Ohio Manufacturing Careers Council

Event – 9/14/15

Thank you!

Meeting Purpose: Address the primary issue that affects manufacturers of all sectors and sizes – ensuring the talent supply chain meets demand.

Goals: Help manufacturers coordinate an Ohio approach for marketing manufacturing careers that drives individuals into manufacturing education/training programs and manufacturing jobs; and develop a strategy for the integration of industry-identified, relevant skills in manufacturing education delivery.

ABLE

Changing the “vibe”

Cleveland Foundation Support

Investigating GED formats (future integration with adult diploma “like” strategies)
INSURANCE

- $18 billion ($17.8 billion) of the States GDP
- Employees nearly 100-thousand Ohioans
- While the industry has three primary pockets of employment (Columbus, Cleveland Cincinnati) the insurance industry is active in all 88 counties and is in every Ohio town from Ashtabula to Zanesville.
- Need 26,000 employees by 2020

InsuringOhioFutures.com

The Insuring Ohio Futures program is a career awareness outreach of the Insurance Industry Resource Council (IIRC)

- Celina Insurance Group
- Central Insurance Companies
- Cincinnati Insurance Companies
- Grange Insurance
- Liberty Mutual Insurance
- Medical Mutual of Ohio
- Molina Healthcare of Ohio
- Motorists Insurance Group
- Nationwide Insurance
- Ohio Insurance Institute
- Ohio Mutual Insurance Group
- PIAA of Ohio
Insurance

- A career survey to identify career options that might appeal to the candidates interest or preferences
- 30 Featured career paths
- Videos testimonials from people working in the industry
- Ask A Pro which allows candidates to email industry experts their specific questions for and receive a person response back
- Educational resources - Ohio colleges and universities with insurance programs
- Scholarship information
- Insurance job listings through a job portal developed by Ohio Means Jobs that lists all posted insurance jobs in the State of Ohio.
- Direct links to all IIRC member companies career pages
- List of Ohio domestic insurance companies searchable by state region with links to their career pages

Ohio now has 134 declared insurance majors in six programs and 37 students in certificate programs

Bachelor Degree Programs
- Kent State University (2012)
- University of Cincinnati (2013)
- Franklin University (2013)
- Ohio Northern University (2014)
- Ohio Dominican University (2014)
- Bowling Green State University (2015)

Certificate programs
- Columbus State Community College (Customer Service)
- Clark State Community College (Claims)
- Owens Community College (Associates Degree Jan '16/Certificate Fall of '16)

Supply/Demand: Education Supply Data Factors

- Public Higher Education Data only
- Graduates (counted by SS#)
- CIP (Classification of Instructional Programs)
- Standard Occupation Codes (SOC)
- National Center for Education Statistics (NCES) Crosswalk and (CIP-to-SOC mapping)
- Students earning more than one degree/credential in the graduation year counted only once for each occupation
Supply/Demand Analysis

- Talent Supply Factors
  - Supply to Demand View
  - Number of Graduates
  - Private Education Institution Supply
  - Regional View
  - Enrollments
  - Graduate Retention/Employment
  - Number/Location of Programs
  - Education Program Capacity
  - Wage
  - Bordering States
  - Credentials
  - Skill Gap (Business Retention – Industry input)

Examples of Analysis and Approach

- Engineering
- Welding
- Timeframe (2012/2013 and FY 2013)
- Public Postsecondary Data Only
  - Ohio Technical Centers Data (Adult Career-Tech)
  - 2-year colleges/community colleges
  - 4-year universities
  - Apprenticeship data where applicable

Engineering Supply Data

<table>
<thead>
<tr>
<th>Occupation</th>
<th>2-4 Year Program Supply Total (2012-2013)</th>
<th>Difference in Supply to Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomedical Eng.</td>
<td>298</td>
<td>260</td>
</tr>
<tr>
<td>Chemical Eng.</td>
<td>420</td>
<td>322</td>
</tr>
<tr>
<td>Civil Eng.</td>
<td>466</td>
<td>355</td>
</tr>
<tr>
<td>Electrical Eng.</td>
<td>744</td>
<td>232</td>
</tr>
<tr>
<td>Materials Eng.</td>
<td>146</td>
<td>24</td>
</tr>
<tr>
<td>Mechanical Eng.</td>
<td>1066</td>
<td>139</td>
</tr>
</tbody>
</table>

Total Engineering Graduate Retention Rate:
- 51% of Total Graduates Employed in Ohio* (includes non-resident and foreign nationals)
- 60%* Retention Rate of Engineering Graduates who are Ohio Residents

*Source: ODJFS UI Wage Data
Example of Type of Industries (NAICS) Employing Engineering Graduates

- Healthcare and social assistance (NAICS 62)
- Accommodation and food services (NAICS 72)
- Real estate and rental and leasing (NAICS 53)
- Information (NAICS 51)
- Retail trade (NAICS 44-45)
- Finance and insurance (NAICS 52)

Question:
- How many of the graduates are working as “Engineers”?

Welding Supply Data

<table>
<thead>
<tr>
<th>Welders, Cutters, Solderers, and Brazers</th>
<th>4-Year Program Supply Total (2012-2013)</th>
<th>OTC Program Supply Total (FY 2013)</th>
<th>Apprenticeship Supply Total</th>
<th>Total Supply (Graduates)</th>
<th>Difference in Supply to Demand</th>
</tr>
</thead>
<tbody>
<tr>
<td>OTC Program Supply Total (FY 2013)</td>
<td>75</td>
<td>1283</td>
<td>35</td>
<td>1413</td>
<td>1154</td>
</tr>
</tbody>
</table>

Welding Graduates:
- A majority (90%) of the graduates with welding credentials are from the Ohio Technical Centers (Adult Career Tech)

Welding Completion and Retention

<table>
<thead>
<tr>
<th>Last Cohort (FY 2012)</th>
<th>369 students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Most Recent Cohort (FY 2013)</td>
<td>1283 students</td>
</tr>
<tr>
<td>Increase</td>
<td>914</td>
</tr>
<tr>
<td>% Increase</td>
<td>347.70%</td>
</tr>
</tbody>
</table>

- Supply has increased 347.7% since last year
- Retention: 73% employed in Ohio
- Supply data does not include high school graduates from secondary career technical programs
Welders: Regional Demand vs. Supply

<table>
<thead>
<tr>
<th>SOC</th>
<th>Occupation</th>
</tr>
</thead>
<tbody>
<tr>
<td>51-4121</td>
<td>Welders, Cutters, Solderers, and Brazers</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Region</th>
<th>Supply</th>
<th>Weighted Demand Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTHWEST</td>
<td>178</td>
<td>31.23</td>
</tr>
<tr>
<td>NORTHEAST</td>
<td>484</td>
<td>100.73</td>
</tr>
<tr>
<td>WEST</td>
<td>60</td>
<td>21.55</td>
</tr>
<tr>
<td>CENTRAL</td>
<td>250</td>
<td>31.25</td>
</tr>
<tr>
<td>SOUTHEAST</td>
<td>131</td>
<td>15.62</td>
</tr>
<tr>
<td>SOUTHWEST</td>
<td>186</td>
<td>36.6</td>
</tr>
</tbody>
</table>

Welding Supply – Additional Considerations

- Demand does not break down to welding specialties
  - There are many types of Welding. Unknown: Is Ohio producing sufficient numbers of welders by specialty?
- Welding education programs border many states
  - Anecdotally it is stated that Ohio prepares welders who are employed outside of Ohio
- Not everyone who studies welding plans to become a professional welder (it may be a skill set for another career)
- Ohio residents working in other states – (example: Construction)

State Workforce Education and Alignment Project (SWEAP)

- Grant awarded to Ohio Board of Regents by the National Skills Coalition
- Funded By: Lumina Foundation, JP Morgan Chase and Ford Foundation
- State of Ohio team includes: Ohio Board of Regents, Ohio Dept. of Job & Family Services, Ohio Dept. of Education, Governor’s Office of Workforce Transformation and legislative representatives, and other key stakeholders
- Purpose: To assist policy leaders in understanding the potential uses of supply and demand information in developing state policies that close identified talent gaps.
- Data Resources: Navigating FERPA and UI Wage restrictions on data sharing, and obtaining out-of-state data.
Wage/Employment Data Reporting

Coming Soon!