

Learning from the Learners: Student Impressions of the Colorado Helps Advanced Manufacturing Program

Overview: The Colorado Helps Advanced Manufacturing Program (CHAMP) was a four-year, U.S. Department of Labor Trade Adjustment Act-funded project under which nine colleges, including seven community colleges, worked with employers to develop a pipeline of qualified advanced manufacturing workers.

The Rutgers University Education and Employment Research Center (EERC) participated in CHAMP as a third-party evaluator, assessing how the program worked and how successful it was in meeting its goals. As part of its evaluation, EERC conducted interviews and focus groups with 46 students to get their perspective on CHAMP.

Student Profile: The profile of the students interviewed varied considerably. Prior educational experience ranged from dropping out of high school to earning a master's degree. Some had served in the military. Most had held jobs before, and a few had owned a business. Some were traditional college age, some nontraditional (25 or older). Like the CHAMP student population as a whole, the vast majority were men. The students volunteered to be interviewed; their views may not reflect those of their peers.

Student Experiences: The majority of students interviewed learned about CHAMP from an online search for a particular industry, type of credential, or college program. Others were referred by a family member, friend, employer, college faculty member, or admissions officer. Some came in with clear academic and career goals, while others were still weighing their options. Few were aware that they could apply for credit for prior learning experiences, including workforce training and military service, though those who did reported satisfaction with the process.

Few students mentioned online courses or hybrid courses that blend classroom time with online activities. By contrast, hands-on learning opportunities, such as working with state-of-the-art machining equipment, were a draw for many. On the whole, the students appreciated CHAMP's emphasis on "soft skills" related to responsibility, interpersonal communication, teamwork, leadership, and problem solving. Some, however, considered it a waste of time, given their past experience in the military and workforce.

Only three of the students interviewed participated in an internship, and only a handful had met with their campus' CHAMP "navigator" for help planning their coursework or developing resumes.

Challenges: Students faced a number of challenges, some personal, some related to their specific campus or course of study. These challenges included:

- Difficulty balancing CHAMP with work and family demands;
- Difficulty adapting to fast pace and workload of some courses;
- Lack of access to resources and events for students on satellite campuses;
- Lack of internship opportunities.

Program Strengths: Despite these obstacles, the vast majority of students interviewed spoke in positive terms about their experience in CHAMP, highlighting a number of the program's strong points, including:

- Knowledgeable and approachable faculty;
- Flexible attendance policy for students with work and family demands;
- Courses that mirror real-world scenarios, incorporate industry standards, and enable students to build a specific set of skills;
- Diverse and up-to-date equipment in program shops;
- A sense of community and mutual support among students.

Promising Practices: *The students deemed several aspects of CHAMP especially beneficial. EERC identified the following as promising practices for similar programs to consider:*

- *Requiring students to develop a portfolio of coursework with photos and samples*
- *Holding an annual "meet and greet" with regional employers*
- *Giving students the opportunity to attend meetings of industry advisory boards and professional organizations*
- *Encouraging students to compete in industry-affiliated competitions, like those sponsored by SkillsUSA and the American Society of Mechanical Engineers*

To read insights on CHAMP in the students' own words and find out more about EERC's evaluation of the program, visit <http://smlr.rutgers.edu/content/colorado-helps-advanced-manufacturing-program-champ-evaluation>.