MN PIPELINE – Advanced Manufacturing Industry Council

Tuesday August 12, 2014 9:30am-12:30pm

Meeting Summary

Welcome – Jessica Looman, Assistant Commissioner, MN Dept. Labor and Industry

- Thank you for coming and participating in the Manufacturing Industry Council
- The Council is recognized as including Employers, Labor, Education and Government
- Industry Council is the experts and everyone's contributions are important to the success of this project.
- This project is about coming to agreement on occupational competencies, and linking them to 3 occupations.
- Competency standards should be accessible, understandable, and transferrable
- The PIPELINE Project should be flexible and broad enough to meet the Industry's needs as a whole

MN PIPELINE Overview and Vision – Senator Terri Bonoff

- Serves as Chair of the Senate Higher Education and Workforce Development Committee
- Discussed 20 Campus Tour around the State, heard student and family stories on what worked and what didn't in higher education. Students expressed desire to have jobs and fear they wouldn't have jobs
- We want to launch the Minnesota Version of the German Apprenticeship Model
- Provided a presentation on the development of the PIPELINE project.

Why the PIPELINE Project is Important to Industry– Kim Arrigoni, Board Officer, Haberman Machine

Ms. Arrigoni's comments included:

- Supporting the workforce
- We owe our kids more than what we are doing
- Mining and Manufacturing are very important to our economy
- Thank you to Buhler for what you are doing in apprenticeship
- We still need college graduates, but we also need machinists

How this impacts education – Richard Wagner, President of Dunwoody College

Mr. Wagner's comments included:

- Growth at Buhler – Success of Apprenticeship Program highlighted
    a. Work Shop at Buhler + 10-12 weeks at Dunwoody
    b. Recent cohort of 40 applicants
    c. Internship Requirement
- Right Skills Now in Burnsville, MN – 1 semester program
- Building stackable credentials
- Governor's Workforce Development Council
- Dunwoody has an Industrial Engineer Bachelor's degree program
- Linking economic development, workforce, and industry together

Questions of the Council:

1. How do we start the PIPELINE before college? For High School juniors and seniors?
2. How do we structure credit for these programs?

Challenge: From a strategic perspective, this is a national issue. It's no longer a state to state competition. The U.S. needs to remain competitive in the global economy.

Competency Standards Framework Overview

Framework overview

Registered Apprenticeship Overview

Apprenticeship in the U.S. vs. Europe

-They include different education models

-The Journey-Level Certificate is marketable. It means something to businesses.

4 components of Registered Apprenticeship

1. Administration
2. Conditions of Employment and Wage Progression
3. Work Process
4. Related Technical & Safety Training

Soft Skills Brainstorming Exercise

What Soft skills or personal/social abilities are necessary for this industry?

Example: Showing up on time

Spreadsheet to follow for "Soft Skills" and "Personal/Social Abilities" for the Industry

Knowledge Brainstorming Exercise

What Core Knowledge is necessary for this industry?

Example: Learned not only in school, but hands on too

Spreadsheet to follow for "Core Knowledge" for the Industry

Technical Skills Brainstorming Exercise

What Technical Skills are necessary for this industry?

Example: These are the closest to apprenticeship models. Work Processes. On the Job Training/Learning. Related Instruction. **This happens at the Employer and in the Classroom.**

Spreadsheet to follow for "Technical Skills" for the Industry

Question of the Council: **What do we mean by Advanced Manufacturing?**

Responses:

- Entry/Assembly
- Machinist
- Master Machinist
- Manufacturing that requires skilled workers.

Question to the Council: **What is the gap for Entry-Level and Advanced?**

Kim Arrigoni (Haberman) Response:

For a long time we have been looking for Operators and Master Machinists that have:

- Experience, Think outside the Box, and have Creativity.
- We want Better, Faster, Cheaper
- We want Efficiency
- We need Quality Assurance
- Experience means more than school for us right now.

Rich Wagner (Dunwoody) Response:

- Eclectic Mix of Skills
- We are talking about Medical Manufacturing now
- Plastic Injection Molding
- Stamping

Jeanne Hoppe (3M) Response:

- Continuous Improvement skills are needed
- We are trying to automate things and that takes a different level of skill-set
- We are looking for Electrical applications/knowledge + Engineering in ONE person

Curt Jasper (E.J. Ajax) response:

- ERP Process
- Automation Processes
- Solid Works training
- Radon Training
- Blue Print Reading
- Advanced Blueprint Reading – To be able to read it, flip it, measure it, etc…
- We train internally

Bernd Weber (Buhler) response:

- We need a Flexible Workforce
- We Not Only Develop, but provide Basic Understanding
- It takes us 3-4 years to train a full worker. We then can place the worker in any position with minimal additional training.
    - Machining
    - Mechanical Assembly
    - Automated Engineering
    - Electrical
    - And Field Services
- We can put the worker wherever we need them

Ralph Canale (Schwan Food) response:

- We interview to get those skills
- We Discern from the interview if they have the Knowledge and Technical Skills needed
- We do very little training

For Maintenance position or Mechanical Technician:

- Can they run a lathe?
- Do they know how to change bearings?
- There are dozens of different types of bearings: Spherical, etc…maximum Load
- How to install bearings?
- What's wrong with them?
- These are basic skills