Comprehensive Learner Record: Tools to Support a CLR Initiative

IMS Roundtable

September 28, 2020

IMS GLOBAL®
Learning Consortium
Better Learning From Better Learning Technology ®

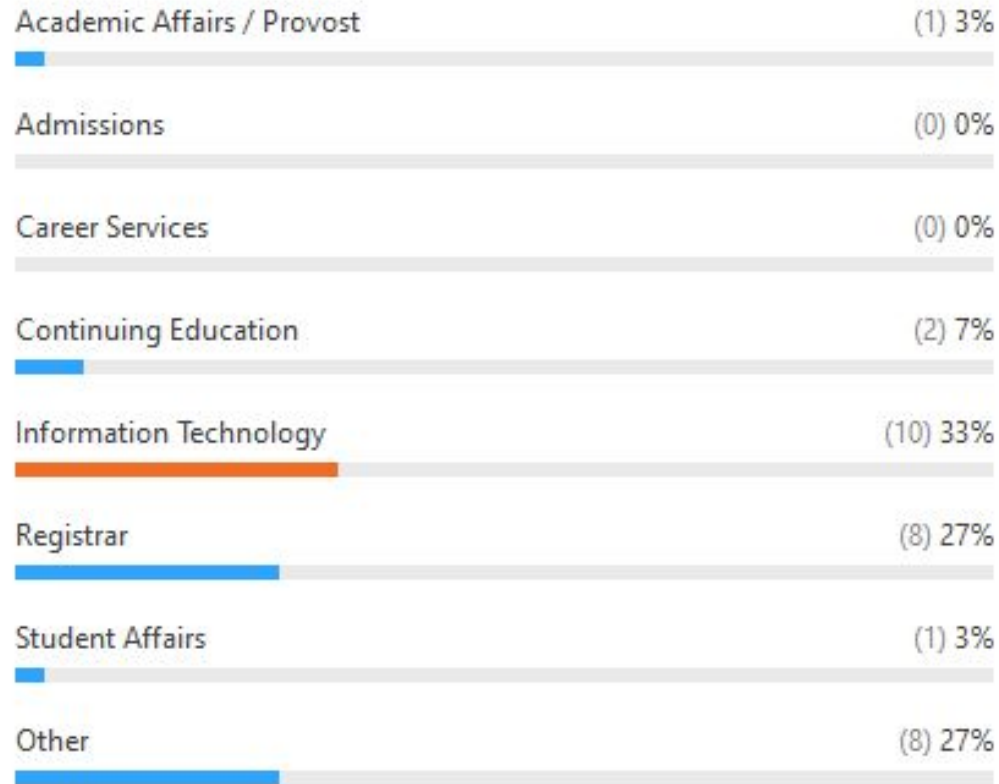# Thank you to our IMS Digital Credentials Initiative Sponsors
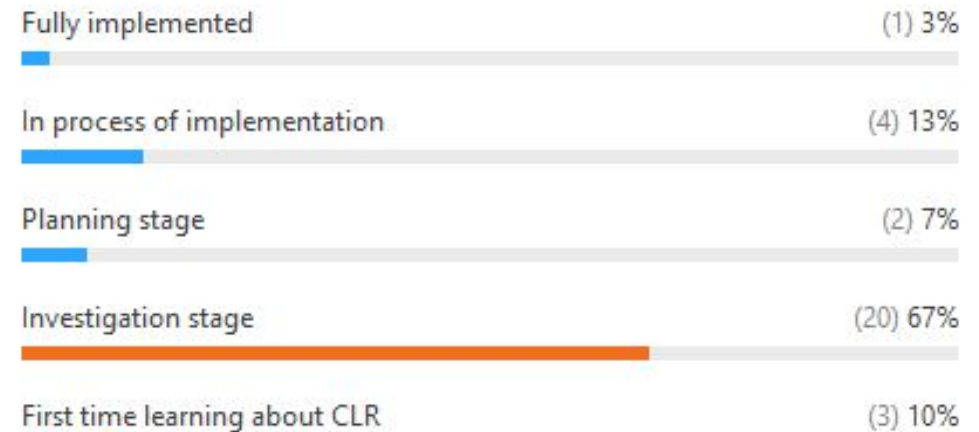
IMS CLR Roundtable: Learn & Lead

- Monthly open forum for institutional leaders
- Focus on strategy, design, and implementation
- Building a community of support
- All events will be recorded and posted to our website
  https://www.imsglobal.org/event/ims-clr-roundtable-open-public

Attendee Poll

1. What is your role?

Role	Count	Percent
Academic Affairs / Provost	(1)	3%
Admissions	(0)	0%
Career Services	(0)	0%
Continuing Education	(2)	7%
Information Technology	(10)	33%
Registrar	(8)	27%
Student Affairs	(1)	3%
Other	(8)	27%

2. What stage are you at in your CLR initiative?

Stage	Count	Percent
Fully implemented	(1)	3%
In process of implementation	(4)	13%
Planning stage	(2)	7%
Investigation stage	(20)	67%
First time learning about CLR	(3)	10%

3. Do you have a platform for generating your CLR?

Answer	Count	Percent
Yes	(5)	17%
No	(25)	83%

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Speakers

- Clint McElroy, Analyst/Programmer, Indiana University

- Jeff Bohrer, Technical Program Manager, IMS Global Learning Consortium

Digital Credentials Ecosystem
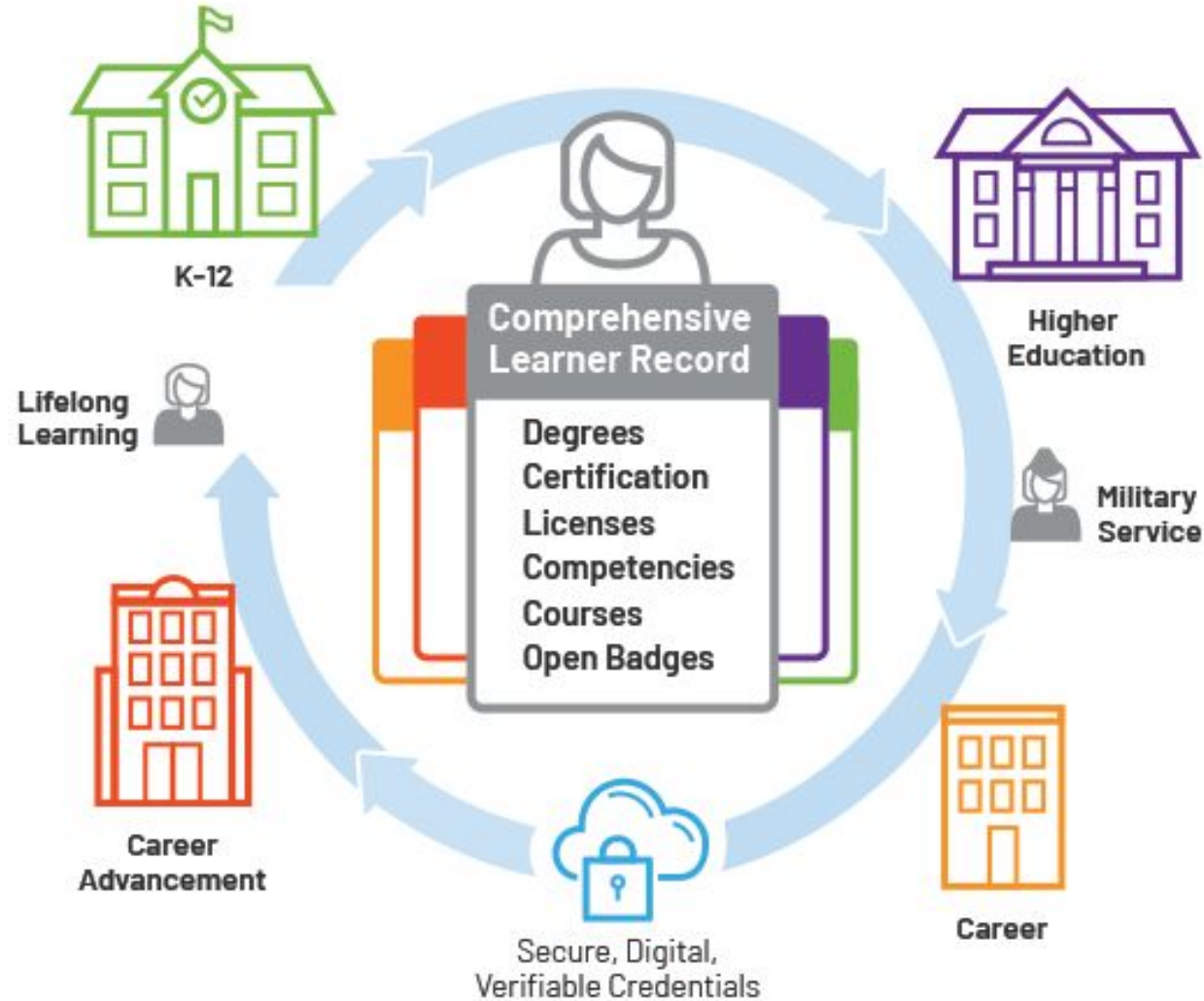
Interoperability of data is possible when all parts of the ecosystem use the CLR 1.0 standard.

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Comprehensive Learner Records

What makes CLR unique?

- **Official record** of learning achievements and skills through all stages of education and work
- Captures achievements and competencies in **context of a learning experience**
- **Transferable** among organizations as an immutable and complete record
- Privately **shareable** by the learner or the employee in whole or parts and electronically **verifiable** by the recipient
- Can contain badges AND non-badged achievements

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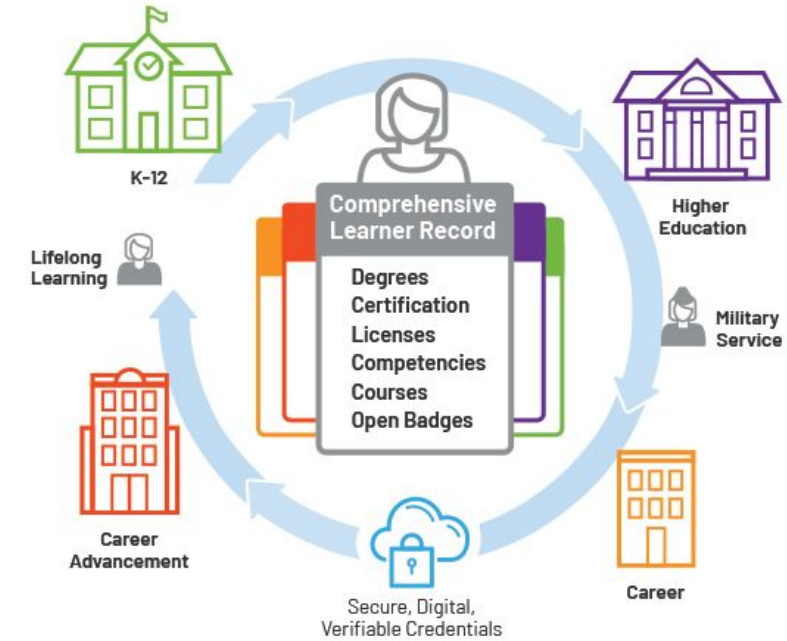
CLR Standard

Adopting certified CLR tools equips your learners with verifiable and interoperable records.

√ CLR 1.0 is available now.

√ CLR 1.0 defines a **data model** and **REST API**

√ Early adopter educational institutions and suppliers are currently implementing CLR 1.0.

More details at imsglobal.org/clr

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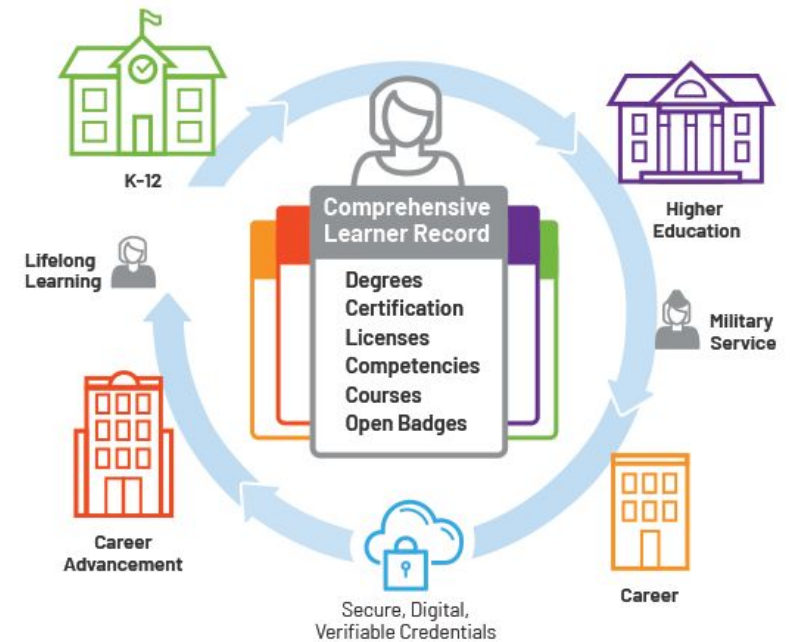
AACRAO Guidance

"Postsecondary institutions of all types and at all levels that are currently using any form of micro-credentials, digital diplomas and certificates, or digital student records or other types should work to migrate that information into the IMS CLR standard.

New records that are being developed should be written to this standard. Commercial software suppliers should adopt the standard as soon as possible to enable learner-controllable records in the IMS open standard."

https://bit.ly/AACRAO_Guidance

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Early Adopters of CLR 1.0

- ➢ Indiana University

- ➢ Johns Hopkins University

- ➢ Univ. of Maryland Baltimore County

- ➢ Western Governors University

- ➢ Broward County Public Schools

- ➢ Edina Public Schools

- ➢ North Dakota DPI

- ➢ AEFIS

- ➢ Core Learning Exchange

- ➢ ELocker

- ➢ Greenlight Credentials

- ➢ iDatafy / SmartResume

- ➢ Paradigm

- ➢ Peridot / LearnersEDGE

- ➢ Public Consulting Group

- ➢ Teacher Wallet by RANDA

First-Year Hoosier Experience Achievement Award

What is the Hoosier Experience?

- A program to enhance a student's first-year experience by attending campus events

- Events highlight the areas of Academics & Careers, Arts & Humanities, Equity & Inclusion, and Community & Engagement

- Earn the award by attending 6 or more events

Certificate of Completion

This certificate presented to

Allison Fake Student

for the

First-Year Hoosier Experience Achievement Award

in recognition of your participation in the Hoosier Experience program during your first year at Indiana University Bloomington.

November 2019

Dr. David B. Johnson
Vice Provost
Office of Enrollment Management
Indiana University Bloomington

HOOSIER EXPERIENCE

Why did we choose the CLR standard?

- Provided a way to transmit additional information

- Ideal CLR pilot project

- Our vendor was willing to learn with us

- Scalable to future projects

- Portable

JSON   Raw Data   Headers

Save Copy Collapse All Expand All | ▽ Filter JSON

@context: "https://clr.oem.indiana.edu/clr/schema.json"
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@type: "CLR"
▼ publisher:
    id: "urn:uuid:805877d8-3110-4745-8283-aa90dfac115f"
    ▼ name: "Office of the Registrar Indiana University Bloomington"
    url: "https://registrar.indiana.edu/"
    telephone: "+18128556500"
    ▼ address:
        addressLocality: "Bloomington"
        addressRegion: "IN"
        postalCode: "47405"
        streetAddress: "408 N. Union St."
▼ learner:
    id: "urn:uuid:6941e96f-e4fc-468b-8b12-ddcdd2b33e55"
    name: "Student, Allison Fake "
    email: "afstudent@indiana.edu"
▼ assertions:
    ▼ 0:
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        ▼ recipient:
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            @type: "email"
            hashed: "false"
            salt: "N/A"
        issuedOn: "2020-03-12T13:12:45+0000"
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            @type: "Achievement"
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            name: "FYE Hoosier Experience"
            ▼ description: "Awarded to a student who attends 6 or more First Year Experience events."
            ▼ issuer:
                id: "urn:uuid:737c9937-408a-443e-b891-74cc12ea381c"
                name: "Office of Enrollment Management"
                url: "https://www.oem.indiana.edu/"
                telephone: "+18128558908"
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                    addressRegion: "IN"
                    postalCode: "47405"
                    streetAddress: "408 N. Union St."
        ▼ results:
            ▼ 0:
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                @type: "Result"
                value: "Awarded"

How did we get started?

- Identified and kept what worked

- Establish communication channels early in the project

- Used the CLR specifications as a blueprint for data structures
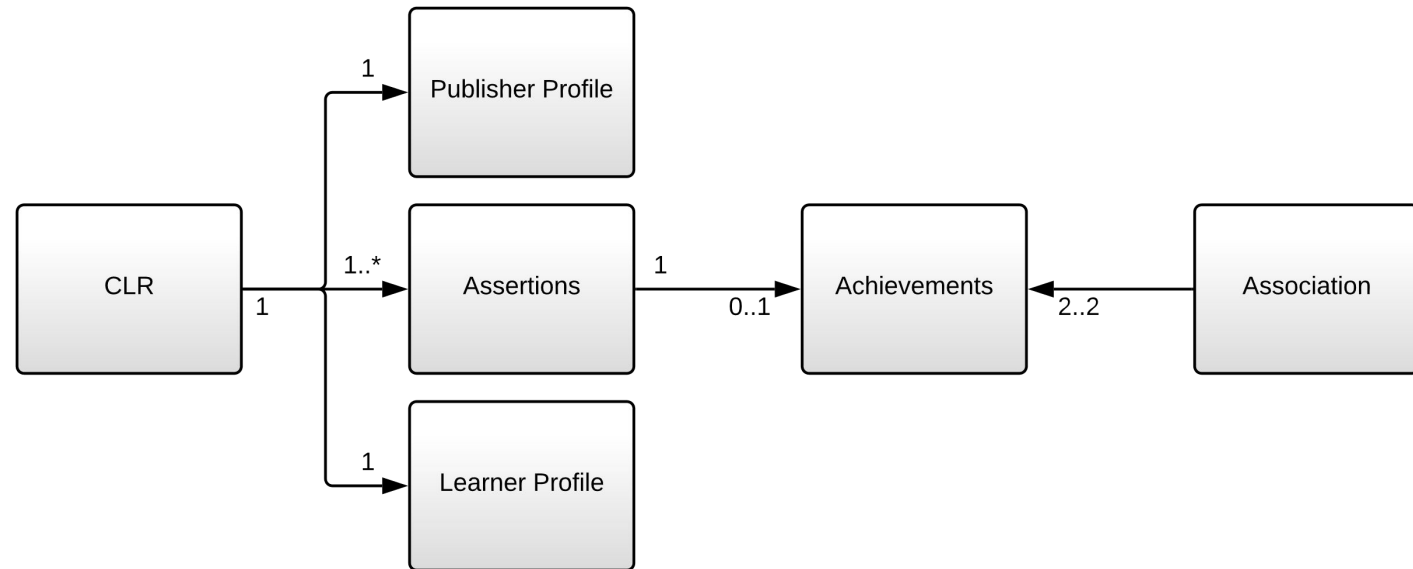
Where are we now?

- Went live in March

- Scalable back-end data structures in place

- More comprehensive understanding of the CLR standard

What's next?

- Update the JSON-LD payload to include verification

- Achieve compliance with the REST/JSON Binding standards

- Identify new projects that will benefit from the CLR standard

Audience Question & Answer

?

CLR Resources

√ Technical documentation

√ Prototype applications

√ Procurement guidance for institutions

CLR Technical Documentation

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CLR Technical Documentation

Specification documents
- Data/information model
- REST/service model

Implementation Guide

Conformance Certification Guide

OpenAPI (Swagger UI)

JSON Schema

JSON-LD Context

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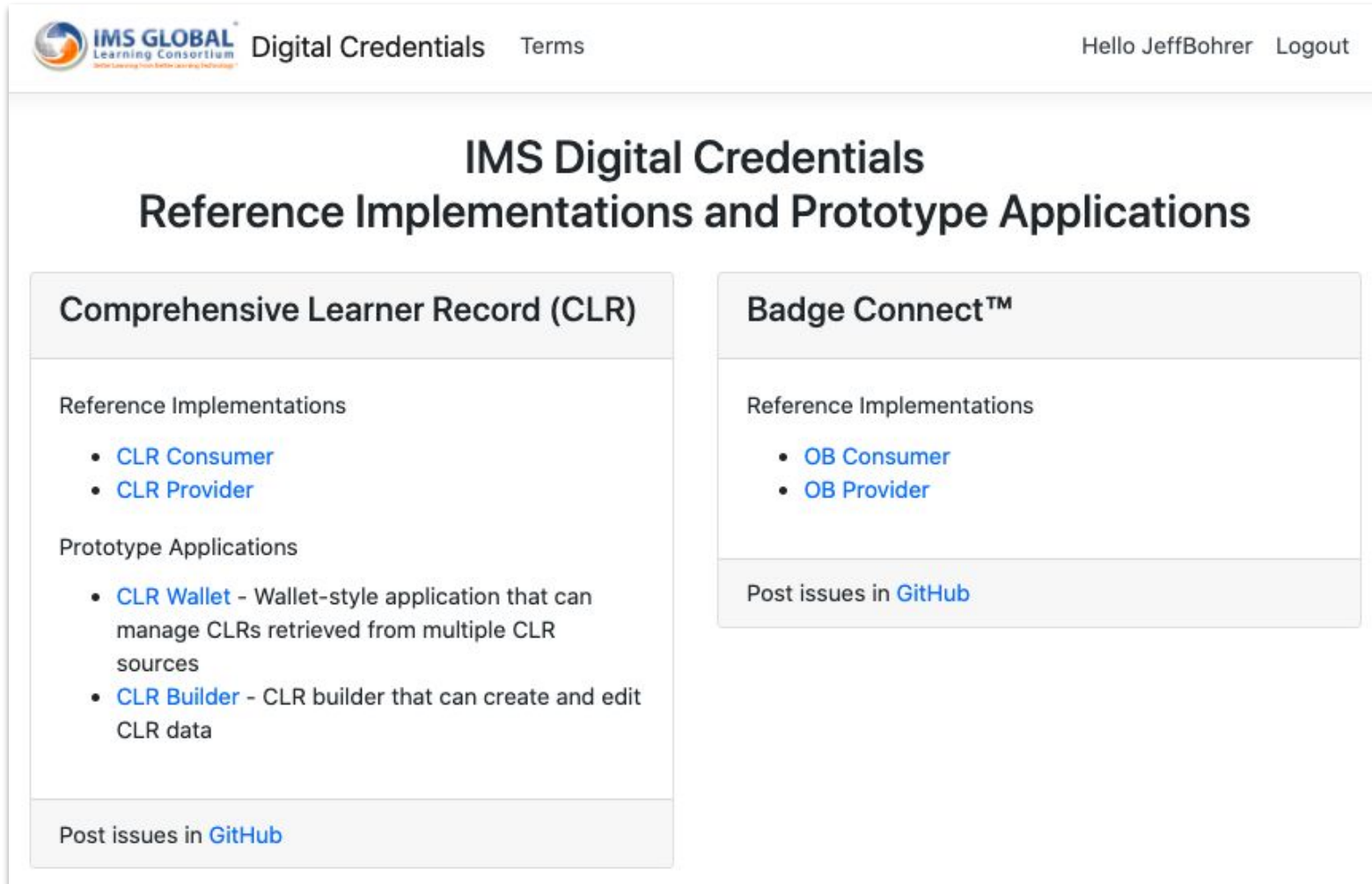
CLR Technical Documentation
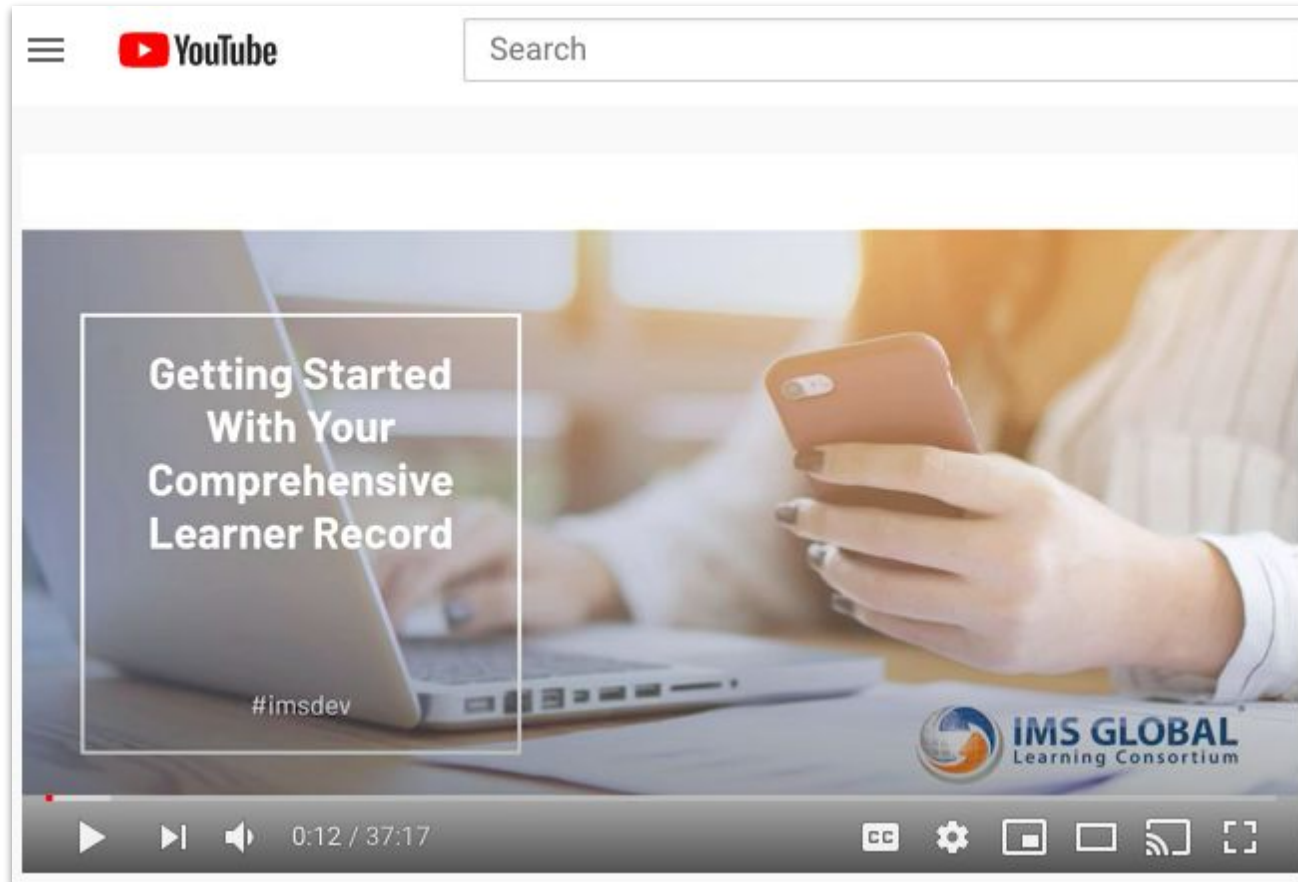
IMS Developer Webinar: CLR

How to implement CLR standard

37 minutes

bit.ly/clr-vid

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CLR Prototype & Reference Applications

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CLR Prototype & Reference Applications

Comprehensive Learner Record (CLR)

Reference Implementations

- CLR Consumer
- CLR Provider

Prototype Applications

- CLR Wallet - Wallet-style application that can manage CLRs retrieved from multiple CLR sources
- CLR Builder - CLR builder that can create and edit CLR data

Post issues in GitHub

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CLR Prototype & Reference Applications

Access Request for dc.imsglobal.org

Thank you for your interest in the Comprehensive Learner Record. IMS Global is providing access to CLR prototype applications and reference implementations to select organizations. To request access, please submit this form, and IMS will follow-up with further instructions.

* Required

Name *

Your answer

Title *

Your answer

---

dc.imsglobal.org requires an IMS member account

**Attendees of CLR Roundtables may request access:

bit.ly/IMS-access-request

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CLR Prototype & Reference Applications

CLR Prototype & Reference Applications

CLR Prototype & Reference Applications

CLR Procurement Guidance

imsglobal.org/clr/rfp/resource

CLR Procurement Guidance

SAMPLE RFP WITH REQUIREMENTS

Credential Management Platform for Comprehensive Learner Records

Request for Proposal Minimal Requirements

[*Education provider*] seeks to recognize and record its learners' knowledge, skills, and abilities (KSA's) using interoperable and verifiable digital credentials that adhere to an open interoperable standard, the Comprehensive Learner Record (CLR) published by IMS Global Learning Consortium.
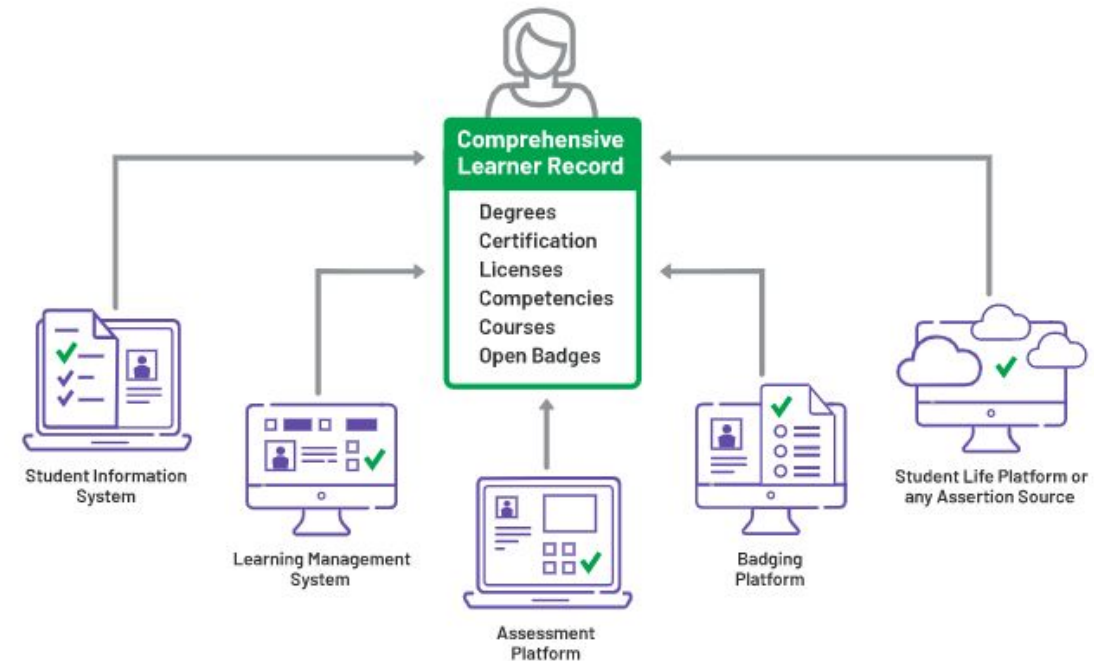
The education provider will be referred to in this document as the record publisher ("Publisher"). The CLR Publisher seeks to license software in the form of a Credential Management Platform ("Platform") to create and manage its comprehensive learner records on behalf of its learners.

The Platform will serve as a central hub for the Publisher's digital credentials, collecting achievement assertions from source systems, organizing the assertions into a CLR and publishing the standard format CLR record so each achievement is verifiable, manageable, and shareable online per the CLR standard implementation requirements.

Access to the CLR will be provided via mobile application ("Wallet") for the learner to view, control, and securely share some or all of their achievements with others, such as employers, other education providers, and social media.

The Platform must be capable of importing and/or creating, hosting, managing, curating, and sharing and exporting CLR records in whole or in part under the learner's control. The Platform will be integrated with the Publisher's administrative data systems via published open integration standards. The Publisher may choose to make the Platform available to the learner after their enrollment or employment as applicable.

Comprehensive Learner Record
- Degrees
- Certification
- Licenses
- Competencies
- Courses
- Open Badges

Student Information System

Learning Management System

Assessment Platform

Badging Platform

Student Life Platform or any Assertion Source

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IMS CLR Roundtable: Learn & Lead

- Join us next time
  - How can CLR contribute to diversity and equity goals?
  - Date: November 2, 2020 at 11:30 ET
  - https://www.imsglobal.org/event/ims-clr-roundtable-open-public

- Feedback, Suggestions, Questions
  - https://forms.gle/bR4Soe4ReYy21FF4A

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