Doing What Matters: Redesigning Programs and Mapping Career Pathways

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Mark Martin
Director Adv. Manufacturing Workforce Development
Laney College

Anjana Richards
Director Workforce Development
Skyline College

Verónica Sánchez – Casián
Senior Program Associate
Career Ladders Project

The Career Ladders Project
Career Ladders Project

fosters educational and career advancement through research, policy initiatives, and direct assistance to California community colleges and their workforce partners.
CAREER ADVANCEMENT ACADEMIES

• Establish pipelines to college and high wage careers for low-income, underprepared young adults (18 –30 years old)

• Demonstration project: Independent Evaluation, Data Tracking, Technical Assistance, Community of Practice

• 32 colleges in 4 regions of state (East Bay, Central Valley, SF Peninsula and Los Angeles)

• Partnerships with employers, workforce boards, unions, community orgs, adult education/ROCPs

• Partnership: CCCCCO and philanthropy

• 90% retention; 74% course success
Essential Program Elements of Career Advancement Academies

- Clearly defined career pathways with attention to transitions
  - options for both continuing education and employment
  - strong connections with employers and industry

- Integrated basic skills and career technical education: contextualized and accelerated approaches

- Cohort-based learning communities

- Support services
  - embedded in the learning community
  - leverage external supports/benefits

- Address needs and barriers for targeted students
Redesigning Programs & Mapping Career Pathways

- **Process of evaluating a program of study** with an eye for identifying and meeting industry and underrepresented students’ needs.

- **Industry & Employers**
  What is the job demand right now? What’s emerging? What are the skills in high demand? What are the entry and middle skills jobs we can train students in?

- **Students**
  How can we offer our programs for maximum benefit to the students? Can programs be shorter? Can we offer credit? Can our offerings meet criteria for industry certifications?

- Engaging multiple stakeholders within the college and with external partners in this process in order to bring it to fruition.
Career Pathways Mapping Framework

• Stackable Certificates

• Multiple entry and exit points with corresponding wage gain

• Instructional Faculty, Counseling Faculty and Administrator involvement

• Participation from employers and industry

• Visually representing all of these elements
SKYLINE COLLEGE CTE & CAA’S
CAA Design

- Cohort model
- Contextualized learning
  - Math
  - English
  - CTE Entry Level Skills
- Strong counseling and coordination
- Dedicated faculty

“It’s good because we grew as a family and were comfortable with each other.” -- CAA student

“I feel like I’ve come a long way in a short time. Excellent teachers who really care about what happens to their students.” – CAA student
Automotive Stackable Certificates

**Skyline College Automotive Stackable Certificates**

- **Bachelor of Science:** Various technical fields
- **Additional Training & Certification:** Weekend Class
- **Hybrid - Electric Certificates:** Basic Hybrid Powertrains, Principles of Hybrid and Electric Drive

**Jobs & Wages**

- **Advanced Level Employment:**
  - Master Technician, Shop Foreman, Team Leader; Lead Technician
  - $25 - 35 per hour (After 5+ years experience + All 8 ASE Certifications)

- **Intermediate Level Employment:**
  - Repair Technician
  - $15 - 20 per hour
  - Service Writer
  - $15 - 25 per hour (After 2+ years experience + ASE 1-6)

- **Entry Level Employment:**
  - Lube Tech
  - Express Technician
  - Beginning Apprentice
  - $8 - 12 per hour

**Program Prerequisites:**

- Fundamentals of Auto Technology (110)
- Math - Required Level or Test Out
- English - Required Level or Test Out

**Direct Entry Into Automotive Tech Program:**

- High School R.O.P./Tech Prep
  - Successful Completion of High School Auto Shop Program
  - Tech Prep Pathway

- Career Advancement Academy
  - Automotive Technician - 1 Semester
  - Fundamentals of Automotive Service Orientation, Automotive Math, Automotive English, Career Counseling
The Past

Advanced Engine Performance
Drive Train
Engine Performance
Engines Technology
Brakes, Steering, Suspension
Cooling, Heating and AC
Electricity/Electronics

High School
Auto Shop

3 YEARS

Lube Tech
$8 – 12 per hour

STACKABLE CERTIFICATE GOALS:
- Student focused
- Provide options
- Meet employer needs
- Accelerate learning
- Accelerate earning potential

AUTO Fundamentals + M & E Prerequisites
The Future

**Hybrid Diagnosis & Repair**
- Advanced Engine Performance
- Drive Train
- Engine Performance
- Engines Technology
- Brakes, Steering, Suspension
- Cooling, Heating and AC
- Electricity/Electronics

**WORK EXPERIENCE**
- Master Technician: $25 – 45 /hr
- Repair Technician: $12 – 25 /hr
- Lube Tech: $8 – 12 /hr

- High School Auto Shop
- AUTO Fundamentals (4 units) and M & E
- CAA (15.5 units)
How did we do it?

- Faculty Buy In
- Collaboration
- Industry Input
Allied Health
What is the Value?

“I have learned so much and I know what my goals are and how to get there.” – CAA Student

- Articulated pathways benefit everyone
- Multiple entry and exit points
- Connect with work experience
- Academic Persistence
- Student Success
Where do we go from here?

- Establishing CAA as the entry point to CTE
- Institutionalization
- Integration with CSI & LC’s
- Expansion
- Replication
Laney College

- Oakland, CA
- 12,000 students
  - 8400 FTES
- Strong vocational programs in manufacturing related careers
  - Machine Technology
  - Industrial Maintenance
  - Welding
  - Environmental Control Technology (HVAC/R)
  - Carpentry
  - Woodworking
Machine Technology Department

- Louis Quindlen, chair
- Certificates
  - Machine Technology (37 units, 2 years)
  - Industrial Maintenance (30 units, 1 year)
    - Career Advancement Academy cohort for Industrial Maintenance
    - 2nd cohort started in Fall 2012
- NIMS (National Institute of Metalworking Skills) certifications
- 3 recent grants
  - IDRC – “Apprenticeships”
  - DOL TAACCT – “Design It, Build It, Ship It”
  - DOL Adv Mfg – “Medical Manufacturing”
Manufacturing in the U.S.

When you hear the word “manufacturing” and “U.S.” what comes to mind?
Less of this in the U.S. ...
Machine Technology Internships

- Shell (Martinez) $20/hr
- Union Sanitary (Union City) $17/hr
- Dow Chemical (Pittsburg) $18/hr
- Terminal Manufacturing (Berkeley) $17/hr
- EBMUD (Oakland) $20/hr
- UC-Berkeley Chemistry Department $20/hr
Keys to Successful Mapping Projects

- Clear understanding of both the education pathways and the career opportunities for the students
- Having a template (thanks CLP!)
- Examples from similar programs (thanks Skyline!)
Benefits to Students / College

- Students have a clear understanding of their career options
- Colleges have useful outreach & marketing materials
CA Manufacturing - Examples
Manpower, Inc.
10 Hardest Jobs to Fill (2011)

1. Skilled Trades
2. Sales Representatives
3. Engineers
4. Drivers
5. Accounting and finance Staff
6. IT Staff
7. Management / Executives
8. Teachers
9. Administrative Staff
10. Machinist

Manpower Survey - http://us.manpower.com
Example

- Let’er Roll
- More Adept
Made in America, Again
Why Manufacturing Will Return to the U.S.

“China’s overwhelming manufacturing cost advantage over the U.S. is shrinking fast.

Within five years [2016], a Boston Consulting Group analysis concludes, rising Chinese wages, higher U.S. productivity, a weaker dollar, and other factors **will virtually close the cost gap** between the U.S. and China for many goods consumed in North America.”

Now, we want to hear from you…

• What did you hear? What resonated with you?

• Please share your comments and questions.
Emerging Lessons

• What is one success and an emerging practice in your particular case?

• What is a key challenge and how did you approach it?
For More Information

Mark Martin
Laney College
mark.martin@design4X.com

Anjana Richards
Skyline College
richardsa@smccd.edu

Verónica Sánchez – Casián
Career Ladders Project
vsanchez@CareerLaddersProject.org

www.TheCareerLaddersProject.org