Manufacturing Advisory Committee Tuesday, May 10, 2022, 8:00-9:30 a.m. Via Zoom

Advisors present: Tom Diehl, Klein Education

Paul Veltkamp, Aerospace Machinist Lodge 750

Travis Moore, JEMCO Rick Rudnick, Boeing (Chair)

Erin Williams, AJAC

SCC staff/faculty: Guy Hamilton, Executive Dean STEM/WF

Lauren Hadley, Director of Advanced Manufacturing

Keith Smith, Lead Faculty Wanda Waldrop, Navigator

Kelly Griffin, Secretary Senior (notetaker)

Introductions were made, and the June and October 2021 minutes approved.

Lauren Hadley asked for input about additional committee member ideas to make sure Shoreline is providing proper instruction for the committee members' future employees.

Wanda's enrollment reporting indicated that enrollment is down so recruiting efforts are on the south end campus. She also said the "Women in Trades" event was in person and a success. Send your incumbent workers to her or send anyone who needs to gain these skills to make a livable wage.

Keith facilitated a discussion about program mapping for the Manufacturing Machinist AAAS two-year degree. The existing outcomes (what a student should be able to do after program completion of the degree) were discussed:

- 1. Perform entry-level tasks as a machinist; program basic machine tools to perform routine machining functions
- 2. Use mathematics skills to solve basic manufacturing problems
- 3. Safely set-up mills and turning tools making tool length and work piece offsets
- 4. Apply teamwork, inspection and SPC to manufacturing problems
- 5. Utilize properties of materials and establish correct speed of tool rotation and feed rate of forward motion
- 6. Interpret mechanical blueprints

Item 1 ideas:

Add definitions related to types of tolerances. Expand definition - there's manual machinists and CNC machinists.

Item 6 ideas:

Include model-based definition – taking measurements from a model. As a machinist, open original model to doublecheck length if a drawing is not available.

If a full set of drawings are not available, minimum definition to get a good part, etc. Use of current software goes with item 6.

Keith asked if there were any items missing from the list and additional input could be emailed to him. Items mentioned – robotics integration, industry 4.0, general awareness of high level (i.e., 3-D printer).

Industry reports that were mentioned included the slowly ramping up to more "new normal" in office; hiring challenges; work shortages; and supply chain problems. Then Keith fielded a few industry questions about costs and student retention considering work shortages. Lauren gave descriptions of four grants that she works with that can help students. Wanda said if students don't qualify for those options, she then walks them through applying for emergency grant funds.

Guy expressed appreciation for the conversation. He shared out a few college updates and thoughts. The construction of the Allied Health, Science & Advanced Manufacturing building has re-started. He expressed the importance of input from the committee – where do you want to see the program in five years? Is there machinery or equipment needed to have students work on to fill industry needs? As Shoreline updates the program for a new space, there is strategy development in high schools and pathways to these programs. It is a tough time to find students, but we are thinking more creatively, and advisory committee input is important both short and long term.

Fall meeting will be Tuesday, October 14, 2021, at 8 a.m. – 9:30 a.m. via Zoom.

The meeting adjourned at 9:25 a.m.