

COMMUNITY BUILDING WITH 3D TECHNOLOGY

Notre Dame High School, Fairfield



Grant Amount=\$12,000
Project Cost=\$12,000

PROJECT UPDATE



80+ Students Impacted
Grade 9-12

PURPOSE: To utilize 3D printing technology to enhance students' academic performance and to provide service for others in need thereby fulfilling the Notre Dame High School mission statement which emphasizes building character, faith and intellect.

IMPACT: The grant expanded the curriculum by adding 3D printing lessons to the Biology and Forensic Science courses, as well as developing service-learning projects linked to the curriculum. These lessons have improved the quality of instruction by incorporating technology, engaging student in challenging activities, and giving them an opportunity to become mentors to other students. Students were engaged in learning the set-up and operations of the 3D printers, received computer-aided design (CAD) instruction, designed and troubleshooted personal models. Biology students also collaborated with 3rd grade students at St. Andrew Academy in Bridgeport, CT on a service-learning project. A group of 24 students assisted younger students in researching and designing a 3D model of their favorite animal which were printed for students to share with each other. The most rewarding use of the printers was the successful printing and assembling of a 3D prosthetic hand. Students in the STEM Club persisted through failed attempts at fabricating and assembling the Phoenix v2 Hand from the e-Nable Community. Students applied for and received the Fabricator and Assembler Badges from e-Nable which enabled them to create a 3D prosthetic hand for a child in need.

FUTURE PLANS: Notre Dame High School will continue and hopes to expand this program.

