Pathways to Employment

Aligning K12, CC, and regional labor markets
April 15, 2019

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Current and Projected Mapping Projects

1. **K14 Pathways:** Mapping relationship between high school and college CTE offerings and alignment to regional labor demand – 2 studies

2. **ADT/Transfer Pathways:** Mapping ADT completion in comparison to transfer rates into CSU system – In progress

3. **Adult Education CTE Pathways:** Mapping adult education CTE offerings in relationship to college pathways and regional labor market demand

4. **Regional Guided Pathways:** Exploring regional projects that would incorporate the above and other kinds of analysis for regional implementation of Guided Pathways.
K14 Pathway Mapping

**Goal:** To map and inventory every high school and community college career education program against LMI for the region.

1. Understand the relationship between high school and college offerings and if they are responsive to regional labor demand

2. Inform pathway planning between high schools and colleges – fill in gaps, develop new programs, improve existing pathways

3. Develop advising tools to help counselors direct students to CC programs and to support college and career exploration
Methodology: Data Sources

- **K12 CTE Course Data** for every CTE course offered within a sector and pathway
- **Community College Program Data** focused on types and quantity of awards offered
- **Labor Market Information** focused on employment, growth, annual openings and wages
Methodology: Crosswalks

- The alignment of K12 programs to college programs to occupations is complicated by the fact that they are not one-to-one relationships.
- For the alignment of K12, college, and LMI data we used and expanded on multiple existing crosswalks:
  - National Center for Educational Statistics
  - Department of Education for Perkins
  - BLS crosswalk of higher education CIP Codes to SOC codes
  - Centers of Excellence CDE to TOP crosswalk
  - Orange County CDE to TOP crosswalk
One to Many Relationships

**K12 Business Pathways**
(11 course sections; )
- Advanced Accounting
- Business
- Business & Financial Markets
- Business Management
- Business Law

**Community College Awards (1 district)**
(30 awards; 914 course sections)

**Associates Degrees**
- Accounting, Business Administration (ADT), Business Management, Computer Business Technology, Entrepreneurship, Financial Services, Legal Admin Assistant, Marketing, Real Estate, Retail Management, Small Business Accounting, Small Business

**Certificates**
- Accounting, Accountancy, Accountancy for Enrolled Agents, Business Administration, Business Management, Entrepreneurship, Financial Services, Legal Administrative Assistant, Marketing, Real Estate Broker, Retail Management, Small Business Management

**Noncredit Certificates**
- Account Clerk, Accounting, Business Management, Project Management, Small Business Growth, Small Business Planning
Data points are questions: they should be the start of the conversation not the end

Framing Concepts

- This is a proportional rather than a traditional supply and demand analysis
- Understanding equilibrium between two state education systems and the labor markets they serve
- K12, higher education, and labor markets are large complex systems and there is no single ‘truth’ to understand how they are related
- Should inform future conversations about system and pathway alignment and integration
K12 CTE Offerings

The top 4 clusters offered by Nevada high schools account for over 50% of all offerings.
College Awards Offered by Cluster

Manufacturing, Health, Ag, Business and IT account for 53% of all College Awards
Entry Level and Median Wages Correlate Directly to Level of Education.

The Level of education required that you use when you extract LMI data impacts the analysis.
Uses:

- **State and Local Needs Assessment** for Perkins V Planning
- **Local and Regional Pathway Planning** between LEA’s and their respective community colleges
- **Transition Planning** for pathway models that strengthen the connections between weaker pathways such as digital media with other applications such as digital product development, health imaging, and other options
- **Strengthening Career Exploration** that help students connect their high school pathway to diverse options and opportunities in postsecondary education and the job market.
Implications for Guided Pathways:

• Because the K12 CTE Sectors crosswalk to many the same college TOP Codes, it creates natural groupings across the K12 sectors that can be leveraged for local or regional pathway planning.

• Focusing on competencies in K12 pathways and the diverse pathways into college programs enables career exploration in exiting ways. For example how underlying competencies in automotive align with manufacturing or how digital media builds competencies relevant to marketing and sales.

<table>
<thead>
<tr>
<th>Construction, Energy, and Engineering - Common Programs</th>
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<tr>
<td>College Programs (TOP4)</td>
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<tr>
<td>Aeronautical and Aviation Tech</td>
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<tr>
<td>Architecture &amp; Architectural Tech</td>
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<td>Civil and Construction Man.</td>
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<td>Construction Crafts Tech</td>
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<td>Drafting Technology</td>
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<td>Electronics and Electrical Tech</td>
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<td>Engineering, General (Transfer)</td>
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<td>Environmental Control</td>
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<td>Environmental Technology</td>
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<td>Laboratory Science Technology</td>
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<td>Manufacturing and Industrial</td>
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<td>Other Eng &amp; Related Indust Tech</td>
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<td>Water and Wastewater Tech</td>
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Organizing and Mapping Across Sectors

**Industrial Trades & Engineering**
- Construction & Building Trades
- Energy, Environment & Utilities
- Engineering & Architecture
- Manufacturing & Product Development
- Transportation

**Business & Entrepreneurship**
- Business & Marketing
- Marketing, Sales, and Services
- Hospitality, Recreation & Tourism
- Fashion & Interior Design

**Medicine, Biology & Natural Sciences**
- Health Sciences & Medical Technology
- Agriculture & Natural Resources
- Public Services

**Education, Human, & Public Services**
- Education, Child Dev & Human Services
- Public Services
- Hospitality, Recreation & Tourism

- Significant alignment of programs across sectors
- Alignment of specific pathways or programs within sector
Pathways and Foundational Competencies

Foundational Pathways

- **College Business and Marketing** programs cross-walked to K12 sectors in Business, Marketing, Fashion, Hospitality, and Information Communication Technology,

- **College ICT** programs cross-walked to K12 sectors in Arts & Media, Construction, Engineering, Business, Engineering, Manufacturing, Marketing, and other sectors,

- **College Arts and Digital Media** programs cross-walked to Construction, Engineering, Fashion, and Manufacturing pathways among other sectors.