Aligning Workforce and Education Programs with the Labor Market

SWEAP Overview

Andy Van Kleunen
Executive Director
National Skills Coalition
Our Vision

We seek an America that grows its economy by investing in its people, so that every worker and every industry has the skills to compete and prosper.
Our Mission

• We **organize** broad-based coalitions seeking to raise the skills of America’s workers across a range of industries.

• We **advocate** for public policies that invest in what works, as informed by our members’ real-world expertise.

• And we **communicate** these goals to an American public seeking a vision for a strong U.S. economy that allows everyone to be part of its success.
Policymakers Hear from Employers that there is a Skill Gap

• 54% of employers report job vacancies that cannot be filled due to a lack of qualified applicants.
  -Career Builder Survey
• 64% of companies say they cannot find qualified applicants for management, scientific, engineering or technical positions.
  -McKinsey Survey
• 67% of small and midsize manufacturers report moderate to severe workforce shortages, and they predict this will get worse not better.
  -National Manufacturing Institute Survey
• 39% of manufacturers have a "severe" lack of qualified, skilled applicants, while 79 percent find it difficult to hire the skilled people they need.
  -Accenture Survey
Much of the Skill Gap is for Middle-Skill Jobs

Middle-skill jobs, which require more than high school but less than a four-year degree, make up the majority of skilled jobs in American’s labor market.
Skill Gap for Middle-Skill Jobs

percent of U.S. Labor Market

Middle-Skill Workers
Middle-Skill Jobs

www.nationalskillscoalition.org
But Policymakers Know there are Many Programs for Middle-Skill Jobs

- Workforce Investment Act (WIA) Title I Program for Adults
- WIA Title I Program for Youth
- WIA Title I Program for Dislocated Workers
- Employment Service
- Adult Basic Education
- Vocational Rehabilitation
- Temporary Assistance for Needy Families (TANF) Employment and Training
- Supplemental Nutrition Assistance Program (SNAP) Employment and Training
- Community and Technical College Workforce Education and Training (Postsecondary Career and Technical Education)
- Private Career Colleges
- Apprenticeships
- Corrections Employment and Training
- Customized Training for Employers
- Sector Partnerships
So Why is There a Skill Gap?

Policymakers Want to Know

- Are people completing the programs and receiving credentials?
- How many get jobs?
- What do the jobs pay?
- Does a diversity of workers have access to these programs?

- Are the programs working together to prepare workers for middle-skill jobs?
- Which programs and strategies work best for which groups of people?

- What occupations and industries have a skill gap?
- Are programs training workers with the right skills and credentials for in-demand occupations?
Policymakers Do Not Have and Use Information About the System of Workforce Development to Answer These Questions

Too Often Information about Workforce Development is Siloed and Inconsistent

- Consequences
  - For employers and workers: Skill gaps
  - For clients: Lack of transparency and clear navigation
  - For program administrators: Lack of coordination across programs
  - For policymakers: Not knowing what works to align the skill levels of individuals with employer needs
State Workforce and Education Alignment Project (SWEAP)

Assisting state policymakers to use cross-program data and information to align workforce and education programs with the labor market.
Building a Workforce Development System

Strategies to build a system of programs aligned with the labor market:

• Sector Partnerships
• Career Pathways
• Job-Driven Investments
• Cross-Agency Data and Measurement
SWEAP

Focusing on 3 Data Tools

- Dashboards
- Pathway Evaluators
- Supply and Demand Reports
Dashboards

Dashboards use a few common metrics to show the performance of programs and the system as a whole.
Dashboards

WIA Adult Program in WA

• Credential Attainment Rate: 36%
• Employment Rate: 69%
• Earnings: $24,178
• Participant Satisfaction: 90%
• Employer Satisfaction: 93%
• Employment Net Impact: 10.8 percentage points
• Earnings Net Impact: $4,511
• Taxpayer Return on Investment: $1.20/$1.00
Dashboards

Answer such questions as:

• Are people completing the programs and receiving credentials?
• How many get jobs?
• What do the jobs pay?
Pathway Evaluators

Pathway Evaluators show patterns of participation across programs and services over time, and the credential and labor market outcomes associated with different pathways for different people.
## Pathway Evaluators

### WIA Adult Program Strategies (WA State)

<table>
<thead>
<tr>
<th></th>
<th>All Participants</th>
<th>Participants Who Received Training</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Impact</td>
<td>+10.8 percentage points</td>
<td>+13.2 percentage points</td>
</tr>
<tr>
<td>Hourly Wage Impact</td>
<td>+$1.73</td>
<td>+$3.14</td>
</tr>
<tr>
<td>Annual Earnings Impact</td>
<td>+$4,511</td>
<td>+$7,529</td>
</tr>
</tbody>
</table>
Pathway Evaluators

Outcomes can be broken down by:

- Service Strategy
- Program Co-Enrollment and Sequences
- Demographics
Pathway Evaluators

Answer such questions as:

• Does a diversity of workers have access to these programs?
• Are the programs working together to prepare workers for middle-skill jobs?
• Which programs and strategies work best for which groups of people?
Supply and Demand Reports

Supply and Demand Reports compare the annual supply of newly trained workers with the annual number of net job openings for skilled workers, broken down by occupational groups and levels of education.
Supply and Demand Reports

Comparing Annual Supply and Future Demand Middle-Skill Occupations in Washington State
Source: WA’s “A Skilled and Educated Workforce”

- Installation, Maintenance Repair
- Manufacturing, Production
- Protective Service
- Selected Health Care Occupations
- Science Technicians

Annual Number of New Workers

Demand
Supply

www.nationalskillscoalition.org
Supply and Demand Reports

Answer such questions as:

• What occupations and industries have a skill gap?
• Are programs training workers with the right skills and credentials for in-demand occupations?
Using Data Tools for Policy

Challenges in Getting the Data
• Obtaining out-of-state employment data
• Lack of occupational data
• Finding data on certifications and licensures

Using Data for Policy
• Asking the right questions in order to get the right information
• Adopting policies that align programs with the labor market
Using Data Tools for Policy

Sector Partnerships
- Use Supply and Demand Reports to Identify Target Industries for Sector Partnerships

Career Pathways
- Use Pathway Evaluators to Identify Effective Pathways for Sub-Populations

Cross-Agency Data and Measurement
- Use Dashboards to Set Goals and Track Progress

Job-Driven Investments
- Use Supply and Demand Reports to Direct Funding to Increase Capacity
- Use Dashboards to Direct Performance-Based Funding
Using Data Tools for Policy

This has been an overview

The Forum will provide more detailed information.
State Leadership Forum
December 8 – 9, 2014
SWEAP Leadership Forum
Dec. 9, 2014

Ruben B. Garcia
Texas Workforce Commission
TX Automated Student and Adult Learner Follow-Up System

- Legislative requirement since 2003
  - Conduct follow-up of education and workforce training exiters at
    - 1 – year post-exit
    - 3 – years post-exit
    - 5 – years post-exit
  - Link records to UI Wage Records, Higher Education Master Enrollment Files, WRIS, WRIS2, FEDES
Texas Workforce and Education Dashboards

- [http://www.lmci.state.tx.us/researchers/dashboard/all_reports_landing.asp](http://www.lmci.state.tx.us/researchers/dashboard/all_reports_landing.asp)

- Comprehensive Dashboard
  - Workforce programs
  - Higher Education
  - Adult Education and Literacy
  - GED
  - Public Education (HS senior exit cohort)
  - Career Schools and Colleges (Proprietary Schools)

- Compliant with Section 508 (Accessibility) of the US Rehabilitation Act
Local Workforce Development Area

LWDA Exit Cohort, 2011-2012: First Year Report

This report covers persons who exited from LWDA programs from the beginning of the 3rd Quarter 2011 to the end of the 3rd Quarter 2012. Outcome data are presented for one quarter prior to the program year (2nd Quarter 2011) and one quarter after exit (4th Quarter 2012). For more information about this tool, click the Methodology link below.

First select a Local Workforce Development Area (LWDA), a Program, and a Category:

LWDA: Statewide
Program: Summary
Category: Program

Click to change the subject of the bar chart:
- Percent Employed
- Median Quarterly Earnings

Select year(s) with checkboxes:
- Q2 2011 (Pre)
- Q4 2012 (Post)

Median Quarterly Earnings
- SNAP E&T
- Choices
- WIA
- SDF
- Rapid Response
Summary or Disaggregate by Workforce Program
First select a Local Workforce Development Area (LWDA), a Program, and a Category:

LWDA
- Capital Area

Program
- Summary
  - Apprenticeship
  - Choices
  - NCP Choices
  - Rapid Response
  - SDF
  - SNAP E&T
  - Summary
  - TAA
  - Total
  - WIA

Category
- Program

Select year(s) with checkboxes:
- Q2 2011 (Pre)
- Q4 2012 (Post)

Quarterly Earnings
- Choices
- WIA
- SDF
- Rapid Response
- Apprenticeship
- NCP Choices
- TAA

Cohort Composition
- SNAP E&T 29.1%
- Choices 11.2%
- WIA 42.5%
- SDF
- Rapid Response
- Apprenticeship
- NCP Choices
- TAA
Disaggregate by Demographics, Program or Services
For detailed information on this Local Workforce Development Area's (LWDA's) economy and demographic characteristics, we invite you to read the Labor Market and Career Information (LMCI) LWDA Narrative Profile.

6,343
Total in Exit Cohort

62.2%
Percent Employed

$4,421
Median Earnings

Table of Detailed Labor Market Outcomes
# Table of Detailed Labor Market Outcomes

<table>
<thead>
<tr>
<th>Category</th>
<th>Group</th>
<th>Number of Customers</th>
<th>Number Working, Q4 2012</th>
<th>Percent Working, Q4 2012</th>
<th>Median Quarterly Earnings, Q4 2012</th>
<th>Number Working, Q2 2011</th>
<th>Percent Working, Q2 2011</th>
<th>Median Quarterly Earnings, Q2 2011</th>
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<tr>
<td><strong>Total</strong></td>
<td>All Groups</td>
<td>6,343</td>
<td>3,948</td>
<td>62.2</td>
<td>$4,421</td>
<td>2,923</td>
<td>46.1</td>
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<td>SNAP</td>
<td>1,848</td>
<td>1,006</td>
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<td>$3,491</td>
<td>678</td>
<td>36.7</td>
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<td>WIA</td>
<td>711</td>
<td>501</td>
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<td>300</td>
<td>42.2</td>
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<td></td>
<td>Apprenticeship</td>
<td>344</td>
<td>298</td>
<td>86.6</td>
<td>$10,141</td>
<td>305</td>
<td>88.7</td>
<td>$7,909</td>
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<td></td>
<td>SDF</td>
<td>329</td>
<td>324</td>
<td>98.5</td>
<td>$18,319</td>
<td>294</td>
<td>89.4</td>
<td>$14,953</td>
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<td>NCP Choices</td>
<td>236</td>
<td>113</td>
<td>47.9</td>
<td>$2,933</td>
<td>73</td>
<td>30.9</td>
<td>$1,463</td>
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<td></td>
<td>TAA</td>
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<td>125</td>
<td>77.6</td>
<td>$8,988</td>
<td>65</td>
<td>40.4</td>
<td>$8,370</td>
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<td>Rapid Response</td>
<td>16</td>
<td>14</td>
<td>87.5</td>
<td>$10,247</td>
<td>7</td>
<td>43.8</td>
<td>$3,344</td>
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<td><strong>Program</strong></td>
<td><strong>Female</strong></td>
<td>3,573</td>
<td>2,095</td>
<td>58.6</td>
<td>$3,307</td>
<td>1,528</td>
<td>42.8</td>
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<td></td>
<td><strong>Male</strong></td>
<td>2,439</td>
<td>1,526</td>
<td>62.6</td>
<td>$5,149</td>
<td>1,101</td>
<td>45.1</td>
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<td></td>
<td><strong>Gender Unknown</strong></td>
<td>331</td>
<td>325</td>
<td>98.2</td>
<td>$18,310</td>
<td>294</td>
<td>88.8</td>
<td>$14,953</td>
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<td><strong>Age</strong></td>
<td>21 - 30</td>
<td>2,469</td>
<td>1,580</td>
<td>64.0</td>
<td>$3,732</td>
<td>1,222</td>
<td>49.5</td>
<td>$2,768</td>
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<td></td>
<td>31 - 40</td>
<td>1,733</td>
<td>1,084</td>
<td>62.6</td>
<td>$5,195</td>
<td>817</td>
<td>47.1</td>
<td>$4,161</td>
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<td></td>
<td>41 - 50</td>
<td>1,217</td>
<td>719</td>
<td>59.1</td>
<td>$5,157</td>
<td>522</td>
<td>42.9</td>
<td>$4,668</td>
</tr>
<tr>
<td></td>
<td>51 or Over</td>
<td>489</td>
<td>308</td>
<td>63.0</td>
<td>$9,065</td>
<td>216</td>
<td>44.2</td>
<td>$7,589</td>
</tr>
<tr>
<td></td>
<td>20 or Under</td>
<td>434</td>
<td>254</td>
<td>58.5</td>
<td>$2,041</td>
<td>145</td>
<td>33.4</td>
<td>$937</td>
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<tr>
<td></td>
<td>No Age Reported</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
<td>***</td>
</tr>
</tbody>
</table>
Higher Education Dashboard

First select a School Type and Exit Category:
- Universities

Next, select a Major Group and Major:
- Major Group
  - 01) Agriculture, Agriculture Operations, and Related Sciences
- Major
  - 01.00) Agriculture, General

Then select a Criterion to sort the data (Award, Ethnicity, Gender, or Total):
- Sort Criterion
  - Ethnicity

Finally, select the subject of the bar chart:
- Percent Employed
- Percent Enrolled
- Median Earnings

Percent Found Employed
- White
- Black
- Hispanic
- Asian
- American Indian
- International
Proprietary Schools

First select a School Type and Exit Category:
- Degree-Granting Proprietary Schools

Next, select a Major Group and Major:
- Major Group: 11) Computer and Information Sciences and Support Services
- Major: 11.01) Computer and Information Sciences, General

Then select a Criterion to sort the data (Award, Ethnicity, Gender, or Total):
- Sort Criterion: Ethnicity

Finally, select the subject of the bar chart:
- Percent Employed
- Percent Enrolled
- Median Earnings

Cohort Composition:
- White: 34.5%
- Black: 30.7%
- Hispanic: 35.8%
- Asian: 12%
- American Indian: 2.3%

Percent Found Employed:
- White
- Black
- Hispanic
- Asian
- American Indian
Community College and Universities by Program

External Link

Texas Higher Education Data

Overview (Quick Links) | External Data Resources | Online Applications | Higher Education Topics | High School to College (P-16) | Reporting to THECB | A-Z Index

ASALES 2yr | ASALES 4yr

Automated Student and Adult Learner Follow-Up System (ASALFS) tracks graduates, completers and non-returners from an academic year for employment and/or additional education. The exit cohort reports provide additional information for Texas public 2-year and 4-year institutions. Exit cohort reports are also available for career schools and colleges and private and out-of-state public postsecondary institutions operating in Texas under a Certificate of Authority or a Certificate of Authorization. Click here for Exit Cohort Report Definitions.

Exit Cohort Reports for Public 2-Year Institutions:
Select an Institution:
ACCD - NORTHEAST LAKEVIEW COLLEGE
Select a Cohort/Report Year:
Display All Cohorts 2012-2013
View PDF

Exit Cohort Reports for Public 4-Year Institutions:
Select an Institution:
ANGELO STATE UNIVERSITY
Select a Cohort/Report Year:
Display All Cohorts 2012-2013
View PDF

Exit Cohort Reports for Career Schools and Colleges and Private and Out-of-State Public Postsecondary Institutions:
Select an Institution:
ALLIED HEALTH CAREERS - AUSTIN
Select a Cohort/Report Year:
Display All Cohorts 2011-2012
View PDF
2010-2011 Texas Public High School Graduates
Texas Public College Enrollment and Employment Outcomes for the Fall Semester Following High School Graduation

School District: 014901 Academy ISD: Little River, TX

<table>
<thead>
<tr>
<th>2010-2011 High School Graduates</th>
<th>Number of High School Graduates: 78</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrolled in College Only</td>
<td>19</td>
</tr>
<tr>
<td>Employed Only</td>
<td>14</td>
</tr>
<tr>
<td>Employed and Enrolled</td>
<td>20</td>
</tr>
<tr>
<td>All Enrolled in College</td>
<td>39</td>
</tr>
<tr>
<td>All Employed</td>
<td>34</td>
</tr>
<tr>
<td>Not Located</td>
<td>25</td>
</tr>
</tbody>
</table>

*Not Located* - High school graduates not found either as college enrolled (in a Texas public college or university in the fall semester following graduation) or employed (not found in the 4th quarter of Texas employment data as reported by the Texas Workforce Commission).

High School Graduates by College Enrollment and Employment Status

- Registered and Enrolled: 32.06%
- Registered Only: 24.39%
- Employed & College Only: 17.95%
- Not Located: 25.64%
Ruben B. Garcia
- Manager, Automated Student and Adult Learner Follow-Up System
- Texas Workforce Commission
- Labor Market and Career Information
- 101 E. 15th Street, Room 0252
- Austin, TX 78778–0001
- (512) 936–3112
- Ruben.garcia@twc.state.tx.us
State Leadership Forum
December 8 – 9, 2014
Supply and Demand Reports

Rachel Zinn
Workforce Data Quality Campaign Director
Supply and Demand Reports

• Compare the supply of skilled workers completing training programs with employer demand as measured by the number of job openings.

• State leaders can use this information to assess where education and training programs in the state are not at scale to address industry skill gaps.

• Direct resources to where they are most needed to meet employer demand.
Counting the Supply of Skilled Workers Completing Training Programs

Counting the Whole Supply

- Degree and Non-Degree Credentials
  Certificates, Certifications, Licensures
  Credit and Non-Credit
- Traditional Higher Education and Other Programs
Counting the Supply of Skilled Workers Completing Training Programs

**Figure 2** Middle-Skill Credential Attainment in Maryland

Counting the Supply of Skilled Workers Completing Training Programs

Total Middle-Skill Credential Attainment in MD
Source: MD StateStat

Middle-Skill Credentials
Counting the Supply of Skilled Workers Completing Training Programs

Adjusting the supply to estimate newly available workers

<table>
<thead>
<tr>
<th></th>
<th>Completions</th>
<th>Enrolled in Education and not Working Full-Time</th>
<th>Enlisted in Military</th>
<th>Not in Labor Force</th>
<th>Remaining Workforce Supply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle-Skill Degree Completers</td>
<td>100%</td>
<td>13.5%</td>
<td>3.8%</td>
<td>13.8%</td>
<td>68.8%</td>
</tr>
</tbody>
</table>

Estimating Employer Demand

Bureau of Labor Statistics forecast of net job openings (growth and separations) for over 800 occupations

10-year Occupational Outlook

What about “Real Time” Labor Market Information?
• Not a forecast
• Sensitive to the business cycle
• Bias (B.A.+ and STEM)

Useful for practitioners, Less useful for policymakers
Comparing Annual Supply and Future Demand
Middle-Skill Occupations in Washington State
Source: WA’s “A Skilled and Educated Workforce”

- Installation, Maintenance Repair
- Manufacturing, Production
- Protective Service
- Selected Health Care Occupations
- Science Technicians

Annual Number of New Workers

www.nationalskillscoalition.org
Comparing Supply and Demand

**FIGURE 7**  
Gap Between Current Supply and Future Demand for Middle-Skill Health Occupations in Washington State

<table>
<thead>
<tr>
<th>Occupation</th>
<th>Supply</th>
<th>Demand</th>
<th>Gap</th>
</tr>
</thead>
<tbody>
<tr>
<td>EMTs and Paramedics</td>
<td>80</td>
<td>195</td>
<td>115</td>
</tr>
<tr>
<td>Health Technologists and Technicians</td>
<td>25</td>
<td>125</td>
<td>100</td>
</tr>
<tr>
<td>Respiratory Therapists</td>
<td>35</td>
<td>90</td>
<td>55</td>
</tr>
<tr>
<td>Dispensing Opticians</td>
<td>10</td>
<td>65</td>
<td>55</td>
</tr>
<tr>
<td>Dental Lab Technicians</td>
<td>10</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>Dental Hygienists</td>
<td>230</td>
<td>270</td>
<td>40</td>
</tr>
<tr>
<td>Medical Transcriptionists</td>
<td>70</td>
<td>100</td>
<td>30</td>
</tr>
<tr>
<td>Cardiovascular Technologists and Technicians</td>
<td>20</td>
<td>45</td>
<td>25</td>
</tr>
<tr>
<td>Nuclear Medicine Technologists</td>
<td>5</td>
<td>15</td>
<td>10</td>
</tr>
<tr>
<td>Ophthalmic Medical Technicians</td>
<td>25</td>
<td>35</td>
<td>10</td>
</tr>
</tbody>
</table>

Considerations, Concerns and Caveats

• Inter-State Migration
• Job Seekers Already in the Workforce
• Accuracy of Forecasts

Focus on the Big Gaps!
Matching Supply and Demand RNs in Washington State

FIGURE 8 | Responding to a Skill Gap—Annual RN Program Completions in Washington State


www.nationalskillscoalition.org
In Summary...

1. States can count the number of newly trained workers completing training across a broad range of programs and providers.

2. States can compare the annual supply of completers with the number of annual net job openings expected in the coming years.

3. States can break the analysis down by major fields of study and occupational groups.

4. State policymakers can utilize a variety of policy levers to direct resources and close the gaps between supply and demand.
State Leadership Forum
December 8 – 9, 2014