

**WELDING TECHNOLOGY ADVISORY COMMITTEE - MINUTES**

**Wednesday, May 9th, 2018\* 5:30 to 7:00 PM**

**AA2, Room 105**

**Members Present:** James Duncan, Frontier Metal Fabrications, Inc.; David Patterson, Mt View HS; Jason Petersen, Vigor Industrial PDX; Larry Stanks, Retired; Bill Dykstra, Praxair

**Members Absent:** Patrick Gonzales, Former Instructor; Laramie Lexow, Shopman Ironworkers Local 516; Nathan Marks, Mark Brothers, Inc.; Paul Sibley, 360 Sheet Metal; Mark Stanley, Columbia Machine; Gary Stone, Stone Consulting Services; Michael Williams, Samson Sports

**Guests:** Sonny Curtis, Ironworkers Local #29

**Clark College:** Caleb White, Department Head; Brian McVay, Welding Instructor; Genevieve Howard, Dean or Workforce & CTE; Cathy Sherick, Assoc. Dir. of Instructional Programming & Innovation; Wende Fisher, Advising; SueAnn McWatters, Program Specialist

Committee member Bill Dykstra called the meeting to order at 5:32pm and introductions were made.

**Approval of Previous Minutes**

*The minutes of October 4th, 2017 were presented: Bill proposed they be approved as written. This was seconded by Larry and passed unanimously.*

**Next Meeting Date**

The committee will next meet on **Wednesday, October 24th at 5:30pm.**

**Office of Instruction Announcements**

Cathy Sherick made the following announcements:

**Welcome SueAnn McWatters,** for those who may not have met SueAnn, she is the new Advisory Coordinator. The position was formerly held by Nicola Farron, and she started in January of this year providing meeting coordination and support to the twenty-seven Career and Technical Education Advisory Committees in addition to administrative support in the Office of Instruction. Sue Ann comes to us most recently from WSU Vancouver where she worked in the College of Business, Finance and Operations, and Development and Alumni. She is a former Clark student and graduate of WSUV, attaining a Bachelor’s in Business Administration.

**Career and Technical Education Insert** was sent in February, unfortunately we were not able to produce the insert as a focus on the high school partnerships as we had originally envisioned. It is however, a very nice look at our professional technical education programs and the students they serve.

**Healthy Penguin Walkabout** Saturday June 2, 2018, registration opens at 9:00 with the event beginning at 10. Community members and anyone interested in good health are invited to participate in this FREE event to stroll the beautiful campus and receive free health assessments.

**Spring Recognition event** planned for Wednesday, June 13th. The event will be held in the somewhere on campus PUB 161. Our opportunity to share some refreshments and acknowledge and thank each of our community advisory members for their service to the college. Watch for a save the date, coming to your email soon.

**Need for new Advisory Members** we are asking our advisory members to think about others in the community that you know that might be interested in being a part of building student success at the college. Our committees are shrinking and we are in need of folks to provide that employee as well as employer perspective.

**PPI Exercise and handout:** Academic plan Goal 6: *Infuse the study of* ***Power, Privilege and Inequity*** *throughout the curriculum.* Last year advisory members asked why this was happening at Clark. To answer that question, we have been working with the Office of Diversity and Equity to put together some basic information to share with everyone.

**Advanced Manufacturing Skills**

Caleb discussed building the advanced manufacturing center and that they are currently in the predesign phase. Some questions that the college is asking:

* What is the industry looking for as far as skill sets?
  + Fabricating and machining; laser cutting, forming parts, saw cutting, etc. Finding someone that is already signed up and interested in the industry is critical.
  + Exposure around materials; knowing the difference between aluminum and stainless steel.
  + Knowing how to measure parts; being able to use a protractor.
  + How to read a print
  + Critical thinking
  + Computer skills
  + Math/tape measure/calculator training; knowing and figuring out the functions and being able to recite them
  + Tape welding (seam work)
  + Measurement; exposure to blue prints, visualization of what the complete product is, attention to detail
  + Team-oriented; working together and showing initiative
  + Showing up on time/showing up at all; ability to listen and be open to all information. Learning what to do and what not to do. Just having the willingness to work.

Brian explained that he does not expect to find someone that knows how to do both machining and fabrication. The goal is to put someone in machining and develop their skills while still being exposed to the side of fabrication. Bill agreed that we need to make sure that students understand that this is a viable and optional career path.

* What equipment do we need to have?
  + Structural or sheet metal; potentially both; an ironworker that has full features (bend, punch, sheer, notch, etc.) can expose students to a lot.
  + Lasers for fabrication; water jets can cut anything but not very well. Lasers are key for sheet metal shops.
  + Material handling; how to move/position steel
* What are they missing now?
* What are they missing for the future?

Feedback is important from the mechatronics and machining side. Some things we’ve been hearing have to do with soft skills and critical thinking. Bill spoke on the demand for welders is the highest it’s ever been in 30 years; both entry and skilled.

Caleb mentioned that there are girls in the program but very few. The culture is mainly male dominated but having a mixed workforce is always good.

The committee discussed apprenticeships and hiring. Students need to learn to be patient and learn the craft. The industry normally contacts the program. It’s been difficult to find a company where the student is also going to class.

**Advanced Manufacturing Center Vision**

Genevieve spoke on the funding for a 70,000 sq. ft. building. It is similar to the STEM building; however, it will be a one-story building with a larger footprint. There are obviously lots of challenges. We are currently in the process of working with faculty and stakeholders across the college and outside to co-locate machining, welding and mechatronics and expand the materials science lab. We are hopeful to gain some efficiencies, and equipment as well as develop some additional programs; networking, computer programming, robotics, are other opportunities that we would like to embed. The college has worked with advisory committees as well as asked people to come in and have discussions. The design and build will occur in the next 2-3 years. The building should open in Fall 2021. We are continuously engaging with the industry to figure out what this will look like. Caleb is a project manager and is collaborating with faculty members to focus on the building.

**Advanced Manufacturing Project Managers/Timeline**

Caleb has hired an architect consultant to help flush out the initial design. The facility will have a metal sculpture that will be fabricated by welding/machining students and maintained by mechatronics students. The building itself is a learning tool; mechatronics will work on conveyor belts or heating systems. It will be professional and set up/organized in a way that is ready. Hopefully it’ll be current with what’s 10-20 years down the road. Safety is also a big deal. It’ll be an education facility, but it needs to mimic what’s happening in the industry. 80% of the time it’s about moving materials, not fabricating. The fastest technological change is robotics.

**Department Updates**

Caleb stated that they got new CMC plasma, 130 amp, high def, oxi-fuel torch attachment. Students get to operate it in their last quarter. The program produces as much in-house projects and parts as we can. It’s gone from whole kit cut (75-100 pieces) down to only farming out 3 pieces. Hopefully we’ll get to 0 in house. They also received an LNJ welding positioner. It can handle 1000lbs.

Wade talked about the BBQ and seeing the students problem solve. It was great to see them put things back together and see the parts in a finished state.

**AWS Testing Facility**

Brian presented that our building is not yet ATF (American Welding Society Accredited Testing Facility) certified but they are looking to be. It is currently WABO (Washington Association of Building Officials) certified. We have to have an entity that is allowing the test. By becoming an AWS testing facility, we can offer students more certifications. This will be another form of revenue but it’s more about providing students more credentials when they leave the program. These accreditations and certifications are critical to our program.

The meeting was adjourned at 7:24pm.

Prepared by SueAnn McWatters