

3D PRINTER

Immaculate High School, Danbury

2020-2021
PROJECT UPDATE



Grant Amount=\$3,000
Project Cost=\$3,000



65 Students Impacted
Grades 9-12

PURPOSE: To use a 3D printer and supporting materials to enhance the teaching of engineering topics while challenging students to think creatively to create a product that solves a real-world problem. Students had the opportunity to design and invent using Onshape, build their prototype using a 3D printer, and evaluate their solution, all of which impacted a deeper understanding of the engineering design process.

IMPACT: The use of the 3D printer and modeling software allowed students to transfer their ideas to a realistic form (engineering and art) and understand abstract concepts in an interactive learning environment. It offered students the ability to inspect, evaluate and improve their design. It created both excitement and confidence in students. Seeing them fully engaged exemplified that students should be responsible for their own learning and a teacher's job is to provide them with the tools to be creative problem solvers. Students took their engineering skills to another level and expressed themselves through designing and printing an object that represented what they stood for. They showcased these charms during the school's Spring Preview event for visiting 6th and 7th graders .

FUTURE PLANS: The 3D printer will always be used in engineering and graphics classes as well as in engineering club with the hope of expanding its use to other departments. Accessories and extra filaments were purchased to ensure the continuation of its use for another year.

