

# Funded Grants 2016/2017 Teacher Innovation

# Algae into Oil – Freedom High School, Tara Broczkowski

Students will design and build a photo-bioreactor which uses carbon dioxide and sunlight to convert algae into energy. The Algae to Oil project is designed to allow students to utilize creativity and engineering skills while learning how emerging STEM technologies can improve and enhance our world.

# Horton Hears Whos...but can he Hear You? - Seussical Jr. - Donegan Elementary School, Jamie-Lynn Carrodo

Donegan's after school Drama Club program will provide students the opportunity to work on character development and analysis, communication and presentation, line memorization and fluency, music memorization, blocking and cast collaboration, while also building confidence in themselves and their abilities. Donegan's Drama Club will be offered to 30-40 students from second through fifth grade starting in October with a grand performance of Seussical Jr. in March that aligns with Dr. Suess's birthday and Read Across America.

# Expanding the Edible Schoolyard: Bringing Permaculture to a Middle School Garden Program – East Hills Middle School, Renee Fritzinger & Linda Frederick

An existing garden program will be expanded to include the principles and practices of edible gardens and permaculture. The infrastructure created will all for project based learning through the lens of STEAM (Science, Technology, Engineering, Arts, and Math).

# Maker Space – Freemansburg Elementary School, Lisa Caiazzo

With this grant, a Maker Space will be implemented at Freemansburg providing students the opportunity for hands learning in STEM with an appropriate mix of building, coding, creating, programming, and developing, all with team work and problem solving at the forefront.

# Saving the Struggling Reader – Hanover Elementary School, Lori Sivick

This grant will provide funding to support two BASD Initiatives: all students will be reading on grade level by Grade 3, and the other is to implement The Leader in Me program to all elementary schools. This project will address these initiatives through the use of materials from the 95% Group to offer targeted, systematic, and explicit instruction in phonics and will also utilize the idea of The Leadership Notebook in order that students may track their progress in these areas and set future goals.

# The Rocket Refocus Room – Broughal Middle School, Damaris Soto & Kelly Simpson

The Rocket Refocus Room will develop an environment where students learn to self-regulate their emotions through varied physical, intellectual and sensory driven activities in order to decrease and ultimately eliminate students' out of class time by using guided behavioral intervention and teaching appropriate, positive coping skills.

### Songwriting & Digital Audio Recording Project – East Hills Middle School, Keith Quelet

The Songwriting & Digital Audio Recording Project will enable students to compose original songs, and record them as digital audio projects. In-clout collaborations with other students and professional mentors will help students build their digital portfolio.

# <u>Growth of the BASD Elementary Choral Music Library</u> – ALL BASD Elementary Schools, Meghann Wright & Keegan Lerch

The purpose of this project is to continue the efforts to organize, catalogue, and "grow" the Bethlehem Area School District's Elementary Choral Music Library and corresponding Electronic Inventory System. With Meghann & Keegan's meticulous organization and electronic cataloguing, they have successfully encouraged their colleagues to use this music in library and in turn have inspired them to have their music catalogued in each of their schools for incorporation into the Electronic Inventory System. This grant will allow for the purchase of newer musical that match the curriculum, reach and connect with students, challenge the students' musical abilities, and bring joy to the community through the programming of this music in BASD vocal concerts.

### <u>Growth of the Spring Garden Elementary School Music K-8 Magazine Library</u> – Spring Garden Elementary School, Meghann Wright

This project will grow the Music K-8 Magazine Library at Spring Garden Elementary School in order to enhance the current music curriculum and concert performances with newer musical selections, activities, and teaching methods/strategies presented in this educational resource. In addition to vocal music, Music K-8 Magazine will also provide Spring Garden RAM Ringers Hand Chime Choir piano parts, student print parts, CD accompaniments, and more.

#### "Make it Happen" in the Farmersville Library – Farmersville Elementary School, Julie Mueller

The purpose of this project is to introduce and equip the students of Farmersville Elementary School with technology and STEM-related activities in a Maker Space to encourage collaboration, problem-solving, and a love of learning.

#### Gender Norms and Media in the Academic English Classroom – Freedom High School, Dr. Louis Martinez

With grant funds, students will deconstruct texts and media through the lens of gender to bring greater awareness to stereotypes and how they affect thoughts and behavior.

# <u>"Rockin' Project ACT UP: Actively Communicating Through Theatre and Uploading Positivity with Schoolhouse Rock,</u> <u>Live!</u> – Freedom High School, Jennifer Wescoe, Kim VanOrden, Jody Kelly, Denise Parker, Joseph Vasquez & Annie Nonnemacher

Project ACT UP uses theatrical workshops to enhance achievements inside and outside the classroom for all middle school students within the district. Theater workshops will be used to improve students' communication skills, promote positive self-image, appreciate diversity, and respect personal differences amongst one another.

#### Freedom Ceramics Mural Project – Freedom High School, Lauren Ackerman

Each of the 24 students of Ceramics II class will create a proposal for a new hallway mural at Freedom High School. This project will develop student's inquiry skills, require divergent and convergent thinking, emphasize the importance of deadlines and budgets, and require students to share their ideas with an audience. Each student will be required to survey the space, sketch out their idea, research new terms/techniques associated with the construction of the mural, problem solve in terms of installation, create a materials list and budget, and present their proposal.

#### All Access through Technology – Miller Heights Elementary School, Jane M. Schleppy

Incorporating a projector, document camera and iPad will add excitement to the classroom by allowing the sharing information from books, models, experiments, and more. These items will support differentiated instruction while enhancing learning and retention in the classroom as they are used across the curriculum.

### Make Way for MakerSpacers! – East Hills Middle school & Broughal Middle School, Amanda Hawn & Dawn Bothwell

Broughal and East Hills are implementing MakerSpaces within their buildings as a pilot for all BASD middle schools. MakerSpaces are areas designed to allow students to create, innovate, design, build, and explore with STEM (Science, Technology, Engineering and Mathematics) and STEAM (Science, Technology, Engineering, Arts and Mathematics) activities. On the STEM side, students are able to work with robots, circuitry, digital animation, coding, and more. On the more artistic side, students are able to write, draw, paint, sculpt, produce movies and creative content to share with peers as they develop their abilities and talents.

#### Leaders of Tomorrow – Thomas Jefferson Elementary School, Michelle Kirias

The Leaders of Tomorrow, fourth and fifth graders who are interested in being leaders within the school and within the community, at Thomas Jefferson Elementary School applied for this grant. The Leaders of Tomorrow will expand their coding knowledge and teach their skills to other students in grades K-5 Thomas Jefferson.

#### Farmersville Book of the Month Club – Farmersville Elementary School, Amy Santanasto & Caren Zupper

Farmersville's Book of the Month Club will reinforce the importance of literacy and foster a love of reading within our school community. The book club will involve the entire school and teach students valuable skills that include, reading for understanding, relating reading to personal experience, how to participate in a discussion by taking turns, and respecting the opinion of others. Students will build relationships through their discussions and read books they might not have chosen to read on their own.

#### Sensory Integration for Effective Learning – Fountain Hill Elementary School, Erin Hines & Erin Kemmerer

This project will provide sensory integration to support students with behavioral and academic needs that may be associated with developmental disorders, trauma histories, or speech/language impairment. Within the regular education classroom, students identified with sensory processing issues will have access to resources such as stress balls, seat cushions, and a calming area. Teachers will provide the necessary resource for the student and/or students as needed during instructional time.

# <u>Personalized and Shared Literacy Through Technology</u> – William Penn Elementary School, Cristy Myers & Sherri Marino

Through the use of technology, Newsela Elementary will provide students the capability to read current news aritcles from around the world in topics such as science, math, breaking news, etc. Students will create their own book reports and/or news reports, videos, and share with other. This program will spark thoughtful classroom discussions about real world events and empowers students to find their voice in current events.

# 360 ° Video Camera Grant, Fountain Hill Elementary School & BASD Media, Thomas Braun

Fifth grade students at Fountain Hill Elementary School will investigate propulsion by building a propeller based plan and measure the variables in which alter the distance it can travel. The measurable outcome for students utilizes the 360 camera demonstrating their understanding of the topic to the camera as if it was a teacher. This project provides a hands on science lesson led by students for classes across the BASD.