

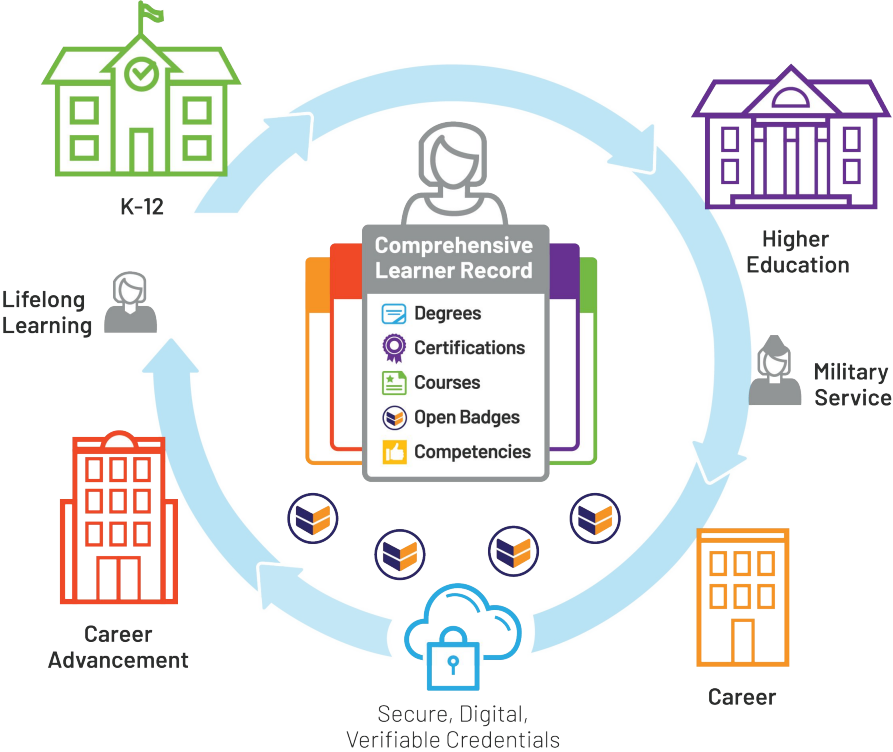


**Digital Credentials**  
Open Standards  
April, 2023



**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

Badge Criteria

Badge Description

Badge Name

Digital Signature

Evidence

Expiration Date

Issued Date

Issuer

JSON-LD

Recipient

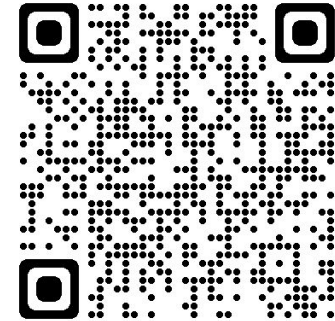
Verification



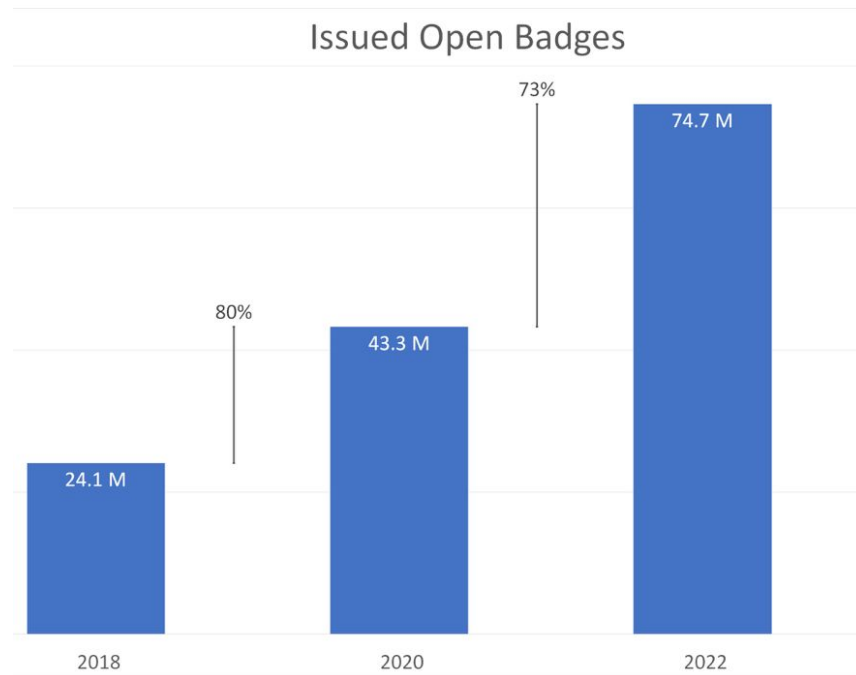
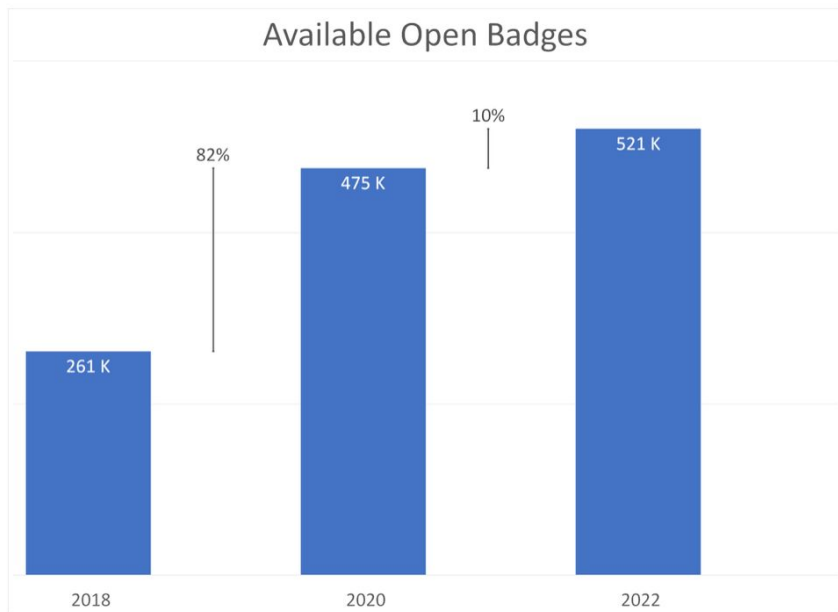
# Badge Count 2022

1EdTech and Credential Engine

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



# Growth of Open Badges





# 1EDTECH

Power Learner Potential

## 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

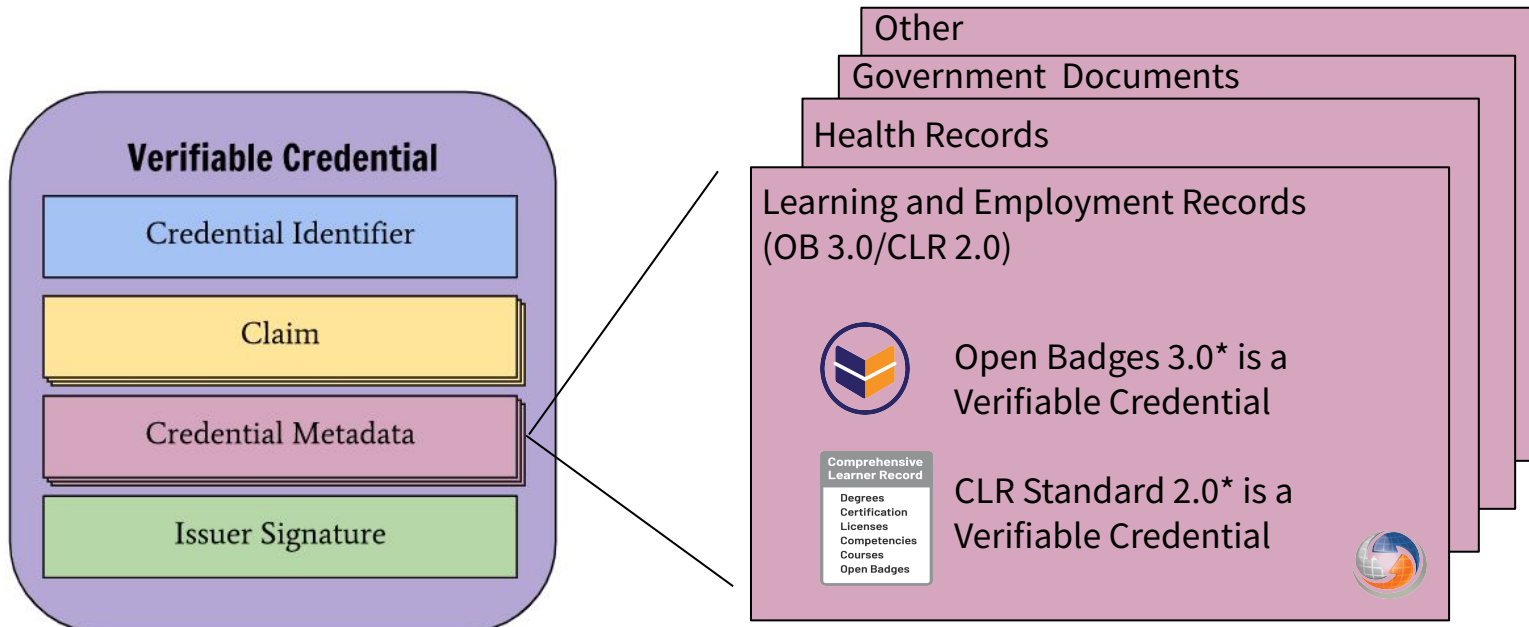


Figure 5 The basic components of a verifiable credential.

\*Candidate Final Release Status

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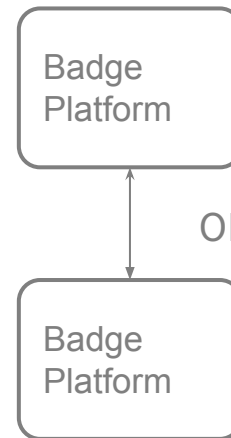
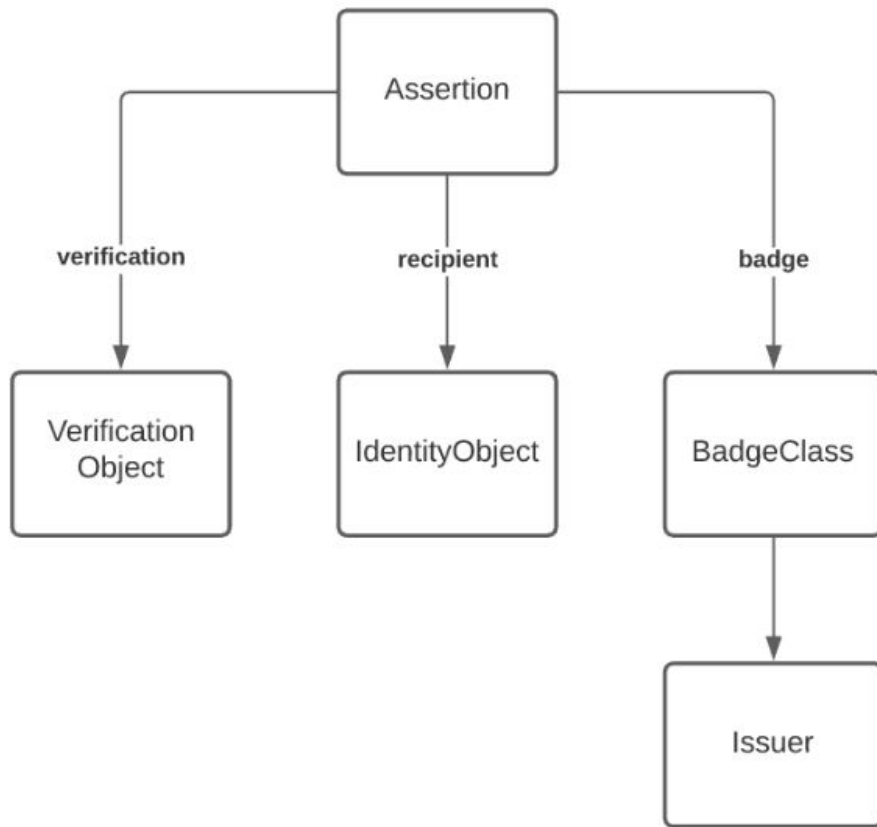
**1EDTECH**

Power Learner Potential

# OpenBadges 3.0



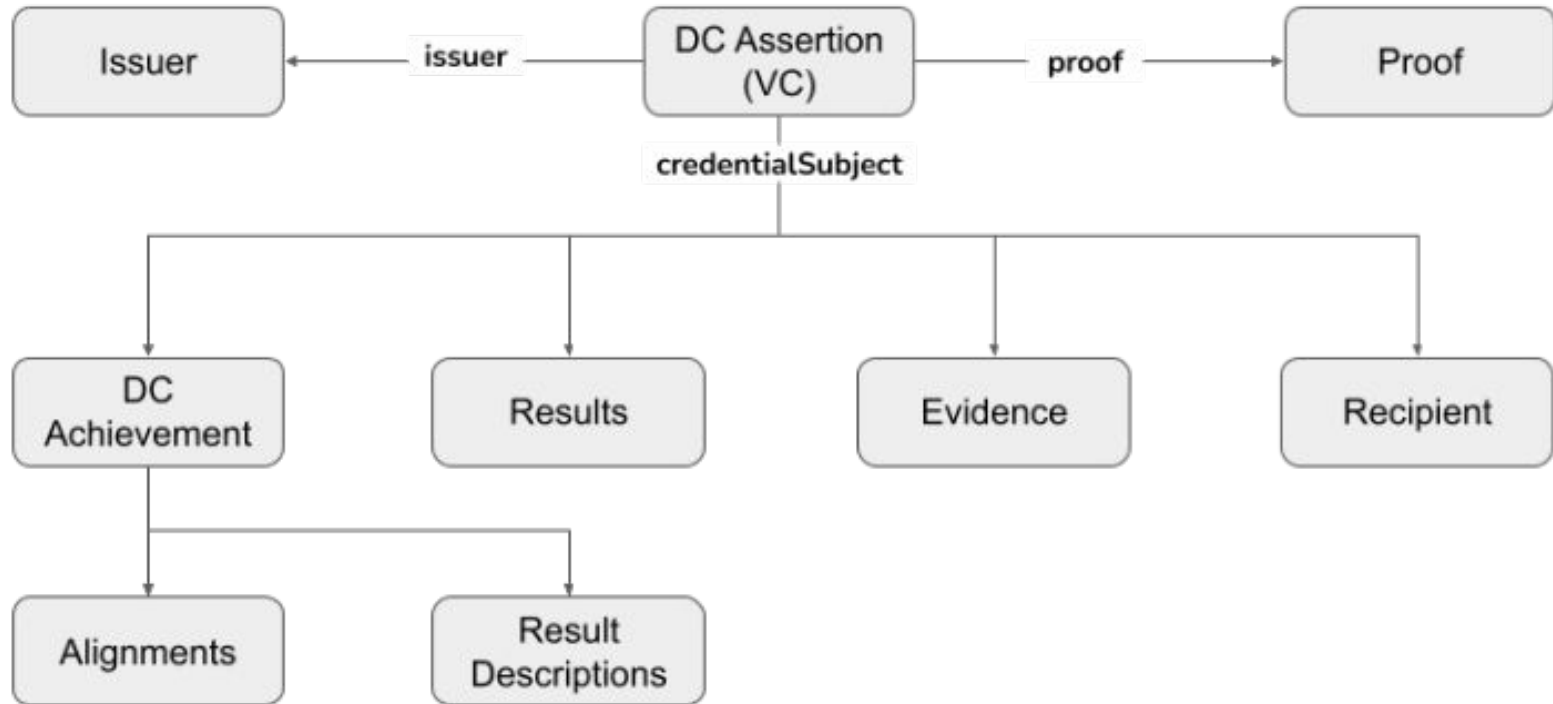
# OpenBadges 2.0 and 2.1



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

## K-12



### Military



### Admissions



## Higher Education



### Career Services



## Career



### Skill Alignment



### Lifelong Learning



Curriculum and Instruction



Assessment



School Records



College and Career Planning



Registrar



Academics



Student Affairs



Alumni and Advancement



Recruitment



People Operations



Learning and Development

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

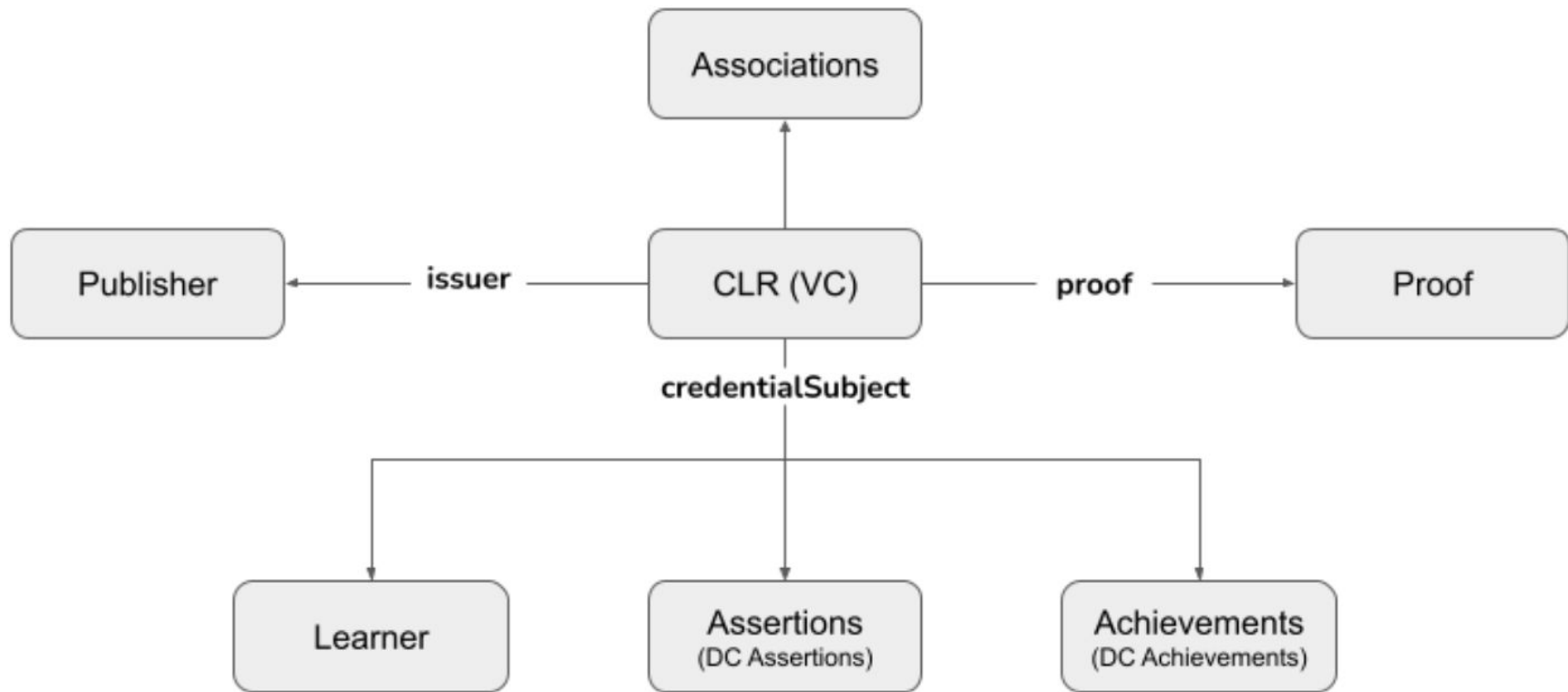
## Evidence and Performance Demos



Can Incorporates data on technical *and* durable career skills

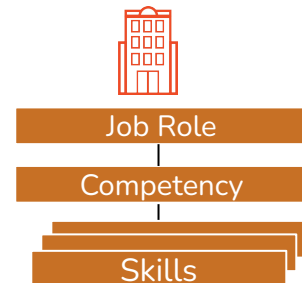
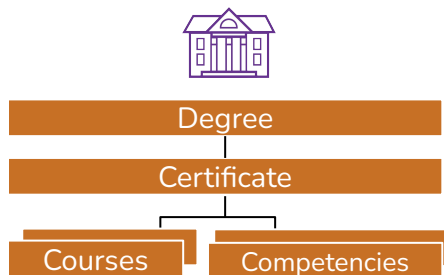
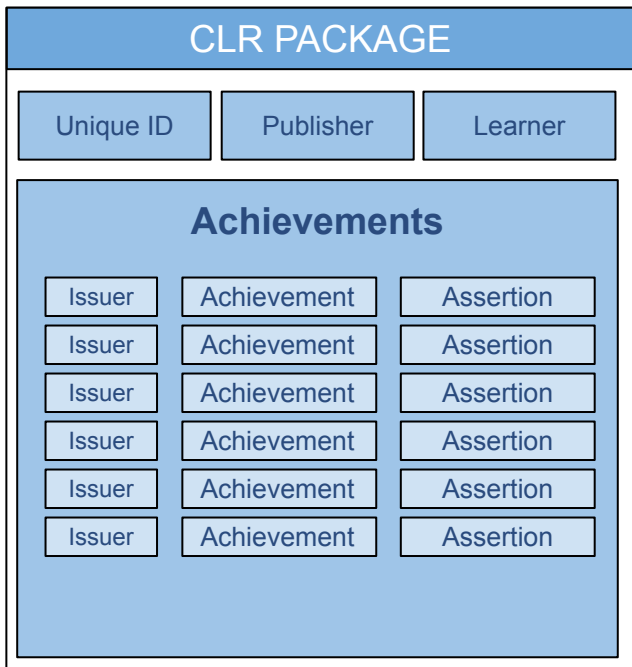


# CLR 2.0





# An Open Standard for Learning and Employment Records

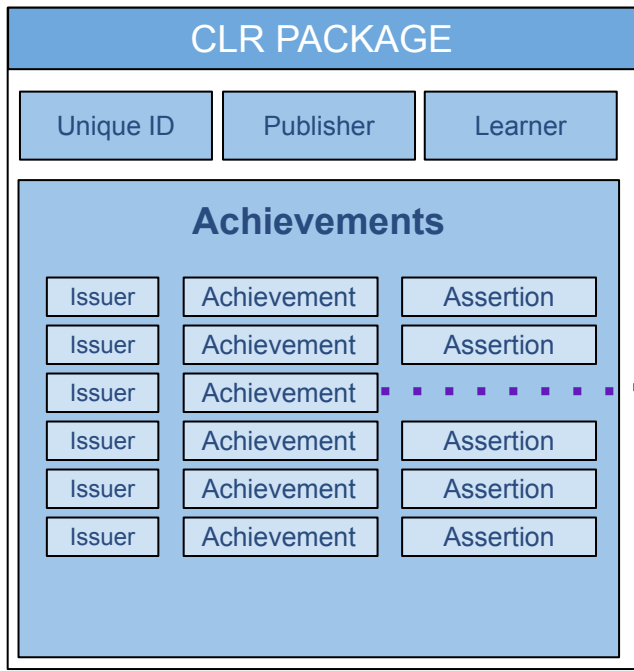


Achievements, including open badges, can be associated to each other within the CLR to express a variety of relationships such as a learning pathway, sequence or a stackable credential.

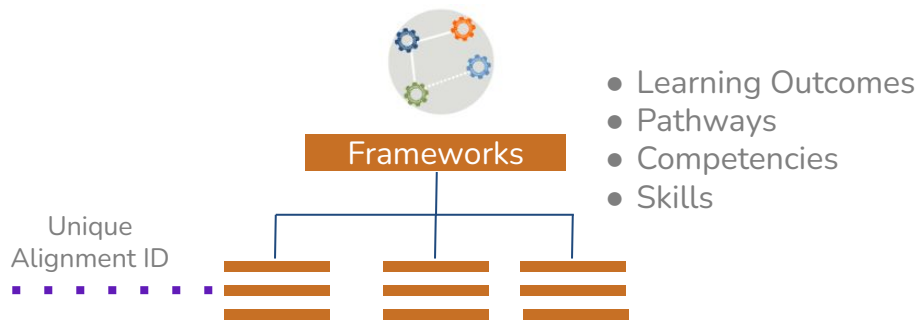


# CLR Content can be Linked to Published Frameworks

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 / TACK

Xavi Aracil  
Technical Standards Architect  
xaracil@1edtech.org

