Advancing Credentials THROUGH Career Pathways
Where We’ve Been, Where We’re Headed

Mapping Upward
- US Dept of Education – OCTAE
- 4 networks/13 community colleges

Advancing Credentials Through Career Pathways
- ECMC Foundation
- 12 colleges from Mapping Upward
- 3 new colleges join as Cohort 2

Advancing Credentials Network
- Affiliate of National Career Pathways Network (NCPN)
- Open to any community or technical college
1. Build capacity of colleges to improve CTE credential attainment rates by offering stackable credentials, a series of shorter pathways to associate degree completion.

2. Help students progress along the education continuum; earn a postsecondary credential with labor market value.

- Stackable credentials: essential ingredients in a career pathways system
- Advocates and partners are vital
- Local context trumps everything
- Many models – shape and reshape to work for your college
Characteristics of Stackable Credentials

- Developed through active employer engagement
- Responsive to labor market/talent development needs of region
- Link educational certificates to industry certifications
- Support diverse groups of learners
- Provide multiple entry and exit points
- Support work-and-learn models through flexible scheduling
- Provide credentials with labor market value on the path to a degree
Tools and Resources

- Podcast Series
- Stackable Credentials Toolkit
- Tutorials

Online @ cte.ed.gov:
> National Initiatives
> Credentials
Advancing Credentials through Career Pathways

Three key focus areas:

1. Significantly enhancing employer engagement
2. Designing career pathways comprised of industry-validated stackable credentials
3. Establishing institutional policies or practices that support non-credit/credit integration
15 Cohort Colleges

**CALIFORNIA:**
Bakersfield College
Reedley College
Shasta College

**ILLINOIS:**
Rock Valley College

**KENTUCKY:**
Owensboro Community and Technical College

**MICHIGAN:**
Oakland Community College

**NORTH CAROLINA:**
Catawba Valley Community College
Forsyth Technical Community College
Isothermal Community College
Mitchell Community College
Piedmont Community College
Robeson Community College
Rowan-Cabarrus Community College

**PENNSYLVANIA:**
Lehigh Carbon Community College
Luzerne County Community College
Ongoing Support

- Technical assistance (TA) to address local needs; guided by action plan
- Dedicated TA coaches; targeted support from subject matter experts
- TA Institutes
- Coaching calls, webinars, workshops, site visits
- Online community of practice
- Toolkits and other resources
Statewide Collaboration Key for Small Programs

- Horticulture changing—environmental constraints, new technologies, customer preferences, labor market trends
- Not easy for small programs to keep up on their own.
- Partnered with peer colleges, industry association, and statewide faculty association in agriculture
- Sustainable Landscape and Landscape Arborist certificates and curriculum; embeds industry-recognized credentials leading to certification
- Approved as statewide model curriculum
Reinventing Advisory Committees through BILT

- Past model: faculty-led industry advisory committee
- New model: Business Industry Leadership Team (BILT)
- Engage local industry to drive curriculum improvement, recruitment, and community engagement.
- Industry-led team includes chair and committees - critical to team’s success and effectiveness
- New BILT collaborated to develop:
  - mission and vision
  - strategic plan/communications plan
  - annual focus area
Business Industry Leadership Team (BILT)
Fostering industry partnerships to create pathways for success

The BILT framework was used to engage a working group of industry partners to drive curriculum development, recruitment activities, and create experiential learning opportunities for students in Advanced Manufacturing programs.

Forsyth Tech’s registered Learn and Earn Apprenticeship Program was created in partnership with BILT members as a means of promoting career opportunities in advanced manufacturing while building a talent pipeline for regional manufacturers.
Non-Credit/Credit Integration

- Relationship building—Cross serving faculty and noncredit instructors
- Shared advisory boards
- Faculty champions—As they saw noncredit students become successful support grew
- Programs physically situated in same hallway
- Re-organization of institution—Dean of Employer Engagement/Community Education seat at academic table
- Awareness that rigor was there to award selected credits
- Presently 12–14 credits carry into Industrial Automation, Mechanical or Electrical Technology AAS degrees and 30 credits articulate into a Technical Associates
- Institutional buy-in and belief
Co-Listed Courses

In order to meet the needs of learners in credit and non-credit programs, Mitchell Community College has been co-listing students from each side of the house into the same courses. These courses, listed below, have near or total matches for student learning outcomes. If a student decides to move into a curriculum program aligned with the work completed in continuing education, the College has awarded the appropriate credit.

<table>
<thead>
<tr>
<th>Title</th>
<th>Con Ed Course ID</th>
<th>Curriculum Course ID</th>
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<tbody>
<tr>
<td>Automation, Intro to</td>
<td>ATR 3115 P35</td>
<td>ATR 312</td>
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<tr>
<td>Electrical: Residential Wiring</td>
<td>ELC 3119 H30</td>
<td>ELC 113</td>
</tr>
<tr>
<td>Electrical: Circuit Analysis 1</td>
<td>ELC 8044 H30</td>
<td>ELC 141</td>
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<td>Electrical: Commercial Wiring</td>
<td>ELC 3119 H30</td>
<td>ELC 114</td>
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<td>Electrical: Industrial Wiring</td>
<td>ELC 3119 H30</td>
<td>ELC 115</td>
</tr>
<tr>
<td>Esthetician 1</td>
<td>COS 3102 T75</td>
<td>COS 119 &amp; COS 120</td>
</tr>
<tr>
<td>Esthetician 2</td>
<td>COS 3102 T75</td>
<td>COS 125 &amp; COS 126</td>
</tr>
<tr>
<td>HVAC: Duct Systems</td>
<td>AHR 3111 H30</td>
<td>AHR 151</td>
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<tr>
<td>HVAC: Servicing</td>
<td>AHR 3131 H30</td>
<td>AHR 133</td>
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<tr>
<td>HVAC: Comfort Cooling</td>
<td>AHR 3111 H80</td>
<td>AHR 118</td>
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<tr>
<td>HVAC: Heat Pump Technology</td>
<td>AHR 3131 H30</td>
<td>AHR 114</td>
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<tr>
<td>HVAC: Heating Technology</td>
<td>AHR 3111 H30</td>
<td>AHR 112</td>
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<tr>
<td>HVAC: Intro to Refrigeration</td>
<td>AHR 3123 H30</td>
<td>AHR 110</td>
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<tr>
<td>HVAC: Refrigerant Certification</td>
<td>AHR 3128 H80</td>
<td>AHR 160</td>
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<tr>
<td>HVAC: Residential System Design</td>
<td>AHR 3131 H30</td>
<td>AHR 211</td>
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<tr>
<td>HVACR Customer Relations</td>
<td>AHR 3131 H30</td>
<td>AHR 180</td>
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<tr>
<td>HVACR Electricity</td>
<td>ELC 8044 H30</td>
<td>AHR 111</td>
</tr>
<tr>
<td>Manufacture/Null Technician</td>
<td>COS 3101 T75</td>
<td>COS 121 &amp; COS 222</td>
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<tr>
<td>Motors and Controls</td>
<td>MNT 3065 P35</td>
<td>ELC 117</td>
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<tr>
<td>Programmable Logic Controllers</td>
<td>ELM 3025 H30</td>
<td>ELM 260</td>
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</table>

Solutions

- Faculty in courses that traditionally have lower enrollment are teaching at fuller loads.
- Students earning credit where it’s due

Challenges

- Process of awarding credit through the Registrar’s office has not been seamless.
- Educating college entrance advisors on availability

Results

- Decrease in course cancellations
- Fuller sections
- Faster completion of curriculum credential
- Decrease in student frustration because they’ve “already done this in another class”
- Increase in students transitioning from con ed to curriculum

For more Information:
Dr. Camille Reese, creese@mitchellicc.edu
“Build Your Own” Template
Tutorials

- **Tutorial 1:** Exploring Credit for Prior Learning
- **Tutorial 2:** Breaking Down Silos to Build In-demand Pathways
- **Tutorial 3:** Learning What Works: Data and Documentation in an Evidence-based World
Podcasts

- **Podcast 1**: Implementing and Sustaining Stackable Credentials Across the Institution
- **Podcast 2**: Aligning Curriculum to Industry Certifications
- **Podcast 3**: Building Lasting Partnerships with Business and Industry
Introduction

In a time when information is critical to success and budgets are tied to outcomes, the need for strategic employer engagement with colleges has never been greater. No longer can programs thrive with limited input from local employers. All community and technical colleges must stay informed of—and respond to—industry-specific trends that impact skill sets, national standards, and credentials.

www.advancingcredentials.org/toolkit
What’s Next?
The Road Ahead

• Unprecedented change in economy and nature of work due to rapidly advancing technologies
• Current education and training systems are not agile
• Stackable credentials could play a larger role in the workforce development ecosystem
The Jobs Landscape in 2022

Top 10 Emerging
1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

Top 10 Declining
1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

Rate of automation

Division of labour as share of hours spent (%)

<table>
<thead>
<tr>
<th></th>
<th>Human</th>
<th>Machine</th>
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<tbody>
<tr>
<td>2018</td>
<td>71</td>
<td>29</td>
</tr>
<tr>
<td>2022</td>
<td>58</td>
<td>42</td>
</tr>
<tr>
<td>2025</td>
<td>48</td>
<td>52</td>
</tr>
</tbody>
</table>

By 2022 everyone will need an extra 101 days of learning

FOW Considerations for Community & Technical Colleges

**Institutional:** Robust technology infrastructure

**Curriculum/Program Development:** Responsive programs aligned to the technologies of local industry

**Students:** Armed with skills for the Future of Work
The Future of Work in America
McKinsey Global Institute
July 2019

Estimated net job growth in midpoint adoption scenario, 2017–30, %

60% of job growth by 2030 could be concentrated in 25 cities and their peripheries

Potential workforce displacement in midpoint adoption scenario, 2017–30

14.7M Young workers age 18–34
11.5M Workers over age 50
11.9M Hispanics and African Americans

4x Higher displacement risk for workers with high school diploma or less

Source: McKinsey Global Institute analysis
1. Reach out to employers; discuss what Industry 4.0 means to their changing workforce needs

2. Take an audit of what Industry 4.0 components are already being taught across the college and where

3. Determine which existing curricula can be leveraged or updated across departments and form interdisciplinary teams

4. Use stackable credentials and emerging certifications as tools for upskilling/reskilling/lifelong learning (cross walk and integrate into courses, programs, certificates, degrees)

NCATC Industry 4.0 Executive Toolkit
Reflection and Action Planning

Priorities

• Don’t ignore the changing nature of work
• Partner with local employers to future-proof your workforce
• Leverage the flexibility and value of stackable credentials to meet the needs of all learners
• Focus on outcomes: for students, for employers, for communities
• Economic mobility for our students is our ultimate goal
New Opportunities

Advancing Credentials
THROUGH Career Pathways

Access resources and collaborate with colleagues
www.advancingcredentials.org

✓ Pathways to Credentials – OCTAE national activity TA opportunity coming soon
Contact Us:

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