

CTE Enhancement Fund Regional Share Grant Application

Lead College: Mt. San Antonio College

Project Name: HVACR Collaborative

Date: Thu Mar 19 2015

Region

Los Angeles/Orange County

Lead College

Mt. San Antonio College

Send Application Drafts to

jjaramillo@collegeofthedesert.edu, amaniaol@sbccd.cc.ca.us, srodriguez@elcamino.edu, guerriJ@lattc.edu, dacostMB@lattc.edu, sdonley@cypresscollege.edu, jlancaster@citruscollege.edu, vrap@elcamino.edu, bruce.noble@riohondo.edu, jbjudd@mtsac.edu

Project Name

HVACR Collaborative

Brief Overview

In cooperation with Sector Navigators, Mt. SAC will lead a collaborative of eight colleges to form a “super-regional network.” The focus of the initial phase of the HVACR Collaborative project is the creation of a virtual cohort across a broad spectrum of heating, ventilation, air conditioning, and refrigeration credit and non-credit programs, preparing a pipeline of employment-ready environmental control sustainability technicians and professionals with industry recognized credentials and an appetite for life-long learning and career advancement. This collaborative is supported by Southern California Edison in addition to key employers and local chapters of the Building Owners and Managers Association and the International Facility Management Association in LA, Orange, Riverside, and San Bernardino Counties.

Intended Impact

By engaging industry stakeholders as strategic guides, the Collaborative will assure employer priorities are driving each phase of planning and activity. It is only when the following changes are made that the Collaborative will begin reducing the annual gap in supply of HVACR technical and related occupations workers in the four designated counties:

- Increased, coordinated, and targeted opportunities for faculty and industry partner professional development

- Aligned curricula
- Common student learning outcomes
- Established framework of stackable credentials
- Established avenues toward industry-recognized certificates
- Improved HVACR lab facilities and available resources among the eight participating colleges
- Increased involvement of regional Workforce Investment Boards in the areas of support services and job placement in identified occupations
- Strengthened, expanded high school articulation resulting in clear career pathways

Total Project Amount

685065

Project Lead Name

Jemma Blake-Judd

Project Lead Email

jbjudd@mtsac.edu

Project Lead Phone Number(s)

909-274-4750

Participating Colleges

College of the Desert

San Bernardino Valley College

Citrus College

Cypress College

El Camino College

Los Angeles Trade/Technical College

Mt. San Antonio College

Primary TOP Code for Program Area to be Served

0946.00 Environmental Control Technology

Additional TOP Codes to be served

0946.10 Energy Systems Technology

0952.30 Plumbing, Pipefitting and Steamfitting

0957.00 Civil and Construction Management Technology

How Proposal Meets CTE EF Criteria

CTE-EF must be spent to enhance programs producing students for occupations with documented demand and a documented gap in supply (see responses to questions 18-64). The grant also requires participants to demonstrate regional alignment of programs and curricula- (see responses to questions 77-78)

Labor Market Information Sources

EMSI 11-2014

Industry Sectors Served

Energy (Efficiency) & Utilities

Geographic area to be served

Los Angeles

Orange County

Inland Empire

#1.1 Occupation Title

Heating, Air Conditioning and Refrigeration Mechanics and Installers

#1.2 SOC Code

49-9021

#1.3 Starting hourly wage

\$15-20.00

#1.4 Median hourly wage

\$26.00

#1.5 Number employed in 2013

11,799

#1.6 Number projected to be employed in 2016

12,272

#1.7 Projected annual openings

1,261

#1.8 Estimated annual community college supply

393 for Occupations 1-4

#1.9 Estimated total annual supply

570 for Occupations 1-4

#1.10 Labor Market Gap

1,872

#1.11 Projected increase in supply

100 total across all 8 participating programs

Would you like to enter another occupation?

Yes

#2.1 Occupation Title

Stationary Engineers and Boiler Operators

#2.2 SOC Code

51-8021

#2.3 Starting hourly wage

\$15-20.00

#2.4 Median hourly wage

\$26.00

#2.5 Number employed in 2013

1,048

#2.6 Number projected to be employed in 2016

1,058

#2.7 Projected annual openings

82

#2.8 Estimated annual community college supply

See Response to Question #25 - Occupation 1 above

#2.9 Estimated total annual supply

See Response to Question #26 - Occupation 1 above

#2.10 Labor Market Gap

See Response to Question #27- Occupation 1 above

#2.11 Projected increase in supply

100 total across all 8 participating programs

Would you like to enter another occupation?

Yes

#3.1 Occupation Title

Construction and Building Inspectors

#3.2 SOC Code

47-4011

#3.3 Starting hourly wage

\$15-20.00

#3.4 Median hourly wage

\$26.00

#3.5 Number employed in 2013

5942

#3.6 Number projected to be employed in 2016

5982

#3.7 Projected annual openings

672

#3.8 Estimated annual community college supply

See Response to Question #25 - Occupation 1 above

#3.9 Estimated total annual supply

See Response to Question #26 - Occupation 1 above

#3.10 Labor Market Gap

See Response to Question #27 - Occupation 1 above

#3.11 Projected increase in supply

100 total across all 8 participating programs

Would you like to enter another occupation?

Yes

#4.1 Occupation Title

Sheet Metal Workers

#4.2 SOC Code

47-2211

#4.3 Starting hourly wage

\$15-20.00

#4.4 Median hourly wage

\$26.00

#4.5 Number employed in 2013

5260

#4.6 Number projected to be employed in 2016

5314

#4.7 Projected annual openings

427

#4.8 Estimated annual community college supply

See response to Question #25 -Occupation 1 above

#4.9 Estimated total annual supply

See Response to Question #26 - Occupation 1 above

#4.10 Labor Market Gap

See Response to Question #27 - Occupation 1 above

#4.11 Projected increase in supply

100 total across all 8 participating programs .

Would you like to enter another occupation?

No

Builds Upon Existing Assets

The HVACR Collaborative project will build on efforts currently occurring on a limited scale in both credit and non credit programs at the seven individual colleges by establishing a regional hub for professional development, curriculum development and alignment, industry certification, and collaborative activities with employers such as regional advisories, work experience opportunities, lunch and learns, employer panels, etc. This hub concept is designed to increase the scale and scope of individual college efforts, aligning student-learning outcomes with industry certifications. In addition, each college will be investing in equipment in a coordinated effort to strategically enhance specialty areas. These enhancements will include the capability for transporting specialized technology among the colleges. A password protected blog for the faculty members will provide support for the hub, facilitating regional conversations and sharing of ideas. If the blog is effective, the Collaborative may expand it to include a student portion as well.

Builds Regional Alignment

The Collaborative will seek to:

- Align curricula across eight participating colleges, making it portable and competency-based
- Evaluate prior credit/ non-credit course work and industry

experience to facilitate articulation into and transfer of credit among the Collaborative's eight programs, supporting career preparation and career progression for students and incumbent workers respectively

- Develop aligned student learning outcomes common to all participating colleges for each of the identified occupations
- Strengthen and expand high school articulation to establish clear career pathways

Articulation

See response to Regional Alignment above

Industry Engagement

Industry representatives and advisory members were present at all planning meetings and developed match portion below. In addition, the HVACR Collaborative requires industry input for curriculum alignment efforts, and the creation of avenues to industry-recognized credentials. It will also require industry participation in regional advisories and engagement in the provision of work-based learning opportunities and job placement for program completers. Engagement will be fostered through the following activities:

- Coordinated outreach to the colleges' industry advisory council members
- Collaboration with facilities management community belonging to the LA, Orange, Inland Empire, and San Fernando Valley IFMA chapters, led by the Inland Empire Chair (International Facility Management Association)
- Collaboration with building owners and managers belonging to the LA, Orange, and Inland Empire BOMA chapters, led by the BOMA California Energy Committee Chair (Building Owners and Managers Association)
- Partnership with Southern California Edison and SoCal Gas in alignment with the California Long-range Energy Efficiency Strategic Plan under AB 32, the California Global Warming Solutions Act
- Collaboration with the Western HVAC Performance Alliance (WHPA) to address priority skills gaps and to align with industry-recognized credentials

Description Industry Match

Direct support from Southern California Edison and SoCal

Gas with subject-specific curriculum and subject matter experts and assistance with mentoring and underwriting industry recognized credential attainment

- Support from sector building management professionals associations (IFMA & BOMA) in alignment of curricula, creation of avenues to industry recognized credentials, provision of work-based learning opportunities and job placement for program completers
- Input from college advisory boards on alignment of curricula, creation of avenues to industry recognized credentials, provision of work-based learning opportunities, and job placement for program completers

Total value of match

35,000.00

Faculty Engagement

Faculty representatives were present at all planning meetings and developed this statement:

Establish a framework of stackable credentials common to all eight participating colleges

- Create clear avenues toward industry recognized certifications
- Expand the traditional, limited articulation agreements with high schools in order to establish clear career pathways

Momentum points

MP 15. Completed two courses in the same CTE Pathway

MP 16. Retention rate between Fall and Spring within a CTE pathway

MP 17. Completed a non-CCCCO-approved certificate within a CTE pathway

MP 18. Completed a CCCCCO-approved certificate within a CTE pathway

MP 22. Completed requirements in a CTE pathway, but did not receive a certificate or a degree

MP 23. Completed an associate degree in a CTE major

MP 27. Participated in a college internship or workplace learning program within a CTE pathway

MP 28. Attained a job placement in the same or similar field of study as CTE pathway

MP 29. Acquired an industry-recognized, third-party credential

MP 33. Participated in incumbent worker training or contract education in a CTE pathway

Use of Indicators

The HVACR Collaborative's impact on the Momentum Points selected above will be monitored through quantitative data captured in DataMart and Launchboard and through qualitative data resulting from Collaborative-deployed student surveys and employer satisfaction surveys. The data noted above will be used to assess the Collaborative's progress toward achievement of work plan objectives. The group will adjust its assigned activities and/or work plan objectives as needed in light of the assessment results.

Student Employment Outcomes

Yes. They would benefit. The data would be used to assess the Collaborative's progress toward achievement of work plan objectives. The group would then adjust its assigned activities and/or work plan objectives as needed in light of the assessment results. The employment data would also be used as a program recruitment tool.

Ready for Certification

This proposal is certified as being compliant with the Enhancement Fund's requirements

Name of Project Director providing above Certification

Jemma Blake-Judd

Email address of Project Director

jbjudd@mtsac.edu

Name of college's CEO, CIO, or CBO providing above certification

Dr. William Scroggins

Title of CEO, CIO, or CBO providing above certification

President, CEO, Mt San Antonio College

Email address of CEO, CIO, or CBO

wscroggins@mtsac.edu

CTE Enhancement Fund College Contacts

Name of your college

Mt. San Antonio College

Name of your district

Mt. San Antonio CCD

Region you belong to

Los Angeles/Orange County

Name of your College President or Designee

Dr. William Scroggins

Title of your College President or Designee

President and CEO

Email address of your College President or Designee

bscroggins@mtsac.edu

Phone number of your College President or Designee

909.274.4250

Name of your CEO/College President or Designee's Assistant

Denise Lindholm

Email address of your College President or Designee's Assistant

dlindholm@mtsac.edu

Name of your College Chief Instructional Officer/Vice President of Instruction

Irene Malmgren

Title of your College Chief Instructional Officer/Vice President of Instruction

Vice President and CIO

Email address of your Chief Instructional Officer/Vice President of Instruction

imalmgren@mtsac.edu

Phone number of your Chief Instructional Officer/Vice President of Instruction

909.274.5414

Name of the Primary Contact

Jemma Blake-Judd

Title of the Primary Contact

Associate Dean

Email address for the Primary Contact

jbjudd@mtsac.edu

Phone Number for the Primary Contact

909.594.5611 x3934

Name of the Person Responsible for Data Entry

Jemma Blake-Judd

Title of the Person Responsible for Data Entry

Associate Dean

Email Address for the Person Responsible for Data Entry

jbjudd@mtsac.edu

Phone Number for the Person Responsible for Data Entry

909.594.5611X3934

Name of the Chief Business Officer or Designee

Michael Gregoryk

Title of the CBO/Designee

Vice President and CBO

Email address for the CBO or Designee

mgregoryk@mtsac.edu

Phone Number for CBO or Designee

909.274.4230

Name of the person responsible for budget certification

Rosa Royce

Title of Person Responsible for Budget Certification

Associate Vice President

Email address for person responsible for budget certification

rroyce@mtsac.edu

Phone number for person responsible for budget certification

909.274.5517