National Science Foundation (NSF) Advanced Technology Education (ATE)
SMARTT Project (Strengthening Mobile Application Resources and Technician Training) (1700519)
Project Summary

Total: $ 680,187
Project Period: 8/1/2017 to 7/30/2020
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Columbus State Community College, in partnership with companies representing the technology industry in Ohio, Franklin University, the National Convergence Technology Center at Collin College, McHenry County College, local school districts (South-Western City Schools, Eastland-Fairfield), and technology-focused organizations, will develop a multi-disciplinary career pathway in Mobile Application Development Technology. An industry-led curriculum design process will lead the development of outcomes targeted to the current and anticipated skills required in this profession. Through collaboration with the National Convergence Technology Center at Collin College, Columbus State will adopt and adapt best practices in industry-led curriculum design and faculty development. Representatives from local and national businesses will collaborate in a Business and Industry Leadership Team (BILT) to design a curriculum that reflects emerging techniques/ technologies and that includes project-based learning, integrated learning objects, and the use of virtual simulations.

The **goal** of this project is to develop an education program for Mobile Application Development Technicians at Columbus State Community College to meet the increased demand by the Ohio region industry and contribute to the diversity of the region's work force. The **project objectives** include:

1. To establish a Mobile Application Development Technology 2+2+2 pathway featuring:
   a. A model articulation agreement from high school to community college and then to university level baccalaureate programs.
   b. The expansion of the existing Industry Advisory Committee into a true Business and Industry Leadership Team (BILT) under the guidance of Dr. Ann Beheler from the National Convergence Technology Center (CTC) so industry co-leads work and provides maximum benefit for students.
   c. A collaborative Mobile Design and Development certificate curriculum led by the BILT.
2. To create a collaborative state-of-the-art curriculum by leveraging the existing Mobile Media Design Associate Degree in Interactive Media and the Mobile Application Software Development Associate Degree in Computer Science including:
   a. An online curriculum featuring digitized, adaptive learning object methodology.
   b. A project-based learning capstone supported by a scalable, state-of-the-art Device Lab that that will provide the real-world work experience in designing and using Mobile Application Development Technology-related software and hardware.
3. To recruit underserved, disadvantaged populations (defined as low-income, first generation) to the new SMARTT pathway through partnerships with high school districts, special interest programs, and non-profit organizations.