Competency Models In Action:

Workforce Development Strategies for the Information Technology Sector

December 2013

- Using the Information Technology Competency Model (ITCM) to bring value to employers and workers
- Affirming the value of ITCM foundational competencies to prepare job seekers for IT occupations
- Creating tools to provide better understanding of the skill needs of the IT sector and data-driven career guidance to IT job seekers

Introduction

The San Francisco Office of Economic and Workforce Development is the recipient of a \$3,000,000 Workforce Innovation Fund (WIF) grant to address the challenges faced by the public workforce system in meeting the needs of the Bay area's technology boom. The project, known as the TechSF Workforce Innovation Partnership (TechSF-WIP), is collaborating with the technology sector to implement industry-based solutions that cultivate talent and align workforce system operations to meet the rapidly evolving needs of tech employers and job seekers. The Office also partners with WestEd, a nonprofit entity providing research, development, and services in education and other communities, on a \$5,000,000 H-1B Technical Skills Training (TST) grant that also focuses on IT skill development.

The Workforce Need

The TechSF-WIP initiative is focused on three closely related challenges: 1) addressing the disparity between the employer-identified needs of the local tech sector and the skills of local job seekers; 2) increasing the ability of educational and workforce development systems to align and realign quickly with industry and job seeker needs; and 3) increasing, obtaining, and responding to real-time information from the tech sector.

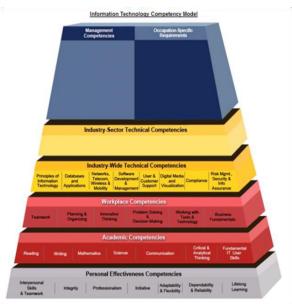
Approach

"Our H-1B TST grant laid the foundation for the WIF grant," says Patrick Mitchell, TechSF Program Manager. "It helped us create a sector strategy for IT. We were able to serve a variety of populations with occupational skills training and placement services. The WIF grant enables us to move to the next level."

The TechSF team also draws upon the resources of another California-based IT initiative launched by the Mid-Pacific Information and Communication Technologies (MPICT) Center. In 2013, an MPICT survey of 782 California employers with direct knowledge of IT workforce needs "resoundingly approved ETA's Information Technology Competency Model (ITCM), especially the foundational IT Workplace Competencies, which all IT workers should know and

be able to do regardless of specialized role."1

"The MPICT survey is one of the resources we use to determine, on a periodic basis, what investments we're making in education, and what employers we're going to target," says Mr. Mitchell. "We use the survey to strategize. The IT sector is all about innovation, and that's why the ITCM is so relevant to our grant goals. It provides a conceptual framework when we speak with employers about what the competencies actually mean to them, especially the foundational skills depicted in the Personal Effectiveness and Workplace Competencies tiers."



The TechSF team confers with IT employers on a regular basis, ranging from key industry players (e.g., Google, LinkedIn, Salesforce.com, Jawbone, Airbnb, Oracle, and Pixar) to small businesses such as a local online food delivery service. Employer feedback affirms the value of the ITCM. "In the IT sector, job seekers need both soft and hard skills," says Mr. Mitchell. "Hard skills are always changing and we have to review them every six months. Soft skill needs are less volatile, but still subject to individual employer interpretation. In general, employers are looking for innovative, entrepreneurial mindsets as a prerequisite, prior to the onset of hard skill training. Job seekers need to be creative, agile, and able to move from project to project."

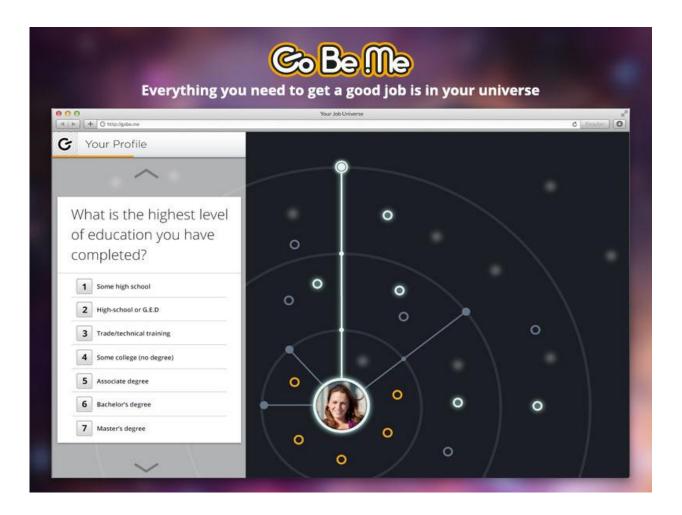
"We mirrored the MPICT survey by asking employers what their perceptions were of the competencies in the ITCM, particularly the foundational tiers." says Mr. Mitchell. "Responses were nuanced depending upon the perspective of the employer. For example, one employer may describe teamwork in a very specific context, such as the ability to work in a team to develop a specific product in a two-month period. Another may view it as the ability to work productively in a multi-generational environment. The employer's interpretation may change as project needs evolve. Holistically, what tech employers are looking for in a job seeker is a combination of soft and hard skills, as reflected in the ITCM."

Next Steps

The TechSF team is using resources from both grants to develop a pathway website in collaboration with MPICT and WestEd. The website, which is in the developmental stages, will feature career pathways that demonstrate how users can navigate from training and education to employment and careers in the IT sector. It also culls quality information about the labor market for IT occupations from other industry sector websites such as Wanted Analytics and O*NET.

¹ http://www.careeronestop.org/competencymodel/info_documents/ITCM-CaseSummary.pdf

"We are creating a clearinghouse of information for job seekers, employers, and educators to better understand the IT sector," says Mr. Mitchell. "On a parallel track, we are collaborating with a local tech employer to pilot a career navigation application, GoBe.Me, which provides data-driven guidance for job seekers. It contains multiple ETA competency models, references the local labor market, and outlines training/education options in order to create a universe of options for the user. The idea of the application is that each person's journey is unique. Education, skills, aptitude, and barriers limit or expand a job seeker's options, but when combined with the right information about careers, training, internships, and job openings, job seekers are better equipped to map out and begin their individual workforce journey."



Related Links

Workforce Innovation Fund https://innovation.workforce3one.org/

GoBe.Me http://gobe.me/