Federal humanities grant showcases Pioneer Valley’s role in technological innovation

NORTHAMPTON: A new grant from the National Endowment of the Humanities will bring $168,400 to help 72 educators around the country make history relevant and exciting for students by exploring how the past shapes today’s culture and technology.

The Forge of Innovation program will showcase the Pioneer Valley’s history as the nation’s hub of development for new technologies during the Industrial Revolution. The project is a collaboration between the Collaborative for Educational Services (CES) Emerging America program, the University of Massachusetts (UMass Amherst) History Department, Springfield Armory National Historic Site, and many other local partners.

“The Springfield Armory; Holyoke’s canal district; and Florence, site of the utopian Northampton Association of Education and Industry; are all hugely important gems of history that are little known outside the Pioneer Valley,” said project director Rich Cairn. Since 2010, Cairn and CES have offered professional development for teachers statewide through its Library of Congress Teaching with Primary Sources Program.

Scholars from UMass Amherst and other institutions will highlight the area’s role in shaping the invention and application of mass production techniques in the mid 1800s, focusing on the development of precision manufacturing at the U.S. Federal Armory in Springfield. No single institution played a more central role in establishing America as an industrial powerhouse. The Armory revolutionized manufacturing with new metalworking techniques, machine tool designs, and workflow processes, especially with the successful application of interchangeable parts.

The Armory’s efficient manufacturing system was a technological engine as influential in its heyday as Silicon Valley was in the 1990s. Innovations employed there allowed the Union to quickly ramp up Civil War production in 1861 from 3,000 to 30,000 muskets per month. Thousands of other factories producing cutlery, sewing machines, motor vehicles, and airplanes as well as guns spun off from the Armory and its suppliers.

“The UMass Amherst History Department is thrilled to be a part of this program; and to share our expertise in public history, U.S. history, and local history with K-12 teachers from across the country,” remarked David Glassberg, Professor of History and Acting Director of the UMass Amherst Public History Program. Glassberg is one of the core architects of the Forge of Innovation Program and one of five UMass Amherst faculty participating in this program.

Everyone is a learner
Teachers participating in the program will study the Armory as genesis to the early Industrial Revolution in two, five-day sessions next summer. They will examine primary sources, visit area museums and historical sites, and compare and contrast the Armory with three other models of development that occurred simultaneously in the Pioneer Valley. Program participants will then return to their classrooms with lesson plans that will help their students understand how history shapes events in the future.

“As teachers of history, it is imperative that we continually update our knowledge of our subject area,” said Easthampton History Teacher and Forge of Innovation Co-leader Kelley Brown. “Programs like the NEH Forge of Innovation give teachers the opportunity to indulge in historical content through in-depth, hands-on exploration. In one week, teachers can improve their expertise in ways that would otherwise only be available through a course of graduate study.”

The grant pays travel expenses for teachers from across the country to participate. CES will hold a free workshop on December 3rd to coach Massachusetts teachers in how to apply for this and dozens of other free NEH programs throughout the U.S. Teachers will hear strategies from peers who won places in prior NEH institutes in Massachusetts and other states.

The program will also expand existing Emerging America websites, so that history teachers and students can learn about this seminal period of our nation’s history.

About the Collaborative for Educational Services

Located in Northampton, MA since 1974, the Collaborative for Educational Services (www.collaborative.org) is a non-profit educational services agency, committed to reaching and educating all learners, and experienced in working with educators to help students learn and succeed. CES partners with and supports local school districts and schools to help them assess their instructional programs and create new ways to improve instruction, student learning and achievement.

The CES Emerging America program (www.emergingamerica.org) offers professional development, curriculum support, and online resources for K-12 teachers to engage students in learning history and social studies.