Learn & Work Ecosystem Library

Workforce Matters Workshop

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

1. Credential Transparency
   - Credential Engine
   - Credential Registry
   - Open-platform schemas and languages

2. Alignment and Alliances
   - State/regional projects
   - Military (DoD, Navy)
   - Policymakers (funding)
   - Credentials of value
   - Aligning bachelor’s degrees and industry-recognized certifications
   - T-Profile builder

3. Drive and Connect Systems
   - Credential Engine: Credential Registry Learn and Build Summit Series (tags)
   - TD Innovation Network (10 pilot projects)
   - Workforce: Data-sharing among organizations toward non-degree credentials
   - Non-Degree Credential Research Network
   - Understanding the landscape of industry certifications

4. Understanding Credentials of Value
   - State identification of credentials of value
   - Public-private education’s credentialing data infrastructure
   - Credential Registry use in Eligible Training Provider List and other eligibility determinations
   - Incremental higher education credentialing system framework
   - Social/Technical education

5. Employers/Workforce
   - Jobs Data Exchange
   - Talent Pipeline Management Initiative
   - Competency/ability competency catalog
   - Hiring for competencies/skills
   - Workforce Partnership Initiatives

6. Navigation Tools and Verification Quality
   - Digital learner records
   - The Quality Assurance Corners
   - Google Education and Pathways Search

7. Messaging about Credentialing System
   - Gallup surveys
   - Media messaging
   - Research number of credentials

2018 - 2020
Lumina Foundation – The Learn and Work Ecosystem
An updated map of the learn-and-work highway (Blog)
Holly Zanville • Jan. 23, 2020
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 learn-and-work ecosystem
Connecting Education & Work
Informing the evolving learn-and-work ecosystem

Use Our AI Library Assistant

Topics (94)
Important subjects or themes which define and describe the learn-and-work ecosystem
View All →

Initiatives (309)
Key projects working to improve the learn-and-work ecosystem
View All →

Organizations (275)
Alliances and intermediary organizations working to improve the learn-and-work ecosystem; some focus in 1-2 areas, others on many areas of the ecosystem
View All →
## Growth in Content

<table>
<thead>
<tr>
<th></th>
<th>12/1/22 Launch</th>
<th>06/10/24</th>
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<tbody>
<tr>
<td>Key Components</td>
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<td>12</td>
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<td>Subcomponent Topics</td>
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<td>95</td>
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<td>Glossary</td>
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<td>300</td>
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<tr>
<td>Initiatives/Projects</td>
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<td>310</td>
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<tr>
<td>Organizations</td>
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<td>277</td>
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<td>Relational Maps (prototypes)</td>
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<td>New content/wiki request forms</td>
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<td>Correction requests</td>
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</tbody>
</table>
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
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
- 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 – Orijn
- 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 (AICEF) in a SNAP Network — CAEL
- Adult Learning & Literacy Network (ALLN)
- ADVANCE Integrated Education and Training (IET)
- Advancing Equity and Upward Mobility through Community College-Employer Partnerships (ACE-UP)
- AI Education Policy & Practice Ecosystem Framework – WCET
- AI 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
- Advirsa
- AFL-CIO Working for America Institute (WAI)
- African American Mayors Association (AAMA)
- Albert Shanker Institute
- Alliance for Excellent Education (ALEC)
- 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 Health Information Management Association (AHIMA)
- American Indian Higher Education

**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
- Apprenticeships
- Articulation/Transfer
- Artificial intelligence (AI), Generative AI, & AI Prompts
- Asian American and Native American Pacific Islander-serving Institution (ANAPISIs)
- Assertion
- Assessment
- Assessment in Bridging
- AED
- 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
Second Example
Third Example
3 Developments

- Research Center
- Special Projects
- AI Library Assistant
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.

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.
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.

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

**FOCUS CATEGORY: PROGRAMMING**

**February 7, 2024**

The Power of Learn-and-Earn Programs

Jane Swift | President, Education at Work
Special Projects

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

USER GROUP SPECIAL PROJECT: JOURNALISTS’ GUIDE TO USING THE LEARN & WORK ECOSYSTEM LIBRARY
05/31/2024
Read More »

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

USER GROUP SPECIAL PROJECT: CREDENTIAL FUTURES CONSORTIUM (CFC)
05/05/2024
Read More »

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

**Partner for Common Ontologies**
- AI spiders out to websites with expected relevant content
- AI compares library ontology with others
- AI 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/

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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)?