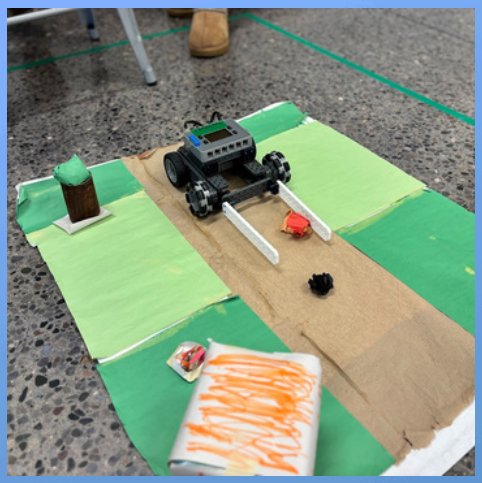
hef | HUDSONVILLE EDUCATION FOUNDATION

PRINTING POSSIBILITIES

HEF GRANT-FUNDED CLASSROOM 3D PRINTER ENHANCES CREATIVITY AND PROTOTYPING



STUDENTS HAVE ACCESS TO EXPANDED MATERIAL OPTIONS THAT ENHANCE THEIR DESIGN THINKING CAPABILITIES.

A CLASSROOM 3D PRINTER ENABLES STUDENTS TO SEE THE PRODUCTION OF ROBOTICS COMPONENTS FIRSTHAND.

THE ABILITY TO PRINT UNIQUE EXTENSION ITEMS ENHANCES DESIGNS DURING COLLABORATIVE CHALLENGES.

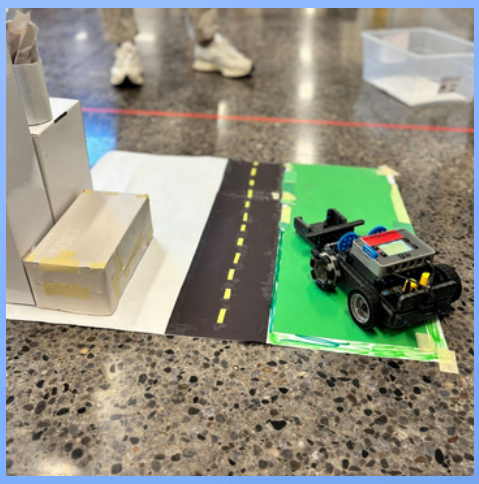
STUDENT-CENTERED IMPACT:

"3D PRINTERS ARE NOT ONLY COOL, BUT THEY ARE USED TO SPARK CREATIVITY, MAKE STUFF WE NEED IN STEAM, AND ARE AN AMAZING TOOL!"

"HAVING THE ABILITY TO 3D PRINT MATERIALS FOR OUR PROJECTS WAS A HUGE HELP. WE COULD 3D PRINT THINGS LIKE WHEEL WELLS AND MICROBIT HOLDERS WHICH ALL HELPED TO BRING OUR PROJECTS TO LIFE. A 3D PRINTER REALLY HELPS ENHANCE THE STEAM EXPERIENCE."

"I LOVED USING THE 3D PRINTER FOR STEAM MAIZE. WE 3D-PRINTED A RACK AND PINION AND HOOKED IT TO A MOTOR SO THE DOORS ON MY PROTOTYPE COULD OPEN AND CLOSE. IT WAS SUCH A COOL EXPERIENCE."

hef | HUDSONVILLE EDUCATION FOUNDATION



THE GRANT DETAILS:

- PRIOR TO 2025, STUDENT DESIGN IDEAS WERE LIMITED TO THE USE OF RECYCLABLE MATERIALS OR EXPENSIVE PRE-MADE PARTS. WITH THE PURCHASE AND USE OF A 3D PRINTER, STUDENTS DESIGN, PRINT, TEST, REVISE, AND IMPROVE THEIR OWN SOLUTIONS – JUST LIKE REAL ENGINEERS.

- THE GRANT-FUNDED 3D PRINTER HAS BECOME AN ESSENTIAL CLASSROOM TOOL, EMPOWERING STUDENTS TO TAKE OWNERSHIP OF THEIR LEARNING WHILE CREATING MEANINGFUL, REAL-WORLD SOLUTIONS.

- STUDENTS TOOK IDEAS FROM CONCEPT TO CREATION—DESIGNING, REFINING, 3D-PRINTING, AND SHOWCASING THE BEST PROTOTYPES TO A STATEWIDE AUDIENCE AT OUR CAPITOL BUILDING IN LANSING.

GRANT AWARD WINNER: ANGELA ERNSTES, TEACHER – 5/6 STEAM

LEARN MORE ABOUT THE GRANTS, APPLICATIONS, AND LEGACY OF LEARNING WITH HEF AT HUDSEDFOUND.ORG.