Strengthening Green Career Pathways for Lower-Skilled Adults

The Greenforce Initiative Webinar Series from Jobs for the Future and National Wildlife Federation

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Los Angeles Trade-Technical College
Los Angeles Trade-Technical College

- 85+ Year History
- Primary Service Area is South Central Los Angeles
- Trade-Tech offers certificate and degree programs in 65 different career-technical disciplines
- 75% of Trade-Tech’s educational programs are career-technical
- #1 Community College in California for Awarding AA/AS Degree in Family and Consumer Sciences
- #1 Community College in California for Green Workforce Education and Training Programs (number and scope or programs)
Los Angeles Trade-Technical College

• Headcount – 30,711
• Gender
  – Male: 52.1%
  – Female: 47.9%
• Age
  – 19 and Under: 24.2%
  – 20 – 24: 25.0%
  – 25 – 34: 24.7%
  – 35 and Over: 26.1%
Los Angeles Trade-Technical College

• Student Ethnicity
  – Asian: 7.0%
  – Black, African-American: 26.8%
  – Caucasian, White: 6.2%
  – Hispanic: 53.8%
  – Other: 6.2%

• Student Socio-Economic Demographics
  – Over half (54.2%) of LATTC students receive a BOG (financial need) waiver
  – One out of two (50.3%) LATTC students live at or below 150% of the Federal Poverty Level (FPL)
Los Angeles Trade-Technical College

• No/Low Academic History - Adults:
  – 55.2% of Do Not Have HS diploma, GED
  – 35.0% have less than a 9th grade education

• No/Low College Going Culture – 18 – 24 yr olds:
  – Only 35% enroll in post-secondary education

• No/Limited English Speaking - Adults:
  – 65.1% non-native English speaking
  – 34.7% limited or non-English speaking
Los Angeles Trade-Technical College

- Low Preparation of Incoming Students
  - 98% of test below college level English
  - 97.5% test below college level math
  - 24% have less than a 12\textsuperscript{th} grade education

- High Rate of Career-Related Goals
  - 53% intend to achieve two-year or shorter, career-related goals
    - A rate 17% higher than the national average for community colleges
Industry Sector-Based Approach

- Sector-Based Approach with Industry Collaborative
- Labor and Industry Research
- Career Pathways, Lattices and Occupational Mapping
- Education and Training Pathways
Research & Development
Career Pathways — Weatherization & Energy Efficiency

Commercial
- Building Operations Specialist
- Sustainability Manager
- Energy Manager

Residential
- Owner Operator / Operations Manager
- Crew Chief
- Weatherization Program Manager
- Energy Auditor
- Outreach Specialist
- Weatherization Installer
Occupation Profile –
For All Occupations in Career Ladder

• Work Description
• SOC Code (if defined)
• Salary Range
• Job Outlook in Region, State, Nationally
• Competency Model Framework (Department of Labor)
• Certifications and Licensure
  • Required, Desirable, Recognized/Optional
• Related Occupations (in Career Lattice)
  • SOC Codes
  • Job Outlook (number of job openings, number of new jobs, & salary range in region/state)
Occupation Profile
(Competency Framework – Weatherization Installer)

Building Block Competencies for Weatherization Careers

Tier 5: Industry-Sector Technical Competencies
Competencies Specified by Industry Sector Representatives

Tier 4: Industry-Wide Technical Competencies
Competencies Specified by Industry Sector Representatives

Tier 3: Workplace Competencies

Tier 2: Academic Competencies

Tier 1: Personal Effectiveness Competencies

Eligibility Requirements

- Physical
- Legal
- Age
- Prior Education
- Eligible to Work
- Drivers License

Legal – Pass Background Check (Theft & Battery Felonies)

Calculation – Calculate minimum ventilation rates

Materials Selection – Proper materials selection based on location of leakage areas

Air Sealing – Use the blower door to locate leakage sites within the building; seal attic and floor bypass at penetrations for plumbing, electrical wiring, flue vents, ducts, dropped soffits, and balloon-framed walls; seal typical bypasses in kneewalls and finished attic spaces; seal basement band joists; properly apply caulk and spray foam insulation; identify, select, and install weatherstripping on doors, windows, and attic latches; cut glass, replace broken window panes; and apply glazing compound; repair plaster and sheetrock (drywall); and modify or install mechanical ventilation to ensure acceptable indoor air quality for post-air-sealing conditions.
Training and Education Pathways

- Transfer to 4-Year, University Program
- Enter Industry/Career Pathway
- Career Advancement for Incumbents

Apprenticeship
Employer-Sponsored Training
Entry-Level Employment
Prep Programs (Academies)

Objectives & Features

• Objectives
  • Prepare Individuals for Entry-Level Occupations or Apprenticeship Programs
    • Employment Readiness
    • Math/English Competencies
    • Basic Knowledge, Skills, and Abilities for Employment

• Features
  • Short-Term, Mostly Not-For-Credit
    • Soft Skills: Not-For-Credit
    • Technical Skills: For-Credit
  • Overview of Industry/Career Pathway(s)
  • Address Employment Barriers/Eligibility Requirements
  • Multiple Diagnostic Assessments Used (TABE, CASAS)
  • Contextualized Math & English to Industry/Career
  • Cohort-Based; Placed by Skill Level
Prep Academies

• Utilities and Construction Prep Program
• Clean Energy Pre-apprentice Program
• Accelerated Diesel/Transit Technology Program (with emphasis in clean fuels and technology)
• Solar Academy
Trade Bridge Academy –
College Orientation and Math/English Bootcamp
Objectives & Features

• Objectives
  • Prepare Individuals for Success in College Certificate and Degree Programs
    • Student Success Knowledge, Skills, Abilities
    • Math/English Competencies
    • Student Pathway Maps

• Features
  • 9 Hour Noncredit Introduction to Post-Secondary Course
    • Open Entry/Open Exit, Tuition Free
  • Diagnostic Testing - TABE
  • Concentrated Basic Skills Instruction (Math & English Bootcamp)
    • Open Entry/Open Exit, Tuition Free
  • Covers What Every Student Needs to Know and be Able to Do Entering College
Certificate/Degree Programs
Objectives & Features

- **Objectives**
  - Prepare Individuals for Entering and Advancing Industry/Career Ladder
  - Prepare Individuals to Pursue a 4-Year Degree

- **Features**
  - “Stackable” programs that culminate in multiple certificate and degree options
  - Certificates/degrees are linked to at least one industry-recognized certificate, credential
  - Provide options for individuals to pursue multiple career pathways in one or more industry sectors
Stackable Certificate and Degree Programs

- Liberal Arts Courses Required to Satisfy AA/AS Degree Requirements or for Transfer to 4-Year University
- Focuses on Advanced Technical Skills, Management/Professional Skills
- Includes Competencies to Pursue Multiple Career Pathways
- Focuses on Occupation-Specific Technical Skills and Competencies
- Focuses on Industry-Wide Skills and Competencies
- Typically Includes Applied Mathematics/Algebra

General Education Requirements

Advanced Technical Courses

Core Technical Certificate Program(s)

Fundamentals Certificate Program

Prep Programs - Trade Bridge Academy
Engaging Employers

- Convene Sector Collaboratives & Targeted Advisory/Working Groups
- Employers Participate in Labor/Occupation Research Activities
- Employers Participate in Program Design Activities
- Employers Serve as Instructors, Guest Speakers, Mock Interviewers
- Employers Co-Present at Conferences/Industry Meetings
Engaging Employers

• Collaborate on Grant Proposals/Activities
• Meet Frequently to Gauge Employment Demand – Adjust Training Schedule as Necessary
• Schedule Interviews, Employment Tests, Certification/Licensure Activities, Etc. at End of Training Program with Employers
• Employability Screening and “Satisfaction Guarantee”
• Provide Funding for Paid Internship Period