



**Shoreline Community College**  
16101 Greenwood Avenue North  
Shoreline, WA 98133

## **Manufacturing/Machinist Advisory Committee Meeting Minutes**

November 8, 2016

16101 Greenwood Ave N, Shoreline, WA 98133, Building 2500, room 2501A

11:30 a.m. – 1 p.m.

Lunch Provided

**Advisors Present:** Tom Stephenson, Royell Manufacturing, Chair  
Sean Blechschmidt, Proto-Design, Inc.  
John Cournoyer, Horizon Manufacturing  
Tom Diehl, Klein Educational Systems  
Peter Eells, Esterline  
John Goes, Ellison Technologies  
Jack Reed, Gosigner

**Staff Present:** Lauren Hadley, Acting Director Manufacturing Grant Programs  
Brain Kever, Part-Time Instructor  
Chris Lindberg, Part-Time Instructor  
Alex Osenar, Career Navigator  
Jeff Purdy, Part-Time Instructor  
Keith Smith, Faculty

**Welcome, Introductions and Minutes Approval:** Tom Stephenson called the meeting to order at 11:35 and invited attendees to introduce themselves. The minutes from the May 4, 2016 manufacturing advisory committee meeting were reviewed and John Cournoyer moved to approve the minutes. Minutes were approved.

### **Updates from Shoreline:**

- A new \$3.8 Million grant from Department of Labor has funded the MechaWA consortium of five colleges to implement mechatronics in the northwest. The five colleges are Renton Technical College, Everett Community College, North Seattle College, South Seattle College and Shoreline Community College. The grant will fund Shoreline for just over \$600,000 over the next four years. Funding will purchase a welding robot, fund a second navigator, and pay for curriculum development. Shoreline will develop a degree program in partnership with North Seattle College. Tom S. asked about welding, and if there is space to add that component. John C. asked about the companies involved, and Tom S. commented that at Royell they are finding this area of training is an emergent need.

- Jeff Purdy discussed the continued development of the Robotics program. Shoreline currently has two robots on certified educational training carts and will be adding visioning systems. The robots will be used in the mechatronics curriculum as well as to expand robotics instruction within the machinist training. The goal is to have a robot that works with the five axis. Shoreline will be adding two additional robots, one will be a collaborative robot. John Goes affirmed that having a collaborative robot will be good for the program. Keith Smith shared that he is seeing other ways robots are used in manufacturing and production and that they will be a good addition to the program.

The committee discussed the appeal of robotics and ways that manufacturing programs can offer students choices for their career:

- John C. – sees and appeal to youth, but it is important to still have trained machinists
- Sean B. – CNC machines are just robots in a box
- John G – Renton Tech is positioning their program as another option for robotics. They also have a pre-course that is an introduction to all areas in manufacturing. It is automation that is driving this, it is in many areas of manufacturing. We have a stigma around machinists, robots is just another avenue to bring people in. We need options for students, not all of them want to be machinists, and not all of them will be successful as machinists. As you think about the program, think about options and choices for students.
- Tom S. – One of the basic tenants in our shop is that you can't automate a poor product. You need to understand the process and how to make it consistent and stable in order to make it solid. Yes, we need to be offering students choices.
- John C. – advising students by showing them choices based on their skills is the best route. If we're graduating students without the skills, it does no good for the program.
- John G – The Renton program filters students and points them in the right direction. Not everyone can be a machinist. These introductory programs offer a short intro into various aspects of the industry and can get them where they need to go. The program also includes presentations and tours. It's a great way to help students understand the careers that are out there.

**Updates from Industry:** Keith asked the committee “what are some of the things you’ve been happy with or would have liked to see in the students you have hired? What is reasonable to expect from recent graduates? What should we do to be relevant?” The committee shared their perspective around shortage of trained employees and skills gaps of new hires.

- Jack. R. – It takes a while to get new hires up to speed. We have an employee who's been with us 3 – 4 years and is finally getting valuable. We also wish new hires had a better understanding of electronics (contacts, relays, overloads, and knowing what the components are).
- John C. – I find they have no concept of time. The time factor of setup, inspection taking a certain amount of time, there is no sense of urgency. I also feel there is a difference in work ethic and the importance of completing a job. “Just because you work hard all day, doesn't mean you're effective.” 50% efficiency isn't making money.

- Tom S. – during tours we emphasize time. We get tours from all the colleges (SCC, EvCC, LWTI) and we tell them our business is to make money. Our setups are timed and we expect you to follow them because we are looking at machine times six months in advance.
- John G. – I’ve encouraged schools to focus on the business side and concepts of yield. These are the things I wish students understood.
- Tom S. – Having timed quality schedule integrated into the assignment with minor parameters into the projects could be an option.
- Sean B. – Yes, perhaps extra points for turning a project in early.
- John G. – Yes and metrics. You could also develop an alumni program and ask graduates “what should we have taught you?”
- Sean B. – Seattle U does this through social media, which could be a way to get feedback.

**Shoreline’s Advanced Manufacturing Program – SWOT** – the committee was asked to break into groups and brainstorm on the strengths, weaknesses, opportunities, and threats of the program. These responses will be used for creating a strategic plan for the future of the program.

<p><b>Strengths</b></p> <ul style="list-style-type: none"> <li>• Have a lot of current equipment</li> <li>• Instructors do job shadows in industry</li> <li>• Multi-disciplined approach</li> <li>• Internships</li> </ul>	<p><b>Weaknesses</b></p> <ul style="list-style-type: none"> <li>• Better focus on practical core curriculum</li> <li>• Lack of time and quality standards</li> <li>• Weak alumni program</li> <li>• Instructors can lose sight of industry</li> </ul>
<p><b>Opportunities</b></p> <ul style="list-style-type: none"> <li>• Possibility to steer students for optimal outcomes</li> <li>• Communicating manufacturing = \$\$</li> <li>• Concentration of tech in the area (+\$)</li> <li>• Number of sharp students coming in</li> </ul>	<p><b>Threats</b></p> <ul style="list-style-type: none"> <li>• Too narrow focus on evolution of program vs. big picture</li> <li>• Occupation perception of value of manufacturing by students</li> <li>• Automation = job losses, change in skill sets</li> <li>• Economy, scale back program</li> </ul>

**Upcoming Meetings** – second Tuesday of the month

- February 14, 2017
- May 9, 2017

The meeting adjourned at 1:00 p.m.