



Manufacturing Advisory Committee Meeting Minutes

November 3, 2015

16101 Greenwood Ave N, Shoreline, WA 98133, Building 2500, 2 – 3:30 p.m.

Advisors Present: Tom Stephenson, Royell Manufacturing, Chair
Sean Blechschmidt, Proto-Design
John Cournoyer, Horizon Manufacturing
Carlisle Gallo, ACCRA Manufacturing Inc.
Sandy Gibb, PROVAIL
Krystal Fitzpatrick, CAMPS
Joe Hauth, Aerospace Joint Apprenticeship Committee (AJAC)
Rick Rudnick, Boeing Commercial Airplanes
Thomas Van Acker, Electroimpact

Staff Present: Sherry Byers, C2C Grant Manager
Guy Hamilton, Science Division Acting Dean
Michelene Felker, Career Navigator/Acting Director
Dan Fey, Workforce Dean
Lauren Hadley, WISE Grant Manager
Brain Kever, Part-Time Instructor
Alex Osenar, Career Navigator
Jeff Purdy, Part-Time Instructor
Keith Smith, Faculty

Welcome and Introductions – Tom Stephenson welcomed the advisory members and introductions were made. The committee reviewed meeting minutes from May 7, 2015 and approved them.

Updates from Shoreline

- C2C final report – Sherry Byers reported on the Credentials to Careers grant and shared some tentative final numbers. 307 new students were trained during the grant and the program showed a 48% growth in enrollment. New programs of study were added in Quality Assurance and Machine Maintenance. In addition the program added the NIMS and ASQ certifications. A 5-axis CNC and Vision System were added to the manufacturing lab and the positions of Shop Manager, Tool Room Manager, Teaching Techs and Career Navigator were funded by the grant. Through a partnership with the Workforce Development Council of Seattle/King County veterans recruitment was funded through a contract with Pacific Associates. Sherry Provided a handout of selected highlights (see attached).

- Additive Manufacturing Conference – Brain Kever reported on his attendance at the Additive Manufacturing conference where he made many industry contacts and gained knowledge to revamp the rapid prototyping course. New 3-D printers were purchased and Chris Lindberg will be developing curriculum. This work is funded by the WISE grant.
- Sean B. – Seeing trend toward machines capable of both additive and subtractive processes. 3D printing of work-holding fixtures and tools also gaining popularity.
- Automation Federation – Alex Osenar asked the committee for their feedback on the Automation Federation and if Shoreline Community College should accept the invitation to become a "Working Group" partner. The committee suggested reviewing the other partners and to talk to the organizations that are members. Following the meeting Sean Blechschmidt did some research and made the recommendation to accept the invitation and become a "Working Group Partner with the Automation Federation.

Updates from Industry - Lauren Hadley facilitated a discussion about industry trends and asked the committee “What is new to your shop? Trends, Challenges, and Opportunities” “What does it mean to be a successful new employee?” Committee comments were:

- Tom S. – Return on Investment and data analysis of possible changes are key things to be aware of and something we look at all the time at Royell. We rely on the college to provide moldable students with basic skills. Our way is important and we want to be able to train new employees of how it is done at Royell. Data and measurement are important and using data to make decisions.
- Tom V. – We want new employees to be aware of stock and be able to track its usage, understanding the cost of a part, be accountable, and understand data. Employees should be open to different roles. The most successful employees are those that understand process. Basic skills that we need are: deburring, horizontal band saw blade changes.
- Sandy G. – We’ve hired four students from Shoreline. I concur, it is important for student to learn to follow the process, know the process to get new material, and understand standards.
- Tom S. – It is important for students to demonstrate the value a change will make with data.
- John C. – We’ve hired two Shoreline students. It’s important they understand the value of time and knowing what you don’t know. Use data in class projects, for example tracking time to appreciate the value of time.
- Sean B. – We use MT Connect, a dashboard that helps us understand what our machines are doing.
- Carlisle G. – Critical thinking skills are important and being able to troubleshoot.
- Rick R. – It’s important for students to know that process are in place to demonstrate that we are doing our job correctly. It allows us traceability. Students also need to know the importance of quality.
- Joe H. – Fundamentals, base skills, QA, and inspection are key.
- Tom S. – Maintenance skills are a big hole in our industry.

Industry Thoughts on AMTEC – Jeff Purdy updated the committee on the AMTEC project in partnership with Boeing and the Center of Excellence in Aerospace and Advanced Manufacturing. AMTEC is a curriculum that Boeing has adopted and is supporting colleges in implementing the curriculum to provide a common set of standards and instruction that will allow Boeing and other employers will know exactly the knowledge, skills, and abilities that a graduate has when they hire a new employee with this certificate. Jeff requested feedback from the committee on their thoughts on Shoreline moving forward with this partnership. This committee had mixed reviews, and had recommendations for suggested partners and recommended reaching out to other maintenance companies.

- Rick R. – Boeing using robots made by Kuka, ABB and Fanuc. Seeing a need for Incumbent training solutions so companies can support the adding of new skills to their current employees. Would require format that could fit into busy schedules.
- Sean B. –Underwhelmed by the details/depth of AMTEC framework.

Micheline Felker updated the committee that the program is considering sending a hiring newsletter out with program updates. The other agenda items were postponed to make time for the industry feedback discussion.

Upcoming meetings – Lauren Hadley proposed meeting times for a winter skills panel and spring meeting. The spring meeting will be held **May 4 from 11:30 a.m. – 1:00 p.m.**

The meeting adjourned at 3:30.

Shoreline Community College
DOL TAACCCT Grant Credentials to Careers (C2C) Project
Selected Highlights

Shoreline's Credentials to Careers (C2C) Project's primary goal is to increase the number of students completing machining/manufacturing technology training, who are readily employable and ready to advance into high demand career pathways.

Shoreline's C2C Project is exceptionally successful, in increasing capacity, serving students, providing deliverables, and meeting or exceeding stated goals, including, but not limited to, numbers of students trained, credit hours completed, and certificates and credentials earned. A high percentage of project students are anticipated to secure full-time employment in machining/advanced manufacturing.

- Our students are benefitting greatly. Enrollment has increased significantly. Since the project's implementation, 307 new students have been trained. Machining/ manufacturing technology enrollment has grown by 48%, with an estimated 100 students enrolled each quarter.
- To meet demand, and to increase access and availability, a project satellite site was opened in the Georgetown area of Seattle in October 2014.
- Under the project, and with input from our manufacturing partners, faculty have enhanced and expanded one program and created two new programs of study that award short-term certificates, which fit within a stackable credentials framework. The three programs include the revamped Principles of Precision Machining, the new Quality Assurance, and the new Machine Maintenance.
- Students additionally are prepared and tested for national credentials through the National Institute of Metalworking Skills (NIMS) or another organization.
- The project purchased several hundred thousand dollars' worth of machine tools, equipment, tools, supplies, and computer hardware and software for students in our Manufacturing Technology Department.
- Under the project we created new positions, including Shop Manager, Tool Room Manager, and Teaching Technician positions. Navigator services have been enhanced, and we now have both a Student Navigator and a Career Navigator. These enhancements promote student learning, persistence, and success.
- The project partners, and contracts, with the Workforce Development Council of Seattle-King County and Pacific Associates for student recruitment, outreach, case management, and Business Services Team services, with a primary focus on veterans.