

Implementation Plan Template

An Implementation Plan for a Voyage Scale Model Solar System in Troy, New York

SECTION 1 – The Coversheet - Partner Organizations and Contacts (no page limit)

Date of Submission: April 29, 2021

Lead Organization

Organization Name: Hudson Valley Community College

Address: 80 Vandenburg Avenue, Troy, NY 12180

Organizational Point of Contact: Jonathan Ashdown, Dean of STEM, cell phone #, j.ashdown@hvcc.edu

Partner Organizations Not Applicable

SECTION 2 – The Community (1 page limit)

An overview of your community - you can include: geographic location, population and demographics, school systems, and the nature of the Lead and Partner Organizations.

Note: strategic objectives in STEM education for these organizations are to be covered in Section 3 below, and not in Section 2.)

Established in 1953, Hudson Valley Community College (HVCC) is a public two-year institution located in Troy, New York (Rensselaer County), approximately 150 miles north of New York City and just across the Hudson River from the state capital of Albany. Collectively, the college maintains a main campus of approximately 120 acres and more than 1,100,000 square feet of building space among its 20 campus buildings. Additionally, the institution offers classes at three off-campus locations: Albany Center for Education (ACE) in Albany, NY (Albany County), Jordan Road at Rensselaer Technical Park in Troy, NY (Rensselaer County), and HVCC North in Malta, NY (Saratoga County). Hudson Valley is the fifth largest of the 30 community colleges in the State University of New York (SUNY) system. With a fall 2020 enrollment of 9,348 it is the second largest undergraduate college in New York State's Capital Region, which includes Albany, Rensselaer, Schenectady, and Saratoga counties. HVCC is accredited by the Commission on Higher Education and is a member of the Middle States Association of Colleges and Schools. The college has over 80 degree and certificate programs that are registered and approved by the NYS Department of Education with the authority to award associate degrees in arts, science, applied science, and occupational studies, as well as occupation-specific certificates. Ninety-six percent of Hudson Valley graduates find immediate employment in their field or successfully transfer directly to a four-year institution following graduation. HVCC's School of Science, Technology, Engineering & Mathematics (STEM) houses three academic departments: Applied Technologies; Engineering, Architecture, Construction, and Mathematics; and Biology, Chemistry and Physics. HVCC has been actively working to enhance existing degree and certificate programs while developing several new degree programs to prepare graduates with relevant skills to thrive in the 21st century workforce. HVCC is part of "Tech Valley," which encompasses 19 counties throughout the Capital Region, the Adirondacks and North Country, Hudson Valley, and Mohawk Valley. Tech Valley is a hub of technological companies and educational facilities. Major educational institutions include: Rensselaer Polytechnic Institute (Troy), University at Albany (Albany), the State University of NY Polytechnic Institute (Albany), and Union College (Schenectady).

HVCC is located in the Capital Region, which is comprised of four counties (Albany, Rensselaer, Saratoga and Schenectady) and is the metropolitan area surrounding Albany, the capital of the state of NY. The Capital Region is a major anchor of the “Tech Valley,” which is a hub of technological companies and educational facilities encompassing 19 counties from Westchester County to the Canadian border. There are 54 public school districts and 26 colleges and universities that serve the Capital Region. HVCC is a premier STEM and technical college and offers career pathways to four-year degrees at all universities in the area.



Source: www.esd.ny.gov

There are 20 designated low-income, opportunity zones served by the Capital Region; all in proximity to HVCC’s main campus. HVCC’s student population is reflective of the ethnic distribution of the Capital Region: 71.3% Caucasian, 11.4% African American, 3.3% Hispanic/Latino, 6.3% Asian/Pacific Islander, 0.4% Native American, and 3.8 more than two races. Students range in age from 18 to over 65. The average age is 22.7.

SECTION 3 – Your Strategic Objectives In STEM (1 page limit)

This section has two key parts: i) provide an overview of your strategic objectives in STEM education, and ii) describe how a Voyage exhibition would help you meet those objectives

The Voyager project will be utilized to engage more under-represented populations into the STEM fields. This will be accomplished by holding community events focusing on the vastness of the solar system and exposing elementary, middle, school and high school students in various space exploration projects. HVCC is located near several major highways, providing easy access to all surrounding counties and communities.

SECTION 4 – Proposed Community Engagement (2 page limit)

This section addresses the central objective of the Implementation Plan - describe how you propose to engage your community in a local Voyage experience

HVCC is seeking to install the Voyager exhibition to engage more under-represented populations into STEM fields. The Voyager exhibition will allow community members the experience of viewing and exploring the vastness of the solar system and the unique and fragile position that Earth holds within it. HVCC will also provide experiential, age-appropriate learning activities to K-12 school groups and summer camps for community youth. Children will be given opportunities to engage in space exploration,

decipher their place in the universe and how their world extends beyond community and national boundaries. In some cases, this exhibition will be their first STEM experience. HVCC's Office of Diversity, Equity and Inclusion (OEDI) works to create awareness, increase resources and provide opportunities to diverse students and staff at HVCC and beyond. In addition, OEDI conducts many programmatic activities to engage community youth in STEM. OEDI will utilize the Voyager exhibition as part of its STEM Outreach Workshop Initiative for middle and high school students.