Open Data for Meaningful, Valuable Learning and Employment Records

Across a lifetime of learning and employment, a person’s achievements are represented in many different types of credentials, from many different providers. Unfortunately, most of our systems for creating and managing records of learning and work are siloed and disconnected. Credentials from schools, colleges, jobs, military, on-the-job training, and many other sources are issued and stored in different ways, using different data structures and different types of control. This is not merely inconvenient. It’s unfair and inequitable. These disconnects can

- create barriers to academic and career progress;
- delay critical support and services;
- systematically exclude people who don’t have the resources to obtain credential records; and
- impede economic advancement, both for individuals and for communities.

To address these barriers, digital Learning and Employment Records (LERs) provide interoperable, portable credentials that document people’s skills, educational experiences, and work histories. LERs document learning and experience wherever they occur, including in the workplace, through education and training, community activities, or military contexts. The basic concept is that a person collects their own records of employment, education, training, and skills in a digital wallet they control, empowering secure and verifiable exchanges of these records across many different learn and work systems and processes. With open standard LERs,

- learners can share their achievements and match them with opportunities and jobs;
- employers can identify and recruit talent more efficiently and equitably; and
- education and training providers can clearly communicate the value of their offerings.

**LERs & the Credential Transparency Description Language**

Download graphic [here](#).
LERs are especially effective at helping people find opportunities when these records include clear and relevant open data. Unfortunately, the credential data issued to a person in an LER only holds a limited amount of information. The Credential Transparency Description Language (CTDL), however, enables credential providers to communicate much richer information than they would otherwise be able to. CTDL contextualizes LER data by linking to a global knowledge graph of data in CTDL, amplifying the range of information conveyed about these credentials. LERs that include CTDL are meaningful (including information about the skills and learning they represent), interoperable (across different types of systems and processes), and actionable, so that people and systems can do useful things with them.

*When LERs include CTDL, learners, workers, educators, and employers are all empowered with the context they need to make informed decisions along learning and career pathways!*

How this works:

1. organizations publish credential and skill data in CTDL to the Credential Registry;
2. digital credentials that are issued to people link to the data in the Registry; so that
3. when people and systems read these digital credentials, they can understand what they mean by using data from the Registry.

**The Role of States in Building an LER Ecosystem**

LERs are emerging as a powerful tool for accessing, linking, and verifying credential and skill information as part of broader state investments in information systems, data transparency, digital literacy, and learner/worker sovereignty. State leaders are in a unique position to make these digital records foundational in their education and workforce strategies, and to require that LERs include transparent, interoperable information about credentials, skills, and experience. State leaders can build a culture that encourages state government, employers, and education and training providers to work in a coordinated and aligned fashion to improve data transparency in learning and career systems, including LERs issued to individuals.

See Credential Engine’s [Learning and Employment Records Action Guide](https://www.credentialengine.org/action-guide) for more in-depth information, in order to connect the *why* and *how to* for LERs that meet the needs of your stakeholders. Contact information: info@credentialengine.org