

Project Impact:

This will make a huge impact on students and provide a level of comfort to parents and me that students have all their needs met to be successful.

STEM Projects - Danielle Blackwell, Scio High School

Project & Award:

Awarded \$1000 to purchase supplies to do hands-on STEM projects in the Patterns physics, chemistry, and biology classes.

Project Impact:

Through hands-on activities, students will learn new skills and see new opportunities for possible future career paths.

Broadcast Media Project – David Dunham, Philomath High School

Project & Award:

Awarded \$1000 to purchase camcorders for the Broadcast Media program.

Project Impact:

Due to COVID-19, the sharing of equipment is not practicable. Making more cameras available makes our practical technology learning model work to its best extent.

Citizen Science Project - Kate Beran, College Hill High School

Project & Award:

Awarded \$1000 to purchase the materials for students to build their own air quality sensors to measure particulate matter.

Project Impact:

Students will build the sensor from home but will participate in a project that is global. Plus, other students can see the data collected and manipulate it, discuss it, and share it.

Shop Tools - David Crowe, Alsea Middle/High School

Project & Award:

Awarded \$1000 to purchase simple hand tools for CTE shop classes.

Project Impact:

This funding allows for Alsea to continue their efforts for a successful rebirth of its CTE program. Every additional dollar of funding expands opportunities offered to Alsea students.

Digital Media Kits - Jayce Giddens, Corvallis High School

Project & Award:

Awarded \$1000 to purchase supplies so students can check out gear to complete photo, video, illustrations, animations, and other digital art and media projects.

Project Impact:

By using industry-standard materials and equipment, students are able to learn the skills they need to succeed.

Educator Awards continued...

Art & Pottery Supplies – Babette Grunwald, West Albany High School

Project & Award:

Awarded \$500 to purchase art kits and pottery kits for all students.

Project Impact:

This funding allows all students to be able to participate fully in art and pottery projects during online distance learning education.

Tower Garden - Jessica Hanson, Philomath High School

Project & Award:

Awarded \$970 to purchase a Tower Garden growing system for growing their own produce year-round for culinary labs and for the Little Warrior Preschool.

Project Impact:

This project teaches the science and process of growing food, how to prepare healthy meals, and the process of farm to table.

Manley Jobs – Blake Manley, Sweet Home High School

Project & Award:

Awarded \$1000 to pay for expenses and supplies associated with the production of Manley Jobs YouTube videos.

Project Impact:

Students are logging on to view each new episode and there has been a genuine interest in the career paths featured on the YouTube channel.

Nightstand Project - Ricky Hall, West Albany High School

Project & Award:

Awarded \$300 to purchase supplies for advanced students to build a nightstand.

Project Impact:

Students will get to learn how to safely use the tools that are required to build this project, and learn the process of building a cabinet from start to finish.

STEAM Thinkers – Lisa Lanza, Baker Charter Schools

Project & Award:

Awarded \$1000 to provide a stipend to Isaac Ashby of STEAM Thinkers to provide handson Virtual STEAM days for students.

Project Impact:

The funding allows this virtual program to continue and allows access for all students, especially those in more rural areas of the state.

Digital Photography Textbooks - Amanda Miles, South Albany High School

Project & Award:

Awarded \$945 to purchase 35 textbooks for a CTE Digital Photography course.

Project Impact:

This project allows students who struggle with reading on a Chromebook to have a physical copy of a textbook to use and read.

Educator Awards continued...

LEGO Robotics - Inger-Lis Nielsen, Kings Valley Charter School

Project & Award:

Awarded \$1000 to purchase supplies for a remote LEGO robotics club.

Project Impact:

Involvement in LEGO Robotics helps develop computer skills, problem-solving skills, and builds confidence in students.

STEAM Kits - Audrey Richards, Sand Ridge Charter School

Project & Award:

Awarded \$1000 to purchase materials for creating STEAM kits for their classrooms.

Project Impact:

This project allows students the ability to explore and learn through creating and problem-solving. This allows them to develop skills they will later need in life and to also learn in a more natural way.

Student Eco & Aqua Spheres - Cheri Taylor, College Hill High School

Project & Award:

Awarded \$630 to purchase 21 USB handheld microscopes for student eco and aqua sphere projects.

Project Impact:

This project provides students with a way to get outside, focus on nature, and examine their world through a rewarding activity.

Do It For The Culture T-Shirt Project – Duece Phaly, South Albany High School

Project & Award:

Awarded \$1000 to purchase materials for the club to create gear and apparel to help students feel more represented.

Project Impact:

The positive impact of advocacy and creative freedom will prosper by giving students the skills to design their own apparel.

Health Occupations Class – Michelle Snyder, Sweet Home High School

Project & Award:

Awarded \$1000 to purchase more suturing, phlebotomy, respiratory therapy equipment for health occupations classes.

Project Impact:

By providing students more access to equipment, this project aims to increase student interest in health occupations.

Woodworking Kits - Pamela Toman, Baker Web Academy

Project & Award:

Awarded \$1000 for the purchase of 15 Young Woodworkers Project Kits.

Project Impact:

This project offers students who traditionally do not have the opportunity to access handson STEM/STEAM type projects from home the ability to participate during COVID and beyond.

Educator Awards continued...

Prototype Manufacturing Projects - Nick Traini, Philomath High School

Project & Award:

Awarded \$750 for the purchase of construction project supplies for manufacturing technology students.

Project Impact:

This project gives students the opportunity to learn in a hands-on setting even though they are participating in distance-learning.

STEM Projects - Pamela Watts, Scio High School

Project & Award:

Awarded \$1000 to purchase equipment to accompany Patterns curricula.

Project Impact:

Through hands-on activities, students will learn new skills and see new opportunities for possible future career paths.

Live Cooking Demos - Dolly Victorine, West Albany High School

Project & Award:

Awarded \$1000 to purchase A/V equipment for streaming live cooking demos.

Project Impact:

With better quality equipment and streaming quality, students will be able to become more fully engaged in culinary video demonstrations.

3D Printing - Rob Zarfas, Philomath Academy

Project & Award:

Awarded \$900 to purchase a 3D printer.

Project Impact:

3D printing will be used to create custom manipulatives to help kinesthetic and visual learners grasp complex math concepts such as the Pythagorean theorem, gear ratios, tessellations, the disk and shell methods, and graphing in 3 dimensions.

Community-Based Organizations (CBO) Awards

Microgrants totaling \$58,079 were awarded to the following organizations:

Carving Instructional Workshops - Albany Historic Carousel & Museum, Albany

Project & Award:

Awarded \$2500 to purchase carving tools for teaching students how to carve the carousel animals.

Project Impact:

Students will feel pride and a sense of accomplishment as they use their carving skills to create animals, rosettes, or other works of art.

Maker Program - Albany Public Library, Albany

Project & Award:

Awarded \$4580 to purchase tablets for maker programs for kids, tweens, and teens.

Project Impact:

Students will be able to experiment, tinker, fail and succeed using interactive tablet programs. For many kids, this could be the only free time they have in a week to explore inquiries without a deadline or homework assignment attached.

Distance Learning Support for Students – Albany Public School Foundation, Albany

Project & Award:

Awarded \$5000 to a partnership with Greater Albany Public Schools and Families and Communities Together to provide low-income students with STEM and technical resources.

Project Impact:

This project will ensure equitable opportunities and educational success for all students during distance learning.

Albany Exploration Zone – Albany Parks & Recreation Department, Albany

Project & Award:

Awarded \$5000 to purchase supplies for after-school STEM programming for youth Pre-K through 8th grade.

Project Impact:

By providing exciting materials, positive adult staff, and opportunities to collaborate with peers, we can impact the youth in our programs in numerous beneficial ways!

Pivot Interactive Science Program – Albany Public School Foundation, Albany

Project & Award:

Awarded \$5000 to purchase a district-wide site license for Pivot Interactive software

Project Impact:

This project will enhance STEM hands-on experiences for high school students during distance learning.

Hot Rod Kids - Better Kids Club, Albany

Project & Award:

Awarded \$5000 to support the launch of a pilot project that will teach kids mechanical skills by building and racing go-karts.

Project Impact:

This project will provide youth with mechanical skills, basic driving skills, cultural diversity, teamwork, goal setting, and the development of potential career interests.

CBO Awards continued...

Watershed Discovery Kits – Calapooia Watershed Council, Brownsville

Project & Award:

Awarded \$5000 to purchase supplies for creating Watershed Discover Kits for 700 5th grade students in Central Linn and Greater Albany Public School districts.

Project Impact:

The kits encourage students to think critically about their environment and what they can do to protect salmon habitat.

Growing Leaders Early Learning Center – Mid-Willamette YMCA, Albany

Project & Award:

Awarded \$5000 to purchase supplies and activities to provide STEM programmatic experiences and learning opportunities for Pre-K students.

Project Impact:

This project offers a diverse curriculum with a wide variety of stimulating STEM activities that are engaging and educational.

FIRST Robotics Competition team – Scalawags, FIRST Robotics Team 1359, Lebanon

Project & Award:

Awarded \$1000 to support the team as they work on their FIRST Robotics Competition team challenge.

Project Impact:

From designing, welding, wiring, and programming a robot, to leadership, imagery, and marketing, students gain priceless opportunities through FIRST.

DSW in a Box Kits - Discovering the Scientist Within (DSW), Corvallis

Project & Award:

Awarded \$5000 to purchase 84 "DSW in a Box" kits to be mailed to participating girls.

Project Impact:

Seeing and interacting with positive women role models in STEM can have lasting impacts on girls, especially those in middle school.

Winter Wonderings - OSU Pre-College Programs, Corvallis

Project & Award:

Awarded \$5000 to purchase supplies and provide scholarships for the Tag Learners Winter Wonderings project.

Project Impact:

This project provides impactful STEM-CTE learning for Linn-Benton TAG learners, also helping motivate these youth to pursue post-secondary education and continued learning.

Maker Tool Lending Library – Silicon Box, Inc., Corvallis

Project & Award:

Awarded \$5000 to purchase supplies for a maker tool library to make STEAM kits available to families that are underserved.

Project Impact:

This project offers high-quality STEAM kits to families along with support curated content in both Spanish and English.

CBO Awards continued...

STEM Academy at OSU, Corvallis

Project & Award:

Awarded \$5000 to provide program support for Virtual STEM Academy activities.

Project Impact:

This project will provide dozens of classrooms in the Corvallis School District with access to high-quality STEM outreach activities created by OSU students and faculty.