

Concurrent Presentation Session
LEARNING ENGINEERING



Linking up the Talent Pipeline

Scott L. Cheney

Credential Engine

Additional Authors: Fritz Ray, Kristin Wood,
Joshua Westfall & Emilie Rafal

Social: #ADLiFEST | WiFi: HILTON_MEETING / Password: ADLiFEST



Linking the Talent Pipeline

Scott Cheney, Executive Director, Credential Engine
Kristin Wood, Software Engineer, Eduworks
Fritz Ray, Director of Product Engineering, Eduworks
Emilie Rafal, Director of Programs, Credential Engine

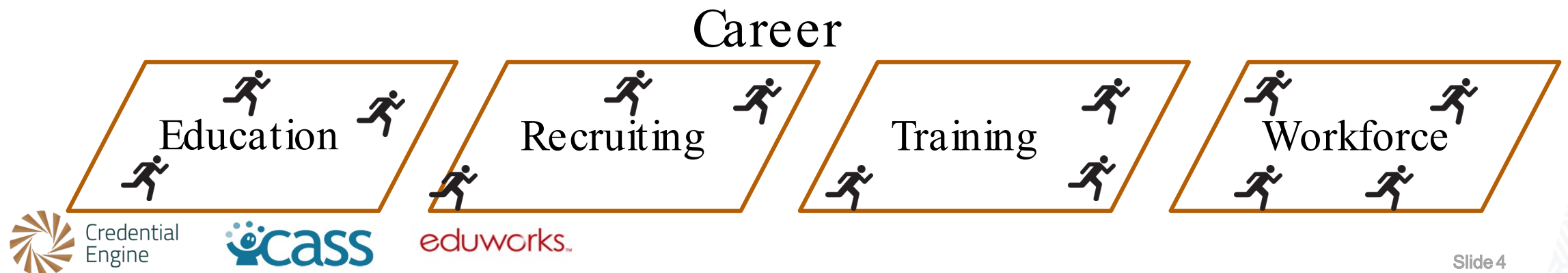


Agenda

- Describe the Talent Pipeline
- Decompose the human facet of the following sectors:
 - Education
 - Training
 - Recruiting
 - Workforce
 - Career
- Links
 - Conceptual
 - Technical
 - People

What is the Talent Pipeline?

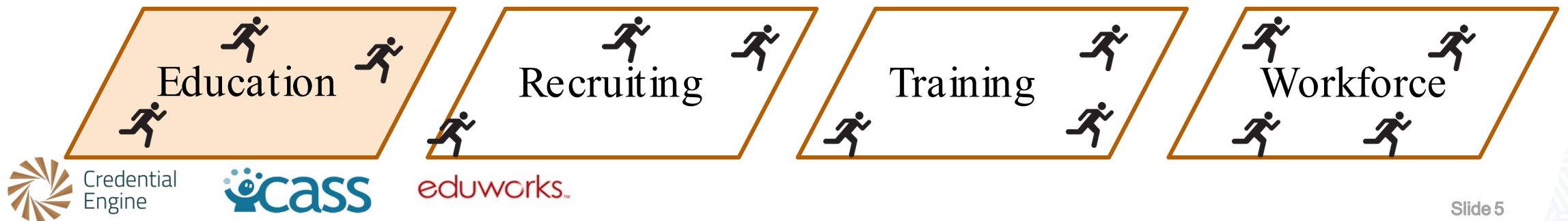
The Talent Pipeline is the nationwide human supply chain where Education, Recruiting, Training, Workforce, and Career sectors combine efforts to create competent and credentialed individuals for the jobs of today and tomorrow.



Decomposing Education

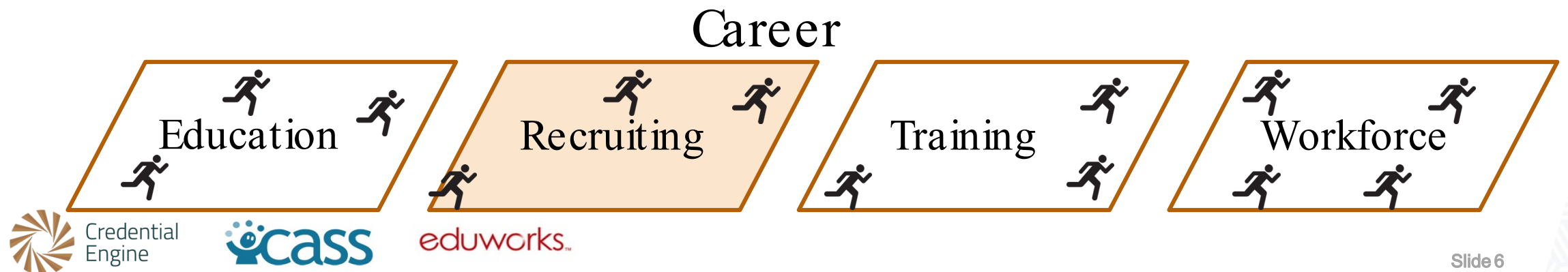
- Degree Program (can represent as Credentials)
- Course
- Curriculum Item
- Learning Objective or Outcome (can represent as Competency)
- Assignment (can represent as a Task)
- Knowledge, Skill, Ability, etc. (can represent as competency)

Career



Decomposing Recruiting

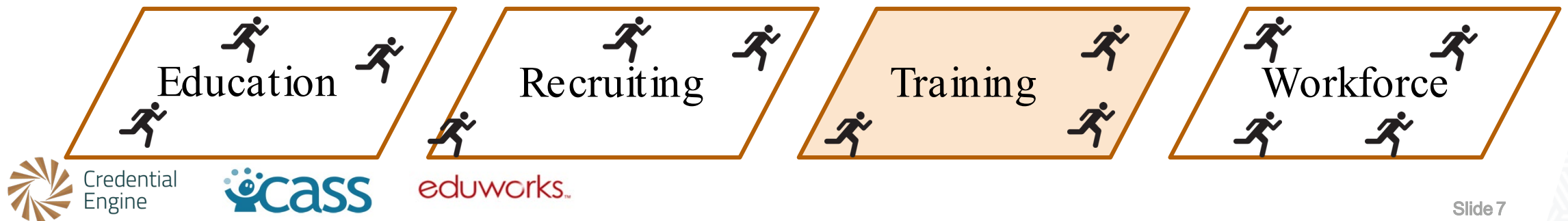
- Job Requirements
- Interview
- Interview Questions (Elicitation of Knowledge by answering questions.)
- Resume
- Credentials
- Experiences (can represent as Tasks performed in the past)
- Skills (can represent as competencies)



Decomposing Training

- Certificates, Certifications, badges, et al. (can represent as Credentials)
- Course
- Course Outline
- Training Objectives (can represent as Competencies)
- Assignments (can represent as Tasks)
- Knowledge, Skills, Abilities (can represent as competencies)

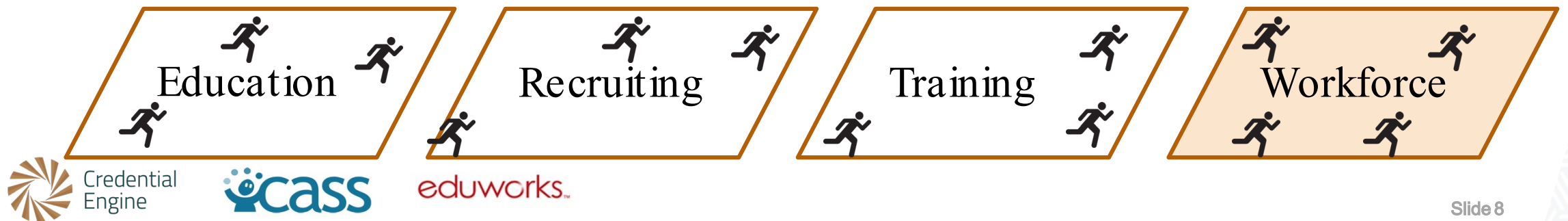
Career



Decomposing Workforce

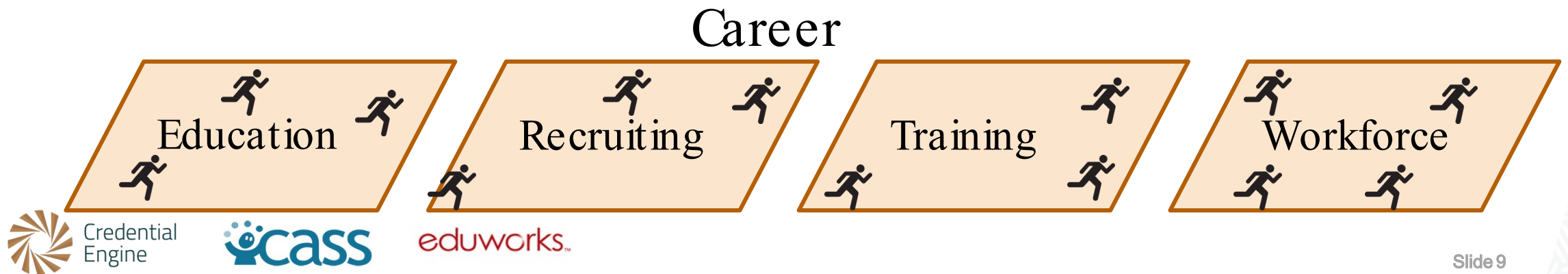
- Project or Product or Service
- Jobs (that require Credentials)
- Roles
- Tasks
- Performance Objectives (can represent as Competencies)
- Knowledge, Skills, Abilities (can represent as competencies)

Career



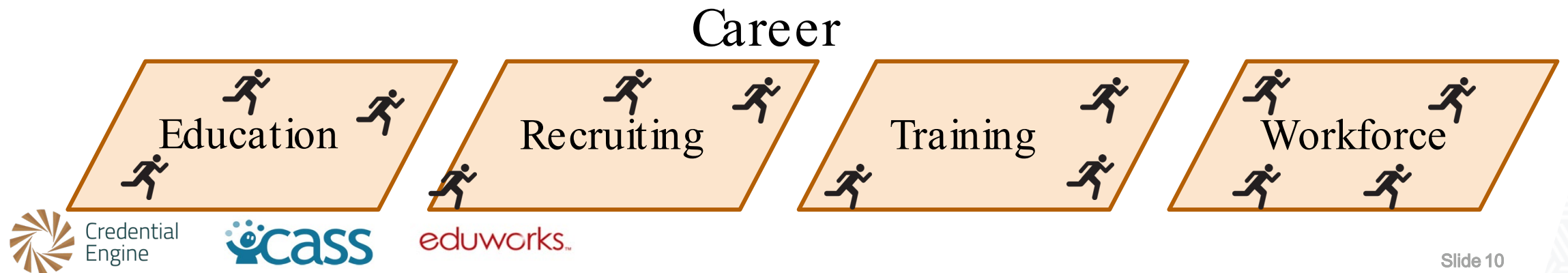
A Brief Model of Competencies.

- Skills, Knowledge, Abilities transfer across sectors.
- **Competencies** describe **KSAs** necessary to perform a **Task** in a **Context**
- The KSAs required to perform a task differ when the context changes.
- The education/workforce gap and the gap from job to job or project to project are caused by contextual changes, which change the required KSAs.



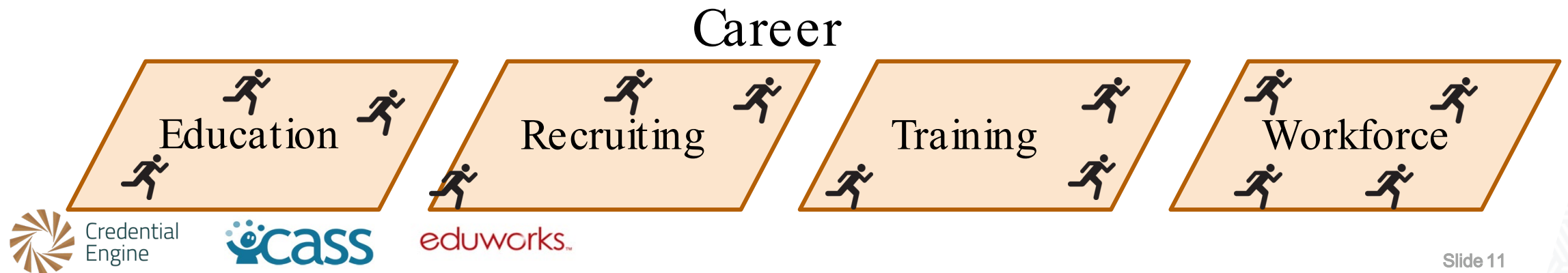
Finding Order in the Chaos!

- Demonstrating Competencies demonstrates KSAs. KSAs are common and transfer.
- Move training and education contexts closer to the expected work context, and you will share more KSAs.
- Link it all to competencies, link competencies to KSAs, and now information can transit sectors.



Credentials are essential signaling tools.

- Awarded Credentials are proof that many things were learned or practiced in an education or training context.
- Better definitions of what was learned and trained in an education and training context begets better signals.
- Link the credentials you award to the competencies demonstrated and the KSAs acquired and practiced.



Capture and Digitize all of it.

Coarse grained signals like credentials are necessary for humans. Fine grained signals, such as every task you have ever completed successfully (every competency demonstrated) is work for computers.

Linking the lower levels (tasks, competencies, KSAs) links the higher levels, creating greater precision, more opportunistic hiring, less OTJ training and fewer failed hires.

Eventually, we can answer the question: “Can this person do it?” -- A question asked every single day in every single sector.

Tools to Capture and Digitize Credential and Competency Information

Credential Engine -

- Manages open-source schema to describe credentials (the “credential transparency description language”, or CTDL) and competencies (CTDL-ASN)
- Hosts the Credential Registry, an open repository of descriptions of credentials and competencies of all types and across all sectors:
- Provides Publishing tools: Bulk upload, Manual Entry, and API options
- Start by setting up a Credential Engine account
<https://credentialengine.org/accounts>

Tools for Competencies

CaSS (Competency and Skills System) - An ADL sponsored open source suite of tools for creating, managing, and using competencies.

- Available within the Credential Engine
- Can be used standalone, as part of other applications
- Compatible with CTDL/ASN, CASE*, ASN, and more.

OpenSALT - An IMS CASE set of tools for authoring competency frameworks

- Create, comment on, and revise competency frameworks
- Publishes using the IMS CASE Specification.

*pending certification



Links

Credential Engine

- Main Site <https://credentialengine.org>
- Publisher <https://credentialengine.org/accounts>
- Finder <https://credentialfinder.org/>
- Technical Information Site <https://credreg.net>

CaSS

- Main Site <https://cassproject.org>
- GitHub <https://github.com/cassproject>
- Documentation <https://docs.cassproject.org>