

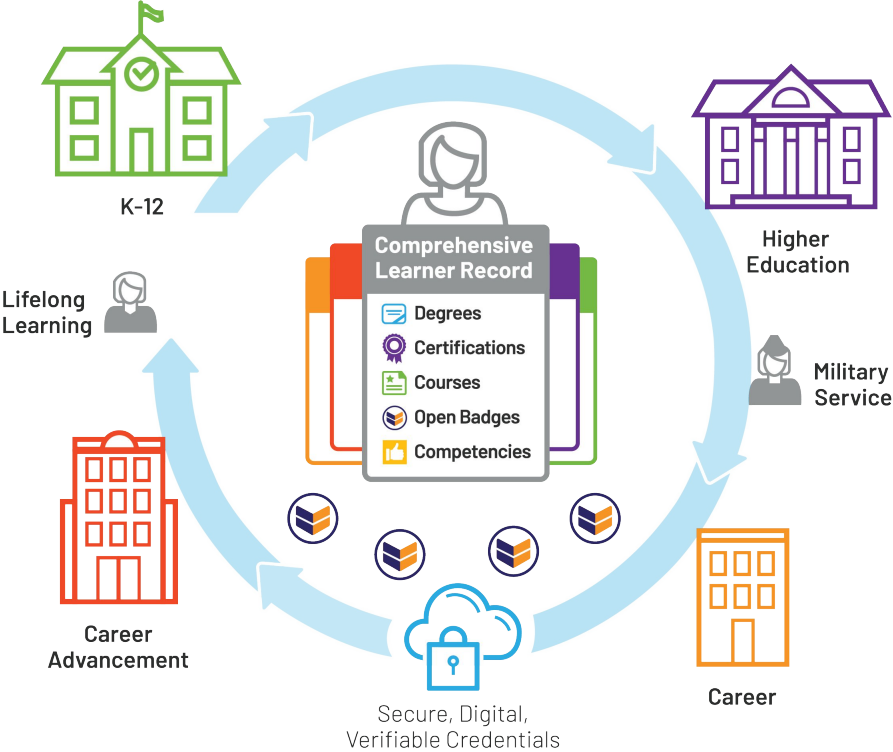


Digital Credentials
Open Standards
June, 2023



1EDTECH
Power Learner Potential

Digital Credentials Ecosystem



Open Standards for Learning and Employment Records

Open
Badges



Token Representing
an Achievement

Comprehensive Learner
Record (CLR)



Longitudinal Record of
Achievements and
Milestones

CASE



Publish and Relate
Skills

1Edtech Open Standards Enable an Interoperable Ecosystem



Open Badges (OB)

OPEN BADGES

Data & Information **Inside**

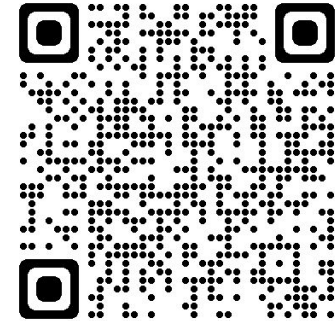
Alignment	Expiration Date
Badge Criteria	Issued Date
Badge Description	Issuer
Badge Name	JSON-LD
Digital Signature	Recipient
Evidence	Verification



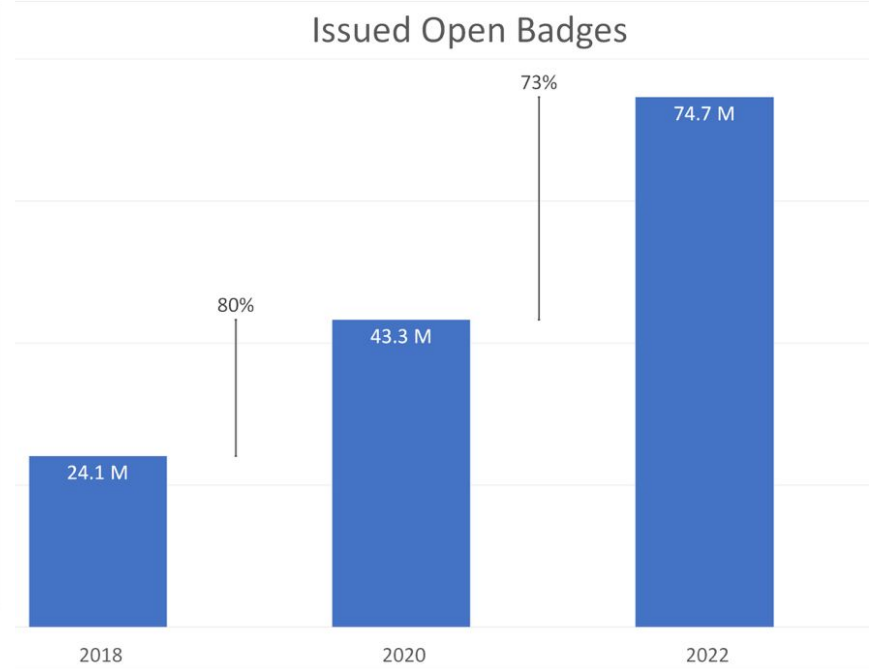
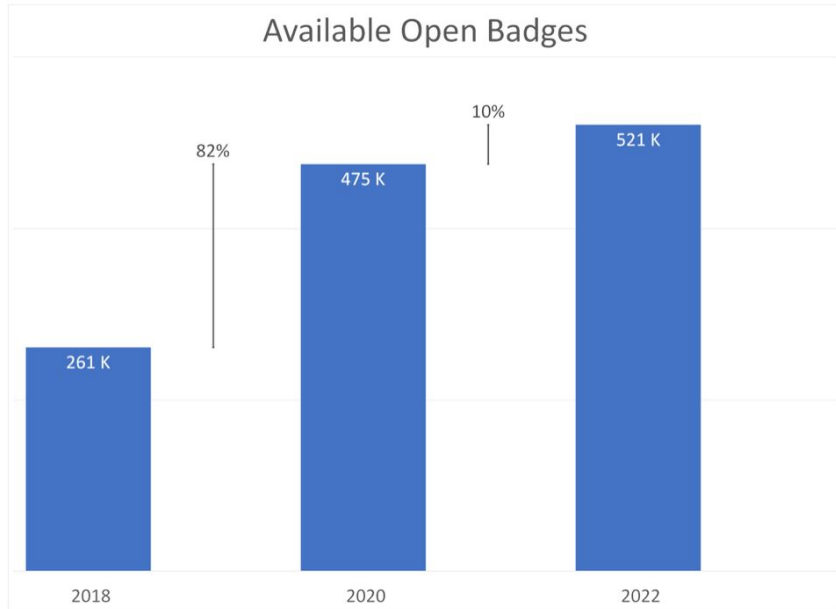
Badge Count 2022

1EdTech and Credential Engine

- 53 Badge Platforms
- 521,070 unique badges
- **74,780,775 issued**



Growth of Open Badges





What's New?

- Alignment between CLR/OB
- Verifiable Credential
- Interoperability



Verifiable Credentials

W3C VC Data Model 1.1 - March 2022

- Cryptographically signed
- Machine Readable
- Privacy Respecting
- Tamper Evident



Compatible with Emerging **Digital Wallet** Standard

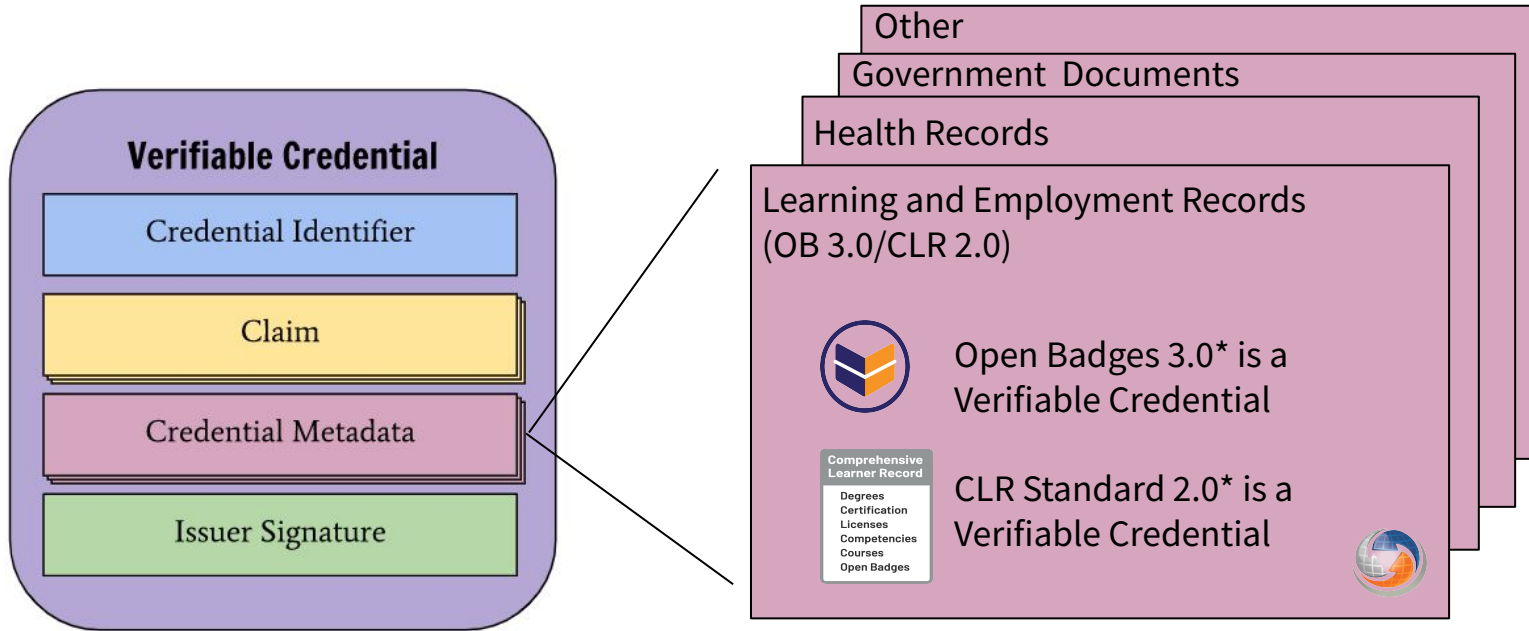


Figure 5 The basic components of a verifiable credential.

*Candidate Final Release Status

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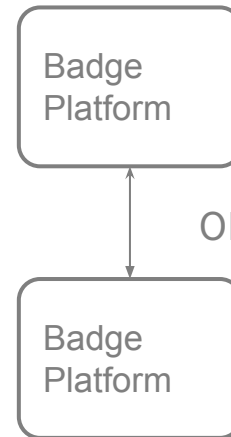
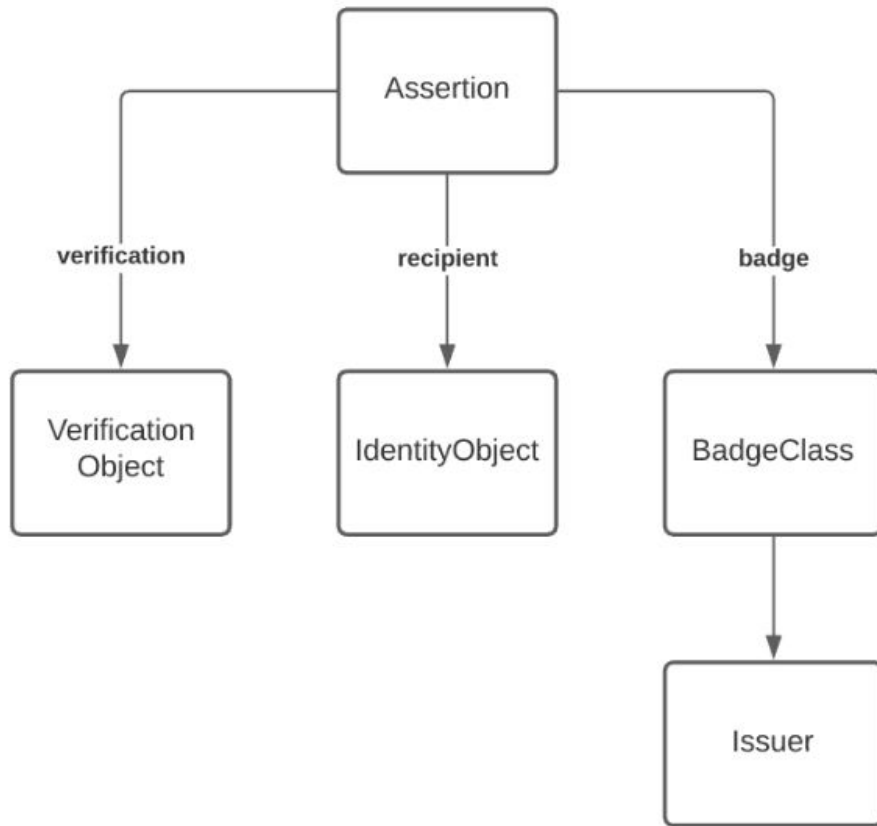




OpenBadges 3.0



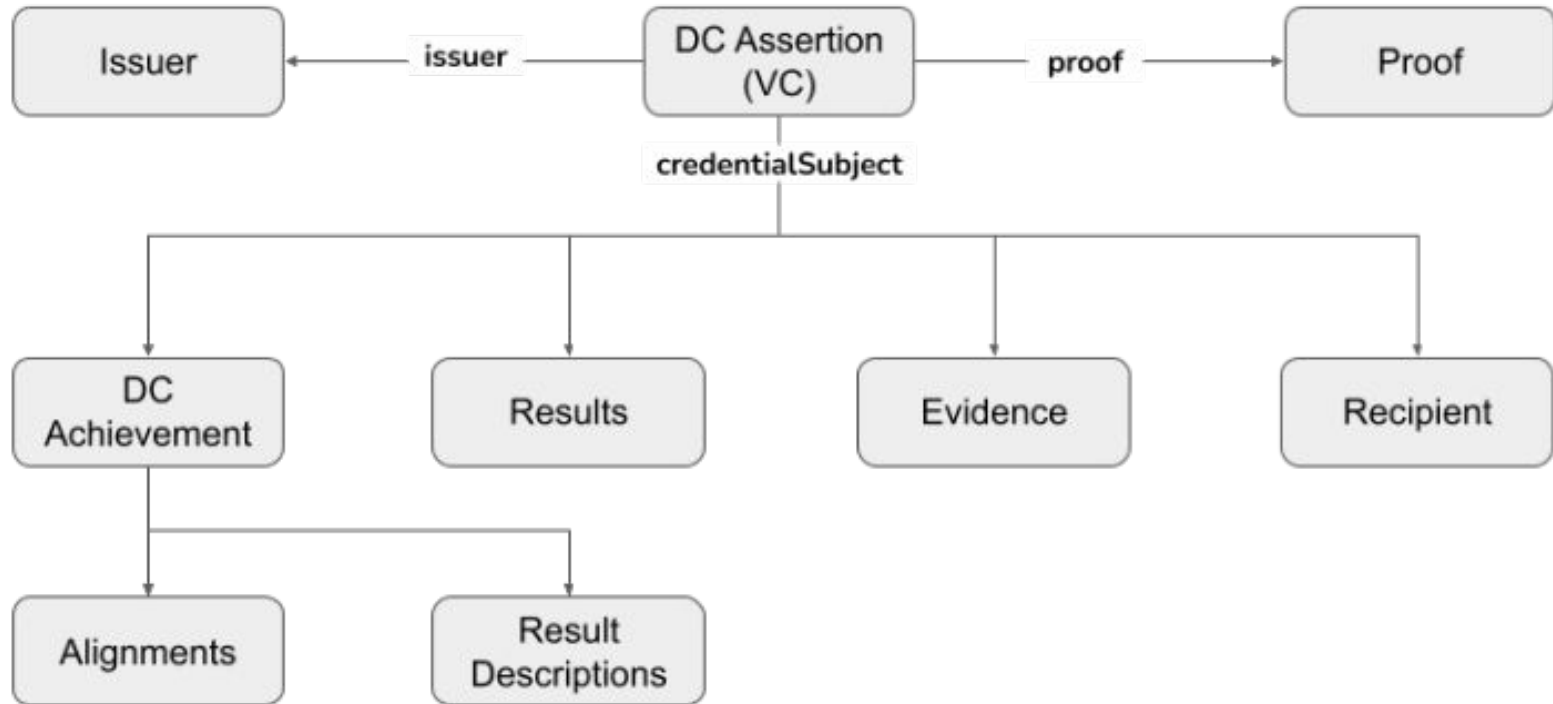
OpenBadges 2.0 and 2.1



OB 2.1 “Badge Connect”



OpenBadges 3.0





Comprehensive Learner Record 2.0

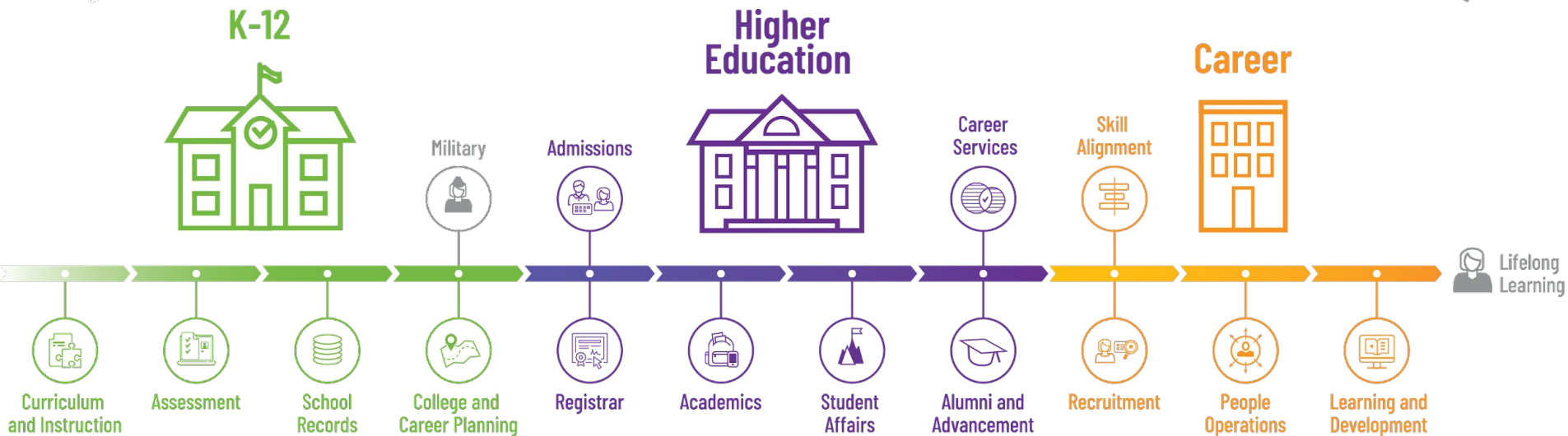


Comprehensive Learner Record Standard (CLR Standard)

Open Standard for Personal Achievements



Comprehensive Learner Record



Power Learner Potential



CLRs Contain High Quality, Verified and Structured **Data**



Example of Metadata in CLR Standard

Targeted Degrees
Test Results
Proficiency Levels
Specializations
Learning Pathways

Certifications
Grades
Evaluation Scale/Rubric
Degree Major/Minor
KSAs

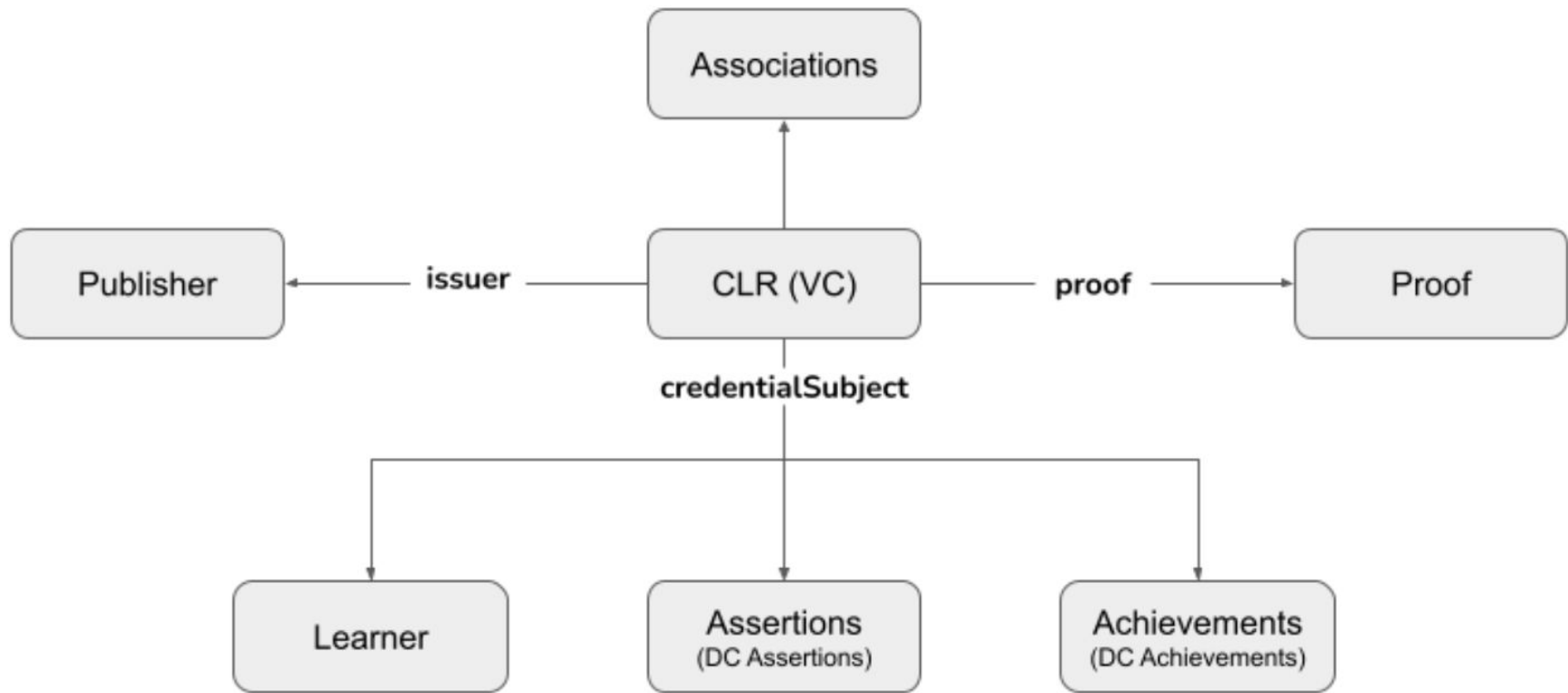
Evidence and Performance Demos



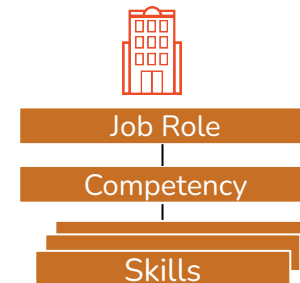
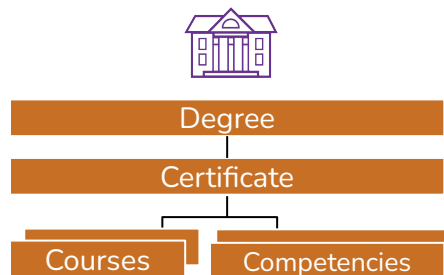
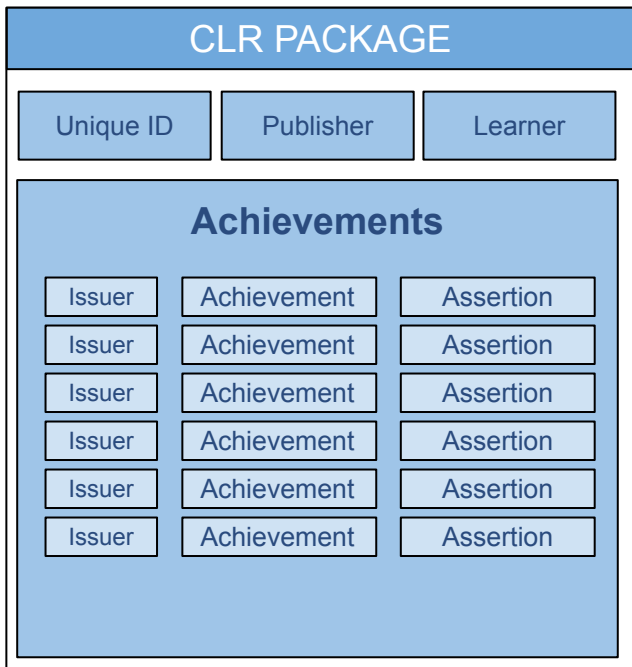
Can Incorporate data on technical *and* durable career skills



CLR 2.0



An Open Standard for Learning and Employment Records

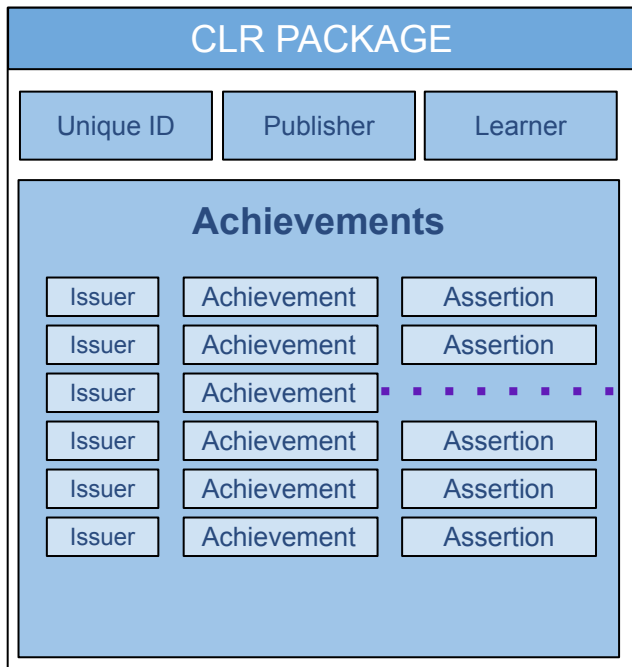


Achievements, including open badges, can be associated to each other within the CLR to express a variety of relationships such as a learning pathway, sequence or a stackable credential.

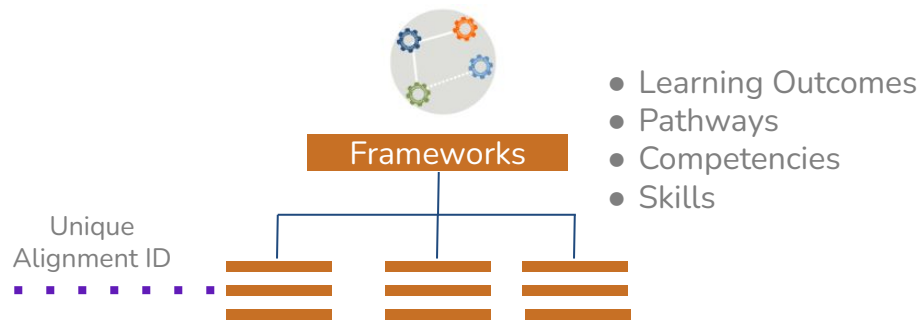


CLR Content can be Linked to Published Frameworks

Frameworks can be “public” or “private” with issuers’ licensing terms



...and explicitly aligned to published skill and competency frameworks in academia and industry.



Machine based algorithms can process the context and structured metadata within each achievement assertion.



Current Status of OB 3.0 / CLR 2.0

- **Specs:** Candidate Final - Public
- **Cert and Conformance Guide:** Complete
- **Implementation Guide:** Complete
 - Contains Getting Started Info
 - Recommended Practices
 - Migration from Previous Versions
 - Certification and Conformance
- **Certification Suite and Validators:** Beta

What's Next: Early Adopters and TAB Vote

Open Badges Implementation Guide



Base Document

Spec Version 3.0

- 1.1 Overview
 - 1.1.1 Spec documents (Normative References)
 - 1.1.2 Audiences
- 1.2 OB Overview
- 1.3 CLR Overview
- 1.4 Use Cases
- 1.5 OB/CLR in the 1EdTech Ecosystem
- 2. **Getting Started (for Developers)**
 - 2.1 Relationship between VC and CLR/OB
 - 2.2 Issuer quickstart
 - 2.3 API quickstart
 - 2.3.1 Consumer basics
 - 2.3.2 User stories for an issuer (API consumer) and host (API provider)
 - 2.3.3 Provider basics
 - 2.4 Supporting Technical Resources
- 3. **Recommended Practices**
 - 3.1 Selecting recipient and issuer identifiers, such as DID methods
 - 3.2 Selecting proof methods and crypto algorithms
 - 3.3 Publishing **Achievement** definitions and selecting **Achievement** identifiers
 - 3.4 Sharing Open Badges and CLR Links as URLs and to Social Media
 - 3.4.1 Open Badges API recommendations
 - 3.5 CLR 2.0 API recommendations
 - 3.6 Protocols for connection to Verifiable Credentials Wallets
 - 3.7 Managing credential status and revocation
 - 3.8 Alignment with CASE items
 - 3.9 Skills



THANK YOU

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