LER TOOLKIT CASE STUDY COLLECTION

Recognizing Project-based Skills and Supporting Student Transitions from Education to Employment

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Recognizing the real-world skills students have gained through adaptive, experience-based learning with digitally verifiable portable credentials is vital for education to work transitions. A collaboration between L-EAF.org, L-EAF Lab, and SOLO Network is focused on integrating verifiable credentials for experience-driven skills into student portfolios, with portability to share them on professional platforms like LinkedIn, enhancing possible visibility and employability. By aligning education with workforce needs, this initiative offers a scalable model for skills-based credentialing that supports learners in their transitions between learning and employment.

Case Study Details

Scope: International
Sector: Education
Industry: Workforce development, esp. education to work transitions
Focus: Recognition of project-driven skills to bridge education to employment.
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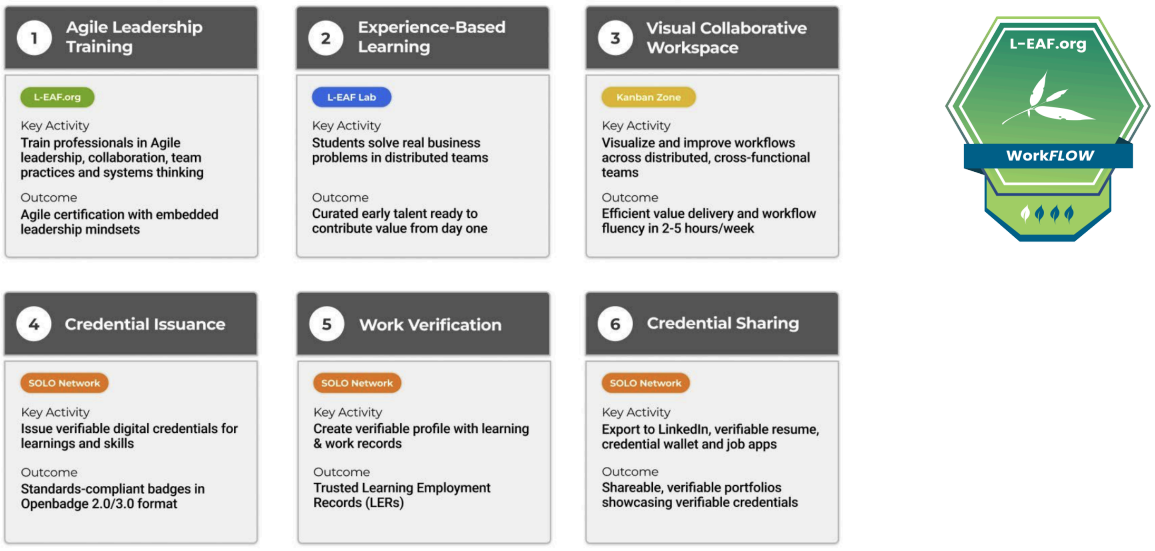
Introduction

As the future of education becomes increasingly skills-focused and digitally enabled, institutions must adapt to equip learners with tools that validate and showcase real-world competencies developed through internship experiences. The partnership between L-EAF.org, L-EAF Lab, and the SOLO Network demonstrates a pioneering model in this space, empowering students with portable digital credentials that represent verified achievements for real-world experiences. By integrating credentialing into adaptive learning programs, students are not only gaining hands-on experience but also building dynamic professional portfolios that travel with them beyond the classroom.

Recognizing Project Skills

L-EAF.org and its certified reseller, the Lean Education Agile Foundry Lab (L-EAF Lab), partnered with the SOLO Network to implement a credentialing ecosystem that captures and communicates student skills and a digital portfolio of verified work experience. The L-EAF Lab offers a variety of 12 and 24-week experience-based learning talent incubation programs with a hands-on opportunity for students to gain practical experience, build their portfolios, and develop an agile mindset and durable skills in a real-world setting. The initiative is built around agile learning experiences, where students engage in real projects, ranging from solving challenges in online education to web development and AI integration (See Fig. 1.).

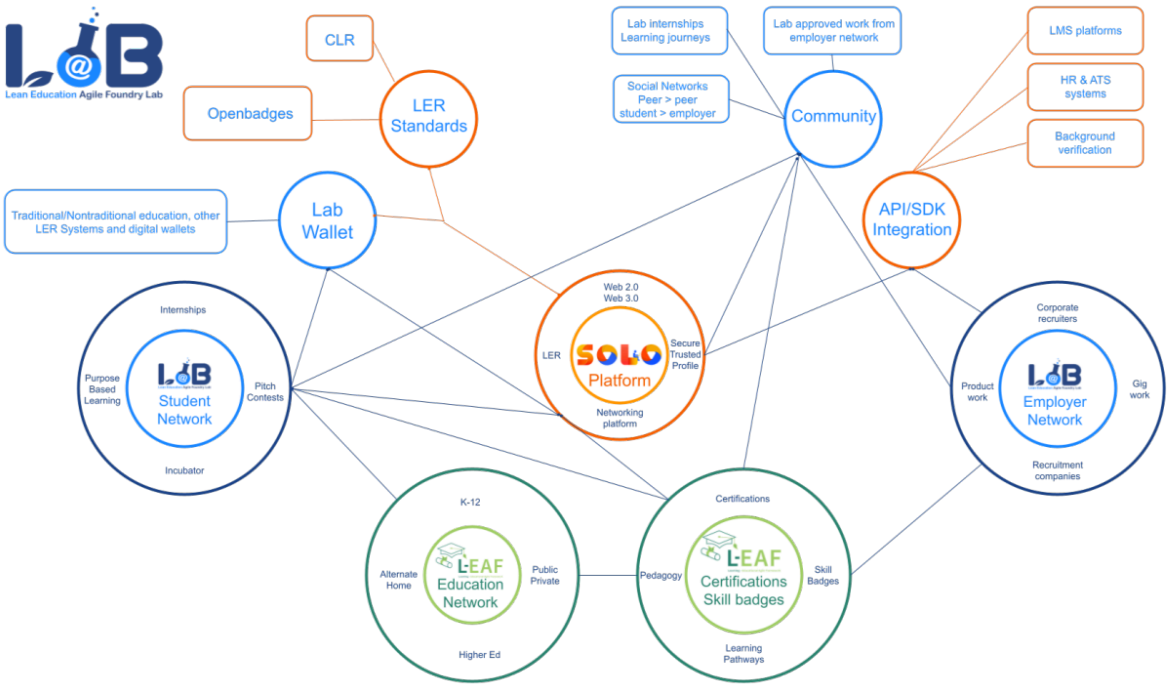
Figure 1. L-EAF Lab Program Structure and Credential Example



Source: L-EAF.org

The SOLO Network provides the infrastructure to issue, manage, and share digital credentials tied to specific competencies and an employment record with rich descriptions of the projects and products the student contributed to while in the L-EAF Lab. Through this partnership, L-EAF Lab students gain credentials that are not only verifiable and standards-based but also portable, usable on professional platforms such as LinkedIn to enhance employability (See Figure 2.)

Figure 2. Ecosystem Map



Source: L-EAF.org

Participant Engagement

Student engagement is deep, collaborative, and project-driven. During their experience-based learning program, students work on real-world problems for 12 to 24 weeks, such as:

1. **Improving Online High School Learning Experiences** - Students diagnose challenges and co-create solutions to improve peer experiences in virtual learning environments.
2. **Developing a GPT for Teachers** - Teams design and test a generative AI tool to help educators transform their curriculum for LearningFLOW, showcasing innovation and educational agility.

3. **Building and Managing Web Infrastructure** - Students are fully responsible for designing, developing, and maintaining the websites, reinforcing digital project management and web development skills.

These learning experiences are mapped to a defined skills taxonomy using L-EAF.org's "Nested WorkFLOW framework" and "WorkFLOW methodology", which includes competencies like collaboration, planning, risk management, demonstration, process improvement, and self-organization, both as a team and with other teams.

Technical Implementation

The technical backbone of the pilot is provided by the SOLO Network, a modular and interoperable infrastructure to support an end-to-end Learning & Employment Record (LER) ecosystem. Below are the key modules and what they enable:

Credential Issuance Platform	Enables issuance of portable, standards-compliant digital credentials using formats like Open Badge 2.0, Open Badge 3.0, and Comprehensive Learner Record (CLR), as well as Self-issued Credentials, Endorsement Credentials
Learning & Employment Hub	A centralized interface for managing, organizing, and accessing learner records, digital credentials, and portfolios across the education-to-employment lifecycle.
Credential Wallet	Provides learners with a secure, privacy-preserving wallet to receive, store, organize, and share credentials using decentralized identity and verifiable credential standards.
Interoperability & Integrations Suite	Provides APIs and plug-ins for LMSs, HR platforms, job boards, and external systems to enable seamless credential exchange and system-wide integration.

Source: SOLO Network

SOLO Network's architecture supports rapid implementation for institutions and employers alike, offering flexibility, standards compliance, and future-readiness for the evolving LER landscape.

Each credential is encoded with metadata from L-EAF's Competency and Training Description Language (CTDL)[1], providing detailed insight into the student's verified skills.

[1] Not to be confused with Credential Engine's Credential Transparency Description Language (CTDL).

Product Stack

Product Name	Role(s)
SOLO	Issuer
SOLO	Holder credential management (integrated)
SOLO	Verifier (integrated)

Credential Model

Category	Implementation
Verifiable Credential Data Model Version	VCDM 2.0
Credential Specification	Open Badges 3.0 & CLR 2.0

Interoperability is critical for verifiable digital credentials and wallet solutions to ensure that the credentials and data can be understood, trusted, and accepted across systems. We invited the project team to share a detailed interoperability profile of the technical specifications and protocol choices they made. A full interoperability report is available in the appendix.

Key Findings

Overall, of the first 42 students who participated in the pilot and completed the program, 31 students were issued and claimed their credentials, resulting in a 73.8% claim rate. Several key findings emerged from the pilot. These included:

- **Skills Made Visible and Credible:** Students develop high-demand competencies and receive verifiable proof of them, which employers can share and understand.
- **Professional Portfolio Building:** Digital credentials become part of each student's evolving digital portfolio, which also includes a verified employment record, helping bridge the gap between learning and earning.
- **Enhanced Student Motivation:** The ability to earn portable credentials tied to real accomplishments motivates deeper engagement and commitment to learning projects.
- **Workforce-Ready Competencies:** Through L-EAF Lab, students emerge with skills aligned with agile leadership, team collaboration, and problem-solving, key traits in today's job market, with SOLO providing the platform that makes the entire LER transportable.

Challenges and Opportunities

Every pilot has its challenges. Some of the challenges and opportunities identified from the experience include:

Challenges	Opportunities
❖ **Institutional Adoption:** Wider adoption requires cultural shifts in how educators assess and value student competencies. ❖ **Awareness Gap:** Employers need education on interpreting and valuing digital credentials within their hiring workflows.	❖ **Scalable Model:** The model is replicable across other agile learning environments and vocational programs. ❖ **Career Empowerment:** By making credentials student-owned and portable, the system reinforces autonomy and lifelong learning. ❖ **Alignment with Future Work:** As more employers seek evidence of skills over traditional degrees, this model positions students at a competitive advantage.

Recommendations

Recommendations for next steps from the pilot include:

- **Expand Credential Frameworks:** Encourage other institutions to adopt credentialing systems with similar frameworks to enhance portability and clarity.
- **Employer Engagement:** Proactively engage hiring managers and HR professionals to interpret and value L-EAF.org credentials.
- **Policy Advocacy:** Push for policy support to recognize digital credentialing systems as legitimate pathways to employment and further education.
- **Mentorship Integration:** Pair credential issuance with mentorship and guidance to support long-term career development.

Conclusion

The partnership between L-EAF.org, the L-EAF Lab, and the SOLO Network exemplifies how education can be reimagined through digital portable credentials. This use case provides a pathway toward more personalized, inclusive, and employable learning journeys by capturing real-world skills and enabling their verification and portability.

As the demand for agile, work-ready talent continues to grow, platforms like SOLO, coupled with innovation labs like L-EAF Lab, can transform how we document, share, and leverage human potential.

Sources

1. Burstein, J. (2024). Empowering Students with Portable Credentials. LinkedIn Article.
2. Solo (2025). L-EAF Lab Use Case. https://thesolo.network/l-eaf-lab
3. Learning Education Agile Framework (L-EAF.org). https://l-eaf.org/
4. L-EAF Lab https://www.L-EAFLab.org
5. SOLO Network. (n.d.). https://thesolo.network/

Attribution

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People	Organizations
❖ Jeff Burstein, L-EAF.org ❖ Simon Holzapfel, L-EAF Lab ❖ Ramakant Samant, SOLO ❖ Sudesh Sangelkar, SOLO	❖ SOLO Network ❖ The Learning-Education Agile Framework (L-EAF.org) ❖ The L-EAF Lab

Appendix: Interoperability Profile

Project teams shared information about the open standards and protocols they used to support interoperability and integration of the end-to-end experience.

Category	Item	Implementation
Product Stack	Issuer Product(s)	SOLO Network
	Holder Credential Management Product(s)	SOLO Network
	Verifier Product(s)	SOLO Network
Identifiers	Issuer Identifier Type	did:key
	Holder Identifier Type	did:key
	Verifier Identifier Type	None
Credential Model	VC Data Model Version	VCDM 1.1
	Credential Specification	Open Badges 3.0, CLR 2.0
	Skill Alignment	OB Alignment to URL
	Metadata Extensions (e.g., CTDL)	Skill names in OB Achievement tags
	Skills Library or Framework Used	L-EAF.org skills framework, expressed in Competency and Training Description Language Other supported options include Competencies and Academic Standards Exchange, Open Skills Network (OSN)
Security	VC Proof Type / Cryptosuite	Data Integrity Proof with eddsa-2022 cryptosuite A blockchain-based issuance log may also be available.
	Credential Status Method	1EdTechRevocationList

Category	Item	Implementation
	Credential Expiration	Credentials expire after several years
	Credential Refresh Method	Not used
	Issuer Authority Confirmation	Validity is enhanced with badge evidence and Endorsement Credentials.
Authentication	Holder Authentication Method	Email address verification for external identify verification of downloaded credentials
Delivery	Credential Handler to Holder	Download JSON-LD
	VC Export Options	Download JSON-LD
	Presentation Protocol Supported	Upload baked badge image, Import from remote JSON URL, Upload JSON-LD
Registries & Discovery	Issuer Registry Solution	Some issuer DIDs are documented in transactions on blockchains, e.g. Hedera.
	Verifier Registry Solution	None

Source: This Interoperability Profile Template was developed by LWYL Studio from interoperability frameworks developed by Project Unicorn, 2023; CBEN, 2022; SkillsFWD, 2024; EDL, 2024; and LWYL Studio, 2025.