Building Alabama’s Occupational Ontology

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CSW’s Vision

To dramatically expand the use of competencies and credentials within learning and talent management systems in order to remove educational barriers and increase career opportunities for low-wage workers with a particular emphasis on people of color.
Core Competency & Credentialing Services

CSW works with:

• State or regional workforce actors to produce competency profiles of targeted occupations

• Education and training organizations to build competency profiles of their credentials

• Employers and industry groups to support skills-based hiring and performance management systems

• State systems to integrate competencies into state workforce and education policies and processes
Examples of Competency Work

• **CompXChange/Competency Calibrator** - Tools for creating competency of courses, credentials and jobs; created with support from the Lumina Foundation

• **Alabama’s Talent Triad** – Developing competency-based occupational profiles and a library of 1,000+ related competency statements.

• **Credential As You Go** – Partner in national movement to build incremental credentialing into postsecondary learning and work.

• **Connecting Credentials Campaign** – Co-led with Lumina Foundation, campaign to increase visibility and importance of non-degree credentials via stakeholder engagement, active website and white papers.
The Alabama Talent Triad
The Nation’s First Full-Scale Talent Marketplace

The Skills-Based Job Description Generator helps translate the competencies that compose a job description into a training program or credential.

The Talent Triad connects jobseekers to employers by matching an individual’s LER to skills-based job descriptions.

The Talent Triad connects students and jobseekers to educational opportunities by identifying the competencies needed for jobs and the training programs that can help prepare someone for those jobs.

The Talent Triad translates the needs of employers into education and training programs designed to prepare people to master the specific competencies needed for the job.
Alabama Occupational Ontology: Competencies are Currency for the Talent Triad

• Alabama is building a talent marketplace. It will only work if employers, educators, and learners understand each other.
• Competencies/skills can become that common language.
• The challenge:
  • Competencies not in widespread use now
  • A lot of competency statements aren’t written at actionable level
The Solution: Build a database of rigorous competency statements

- CSW is completing competency audits for 370+ priority jobs
- Rigor and consistency
- Competencies within functions
- Active verbs
Alabama Ontology

Tier 8 - Management Competencies
Competencies required to advance to supervisory or management level.

Tier 7 - Occupation Specific Requirements
Required training, licenses, or credentials an individual needs to perform in the job at the entry level.

Tier 6 - Occupation Specific Technical Competencies
Competencies that an individual must know to perform in the job at the entry level.

Tier 5 - Career Pathway Technical Competencies
Specific Competencies that are required for success in a specific career pathway within the cluster.

Tier 4 - Ready to Work Cluster Competencies
Competencies required for all occupations within a cluster, but are specific to the respective cluster. Competencies that would allow an employer to know that an individual is ready to pursue employment in that particular Career Cluster — Ready to Work +

Tier 3 - Ready to Work Workplace Competencies
Competencies across all clusters that are needed for individuals to succeed in a work setting. Represented in Alabama Ready to Work Credential.

Tier 2 - Ready to Work Academic Competencies
Academic competencies that are the foundation to occupations across all clusters. Individuals need to demonstrate a certain level of performance to be successful in all jobs. Represented in Alabama Ready to Work Credential.

Tier 1 - Ready to Work Personal Effectiveness Competencies
Competencies needed to enter the workplace in any cluster. Often referred to as soft skills. Represented in the Alabama Ready to Work Credential.
What the Audit Work Achieves

- Provides an organizing construct that will allow users of the Alabama Skills-Based Job Description Generator to easily search for, locate, and select competencies needed to build competency/skill-based job descriptions.

- Builds on, develops and expands the Occupation Specific Technical Competencies identified in Tier 6 of the Alabama Competency Model.

- Ensures all Tier 6 competency statements are written in a standardized format and reflect structural best practices for well-written competency statements. Content drawn from diverse industry and credentialing sources.

- Identifies credentials specific to audited occupations.

- Identifies general levels of proficiency based on CSW’s Competency Calibrator (Foundational, Applied, Integrative and Creative)

- Audited 380+ Tier 6 Occupations which will be translated into CTDL providing the data for all three Triad products
Aligning Tiers 4 + 5 With The Tier 6 Audits

- Applies the functional structure created through the Tier 6 audits to the Career Pathway Technical Competencies and Ready to Work Cluster Competencies
- Reveals general competencies that cut across all occupations and pathways in an industry cluster
- Identifies sets of competencies that are specific to a particular path and aligns them to the general competencies according to functional area
- Ensures the general and pathways specific competency statements are unique (removing duplication) and written in a standardized format
- Ensures that the competency statements reflect the appropriate level of proficiency
- Reveals and points to opportunities for creating on-ramp, stackable and/or pre-apprenticeship credentials within and across industry clusters.
# A Competency Audit Example

<table>
<thead>
<tr>
<th>Sector:</th>
<th>Function Selected</th>
<th>Competencies</th>
<th>Function Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Science</td>
<td></td>
<td>Actively collaborates with patients and families in decision-making and care planning Demonstrates empathy and respect towards the patient and family</td>
<td>Levels 1-4</td>
</tr>
<tr>
<td><strong>Occupation/Job Title:</strong></td>
<td>Respiratory Therapist</td>
<td>Establishes partnerships with patients and families</td>
<td></td>
</tr>
<tr>
<td><strong>Competency Sources:</strong></td>
<td>National Alliance of Respiratory Therapy Regulatory Bodies Competency Framework, AARC Taskforce on Competencies for Entry into Respiratory Care Professional Practice</td>
<td>Plans respiratory care Supports patients and families throughout the patient experience Shows respect and empathy and communicate in a manner that is respectful of individual diversity Uses effective methods, including appropriate interview techniques, to obtain the patient’s complete medical history and assess their level of health literacy Conveys information on investigations and treatments with the level of clarity appropriate to each patient’s health literacy to allow for mutual understanding and informed consent Uses a variety of communication tools and techniques to enhance and assess understanding on the part of patients and their families Uses appropriate communication techniques to provide accurate and timely transfer of information at all transition points Reviews procedure and diagnosis code assignments as determined by physician for accuracy Applies therapeutic and diagnostic procedures based on research data, methods and results Assesses patient general status (American Society of Anesthesiologists (ASA) status) and verifies urgency of procedure Evaluates patient airway prior to induction Assists in positioning patient for surgery Monitors patient during anesthesia Prepares the patient for emergence Assists the anesthesiologist during emergence Evaluates patient’s airway prior to sedation Assists during sedation or perform analgesic sedation Determines goals and strategies for lung volume recruitment maneuvers Performs lung volume recruitment on patients using the chosen technique Manages transport of a patient Manages vascular access through invasive procedures Manages arterial lines Performs an arterial, venous or capillary puncture Assists with vascular access through central lines/pulmonary artery catheter Collect samples using indwelling catheter Explains the procedure to the patient Manages arterial lines Performs an arterial, venous or capillary puncture Prepares the patient for central line/ pulmonary artery (PA) line insertion</td>
<td></td>
</tr>
<tr>
<td><strong>Associated Credentials:</strong></td>
<td>Associate, Bachelor’s, or Master’s Degree National Board of Respiratory Care Certified Respiratory Therapist (CRT) and Registered Respiratory Therapist (RRT)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Related Titles:</strong></td>
<td>None</td>
<td>Customer/Client/ Patient/Partner Relationships and/or Services</td>
<td></td>
</tr>
<tr>
<td><strong>Audit Completed:</strong></td>
<td>Sep-21</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CSW’s Contribution:

- A big, consistent database of well-researched competency statements done in the context of work functions – deep and broad
- Methodology that can be used to annually update
- Speed – ability to build profiles for emerging jobs not in federal data yet
- 380+ Tier 6 Occupational audits which will be translated into CTDL providing the data for all three Triad products
- Solid data being embedded in applications
- Ability to analyze transferable competencies/functions across industries