Learn & Work • ECOSYSTEM LIBRARY

Learn & Work Ecosystem Library

Workforce Matters Workshop

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Holly Zanville, Research Professor, George Washington University | Co-Lead, Credential As You Go | Founder/Lead, Learn & Work Ecosystem Library | hollyzanville@gmail.com

Matthew Valdez
Librarian
Learn & Work Ecosystem Library
librarian@learnworkecosystemlibrary.com

Credential Transparency

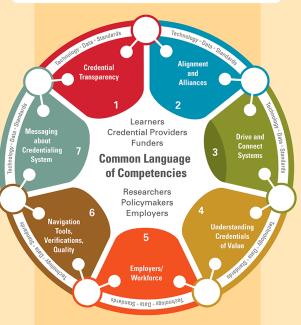
- Credential Engine
 Credential Registry
- Open-platform schemas and languages
- 2 Alignment and Alliances
 - State/regional projects
 Military (Dept of Defense, Navy)
 - Public/private ROI
 - Credentials of value
 Aligning bachelor's
 degrees and industryrecognized certifications
 - T-Profile builder

Drive and Connect Systems Credential Engine: Credential

- Registry Learn and Build Summit Series (apps)
- T3 Innovation Network
 (10 pilot projects)
- Workcred: Data-sharing among organizations awarding non-degree credentials
- Non-Degree Credential Research Network
- Understanding the landscape of industry certifications

Lumina

Stakeholders and Key Initiatives for a Connected Learn-and-Work Ecosystem



4 Understanding Credentials of Value

- State identification
- redentials of value
 Public-private education/
- credentialing data infrastructure

 Credential Registry use in
 Eligible Training Provider List and
- other eligibility determinations
 Incremental higher education
 credentialing system
 framework
- SocialTech's unmudl.com

5 Employers/Workforce

- Jobs Data Exchange
- Talent Pipeline
 Management Initiative
- Competency/skills/ competency calibrator
 Hiring for competencies/
- Workforce Partnership Initiative

6 Navigation Tools, Verification Quality

- Digital learner records
- The Quality Assurance Commons
- Google Education and Pathways Search

7 Messaging about Credentialing System

- Gallup surveys
- Media messaging
- Research: number of credentials

2018 - 2020

<u>Lumina Foundation –</u> The Learn and Work <u>Ecosystem</u>

An updated map of the learn-and-work highway (Blog) Holly Zanville • Jan. 23, 2020

(1) Drawing board (conceptual stage)

2 New effort, under construction, supported extramurally

Stages

- (3) Created, in testing (proof of concept) phase, supported extramurally
 - (4) Created, tested, scaling, supported extramurally
- (5) Created, tested, scaling, at/or past tipping point, financial sustainability

One Project + Two Studies Informed Library Development

Foundation Project to Map Learn/Work Ecosystem

- . 2018: Meeting of ~40 foundations resulted in request to map "key initiatives" in various stages of development being funded by foundations
- . 2019: Multiple foundations identified 17 projects; Lumina Foundation housed 1st map
- . 2020: Published 3rd edition with 36 initiatives (up from 23 in 2nd edition)

Exploratory Study at GWU to Inform Planning

- . 2021: Reviewed 18 websites for definitions, key words, referrals
- . 2021: Produced annotated list of websites

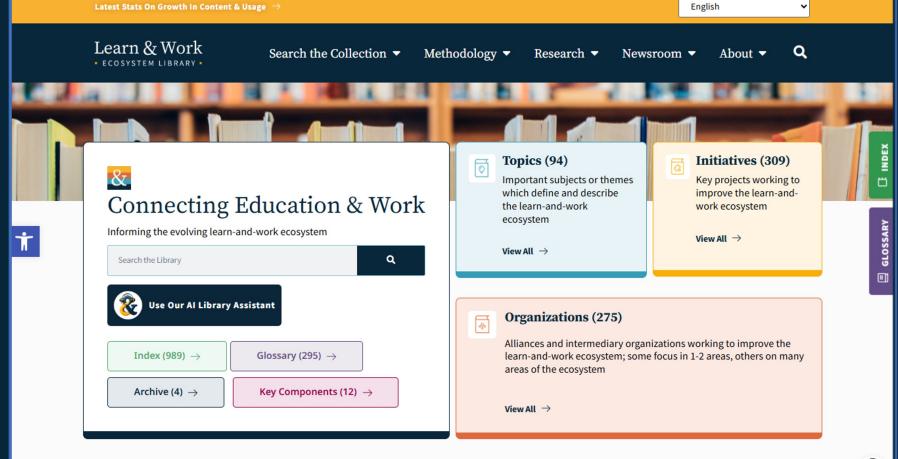
Groundwork for Library Ontology at GWU

- . 2021: Surveyed ~300 experts in learn/work ecosystem (23% response rate)
- . 2021: Rated 12 key categories + 97 sub-categories for importance
- . 2022: 1st ontology developed from research

12 Key Components of Learn-and-Work Ecosystem

- All components must be connected and coordinated so that INDIVIDUALS can move seamlessly through marketplace using a variety of credentials to communicate the skills and knowledge acquired in multiple settings (school, work, service, self-study)
- SCHOOLS can count learning obtained outside of academic settings toward a degree or other credential
- EMPLOYERS have more detailed and externally-validated information for hiring, reskilling, and upskilling workers
- PUBLIC is informed about the learnand-work ecosystem





Growth in Content

	<u>12/1/22 Launch</u>	06/10/24
Key Components	12	12
Subcomponent Topics	71	95
Glossary		300
Initiatives/Projects	88	310
Organizations	118	277
Relational Maps (prototypes)		5
	286	999
New content/wiki request forms	S	33
Correction requests		23

Growth in Users

12/02/22	668 distinct tracked users
06/10/24	22,558 distinct tracked users
	3,100 repeat visitors
	32,373 sessions
	57,263 page views
	520 downloads
	1 min avg. session

Research -

Newsroom ▼

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Q

Dynamic Content Index for Topics, Initiatives, Organizations, and Glossary Terms

TOPICS (95)

IMPORTANT SUBJECTS OR THEMES WHICH DEFINE AND DESCRIBE THE LEARN-AND-WORK ECOSYSTEM

- Academic Advising
- Accreditation
- · Adult Learners: Second-chance Options, Accelerated Options
- Alternative Credentials
- Apprenticeship
- Articulation / Transfer
- Auto-award (Automatic)
- · Automated Screening for Hiring Processes / Applicant Tracking System
- Badge Backpack
- Badge, Skills Badge, Open Badge, Competency Badge
- Blockchain
- Career Coaches, Career Coaching
- Career Pathways
- Certificate
- Certification
- · Classification of Instructional Programs (CIP)
- College Education in Prisons
- · Common Job Descriptions; Job Postings in Language of Competencies/skills
- Community College Baccalaureate Degrees (CCB)
- · Competency Models, Skills Models & Learning Frameworks

INITIATIVES (310)

KEY PROJECTS WORKING TO IMPROVE THE LEARN-AND-WORK ECOSYSTEM

- 1EdTech Open Badges Standard
- 1EdTech's Digital Credentials Learn & Lead Roundtables
- 2nd Chances@Work Initiative Orijin
- · 2U / edX Bootcamp Partnership
- AACRAO Alternative Credentials Initiative / Report
- AACRAO Credit Mobility Initiative
- AACRAO Digital Interoperability Initiative
- Accelerate ED
- Accelerating Opportunity: Kansas
- Access in Prison Initiative JSTOR
- Adult Learner Centered and Equity Framework (ALCEF) in a SNAP Network — CAEL
- Adult Learning & Literacy Network (ALL IN)
- ADVANCE Integrated Education and Training (IET)
- Advancing Equity and Upward Mobility through Community College-Employer Partnerships (ACE-UP)
- Al Education Policy & Practice Ecosystem Framework - WCET
- Al Incubator Network
- Alabama Partnership with Credential Engine
- Alabama Talent Triad
- Alternative Credentials: Considerations.

ORGANIZATIONS (277)

ALLIANCES AND INTERMEDIARY ORGANIZATIONS WORKING TO IMPROVE THE LEARN-AND-WORK ECOSYSTEM

- 1EdTech Consortium
- AARP Foundation
- Accelerate Montana
- Accredible (digital badge & certificate platform)
- Achieving the Dream (ATD)
- ACT
- Advance CTE
- Advisera
- AFL-CIO Working for America Institute (WAI)
- African American Mayors Association (AAMA)
- Albert Shanker Institute
- Alliance for Excellent Education (All4Ed)
- America Achieves
- American Association of Colleges and Universities (AAC&U)
- American Association of Collegiate Registrars and Admissions Officers (AACRAO)
- American Association of State Colleges & Universities (AASCU)
- American Council on Education (ACE)
- American Dental Education Association (ADEA)

· American Indian Higher Education

 American Health Information Management Association (AHIMA)

GLOSSARY (300)

CURATED LIST OF TERMS AND DEFINITIONS, FOCUSING ON IMPORTANT SUBJECTS OR THEMES THAT DEFINE AND DESCRIBE THE LEARN-AND-WORK ECOSYSTEM

- Academic advising
- Accreditation
- Achievement Wallet
- Adult Education
- Adult Learners
- Alternative Credential Platforms
- Alternative Credentials
- Alternative Provider
- · Applicant Tracking System (ATS)
- Applied Liberal Arts
- · Apprenticeship Intermediary
- Apprenticeships
- Articulation / Transfer
- Artificial intelligence (AI), Generative AI, & AI Prompts
- Asian American and Native American Pacific Islander-serving Institution (AANAPISI)
- Assertion
- Assessment
- Assessment in Badging
- Asylum Seeker
- Auto-award Badge Baking
- Badge, Skills Badge, Open Badge, Competency Badge





Prototype Relational Maps

- Show connections within the ecosystem
- Contain active links to take users to artefacts within library collection
- Updated as new related content is added to the library collection
- Leverage human judgment and A.I. to create connections beyond basic keyword matches





- · Comprehensive Learner Records (CLRs) · Credit Interoperability
- · Credential Management System (CMS)
- · Digital Credential Ecosystem / Marketplace
- · Digital Wallets /Digital Badge
- · Ethical Standards/Integrity in Credentialing
- · Integrated Credential Management System
- · Learning and Employment Records (LERs)
- · Verifications & Recordkeeping



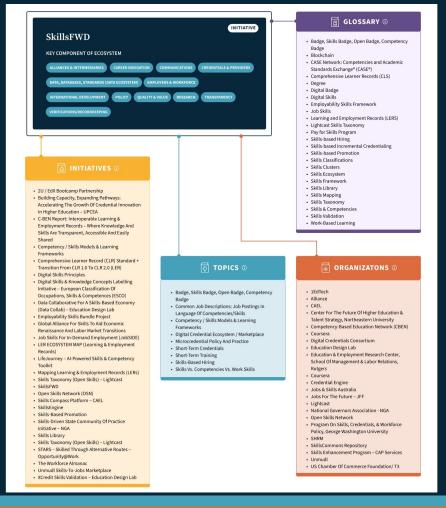
- · 1EdTech's Digital Credentials Learn & Lead Roundtables
- · AACRAO Digital Interoperability Initiative
- · AACRAO Credit Mobility Initiative
- · C-BEN's Interoperability Principles Project
- · C-BEN Report: Interoperable Learning & Employment Records - Where Knowledge And Skills Are Transparent, Accessible And Easily Shared
- · Center For Skills Validation Education Design Lab
- . Comprehensive Learner Record (CLR) Standard + Transition From CLR 1.0 To CLR 2.0 (LER)
- · Comprehensive Learner Records Standard Working Group
- · Credit When It's Due (CWID)
- · Digital Learner Records
- · Digital Skills & Knowledge Concepts Labelling Initiative -European Classification Of Occupations, Skills & Competences (ESCO)
- · Expand Acceptance Of Digital Records And Credentials With Community College Systems
- · Experience You: Bring Your Past Forward HBCUv
- · IDB Digital Credential Framework (Inter-American
- Development Bank)
- . LER ECOSYSTEM MAP (Learning & Employment Records)
- . Mapping Learning & Employment Records (LERs) · Midwest Credential Transparency Alliance (MCTA)
- · Rasmussen University Phase 1 Comprehensive Learning
- · ResearchDataGov (RDG)
- · Rising Up Through Stronger & More Equitable Transfer: Tracking Transfer & Transfer Playbook 2.0 (Aspen Institute,
- · Skills-Driven State Community Of Practice Initiative (NGA)
- · SmartResume (Digital Wallet)
- · SmartReport Ecosystem Map
- · Territorium's LifeJourney Toolkit
- . The State Of Digital Credentials 2022 Guide (Accredible)
- · The Education Blockchain Initiative
- · Unmudl Skills-To-Jobs Marketplace
- · XCredit Skills Validation Education Design Lab

TOPICS ®

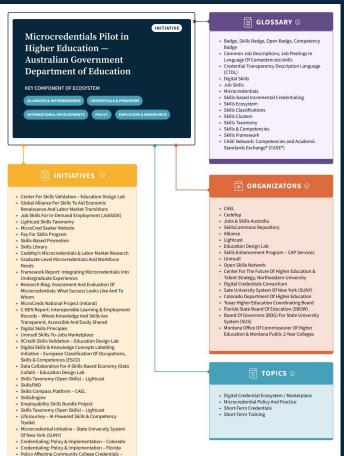
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- · Badge, Skills Badge, Open Badge,
- Competency Badge
- Badge Backpack
- · Credentials For Young Adults
- · Credential Registry · Digital Credentials
- · HR Open Standards Consortium
- · Incremental Credential / Incremental Credentialing System / Incremental Credentialing Framework
- · Non-Degree Credentials
- · Prior Learning Assessment, Credit For Prior Learning, Recognition Of Prior Learning - Learn & Work Ecosystem
- Library · Skills-Based Hiring
- · Skills Vs. Competencies Vs. Work Skills
- · Workforce Certificates, Certifications, Occupational Certifications, Occupational Licenses

- **→ ORGANIZATONS** ⊙
- · 1EdTech Consortium, Inc.
- AACRAO
- · Canvas Credentials/Badges Instructure
- Community (Formerly Badgr) · Council For The Study Of Community Colleges
- · Credly
- · Digital Credentials Consortium (DCC)
- · Education Commission Of The States (ECS)
- · Education Design Lab (The Lab)
- · International Society For Technology In Education
- · Lightcast (Formerly Emsi Burning Glass)
- Mastery Transcript Consortium® (MTC)
- · National Student Clearinghouse (NSC) · National Commission For Certifying Agencies
- · National Commission For Certifying Agencies (NCCA)
- · National Center For Higher Educational
- Management Services (NCHEMS)
- · National College Credit Recommendation Service (NCCRS)
- · Parchment & Digitary
- · Rural Local Initiatives Support Corporation
- · Sovrin
- Territorium
- · Trusted Learner Network (TLN)
- · U.S. Chamber Of Commerce Foundation
- Wipfli
- · Workday
- · Working Nation
- WorkRise

Second Example



Third Example



 Montana 'Year To Career' Initiative To Create Microcredential Job Pathways

3 Developments



Research Center



Special Projects



Al Library Assistant

RESEARCH CENTER



Library Lens

The Library collection, constantly evolving as new content is added and new connections are generated, is itself an information database to be analyzed. Through the Library Lens, our briefs and reports explore trends within the ecosystem and insights revealed by analysis of website use.



Professional Development Hub

A space dedicated to professional development resources produced by the Library, including webinars and a newsletter.



Consultation with Librarian

If you're having trouble finding the information you seek or are unsure whether the Library addresses your specific research question, a librarian is available to help. Questions submitted by email or contact form will initiate an asynchronous email consultation and present options for further collaboration.



Special Projects

A space dedicated to collaborative projects designed to support the use and improvement of the Library. These may include: exploring use of Library as an open educational resource or instructional tool, user case studies, and assessment of the content's currency and adequacy.



Researcher Showcase

A space for researchers to present their projects and findings related to the Learnand-Work Ecosystem. Reports and findings that are coded to the Library Classifications (cross-referenced) are found here.



Online Newspaper

Through a partnership between the Learn & Work Ecosystem Library and The EvoLLLution, Library users have access to thousands of relevant articles. With over 60,000 monthly visitors, the Toronto-based EvoLLLution (a project of Open Campus) is a go-to source for opinions and information. It works with over 2,500 contributors, including college deans, state system presidents, working adults, hiring managers, government officials, and researchers. Since 2012, The EvoLLLution has recognized the importance of diverse viewpoints and provided a unique platform for contributors to share their stories, opinions, and experiences.

Online Newspaper

Research Center

Access Evergreen Learn-and-Work Insights

Through a partnership between the Learn & Work Ecosystem Library and The EvoLLLution, Library users can easily access articles on evergreen topics in the learn-and-work ecosystem. With over 60,000 monthly visitors, The EvoLLLution: A Modern Campus Illumination, is a go-to source for opinions and information. The publication is made up of over 2,500 contributors including college deans, state system presidents, working adults, hiring managers, government officials, and researchers to publish timely articles. Since 2012, The EvoLLLution has recognized the importance of diverse viewpoints and provided a unique platform for contributors to share their stories, opinions, and experiences for the benefit of the field. There is 81% overlap in themes addressed at The EvoLLLution and this Library.



Search for articles from leaders on topics relevant to the learn-and-work-ecosystem

Visit EvoLLLution.com

See examples of the types of articles available from The EvoLLLution below:

FOCUS CATEGORY: OPPORTUNITIES AND CHALLENGES



February 13, 2024

Navigating Uncharted Waters in Higher Ed: A President's Perspective

Stephen Easton | President, Dickinson State
University





February 7, 2024

The Power of Learn-and-Earn Programs

Jane Swift | President, Education at Work

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Special Projects



USER GROUP SPECIAL PROJECT: LEARNING & **EMPLOYMENT** RECORDS (LER) POSTSECONDARY ACCELERATOR INITIATIVE 06/10/2024

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USER GROUP SPECIAL PROJECT: LEARN & WORK **ECOSYSTEM** LIBRARY AS INSTRUCTIONAL TOOL 05/14/2024

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USER GROUP SPECIAL PROJECT: CREDENTIAL **FUTURES** CONSORTIUM (CFC) 05/05/2024

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REQUEST FOR PARTICIPATION (RFP): **COMMUNITY OF** LEARNERS/LIBRARY PARTNERSHIP 03/01/2024

Read More »



Library Meets AI: 3 Next Steps

Natural Language **Query for Searches**

- Training AI to Library ontology
- Offers natural language query to simplify searches

Build Relational Maps

- Al model builds maps on Components, Topics, Glossary Terms & Organizations
- Maps are refined using human feedback

Partner for Common Ontologies

- Al spiders out to websites with expected relevant content
- Al compares library ontology with others
- Al identifies best fits for aligning library with potential partners

Major Milestones / Lessons Learned

- Challenges of finding easily accessible and accurate information at websites websites generally not connected, some have pay walls, some not kept up when funding ends
- There are more competing information resources / libraries
- Co-pilot bots are coming on strong are they / will they be reliable?
- Challenges of updating library content
- Overwhelming there is a lot of mostly discrete information challenges of synthesis
- AI changes how we find and interrelate with information need navigation pathways

Learn & Work

■ ECOSYSTEM LIBRARY ■

https://learnworkecosystemlibrary.com/

Holly Zanville - hollyzanville@gmail.com
Matthew Valdez - librarian@learnworkecosystemlibrary.com

For Discussion

- Where do you go to get information on topics such as these?
- Is anyone else doing something like this?
- Do you see the Library helping you with your efforts?
- How could we let your grantees know about the Library (e.g., what other efforts are working in areas they are to expand collaboration, leverage funds, find glossary terms)?