CEDS offers a common data vocabulary that defines the data used in digital badging to recognize learner achievements for the purposes of motivation and credentialing. Digital badges are used for micro-credentialing as a visible and verifiable online record of learner competencies. CEDS initially worked with the Open Badges community established by Mozilla and the MacArthur Foundation to define compatible data element definitions for the properties used to issue badges. CEDS continues to be informed by the work of the Badge Alliance and other initiatives advancing open standards for digital badges.

**Scope**

Data elements defining digital badges fit into the CEDS *Achievement* entity. The following CEDS elements are defined for achievements:

- Achievement Award Issuer Name
- Achievement Award Issuer Origin URL
- Achievement Category System
- Achievement Category Type
- Achievement Criteria
- Achievement Criteria URL
- Achievement Description
- Achievement End Date
- Achievement Evidence Statement
- Achievement Image URL
- Achievement Start Date
- Achievement Title

The *Achievement* entity may be related to competency definitions (CEDS: Learning Standard Item). When a digital badge is issued to a person, an association is made between the achievement and the person, with information about when the achievement was earned, evidence supporting the achievement, information about the issuing organization, etc. The Open Badges approach embeds this assertion data into the image that represents the achievement.
Connections

The following CEDS Connections are available:

<table>
<thead>
<tr>
<th>Connection</th>
<th>URL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Digital Badges and Achievement Elements in CEDS</td>
<td><a href="https://ceds.ed.gov/connectManageCase.aspx?UseCaseId=653">https://ceds.ed.gov/connectManageCase.aspx?UseCaseId=653</a></td>
</tr>
</tbody>
</table>

(Other Connections may be developed from time to time. Please visit http://ceds.ed.gov for more information.)

Logical Model

CEDS provides a logical model showing the relationships between data elements as they might exist in an operational data store (a database designed to integrate data from multiple sources for additional operations on the data). The following reference model shows the definition of a badge and the relationship to a person, issuing organization and learning standards (competency definitions):

References