Labor Market Information for Community College Faculty

What is it and why is it important?

2015 Career Technical Education Institute
May 8, 2015
Today’s Conversation

→ Overview of the COE

→ Labor Market Information
  • Definition
  • Sources

→ Applications of Labor Market Information

→ Q&A
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→ Q&A
Who are the Centers of Excellence (COE)?

- Community College
- Regional Consortia Chair/Vice Chairs (RCs)
- Deputy Sector Navigations (DSNs)
- Sector Navigators (SNs)
- Technical Assistance Providers (TAPs)
- CA Community College Chancellor’s Office (CCCCCO)
About the COE

The Centers of Excellence deliver labor market research customized for community college decision making and workforce development.

As a grant-funded technical assistance provider, the COE work with colleges, regions and the sector networks to:

- Identify opportunities and trends in high growth, emerging, and economically critical industries and occupations.
- Estimate the gap between labor market demand, available training, and existing or future workers.
- Help regions respond to workforce needs by providing them quality information for decision-making.
Regional COEs

<table>
<thead>
<tr>
<th>Region</th>
<th>Director</th>
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</thead>
<tbody>
<tr>
<td>San Diego-Imperial</td>
<td>Zhenya Lindstrom</td>
</tr>
<tr>
<td>Inland Empire/Desert</td>
<td>Lori Sanchez</td>
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<tr>
<td>Los Angeles-Orange</td>
<td>Interim</td>
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<tr>
<td>South Central</td>
<td>Laura Coleman</td>
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<tr>
<td>Central</td>
<td>Interim</td>
</tr>
<tr>
<td>Bay Area</td>
<td>John Carrese</td>
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<tr>
<td>North-Far North</td>
<td>Theresa Milan</td>
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</tbody>
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Example Research Questions

• Should regional college(s) add courses or new programs? Should the region reduce, modify or retire programs?

• Is there an adequate supply of trained workers to meet labor market demand now and in the near future?

• Is college curriculum in alignment with employer needs?

• What are skills and training requirements for emerging occupations?
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Labor Market Information (LMI) Sources/Tools

1. Traditional LMI
2. Employer Surveys
3. Real Time LMI
4. Program Completions
Categories of LMI

Demand-side data
- Traditional LMI
  - Quantitative, primary, secondary

Real-time LMI
  - Quantitative, secondary

Employer survey
  - Quantitative, qualitative, primary

Supply side data
  - Quantitative, primary, secondary
Labor Market Information
Industry definition

North American Industry Classification System (NAICS)
- used to classify business establishments for the purpose of collecting, analyzing, and publishing statistical data

Example:
23  Construction
236  Construction of Buildings
2361  Residential Building Construction
23611  Residential Building Construction
236117  New Housing For-Sale Builders
Industry data

What data is available?

• # of jobs
• # of establishments
• average earnings
• employment change
• occupations employed by industry
• location quotient
Labor Market Information
Occupation definition

Standard Occupational Classification (SOC) System
- used to classify workers into occupational categories for the purpose of collecting, analyzing, and publishing statistical data

Example:
15-0000  Computer and Mathematical Occupations
15-1100  Computer Occupations
15-1120  Computer and Information Analysts
15-1121  Computer Systems Analysts
Occupational data

What data is available?

- # of occupational jobs
- jobs change (growth/decline)
- earnings (median, average, percentile)
- typical minimum education requirement
- jobs openings
- demographics
Categories of LMI

Demand-side data

- Traditional LMI
  - Quantitative, primary, secondary

- Real-time LMI
  - Quantitative, secondary

- Employer survey
  - Quantitative, qualitative, primary
Economic Modeling Specialists, Inc. (EMSI)

- Proprietary resource/ traditional LMI (www.economicmodeling.com)
- Combines multiple sources of data; requires subscription to access online
- Provides data for a custom region (ZIP code or county level)
- Outputs Include:
  - Industry & Occupational Employment Reports
  - Various Economic Indicators (unemployment, export, import, etc.)
  - Basic Demographic Reports
  - Program Completion Reports (uses IPEDS data)
Economic Modeling Specialists, Inc. (EMSI)

Benefits

- Occupational reports (customized projections)
- Staffing patterns reports (what occupations are employed in an industry)
- Educational completion data conveniently packaged
- Provides multiple data elements in one place
- Easy to use and quick to share

Limitations

- Data limitations (e.g. reports data for 2-digit “catch-all” Government NAICS code; no breakdown for public education and other public services)
- No data for emerging industry or occupation
- Projections are based on historic data
Employer Surveys

• Online or phone surveys of firms
• Usually focused on a specific industry/ies and occupations
• Sufficient sample size to make valid employment estimates for the universe of firms
• Able to obtain real-time quantitative & qualitative data
• COE employer surveys include the following elements:
  o Current & projected overall company employment
  o Current & projected employment for each occupation
  o Turnover/replacement rates & projections
  o Hiring challenges
  o Education/training preferences
  o Skills & knowledge deficiencies & needs
  o Other (awareness of existing programs, industry trends,...)
Employer Surveys

Benefits
- Customizable (can include the questions that are of most interest to you)
- Ideal for understanding emerging occupations & industries
- Collects qualitative data (skill mismatch, employer preferences, etc.)
- Can be used as a marketing tool too

Limitations
- Cost
- Identification of a universe can be challenging
- Getting to a representative sample can be challenging
- Only short list of occupations
- Only short-term projections (1- or 3-year)
- Takes time to collect data
ESRI’s Business Analyst

- An extension of Esri’s software that provides a useful tool for mapping and analyzing businesses, industries, and communities.
- Available as an online tool as well

Outputs Include:
- Demographic data reports for a customized geography
- Demographic GIS Maps
- Business Distribution Maps
- Employment Maps
- Overlay maps of various boundaries
- Various analytical maps (simple ring, drive-time ring, etc.)
ESRI’s Business Analyst

**Benefits**
- Visually displays business concentration & demographic data
- Provides access to the most up-to-date demographic data
- Generates listings of businesses for a specific industry
- Provides data for a custom geography (not just ZIP codes, but simple ring, drive-time, buffer, etc.)

**Limitations**
- InfoUSA business data limitations
- Data is static
Real time LMI

- Labor market intelligence derived from the analysis of job postings and resumes placed into public and private labor exchanges.
- Constantly “spidering” to thousands of online job boards such as Monster, Indeed, Dice…data aggregates job posting information pulled from the internet.
# Real Time LMI

## Benefits
- Continuously updated
- Searchable occupational titles
- Names of employers posting job openings
- May include new and emerging occupations
- Can identify “hot” skills and certifications

## Limitations
- Frequent duplication of job openings, often not easily detected
- Job openings do not equal vacancies
- Job postings vary across industries
- Over half of the listings are for Bachelors degrees and above
- Recruitment tool
Labor Market Information

Federal: Bureau of Labor Statistics (BLS)

State: Employment Development Department (EDD)
Latest

**Walking to Work Remains Unchanged from 2000**
May 10, 2014
Walking to work has remained unchanged since 2000 after decreasing since 1980.

**Biking to Work Increases 60 Percent Over Last Decade**
May 06, 2014
Many U.S. cities are seeing an increase in bicycle commuting according to a U.S. Census Bureau report released today.
Summary Report for:
47-1011.03 - Solar Energy Installation Managers

Direct work crews installing residential or commercial solar photovoltaic or thermal systems.

This title represents an occupation for which data collection is currently underway.

Conventional — Conventional occupations frequently involve following set procedures and routines. These occupations can include working with data and details more than with ideas. Usually there is a clear line of authority to follow.
Categories of LMI

Supply side data

Student Program Completions
(CO MIS and IPEDS)

- Quantitative, primary, secondary
Outcomes

- **Basic Skills Cohort Progress Tracker**
  Progress report of Basic Skills Cohort

- **Retention/Success Rate**
  Course Retention and Success Rates

- **System Wage Tracker**
  Statewide Wage Outcomes by TOP Code

- **Grade Distribution**
  Grade distribution by credit status, T.O.P. code, day/evening status, and SAM code

- **Program Awards**
  Count of awards by award type, CDCP status and T.O.P. code

- **College Wage Tracker**
  Collegewide Wage Outcomes based on 8 years cohort by TOP Code

- **Student Success Scorecard Metrics**
  Metrics measure intermediate progress and completion at each college, district and systemwide. The rates are available for students with various levels of college preparation and also by student demographic groups

- **Transfer Velocity**
  Cohort-based Transfer rate

- **Transfer Volume**
  Volume of transfers to In-State-Private (ISP) and Out-of-State (OOS) four year institutions. * Volume of transfer to CSU (CSU Analytic Studies)
www.calpassplus.org

LaunchBoard

Welcome to Cal-PASS Plus, California's actionable system of data linking student performance from pre-K through 12, to college and the workplace.

Explore Data and Collaborate

- Pre K-12 Schools
- Community Colleges
- Universities
- Regional Learning Councils

Education-to-Workforce Pipeline

Select Your Economic Region OR Select Your County

- Early Childhood Education
- Elementary School
- Middle School
- High School
- Community College
- University
- Labor Market
LaunchBoard

www.doingwhatmatters.cccco.edu/LaunchBoard
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Group Think Exercise

1. What does this data tell you?
2. What are some of the risks/challenges?
3. What are some of the opportunities?
4. Implications for your program?
5. How can you use LMI for your program/department?
6. How can your college/district use LMI?
CC Applications for LMI

- Program Review
- College or District Strategic Planning
- Career Exploration for Students
- Program Creation
- Grant Application Support
- Update Existing Curriculum
- Employer engagement
- Regional program alignment
- Gap Analysis
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Online @

Inform
through real-time regional and local labor market research and data validation.

“...the Centers of Excellence did the initial research and brought a regional stakeholder group together to apply for a DOL grant. This joint effort is an example of regionalism at its finest and is a model for convening future endeavors.”
Steve F. Harrington, EWD, Inland Empire Economic Partnership

www.coeccc.net

www.path2careers.net
Thank You!

Contact a COE near you - www.coeccc.net/contact
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