Competency Models In Action:

Community College Uses Competency Models to Improve Outcomes

February 2013

- Stack up those credentials: Ten new certificate & degree programs in renewable energy career pathways
- Utility industry competency model is used for curriculum development, student learning assessment and career guidance
- "How to" guide for using industry competency models is developed for use by community colleges
- A star is born: New Design and Media Arts competency model

Introduction

When it comes to competency models and stackable credentials, Los Angeles Trade-Technical College (LATTC) continues to push the envelope. LATTC was profiled in the Users Showcase of the Competency Model Clearinghouse (CMC) in August 2011. That case study featured the college's Utility Industry Framework Showing Sample Competencies and an emerging program for Stackable Certificates and Degrees under development at that time. A lot has happened since then at LATTC.

Stackable Certificate and Degree Programs

The college now has ten new stackable certificate and degree programs in two career pathways: Renewable Energy Technician (RET) and Renewable Energy Generation, Transmission, and Distribution (REGTD)

The RET pathway is comprised of seven stackable certificate/degree programs:

- Renewable Energy Technician Energy A.S. Degree, with Emphasis on Solar Thermal
- Solar Thermal Installation and Maintenance Technician Certificate of Achievement
- Renewable Energy Technician A.S. Degree with Emphasis in Solar PV
- Solar PV Installation and Maintenance Technician Certificate of Achievement
- Renewable Energy Technician A.S. Degree, with Emphasis in Energy Efficiency
- Weatherization and Energy Efficiency Certificate of Achievement
- Energy Systems Technology Fundamentals Certificate of Achievement

The REGTD pathway is comprised of three stackable certificate/degree programs:

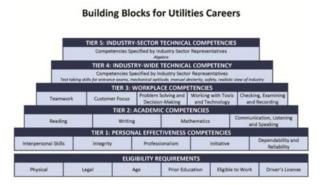
- Renewable Energy Generation, Transmission, and Distribution A.S. Degree with Emphasis in Powerline Mechanic
- Powerline Mechanic Certificate of Achievement
- Utility Industry Fundamentals Certificate of Achievement

"This spring, we will have our first set of graduates who completed their coursework in the fall 2012 semester," says Leticia Barajas, Vice President of Academic Affairs and Workforce Development at LATTC. "We will issue about 200 certifications at that time, some of which will be multiple certifications for the same student."

Utility Industry Sector Model in Action

"We've given presentations on the model at multiple sustainability related conferences, says Marcy Drummond, Vice President for Institutional Effectiveness and Innovation, and we're finding that attendees are definitely interested and requesting more information after the formal presentation." The attendees at these conferences are largely community college staff, but individual business owners, industry representatives and non-profit training providers are also present.

The model has attracted a broad audience that has customized its application to meet their specialized needs. Faculty members are using it to develop rubrics to assess student learning outcomes. High school counselors are using it as a visual aid to guide students in career choices. College administrators are using it to help inform industry partners about the scope and breadth of LATTC's competency-based curriculum.



"One of our business utility partners is Pacific Gas and Electric (PG&E), says Ms. Barajas. "They come here to test our graduates on the skills they need for their workforce. The competency model framework helps PG&E representatives better understand all the interrelated certificates. Our graduates are better trained for their positions because of the competency model. It strengthens our relationship with PG&E and other employer partners."

Technical Assistance Tool: LATTC's Competency Model Guide

LATTC has developed its own "How to" guide on creating a competency model for use by other community colleges. They utilized many of the CMC User Guides in developing this guidance, including Technical Assistance, Build a Competency Model, and the Career Lattice Tool. They've also incorporated the Building Blocks Pyramid as a guide in notebooks developed for faculty. "We use competency models as an approach to build curriculum focusing on post-secondary effectiveness and success," says Ms. Drummond. "It provides a conceptual framework around curriculum development and assessment of student learning.¹

Secondary to Postsecondary Program of Study Pathway Project

To ensure that all LATTC students succeed, the college has developed an innovative model, the Pathway for Academic, Career and Transfer (PACTS) framework. PACTS is a sequence of

¹ http://college.lattc.edu/green/green-competitive-advantage-guide

postsecondary instructional programs and activities, with supportive services, designed to provide individuals with the competencies they need to successfully access a college education, attain industry-recognized and post-secondary credentials, and obtain a career that pays family-supporting wages and offers opportunities for advancement and growth. PACTS are comprised of four distinct tiers: foundational competencies, readiness competencies, program of study core competencies and degree and/or transfer program of study competencies.²

New Competency Model Under Development

LATTC is crafting a new competency model that addresses an industry sector that is well established in Los Angeles. That is the emergent new Design and Media Arts (DMA) Industry Competency Model that will include competencies for fashion design, graphic design, sign graphics, mobile applications design and digital media industries.

This is a groundbreaking initiative in many respects. In developing prior competency models, LATTC had limited consultation with college department chairs. In an effort to achieve greater buy-in, the college has brought in all design and media faculty into the deliberations. Furthermore, LATTC's earlier competency models were developed to conform to the requirements of established industry certifications. Other than software-specific certifications such as Adobe, no such certifications exist for design and media arts occupations, particularly those occupations in the fashion industry.

For this effort, the LATTC competency model team took a new approach. They used the DACUM (Developing a Curriculum) process to clearly define the duties and tasks that are performed by expert workers in design and media arts occupations. The team identified the courses that share these core competencies as well as the occupations for which they were preparing students. They also consulted with several K-12 institutions, including art and design career academies, to inform the pipeline from high school to college for these occupations.

"We had a very highly trained facilitator who kept people on focus during the discussions so that they had a clear understanding of the connection between the core competencies and the industry," says Ms. Barajas. "We identified the best practices and are customizing them to develop our DMA competency model. We anticipate that our draft DMA model will be approved by all industry advisors in late April."

Return on Investment

LATTC has a broad wingspan when it comes to competency models. They have received a grant from the Irvine Foundation to utilize the competency model approach to build secondary-to-postsecondary educational pathways including assessing competencies and experiences that secondary students attain to garner college credit. The college is working with the Los Angeles County Metropolitan Transportation Authority to design and implement incumbent worker training for their Electrification of Transportation Competency Model. They ultimately plan to work with four-year institutions on developing articulation agreements based on successful completion of competency-based curricula at the community college level.

² http://sp3.lattc.edu/comm/collegecouncil/ssc/SitePages/pacts-framework.aspx

"We're firm believers in the competency model approach," says Ms. Drummond. "It informs everything we do around curriculum and professional development."

Related Links

Los Angeles Trade and Technical College http://college.lattc.edu

Green Competitive Advantage Guide

http://college.lattc.edu/green/green-competitive-advantage-guide