Digital Credentials
Open Standards
June, 2023
Digital Credentials Ecosystem

Power Learner Potential
Open Standards for Learning and Employment Records

Comprehensive Learner Record (CLR)

Open Badges

Token Representing an Achievement

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

VERIFIED ACHIEVEMENT
Badge Count 2022
1EdTech and Credential Engine

- 53 Badge Platforms
- 521,070 unique badges
- 74,780,775 issued
Growth of Open Badges

Available Open Badges
- 2018: 261 K
- 2020: 475 K
- 2022: 521 K

Issued Open Badges
- 2018: 24.1 M
- 2020: 43.3 M
- 2022: 74.7 M
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

**Verifiable Credential**

- Credential Identifier
- Claim
- Credential Metadata
- Issuer Signature

**Learning and Employment Records (OB 3.0/CLR 2.0)**

- Open Badges 3.0* is a Verifiable Credential
- CLR Standard 2.0* is a Verifiable Credential

*Candidate Final Release Status

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Figure 5 The basic components of a verifiable credential.

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OpenBadges 3.0
OpenBadges 2.0 and 2.1

Assertion

Verification Object

Identity Object

BadgeClass

Issuer

Badge Platform

OB 2.1 “Badge Connect”
OpenBadges 3.0

Diagram:
- Issuer
- DC Assertion (VC)
- Proof
- credentialSubject
  - DC Achievement
  - Results
  - Evidence
  - Recipient
  - Alignments
  - Result Descriptions
Comprehensive Learner Record 2.0
Comprehensive Learner Record Standard (CLR Standard)
Open Standard for Personal Achievements

K-12

Higher Education

Career

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

Can Incorporate data on technical and durable career skills
CLR 2.0

The diagram illustrates the components and relationships within CLR 2.0:

- **Publisher**
- **CLR (VC)**
- **Proof**

**Issuer** and **CredentialSubject** are central to the diagram, linking to:

- **Learner**
- **Assertions (DC Assertions)**
- **Achievements (DC Achievements)**
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
THANK YOU

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