

GFIT Grant Examples

Structural Analysis of PTF1 Complexes in Pancreatic Development

Biology students at Thomas Jefferson High School are researching key protein complexes critical for pancreas formation, using advanced tools like PyMOL and 3D printers. This interdisciplinary project combines biology, computer science, and engineering, addressing a serious genetic disease while giving students real-world scientific experience.

Café Connections: Sowing Friendship, Serving Life Skills

This project aims to empower students at W.H. Adamson High School with significant cognitive disabilities by providing them with hands-on experience operating a coffee and smoothie cart for the faculty at W.H. Adamson High School. Recognizing the need for inclusive opportunities for these students to develop essential life skills, the project focuses on three main components: social skills, money management, and interpersonal skills. By engaging in activities such as interacting with customers, handling transactions, and managing inventory, students are able to build valuable social and communication skills.

Curious Hands: Revitalizing the PreK Sensory Lab

This project aims to revitalize the pre-K sensory lab at L.L. Hotchkiss Elementary School by introducing new materials that promote cognitive development, creativity, and social skills. Teachers plan to create an immersive space for students to explore textures, colors, and sounds through hands-on activities. With tools like a light panel, dinosaur bone kits, sensory rice, and more, the sensory center will support brain development, motor skills, and teamwork, fostering curiosity and learning for every child.

Story Teller: Based on You Story

This project is for 6th grade students to write, produce, direct, edit and market their very own short film in which they (or a version of themselves) are the main protagonist (Based on A You Story). Students will conduct research on how to complete interviews and write self-reflection journals to turn into scripts. They will learn about: using AV equipment; editing scenes to create structure and plot; selecting music to stir emotion; collaborating to make selections; and meeting deadlines. Students will compile a cohesive movie that will be submitted to the Dallas Film Festival in the youth short film category.

Sports Video Live Streaming

This project is the second phase of students continuing to explore and get hands-on experience at action video. Students will be able to collaborate with others in a production role such as talent, director, producer, videographer, and editor to tell a story through live or recorded productions. AV Production and Broadcast Journalism students in 9-12th grades at Skyline High School will have an opportunity to get hands-on experience with live event broadcasting and streaming of sporting events at their school. Students will work on the many facets that come with live broadcasting including, live video setup and video switching. In addition to live streaming the sporting events, students will interview coaches, players and fans gaining conversation and interview skills in front of the camera and/or work behind the scenes learning to create the “magic.” They will also learn public relations skills and sales techniques as they sell advertisement to play during the livestreamed sporting events.

Growing Social Skills Through Hydroponics

This project will use a hydroponic system, initially a tool for gardening, to become a bridge connecting diverse student groups. The project engages middle school students in SPED and general classes, as well as parents to focus on fostering social skills and inclusion through the shared task of soil-less gardening. Students will gather around the intriguing setup, pairing up to plant seedlings, mix nutrients, and monitor water levels. Guided by teachers and volunteers, these interactions become a platform for learning and understanding. As the plants grow, so will friendships and communication skills, particularly for students with disabilities. A digital diary of the project will be shared with the school community, highlighting progress and the importance of inclusivity. Events like 'Harvest Day' will invite the entire school to celebrate the joint effort and taste the produce.

Voices of Vickery

This project is designed for 4th- and 5th-grade Newcomer students and combines autobiographical writing and creative arts. The Newcomer class is made up of students who have recently moved to the U.S. Most have come from refugee camps and have attended little to no formal school. The project invites students to reflect on their past (family heritage), present (school), and future (goals and dreams). This year students will interview their families in their native language using recording devices and take pictures of their families and community using polaroid cameras. At the end of the project, students have created not just an essay but also a vision boards using trifold posters and present their projects at an all-school event. This project is in its fifth year. It has been a spark for teachers in other parts of the U.S. to engage new students and families by doing similar projects.