

# Grants for Innovative Teaching

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Award Ceremony

Tuesday, Sept. 25, 2018 6:30 p.m.

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# Junior League of Dallas Grants for Innovative Teaching

# History

In 1992, the Junior League of Dallas created *Grants for Innovative Teaching (GFIT)* to provide opportunities for teachers to improve education in the Dallas Independent School District (Dallas ISD). Through generous donations from our sponsors, *GFIT* has provided approximately \$1.8 million to Dallas ISD educators who have created innovative approaches to teaching children.

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# 2018-2019 Grants Awarded

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This year, *GFIT* will award 50 grants totaling just over \$89,300. These grants are made possible through generous donations from Texas Instruments Incorporated, Agnes Cluthe Oliver Foundation, and the Hillcrest Foundation, Bank of America N.A., Co-Trustee.

# Junior League of Dallas Mission

The Junior League of Dallas is an organization of women committed to promoting volunteerism, developing the potential of women and improving the community through the effective action and leadership of trained volunteers.

# 2018-2019 Grant Summaries

# **Teacher Recognition Ceremony**

Opening Remarks Alicia Hall President, Junior League of Dallas

Importance of Grants for Innovative Teaching Dr. Michael Hinojosa, M.Ed., Superintendent, Dallas Independent School District

> Presenting Sponsor Remarks Andy Smith Texas Instruments Foundation

Grant Presentation Sarah Barnes Grants for Innovative Teaching Chair Junior League of Dallas

Closing Remarks Alicia Hall President, Junior League of Dallas

# **Reception Immediately Following**

#### Wilmetria Simpson Vikings Have GOOD Character Billy Earl Dade Middle School

Students in the audio-video-production class will gain necessary skills to produce content for educational videos which will be shown to the student body on a bi-weekly basis. Students will write, film, produce and edit videos and will learn to become creators rather than just consumers. The videos will feature subjects such as bullying, being trustworthy, respect, and other hard issues.

### Jessica Bell

#### Wonderful Sparks

# Booker T. Washington High School for the Performing and Visual Arts

This program will take Booker T. Washington HSPVA's metal working program to the next level. Visual art sculpture students in 10th through 12th grade will work in groups to create large scale metal sculptures that incorporate technology, engineering, the arts, and math.

#### Jose Delgado

# Lights, Chemistry, Action! Integrating 3D Printing Into a Chemistry Classroom

#### **Bryan Adams High School**

This project will allow students to learn how light affects matter through the real world example of 3D printers. During their chemistry unit on light, students will work with Mr. Delgado and engineering teachers to create, scan, and print 3D projects.

#### Jeff Yerger

#### From the Hand to the Screen

#### **Bryan Adams High School**

The goal of this project is to expose students to digital imaging platforms by drawing and painting while learning the sensitivity levels of the stylus to create expressive brushwork. They will be able to learn both traditional and digital painting. Students will have the opportunity to have authentic, real-world experiences that foster inquiry, inspire, and extend the possibilities of making art beyond the pencil, brush, and canvas.

#### Bart Davis Learning Computer Aided Design through Robotics Conrad High School

Learning Computer Aided Design through Robotics is an afterschool program aimed at teaching and executing design and engineering concepts in the field of robotics. With the assistance of local professional engineer volunteers, students will learn computer aid design software, and peer-mentor others to individually design and manufacture robot component parts. Using the concepts learned, teams of students will design and build objective-specific robots for local, state, and national robotics competitions.

#### Tamara Thomas

## Whole Students Creating Whole Communities

#### D.A. Hulcy STEAM Middle School

Eighth grade students will rebuild a garden area behind their school and study Texas soil and climate to determine which fruits and vegetables will best grow in our region. They will then plant and care for the garden, and host their own farmers' market to sell their crops to members of their community.

# Roxanne Dansby

**Metaphorically Speaking** 

#### **Dallas Environmental Science Academy**

Using Matt de la Peña's picture book, *Love*, students will be given the opportunity to connect, understand, and imitate metaphors in their own writing. Students will create their own illuminated poem exploring a powerful emotion in their own lives through metaphors and image. They will utilize Matt De La Peña's work as a mentor text during the writing process.

# Tabatha Sustaita-Robb

## Calm Down! It's Just a Box!

#### **Dallas Environmental Science Academy**

This project is like an "escape room" experience for students that provides innovative experiences for collaboration, communication, and problem solving as they try to unlock a box. Students will be immersed in an investigative situation that will require them to rely on creative thinking of how the clues are connected to successfully unlock the box.

#### Monalisa Chadha Environmental Agricultural Sensor Conrad High School

This project allows high school students to build a sensor and android application that will identify the type of plants that can grow in the environment being tested. This will allow the students to take their knowledge of environmental systems and apply it to a programming environment to create a useful tool and application for themselves and others.

#### Harry Monroe Powerful City

#### **Aquarium Outreach Project**

Through this project, the STEAM Environmental Education Center will provide 10 teachers from DISD schools with aquarium kits, along with organisms, to set up in their respective classrooms. Their goal is to train these Pre-K to fifth grade teachers in aquarium maintenance and provide them with relevant grade-appropriate teaching material for science, math, social studies, language and art. The center will also establish a support network for these teachers by connecting them with several aquarium-related online communities and resources.

#### Janet Fuller

#### **Farmhouse Greenhouse Project**

#### **Environmental Education Center**

The Farmhouse Greenhouse is an important addition to the currently offered K through fifth grade programming related to plants at the Dallas ISD STEAM Environmental Education Center. The greenhouse will integrate botany, food chains and renewable energy sources. Additionally, the greenhouse will be used to teach children how to reduce, reuse and recycle since they will be refurbishing old pallets for shelves and using rainwater collected from barrels already installed at the center.

#### Sara Ramirez Entomology Project

### **Environmental Education Center**

This project will allow fourth through seventh grade students to work as young Entomologists at the Dallas ISD STEAM Environmental Education Center. The center uses entomology to teach students about many areas of ecology, including climate change, and to talk with students about the various careers available to them as entomologists, such as working in agriculture, conservation, ecology and land management in national parks. This grant will replace some current materials that are worn, allow them to expand the program and add new equipment such as field guides and microscopes to ensure all students are given ample time to use the tools available when they visit the center.

#### Lillian Curtis

#### Playaway Listening Station

#### Felix G. Botello Elementary School

Ms. Curtis will use the grant to update the students' listening station in a "personalized learning school" with audio books that are also their own listening devices. The Playaway Audio Packs allow students to play, stop, and control the speed – which helps with primarily Spanish-speaking students trying to learn English. Students follow along with the book as they listen, and Ms. Curtis will test comprehension by having students "retell" stories (book reports) and using language testing.

#### Beatriz Zuluaga Robotic Legos

#### Frank Guzick Elementary School

This grant will be used to expand the current club that was funded by GFIT last year. The additional funding will provide more Lego and robotic programming systems to accommodate more students in an economical needed area to increase exposure to STEAM to third through fifth graders.

#### Aleksandra Marczyk

#### Hand on Equations

#### George H. W. Bush Elementary School

Hands on Equations is a program used to provide a concrete foundation for algebra. Using visual and kinesthetic instructional approach, students are able to better understand abstract algebraic concepts. This hands-on, intuitive approach enhances students' self-esteem and interest in math.

#### Mary Ellen Knight

#### **Place Based Education: Plein Air Painting Center for Children George H. W. Bush Elementary School**

Transforming an unutilized space to create an outdoor art room is the goal of this project. The students will be able to enjoy "plein art" and additional time outside while expressing themselves through artwork.

## Dee Coyle Vex IQ Competition Teams

#### Harold W. Lang Sr. Middle School

Through the use of robotics, this project will provide middle school students with the opportunity to collaborate with others and develop problem-solving skills. The robotics materials funded by this grant will help the robotics team to be better equipped to compete in statewide robotics competitions against teams that often have greater financial resources.

# Yolanda Rosa Bridging Print to Digital Learning

#### Henry B. Gonzalez Elementary School

The Bridging Print to Digital Learning program consists of third, fourth, and fifth grade students doing a book review and creating a Vlog (video logs of books) based on their book review. The students will learn how to create a Vlog and use it to summarize and recommend various library books to their classmates. This project helps students to learn how to critically analyze texts, use different types of technology, research, and learn how to use online resources.

#### Ward Coats

# **Capstone Basic Research Projects for the Hillcrest Academy of Health Science Students**

#### Hillcrest High School

High School students interested in pursuing careers in health services will gain meaningful biomedical research experience by studying proteins involved in pancreatic development.

#### *Stephanie Gardner*

#### **Fun and Function in a Sensory Room I** Jerry R. Junkins Elementary School

Teachers will establish a sensory classroom with specialized equipment to help all students with emotions, senses, fine and gross motor skills. The grant funds will allow for interactive equipment which will provide a multisensory experience with visual, auditory, tactile vestibular and gross motor activities. This classroom will help students to be their best, and will encourage blending between mainstream classes and special education classes.

## **Emily Stallsmith Fun and Function with a Sensory Room II**

Jerry R. Junkins Elementary School

In partnership with the Special Education teacher, the Preschool Program for Children with Disabilities (PPCD) Special Education teacher will provide additional support to establish a sensory classroom with specialized equipment to help all students with emotions, senses, fine and gross motor skills. The grant funds will allow for interactive equipment that will provide a multisensory experience with visual, auditory, tactile vestibular and gross motor activities. This will be a classroom that helps students to be their best and will encourage blending between mainstream classes and special education classes.

#### Amanda Meyer

#### Movement in Music

#### José "Joe" May Elementary School

This project will help students incorporate and interpret music through movement. The teacher will provide them with various props (a parachute, a scarf, a rubber band) and use these props to learn different aspects of music such as sections of a song, tempo, and beats in a fun and interesting way!

#### Sara Cox

#### **Upward with Ukuleles**

#### Kleberg Elementary School

Upward with Ukuleles is a project teaching fifth grade music students how to play the ukulele using new classroom instruments and online textbooks. Students will learn how to tune the ukuleles and how to play a song with multiple chords. The ukulele is a great first instrument because they are easy to learn and students have success from the first class.

#### Terry Stotts Kids Helping Kids

#### Multiple Careers Magnet Center

The special needs students in the Construction Trades Cluster will build wooden toy rocking horses to be donated to sick children staying at Ronald McDonald House while receiving medical treatment. Horses will be delivered during the holidays in December. Through the project, students will learn that they can accomplish a difficult task and work on social and safety skills.

## Ana Figueras Empowering Our Young Writers

#### Nathan Adams Elementary School

The Empowering Our Young Writers program is a project where fourth grade students improve their writing through peer revision and classroom writing samples using Google Documents. Students will use their writing samples to create a monthly school newspaper. This project helps improve their writing, collaboration, and peer critical analysis skills as well as improve their familiarity with current technology.

#### Natoscha Golightly Franchising Your Success North Dallas High School

Tenth and 11th grade students will have the opportunity to create their own apparel business. Students will gain real life skills for creating and managing a business. In addition to learning a trade, students will create their own companies which will sale affordable school spirit apparel to a team or club. Students will be tasked with creating logos, business cards, workflow charts, proofs, in addition to providing customer service.

#### Eliana Tseng

#### **3D Printing the Engineering Design Process** Robert T. Hill Middle School

Sixth through eighth grade STEAM students will use 3D printing pens to put into practice and bring to life the steps of the engineering design process, while solving engineering design challenges.

# Marvin Gonzalez

VRevolution

#### **Roger Q. Mills Elementary School**

This project aims to provide 5 Oculus Rift/Touch Virtual Reality sets for the school's library which will allow third through fifth graders at Roger Q. Mills Elementary School to learn by "bringing the outside world in." The virtual reality tools help students to remember and apply what they see to the concepts in the curriculum – engagement and immersion are key to information and knowledge retention. The immersive and sensory nature of the technology aims to improve the quality of students' language, particularly for those students who struggle to think of what to write, read or complete projects during class time.

## Dorcas Kassebaum Ready! Set! Think!

#### **Ronald E. McNair Elementary School**

First grade and special education students will work together in small groups using STEAM kits to build a bridge, make a raft that floats, test a working parachute, make a leak-proof roof, and construct a chair. The kits encourage problem solving and cooperation, and help students learn early coding skills. Students will then show their projects at a Science Expo at School on Mar. 7.

#### Ramicia Paul

#### Game On! Gaming to Promote Literacy and Social Skills Development

#### Ronald E. McNair Elementary School

This project is aimed to assist with special needs students. Social and emotional learning is just as critical to students' academic achievement and success as mastering math, science, and reading. The games selected as part of this grant encourage working in groups and with partners; working collaboratively helps build community in the classroom and improve reading literacy.

#### Sarah Taylor

#### **Rube Goldberg Young Inventors**

#### **School Community Guidance Center**

Students will create projects using Rube Goldberg. They will incorporate many aspects of STEAM to make their project including learning about gears, pulleys, geometry, centripetal force, and more.

#### David McLoda

#### **Engineering an IoT Raspberry Pi Air Quality Monitor** School of Science and Engineering

Engineering an IoT Raspberry Pi Air Quality Monitor involves ninth through 12th grade students in a multi-class project. Students will program an air quality monitoring station using the Raspberry Pi microcomputer. They will then design and perform controlled air quality experiments around the school. Using the monitoring station, students will log and analyze atmospheric pollution data in real-time.

#### Mary Machovsky Expanding the Blind Dragon Café Seagoville High School

This project will expand the current Dragon Cafe that was funded by GFIT last year to now include baked goods to be sold to teachers and staff. This project will enable special needs students hands on experience with money, cooking as well as life skills to be more independent, learn soft skills and how to maintain a job when they graduate.

## Mark Hillegass Jr. Blocks: The Instrument of the Future

#### Sidney Lanier Expressive Arts Vanguard

Students will use music "Blocks" (digital instruments) to learn about composition, pitches, melody, harmony, and rhythm. The "blocks" are music players with speakers, and the students manipulate them through touch to create music. Mr. Hillegass will teach students about song structure, and the students will then create their own songs over the semester and present to the class.

#### Sherwin Macalintal

#### **SPARK Makerspace in Skyline High School** Skyline High School

Skyline High School acknowledges the need for the future workforce to be digitally literate and equipped with knowledge and skills the information age requires. This school year they will introduce the Computer Science endorsement which requires hands on learning. The grant will fund the equipment, tools and supplies needs to reinforce the concepts they are learning.

#### Derek Thomas

#### **Active Classroom**

#### **Solar Preparatory School for Boys**

This project will provide flexible seating equipment for one classroom per grade level with the goals of helping elementary school scholars be more engaged in the academic lesson and therefore achieve more academic success.

#### Angela Watts Makerspace 2.0

#### **Thomas Tolbert Elementary**

Through this grant, the lead educator will take the makerspace to the next level. The educator will be able to introduce technology and STEAM elements to students while encouraging collaboration.

#### *Leslie Correa*

#### **Dancing with Words**

#### Tom C. Gooch Elementary School

This project provides a set of learning materials designed by National Geographic that teaches Literacy Language, Dual Language and Vocabulary to first and second grades. Students will use printed materials, pictures and workbooks to help use their metacognitive skills to acquire academic vocabulary and to bridge two languages (English and Spanish). Through cooperative and independent work, this program creates a strong language acquisition environment that will increase the students' confidence as readers, and allows teachers to quickly remediate students are not testing at grade level.

#### Bennett O'Connor

#### **Establishing an Indoor Vegetable Garden Using Sustainable Methods**

#### Trinidad Garza Early College High School

Students will investigate modern agricultural practices by building indoor aero-gardens and comparing crop growth with outdoor gardens. They will construct aero-gardens and establish an indoor plant nursery and then transplant the plants to outdoor gardens to compare controlled and non-controlled environmental conditionals. Students will conduct weekly chemical analysis on soil temperature, moisture, pH, nitrate, phosphate and potassium levels. They will be graded on their research methods, data collection and on oral and written presentation of their findings.

#### Donielle Edwards-Tyeskie

# **Creating a Sustainable Garden Using Aquaponics V: Comparison of Plant DNA Using PCR**

#### Trinidad Garza Early College High School

This project allows high school biology students to study plant DNA and compare plant genes from their aquaponics system. Students will develop a hypothesis, record test data, and will present their findings in a scientific research poster and journal.

## Juan Bustamante Bridge Competition

#### Two Way Dual Language TAG Academy

This project uses a bridge building competition to teach students STEAM principles. Students will have to explore the strengths of materials and trusses designs, create a bridge made from wood then test the quality of their bridge. The winner of the contest will be the student who created the most efficient bridge which can hold the most weight compared to its own weight.

#### Jennifer Belchi Segura CSI: Math Detectives

**Two-Way Dual Language Talented and Gifted Academy** CSI: Math detectives is a project in which students can solve mysteries, find the answer to challenges and become immersed in solving investigations. By using hints, solving math problems, including computation, algebra, fractions, numerical expressions, and multi-step problems, and other skills needed to solve cases and study the crime scenes presented.

#### Bonita Reece

#### S.O.A.R (Saving Our Aquatic Resources) Umphrey Lee Elementary School

Students will have the opportunity to learn about aquatic life, the various relationships between humans and aquatic life, and how we can help save aquatic life through this grant. This project will provide insight on the global problem and solutions which they personally can help. This will involve observing aquariums in the classroom, a trip to the Dallas World Aquarium, videos, books and setting up recycling bins in the classroom.

#### Carmen Slater

**Beginner Bots** 

#### **Umphrey Lee Elementary School**

This project is designed to introduce pre-K and kindergarten students to robotics and programming through the use of basic "bee" robots. Students will work in groups to create work mat activities for the programmable robots, and then use programming language of the Bee Bots to create a simple, three step design the robot must follow. The project exposes the schools youngest students to crucial STEAM learning elements.

#### Ruben Delgado Engine Operation W. H. Adamson High School

Students in the automotive class will learn how an engine works. The eight engine motor kits will allow students to work in small groups to identify and analyze engine components, demonstrate internal working components with sequencing and timing, and compare two different types of engine models.

#### Dwayne Dorsey

#### **Learning Computers Inside Out** W. T. White High School

This project will provide high school students with a holistic understanding of computers through hands-on experience in assembly and disassembly of computer components, servicing, troubleshooting, maintenance, software installation, coding and more! Students will be equipped with a wide range of valuable tech skills, giving them a head start when pursuing careers in the IT industry.

#### Samantha Culpepper Coding for Kids

#### William L. Cabell Elementary School

Coding for Kids is an after-school club for kindergarten students with third through fifth grade students serving as mentors. Through the club, students will learn foundational coding skills through hands on exploration, explicit instructions and collaborative practice with robots. By the end of March, the goal is for the students to have learned to program at least four different robots and to showcase their learning by creating math or literacy maps for their peers to explore with robots.

#### Daniel Garrison

#### **STEMconnect**

#### Woodrow Wilson High School

This project gives grade school students a chance to participate in a free one to three day robotic camp during select student holidays. Grade school participants will have the opportunity to learn about robotics as well as develop problem-solving and presentation skills. High school students, who will serve as group leaders, will have a chance to further cultivate their leadership skills and serve as mentors to younger students.

#### Bobby White Hands on for Deaf Hands Woodrow Wilson High School

This grant will allow Deaf Education students to prepare and serve coffee to teachers every weekday morning. Everything they will execute is already in their existing curriculum. This will allow the opportunity to gain hands on work experience while learning key money management, inventory control and self-esteem skills.

### Chandra Johnson Tuesno

#### **Rover Explore**

#### Young Men's Leadership Academy at Fred F. Florence Middle School

Project "Rover Explore" transforms and affords a diverse, interactive, cooperative and hands-on learning opportunity for students and teachers in today's classrooms and beyond with the TI-Innovator Rover, Hud and external battery. The goal of this project is to stimulate brain-health by exposing and motivating the student population with current innovative learning trends in education like putting math and science in motion to inform learning and career choices.

# 2018 – 2019 Grants for Innovative Teaching Committee

Sarah Barnes, Chair Molly Averitt, Assistant Chair Bonnie Achariyakosol, Application Liaison Laura Bubalo Manor, Application Liaison Robin Kraase, Public Relations Coordinator Jamilah Pate, Public Relations Coordinator Jennifer Burns, Budget Analyst Becky Park, Sustaining Advisor Sarah Rockey, Signature Projects Vice-President

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