

# **NSF TEPP**

Rev 06/12/12

## **INTRODUCTION**

The Community College and Board of Cooperative Educational Services (BOCES) submitting this proposal are located on the western boundary of the Capital District Region of New York State; the area lies next to the Mohawk River and extends into the foothills of the Adirondack Mountains. The small cities of Johnstown and Gloversville and surrounding towns/small cities have been and still are known as the “Glove Cities” area. Plentiful wood bark for tanning supplied the area’s leather industry during the late 1800s. Soon the area became the glove-making capital of the world, with businesses such as box manufacturers, thread dealers, and sewing machine repair shops supplying/servicing hundreds of local glove manufacturers and leather tanneries. The end of World War II led to a decline in contracts for military leather gloves, contributing to an economic decline, which along with industrial moves to the Sunbelt and overseas continued for the remainder of the 20<sup>th</sup> Century. The area is now actively seeking emerging technologies to provide 21<sup>st</sup> Century jobs to revitalize its economic status. Stakeholders realize that to do so, they must provide enlightened, cumulative science, technology, mathematics and engineering (STEM) education for students and attract new industries to the area. All over the United States (U.S.), other areas have similar stories and are attempting to carry out similar missions. The Technological Education Pathways Partnership (TEPP) seeks to bring educational revitalization to the Glove Cities area and to provide a national example of cooperation between high schools and community colleges that will help others, particularly in economically disadvantaged areas, achieve similar goals.

TEPP will prepare students for the area’s emerging jobs by establishing a technician career pathway program at the 11<sup>th</sup> and 12<sup>th</sup> grade levels and vertically aligning that program with two years of to-be-revised community college coursework for students intending to become technicians in the electrical/electronics industry. FMCC is well positioned to provide the leadership to accomplish such change; it already has an established AAS program in Electrical Technology (ET). The deliverables to be developed by TEPP will build upon exemplary products, processes and techniques developed by prior Advanced Technological Education (ATE) National Science Foundation (NSF) projects. A comprehensive model, the STEM Vertical Alignment Model, will be developed to enhance and promote project replication and dissemination.

This proposal is submitted by a consortium that includes Fulton-Montgomery Community College (FMCC) and the Hamilton-Fulton-Montgomery Board of Cooperative Educational Services Career and Technical Center (H-F-M BOCES) representing the 15 component schools that Board serves (see Appendix Item 1: List of TEPP collaborating Schools). FMCC and H-F-M BOCES share the same entrance to adjacent buildings on county-owned land in upstate New York.

High school students from 15 component school districts in Hamilton, Fulton, and Montgomery counties are eligible to attend the H-F-M BOCES in their junior and senior years. This BOCES has a history of offering students career exploration and enrichment through practical learning applications. Teachers provide experiential activities in a stimulating and engaging environment

where students implement and practice their newly acquired skills. Those attracted include students who want to pursue career training as part of their high school experience.

BOCES were created by New York State in 1948 to provide shared regional educational services to rural school districts. Each BOCES is a supervisory district whose chief executive officer is the District Superintendent, a dual employee of New York State and BOCES, and a link to the State Education Department. Next BOCES expanded services to supplement those of suburban/urban school districts, and provide a mechanism that equalizes educational opportunities across districts. There are currently 37 supervisory districts in New York State, with a BOCES located in each.

FMCC has a strong collaborative history with H-F-M BOCES and its component school districts. The partnership currently includes:

- **construction technology and automotive technology programs.** FMCC uses BOCES facilities as instructional sites and H-F-M BOCES faculty as FMCC adjunct faculty.
- **the College in High School program.** FMCC offers college courses at high schools taught by qualified high school teachers. FMCC Division Chairs serve as their mentors.
- **early admission for qualified high school seniors.** Students can take courses at FMCC on a full-time or part-time basis, earning college credit while fulfilling high school graduation requirements.