

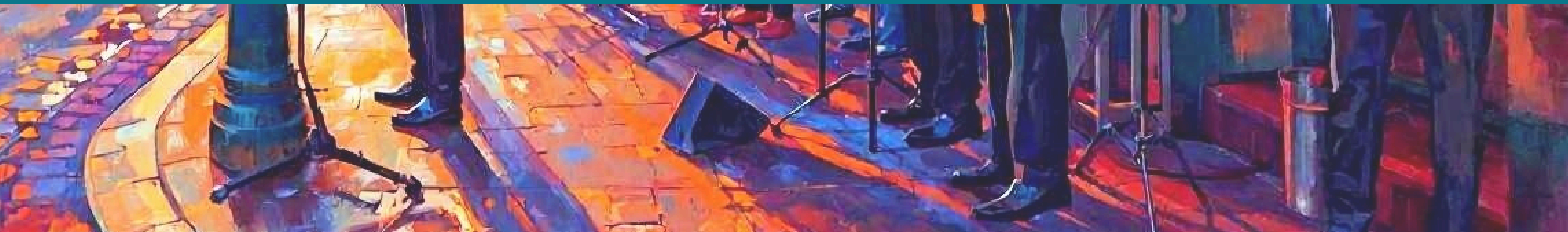
PESCC[®]

APRIL 2026 DATA SUMMIT

NEW ORLEANS
APRIL 22-23



WELCOME & OPENING REMARKS





OPENING REMARKS



Monterey Sims
PESC Board Chair



Hillary Halpern
PESC Summit Committee Chair



APRIL 2026 DATA SUMMIT

WELCOME

Social Media:

Please share your photos and experience from the summit using the following tags:

#PESCapr26summit

#PESCComposingSmarterDataSolutions

You are welcome to tag PESC and the PESC Event team on LinkedIn:

@Postsecondary Electronic Standards Council

@Dennis Becker

@Melissa Buckley

@Mark Cohen

@Bryant Faust

@Hillary Halpern

@Alex Jackl

@Jennifer Kim

@Michael Sessa

@Monterey Sims

@Jodi Tavares

@Vivian Wong

NEW ORLEANS | APRIL 22-23, 2026

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GOLD SPONSOR



Marten Roorda
Senior Advisor,
Gates Foundation





STANDARDS & AI: A CRITICAL PARTNERSHIP



Brandon Dorman
AI Expert & Solutions
Architect,
EDUcore Project



Hillary Halpern
Sr. Director of Program
Deployment,
University of Phoenix



Alex Jackl
Chair, DSU
CEO & Founder,
BardicSystems



David K. Moldoff
Founder & CEO,
ACADEMYONE, INC.



DSU REFERENCE LIBRARY



Martin Roorda
Senior Advisor,
Gates Foundation



Brandon Dorman
Solutions Architect,
EDUcore Project



Alex Jackl
Chair, Data Standards United (DSU),
CEO & Founder, BardicSystems





ALIGNING THE EDUCATION DATA ECOSYSTEM



Martin Roorda
Senior Advisor,
Gates Foundation

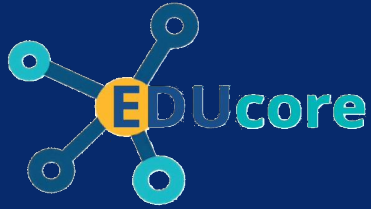


Vivian Wong
Group Vice President,
Oracle Higher Education



Alex Jackl
Chair, Data Standards United (DSU),
CEO & Founder, BardicSystems





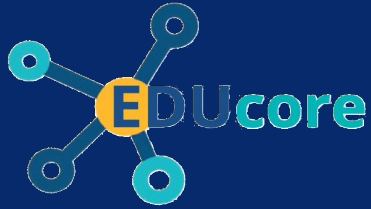
Ecosystem Alignment

PESC · APRIL 2026

We've spent decades building data standards in education—PESC, CEDS, Ed-Fi, A4L/SIF, IMS/1EdTech, Credential Engine, T3, and others—each solving real problems for real constituencies.

But the people who have to *consume* our collective output—districts, states, vendors, postsecondary institutions, workforce systems—increasingly tell us the same thing: the standards landscape is a maze, not a map. EDUcore exists to propose a different posture: not another standard competing for mindshare, but a coordinating layer that lets existing standards interoperate without forcing anyone to abandon what already works.

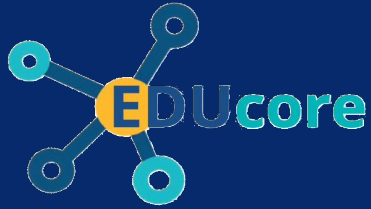
Before I tell you what we think EDUcore should do, **I want to hear from you.** The questions that follow aren't rhetorical—your answers will shape whether this effort succeeds or becomes another well-intentioned artifact.



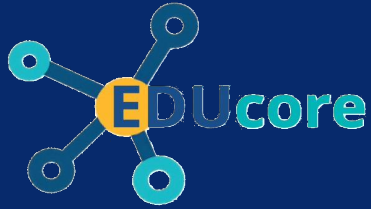
When a district or vendor asks you "which standard should I use?", what do you actually tell them—and how often do you wish you had a better answer?



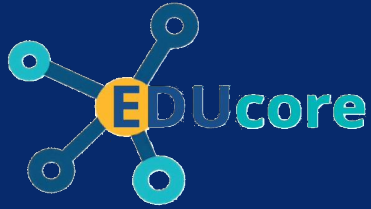
Where have you seen two standards bodies solve the same problem differently, and what did it cost the field? Be specific.



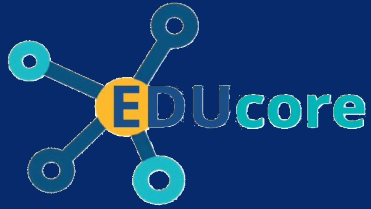
If EDUcore succeeds, what becomes less necessary in your organization's work? (If nothing, we're probably not being ambitious enough.)



What's the failure mode you're most worried about for an effort like EDUcore?



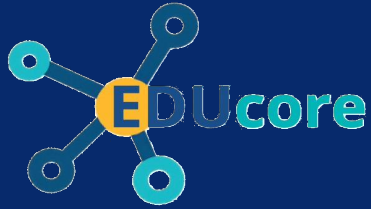
Who in this ecosystem has the least voice today, and what would it take to get them to the table—not symbolically, but with actual influence on decisions?



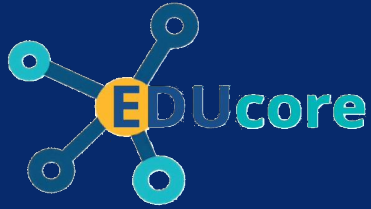
Where is the line between
"healthy standards competition"
that drives innovation and
"fragmentation" that just burns
implementer time? How do we
know which we're looking at?



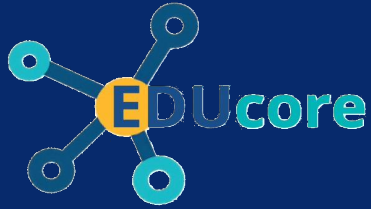
What's one concrete interoperability problem—pick something you've personally hit—that you'd want EDUcore to demonstrate it can solve in the next 12 months?



If your organization had to give up something to make EDUcore work—governance authority, a data model, a naming convention, funding—what could you actually let go of, and what's non-negotiable?



What signal would tell you, two years from now, that EDUcore worked? And what signal would tell you it's become the thing it was built to replace?



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What question should I be asking this room that I haven't asked?

Ecosystem Map

Education	Education Technology Vendors	Military	Workforce	Government	Health	Learning & Employment Records	Big Tech/ Hyperscalers
Adult Education		Transition to civilian life	Fed & State Compliance Report	Fed & State Compliance Reporting	Clinical data & Med Portals	Wallets	
Workforce Training					Continuous Ed & Certifications		
Post secondary		TLA/ELR	Position (employer) & Skills (employee)	Regulations & Policy	workforce training & development	Employment Records	
K-12							
Pre-K		KSATS	Payroll Taxes	Support to states, local	Child health (vaccines & allergies)	Learning Records	

How meaning flows through EDUcore.

CLICK, TAP, OR PRESS TO ADVANCE

STEP 0 / 7

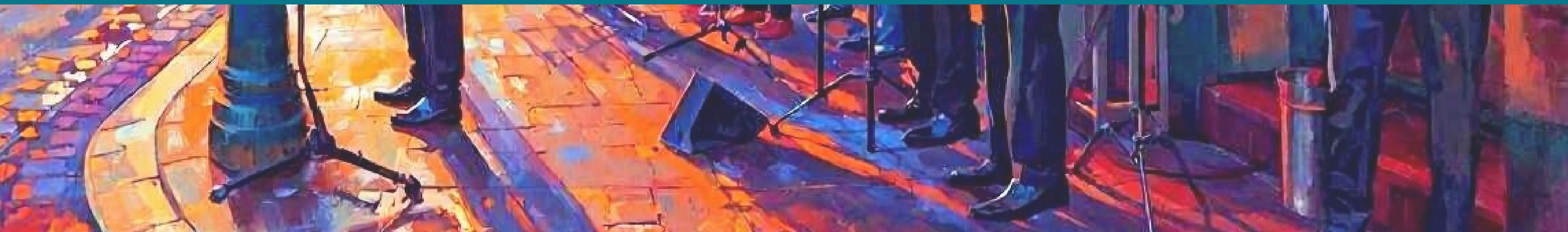
Click the stage to begin.

RESET

START ▶



WELCOME DAY 2





LER'S, AI, AND THE INTEROPERABILITY GAP IN ADMISSIONS



Melanie Gottlieb

Executive Director,
AACRAO



From Record to Recognition

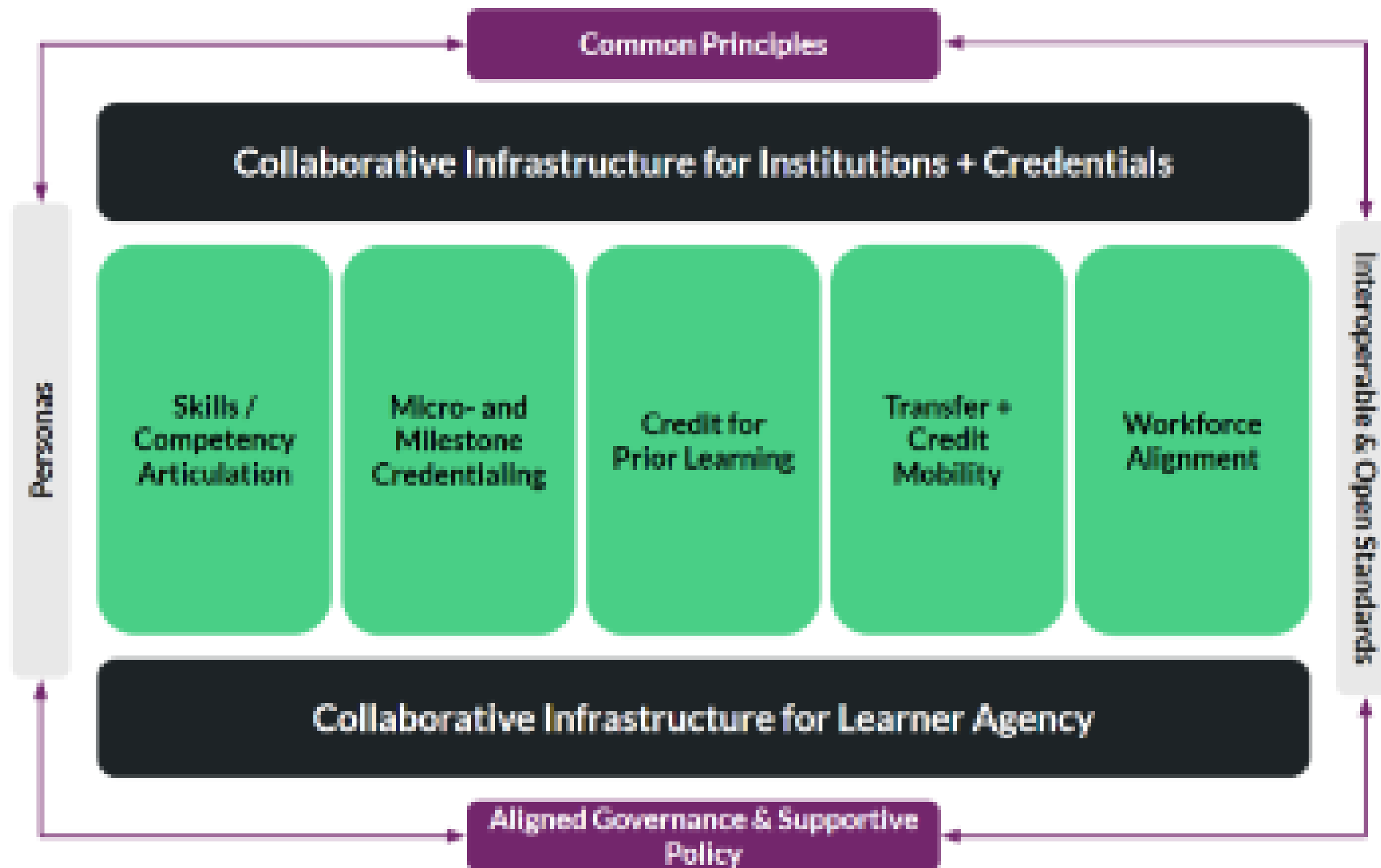
LERs, AI & the Interoperability Gap



Melanie Gottlieb, AACRAO



LEARNING MOBILITY FRAMEWORK



Developed in partnership with AACRAO, Strada Education Foundation, and Education Design Lab for discussion by the Arizona Learning Mobility Collaborative / Creative Commons License 4.0

Learner-Centered: Prioritizing the unique needs and goals of the learners' experience.

Interoperability and Open Standards: Advocates for a seamless data flow, open standards and common frameworks for learning mobility.

Value of Higher Education: Spotlights the role of higher education for enhancing critical thinking, skills acquisition, personal growth, and economic prosperity.

Equitable Opportunities: Removes barriers that impact the learning experience.

LER Accelerator Coalition Members



Project support from StrategyForward
ADVISORS

Principles of LER Adoption

Designed for All Users

LERs should be accessible, inclusive, and user-friendly, ensuring engagement across diverse backgrounds and abilities with clear feedback processes and equitable access to technology.

Skills-Centered and Competency-Focused

LERs should clearly define and validate skills, knowledge, and achievements across education, work, military, and alternative learning, with verifiable performance evidence.

Accessible and Boundless

Individuals should have full access and control over their LER, regardless of institutional or organizational ties.

Centered on Learner Agency

Users should fully control their LERs, managing, storing, sharing, and protecting their credentials across platforms while maintaining privacy and security.

Privacy Protected and Secure

LERs must safeguard personal data through compliance with security standards, ensuring transparency, user consent, and trust in the system.

Collaborative

LERs should be developed and managed with input from institutional and external stakeholders to maximize impact and usability.

Interoperable

LERs should use open, interoperable standards to enable seamless data exchange across platforms, institutions, and industries.

Able to Provide Assurance of Identity and Achievement

LERs should follow best practices to verify learner identity, credential ownership, and the validity of credential metadata.

Updatable and Time-Delineated

LERs should allow issuers to update, revoke, or expire credentials as needed.**

**Note that LERs issued as verified credentials may not be updated once digitally signed. Modifications require reissuance, and some issuers may choose to revoke before reissuing.



NO MACHINE READABILITY

Paper transcripts
Plastic ID cards, etc.

MACHINE READABLE UNSTRUCTURED DATA

PDF transcripts
Smart ID cards, etc.

MACHINE READABLE STRUCTURED DATA

Electronic transcripts
Badges

**MACHINE READABLE STRUCTURED DATA
INCREASED DIGITAL AUTHENTICATION**

CLR 1.0
Open Badges <=2.0

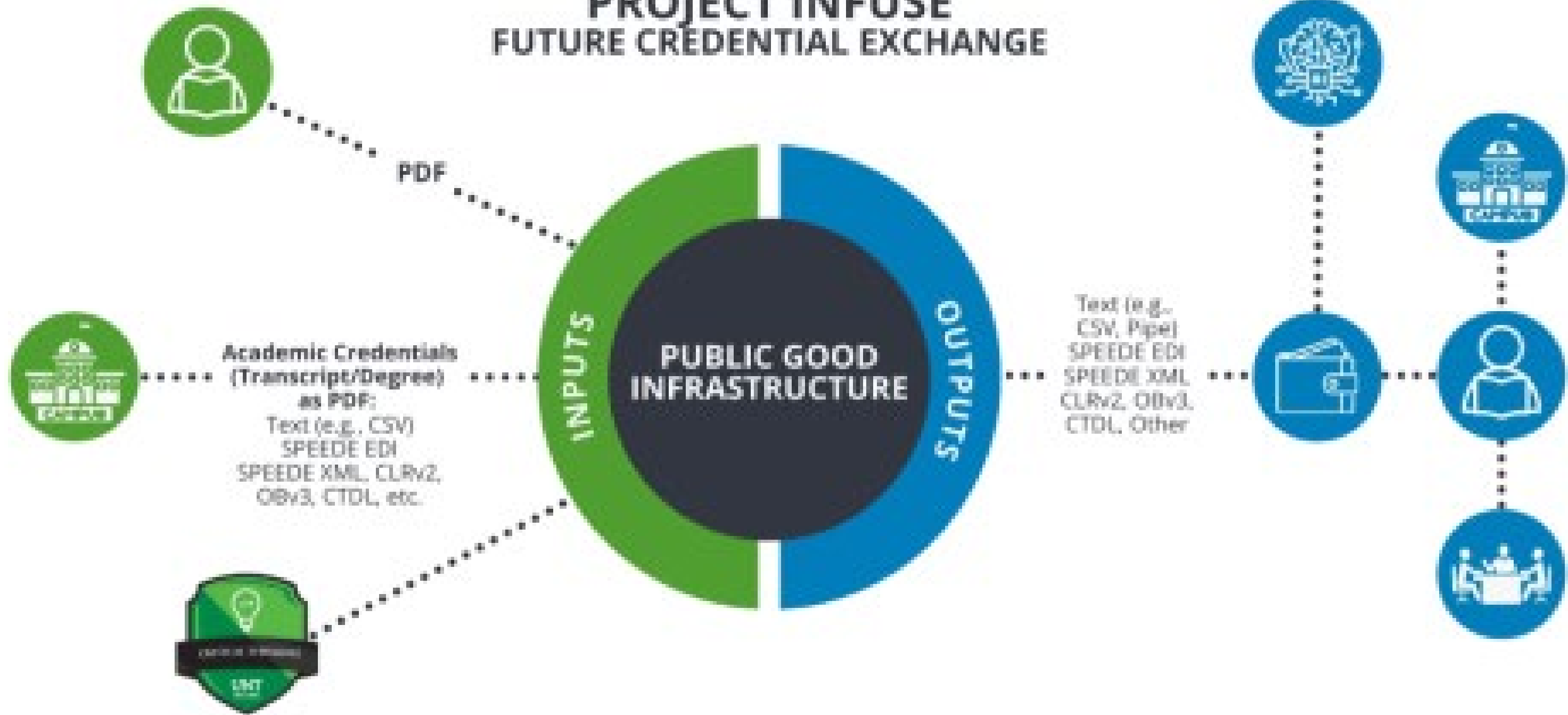
**MACHINE READABLE STRUCTURED DATA
TAMPER EVIDENT
DIGITALLY SIGNED
PRIVACY PRESERVING**

W3C Verifiable Credentials
CLR 2.0, Open Badges 3.0

DIGITAL CREDENTIALS

INCREASINGLY DETAILED METADATA

PROJECT INFUSE FUTURE CREDENTIAL EXCHANGE



BUILDING A CAMPUS COALITION FOR LER SUCCESS

EXECUTIVE LEADERSHIP

Provide strategic oversight, ensuring cross-campus alignment, authority, and resources to sustain your LER initiative.

CONTINUING, PROFESSIONAL & ONLINE ED

Often lead credential innovation for adult and workforce learners. Bring critical expertise and often manage non-degree credentials not captured in traditional systems.

REGISTRAR & ENROLLMENT MANAGEMENT

Serve as institutional stewards of academic records and policies. Ensure new credentials uphold institutional integrity and trust.

ACADEMIC AFFAIRS, FACULTY & CURRICULUM

Safeguard academic quality and help integrate credentials into curriculum design and learning outcomes.

IT LEADERSHIP

Ensure infrastructure supports credential interoperability, security, and scalability.

CAREER SERVICES & EMPLOYER RELATIONS

Align credentials with employer needs, shaping content and formats that resonate in hiring.

INSTITUTIONAL RESEARCH & EFFECTIVENESS

Measure impact, uptake, and alignment with institutional goals like equity and student success.

STUDENT AFFAIRS & CO-CURRICULAR PROGRAMS

Capture learning beyond the classroom, using trusted frameworks to credential leadership, engagement, and wellness.

ASSESSMENT & ACCREDITATION

Ensure alignment with quality standards and help anticipate compliance needs.

LEARNING SUPPORT & LIBRARIES

Enhance credential literacy, manage access to tools, and support digital archiving.

ADVISERS & STUDENT SUCCESS PROFESSIONALS

Guide learners in understanding and applying credentials in academic and career contexts.

LEARNER REPRESENTATIVES

Offer vital perspectives on usability and value, ensuring credentials meet real user needs.

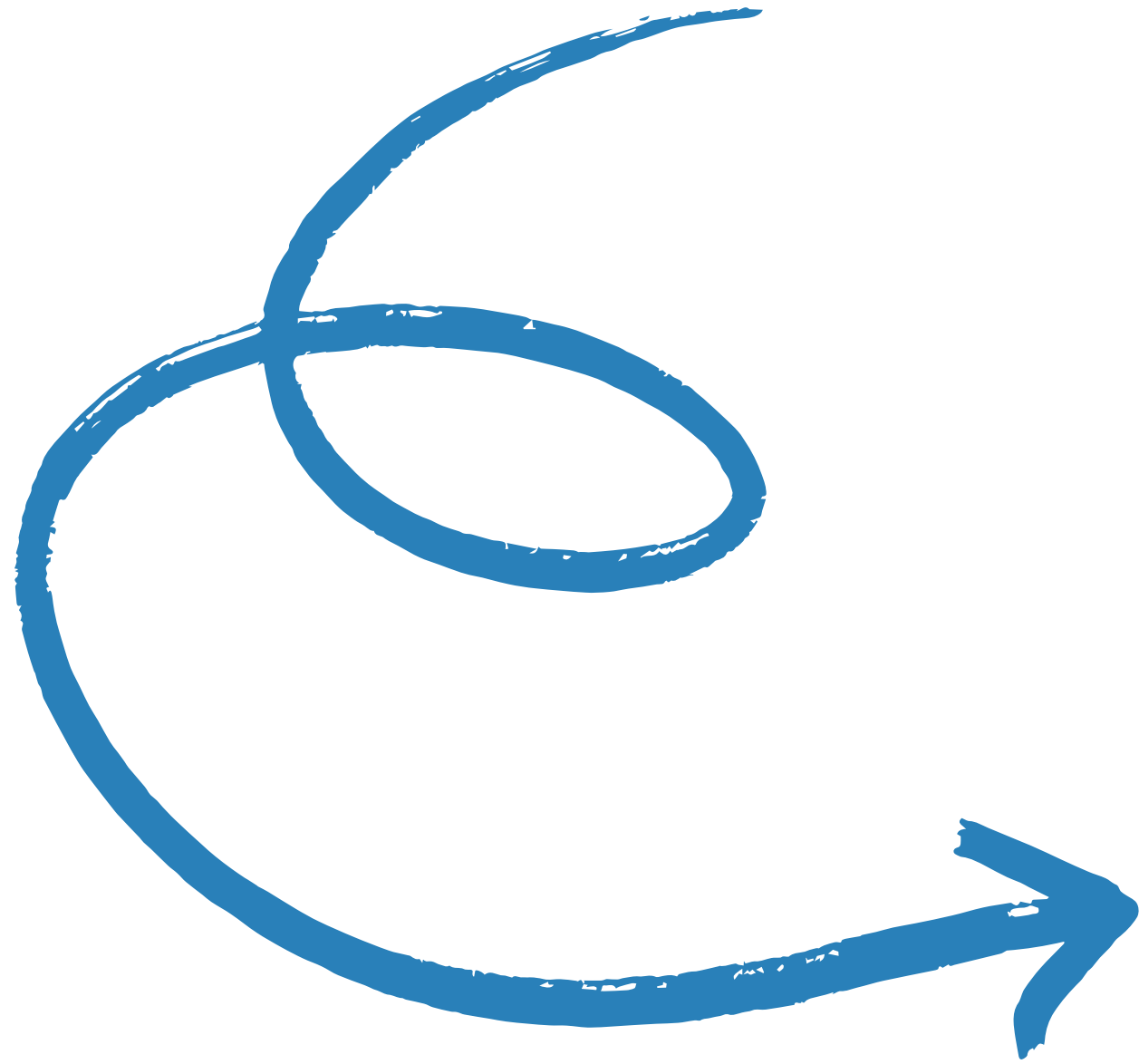
OFF-CAMPUS STAKEHOLDERS

Help ensure your LER efforts are aligned with labor market demands and public priorities.





LER ACCELERATOR



LEARNING
MOBILITY
ACCELERATOR



Accelerated
Processing
Times

Reduced
Fraud and
Increased
Security

Streamlined
Transfer and
Articulation

The Promise of Transformation

Comprehensiv
e Assessment

Improved
Efficiency

Enhanced
Learner
Experience

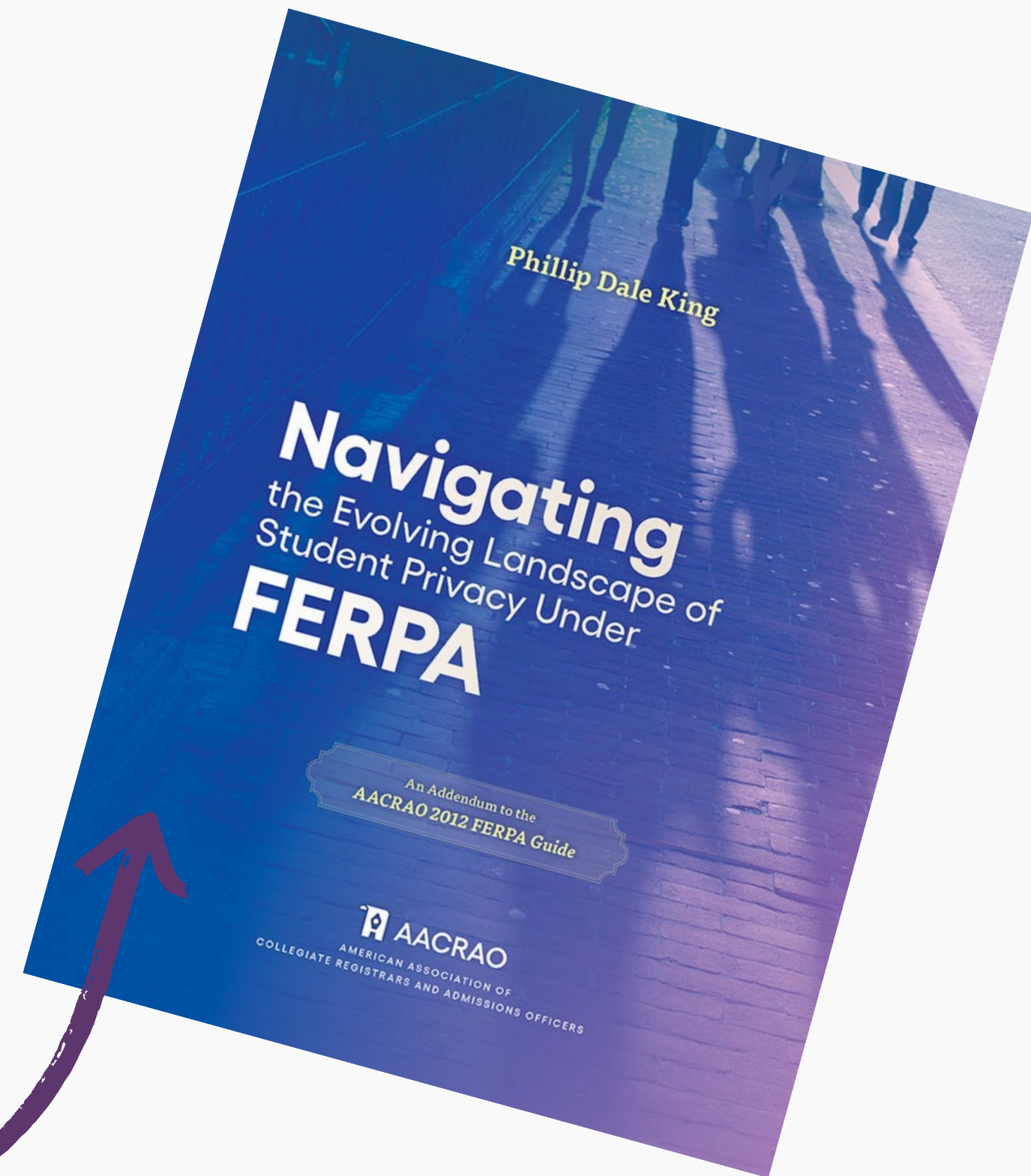




**AACRAO members
are the custodians of
foundational data for
models**

1. Algorithmic Bias
2. Data Privacy and Security
3. Lack of Transparency
4. Policy Contradictions

Emerging tools to support decision making and evaluation



AACRAO's Technical Advisory Council

Purpose

- Provides expert, forward-looking guidance on digital learner records and emerging technologies
- Advises AACRAO on content, programming, and strategic initiatives

Focus Areas

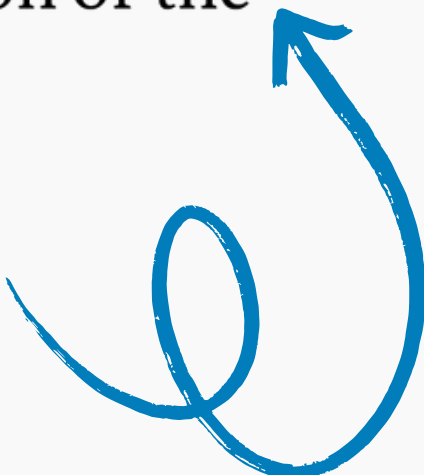
- Advancing secure, equitable, and interoperable data systems
- Promoting best practices in data privacy and security
- Supporting learning mobility across and beyond higher education
- Addressing technical and psychological barriers to data exchange

Role & Impact

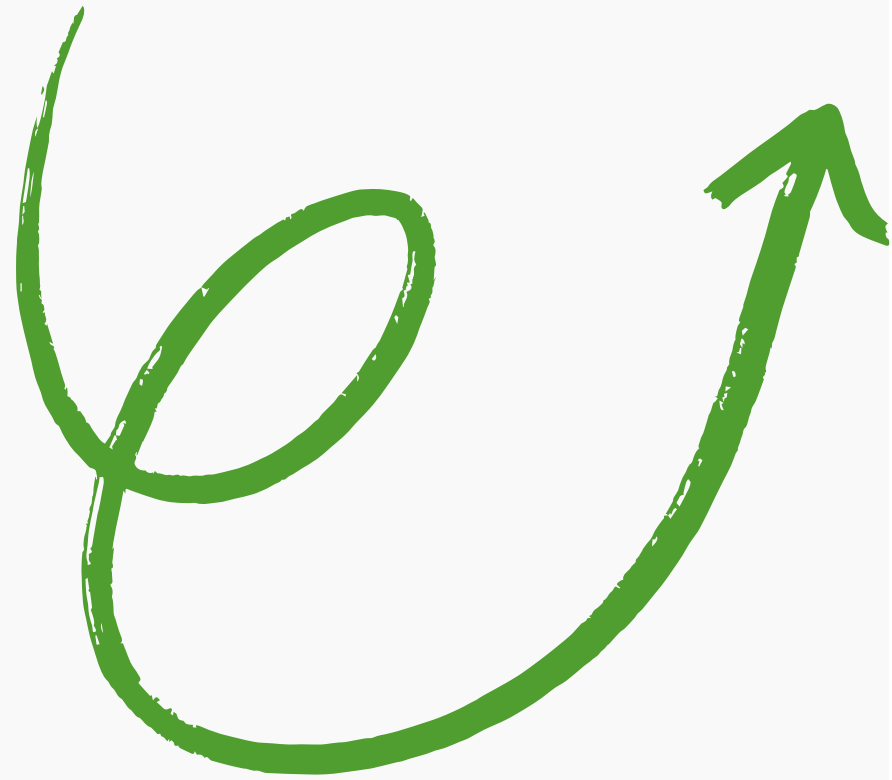
- Anticipates trends and shapes the future of student records
- Promotes data standards and innovation across the credentialing ecosystem
- Supports an inclusive, trusted data-sharing environment in the U.S.

Membership

- Volunteer leaders in student records, ed tech, and data management
- AACRAO members and broader ecosystem
- Appointed by and serve at the discretion of the AACRAO Exec. Director



Global Insights for Local Impact



Catalyzing a Network of Networks

- Knowledge, Change, Readiness & Adoption
- Funding & Business Models
- Governance
- Conventions, Regulations & Policy
- Data Exchange Schemas, Interoperability & Standards
- Quality Assurance Recognition & Assessment



Catalyzing a Network of Networks

- Knowledge, Change, Readiness & Adoption
- Funding & Business Models
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- Conventions, Regulations & Policy
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- Quality Assurance Recognition & Assessment





GDN Network Regional Meeting – Manchester, UK

Skills Without Limits: Developing the Future Skills Ecosystem

2–3 June 2026 | Manchester Metropolitan University | Manchester, UK



LOUISIANA COMMUNITY AND TECHNICAL COLLEGE SYSTEM (LCTCS)



Erin Landry
Executive Director,
Louisiana Community and
Technical College System
(LCTCS)



Melissa Buckley
Senior Director of Strategy
and Market Insights,
National Student Clearinghouse





GOVERNING A NATIONAL DIGITAL CREDENTIAL NETWORK



Sarah Ghys
Customer Success
Manager,
Parchment by Instructure



Jodi Tavares
Executive Director,
MyCreds | MesCertife



Governing a National Digital Credential Network: A Canadian Federated Case Study

PESC Data Summit April 2026

Jodi Tavares, Executive Director MyCreds/MesCertif

Sarah Ghys, Customer Success Manager, Instructure

MyCreds.ca  MesCertif.ca[®]

Instructure.



Introductions

Jodi Tavares
Executive Director
MyCreds/MesCertif



Sarah Ghys
Customer Success Manager
Instructure

Instructure.



Setting the Stage

- MyCreds is owned by a national non profit
- Governed by its members
- Powered by Instructure's Digitary CORE technology



We Solved Interoperability...

So why isn't everyone connected?

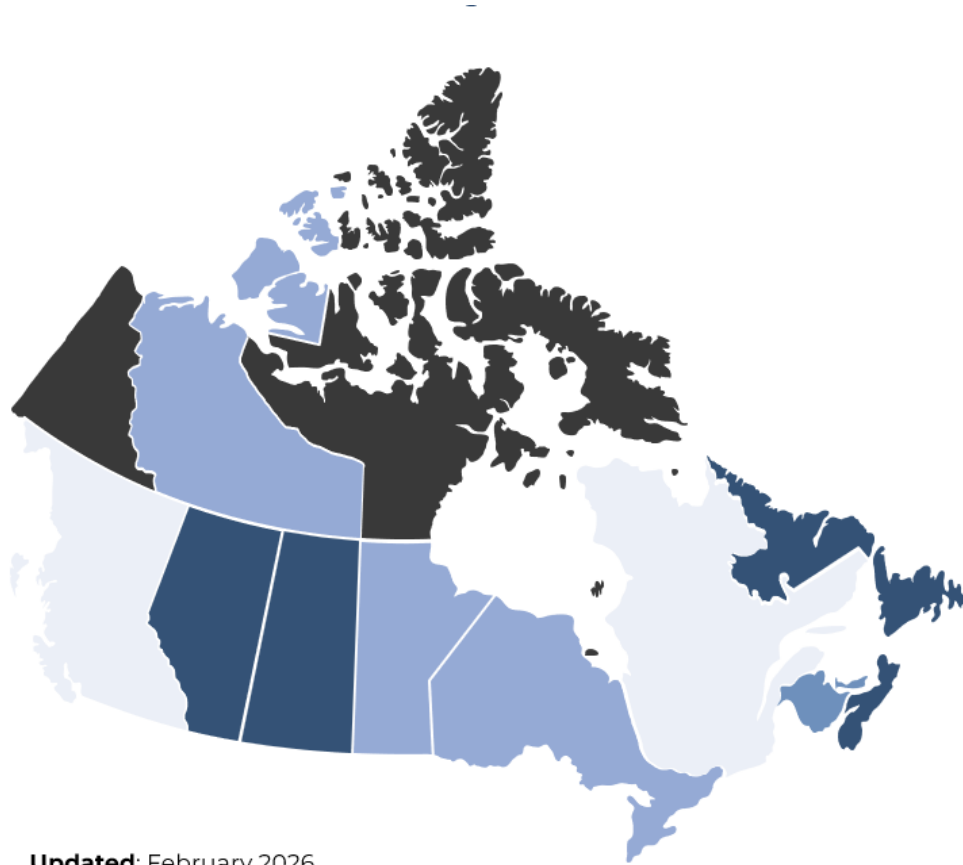
Standards exist

Technology exists

Adoption is uneven

Because interoperability is not the hard part anymore — governance is.

What National Adoption Looks like

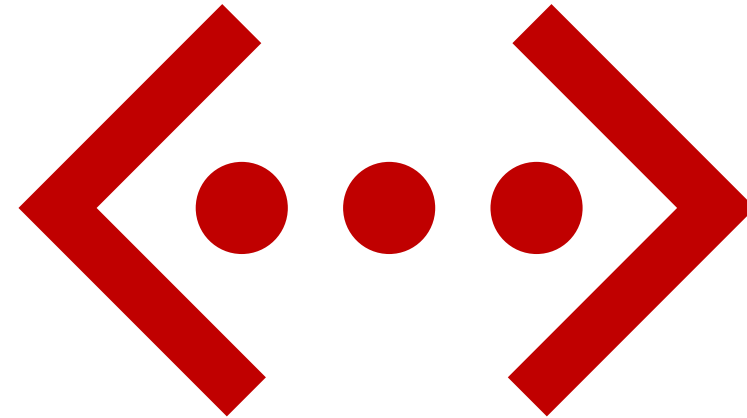


Updated: February 2026

- 91% adoption across national post secondary & trade
- 176 organizations/institutions
- 4.3M documents issued
- 7M documents shared/picked up
- 100,000+ microcredentials issued
- 1.82M credential holder accounts

Interoperability + Adoption

- Publishing standards ≠ participation
- Networks fail when:
 - governance is unclear
 - incentives are misaligned
 - costs are uneven



Digital Credentials are Infrastructure



Not files — systems



Not exchange — ecosystems



Governance determines:

trust

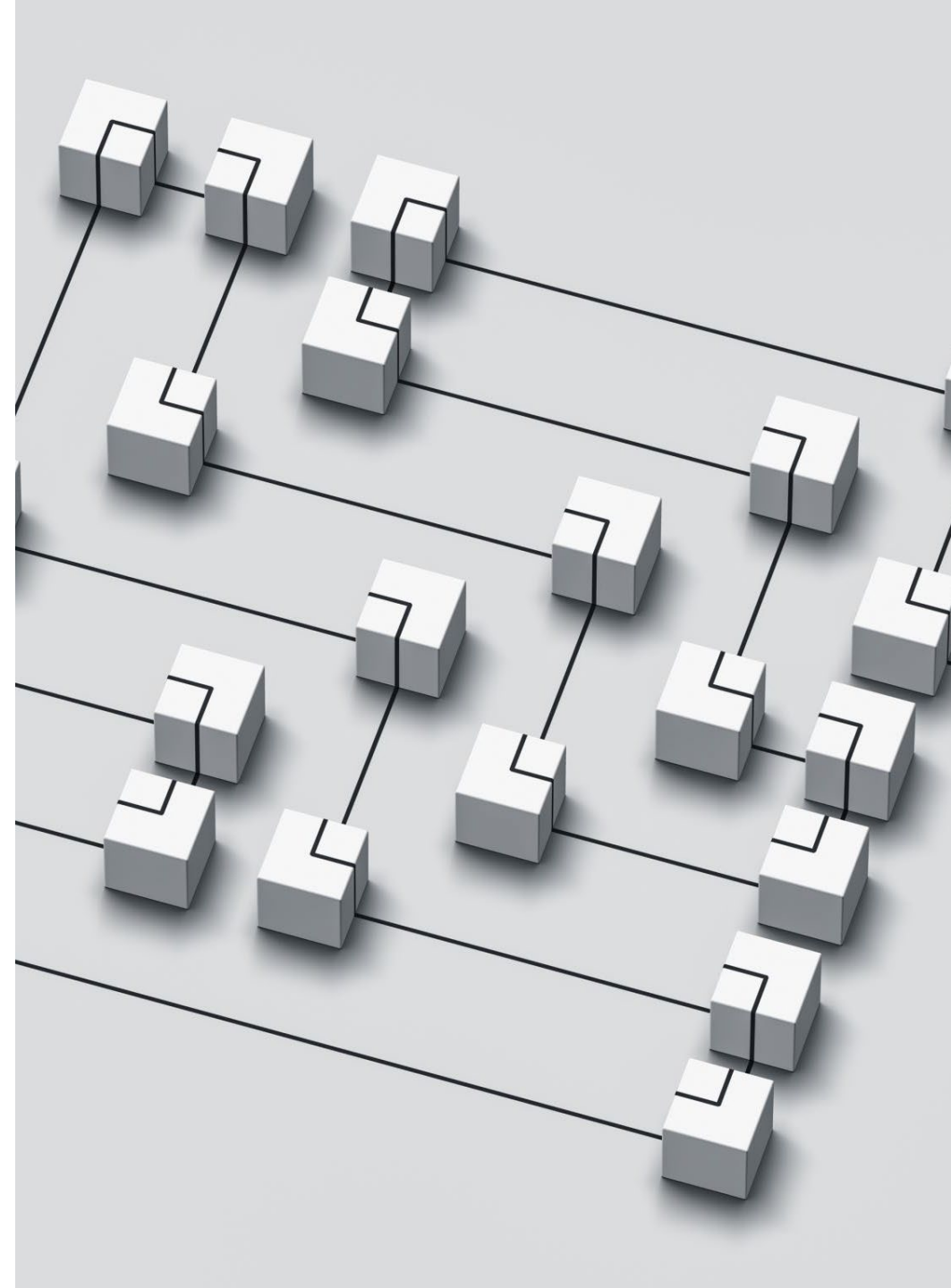
scale

sustainability

Case Study Context

The Canadian Model

- National network
- Provincial jurisdiction complexity (education is not federal)
- No central mandate
- Built through collaboration
- Sector owned
- Supported by contracted technical providers

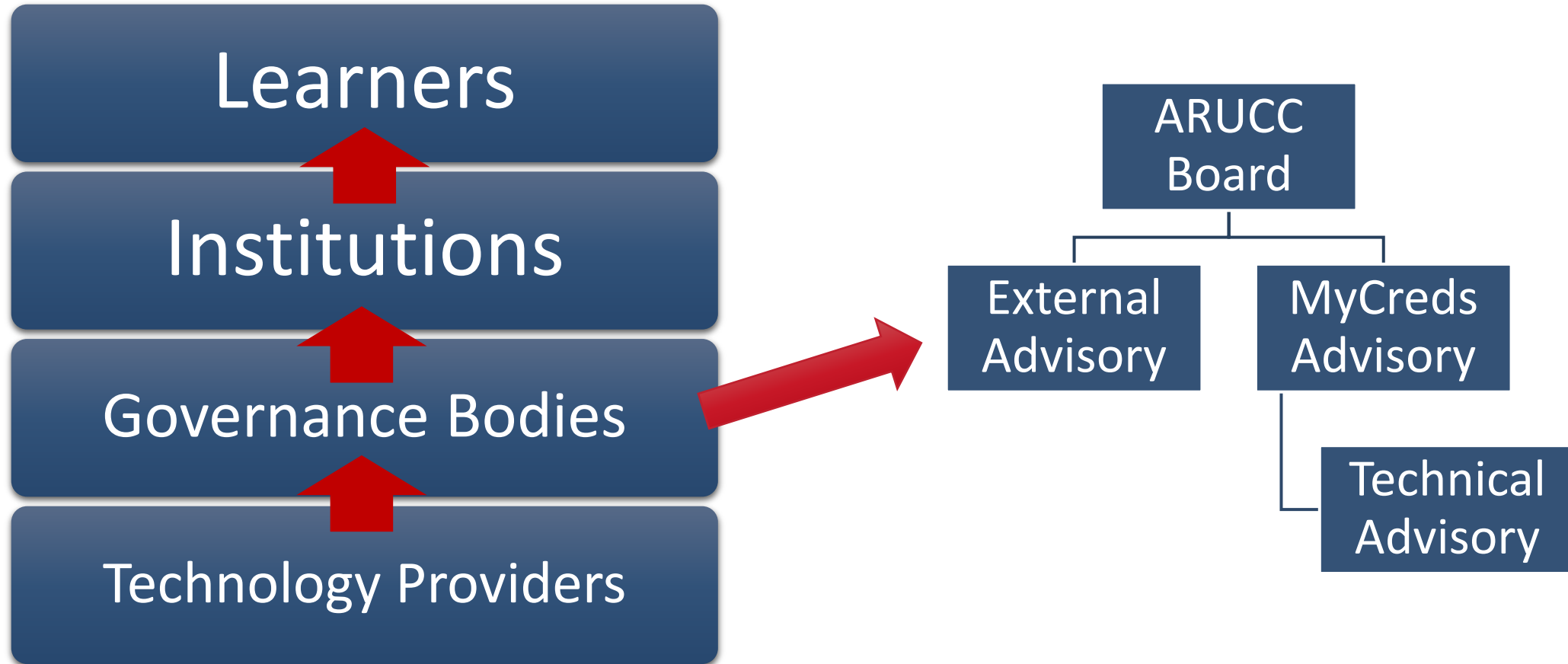


Centralized vs Federated

MyCreds chose trust over control

Centralized	Federated
Control	Coordination
Speed	Durability
Uniformity	Flexibility
Compliance	Trust

How the Network Actually Works



The Questions that
Matter

Who owns it?

Who pays?

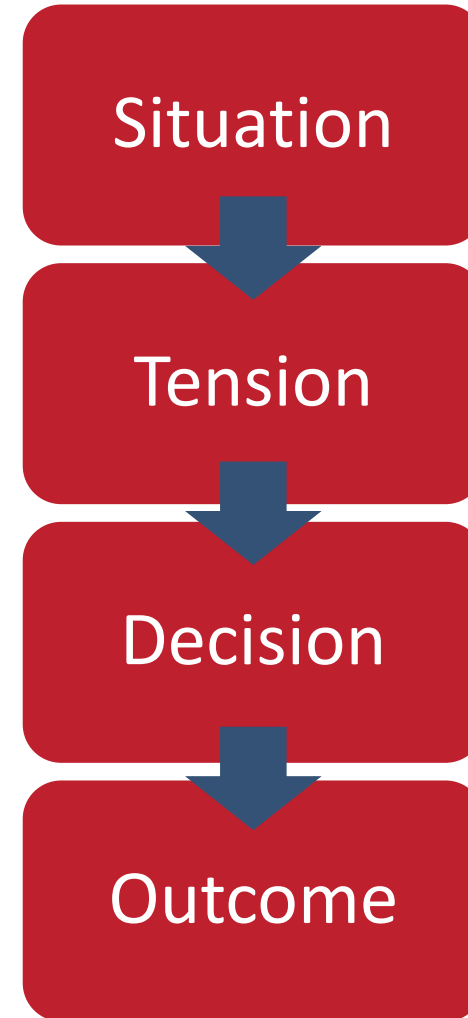
Who decides?

Who is accountable?

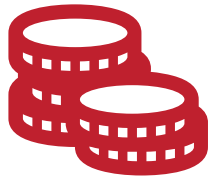
Who gets left out?

A Real Governance Tension

- Institutions wanted security
- Learners wanted speed
- Verifiers wanted trust
- Need for national consistency
- Tension between speed vs consensus



Funding a Shared System



Cost-sharing approach



Avoiding:

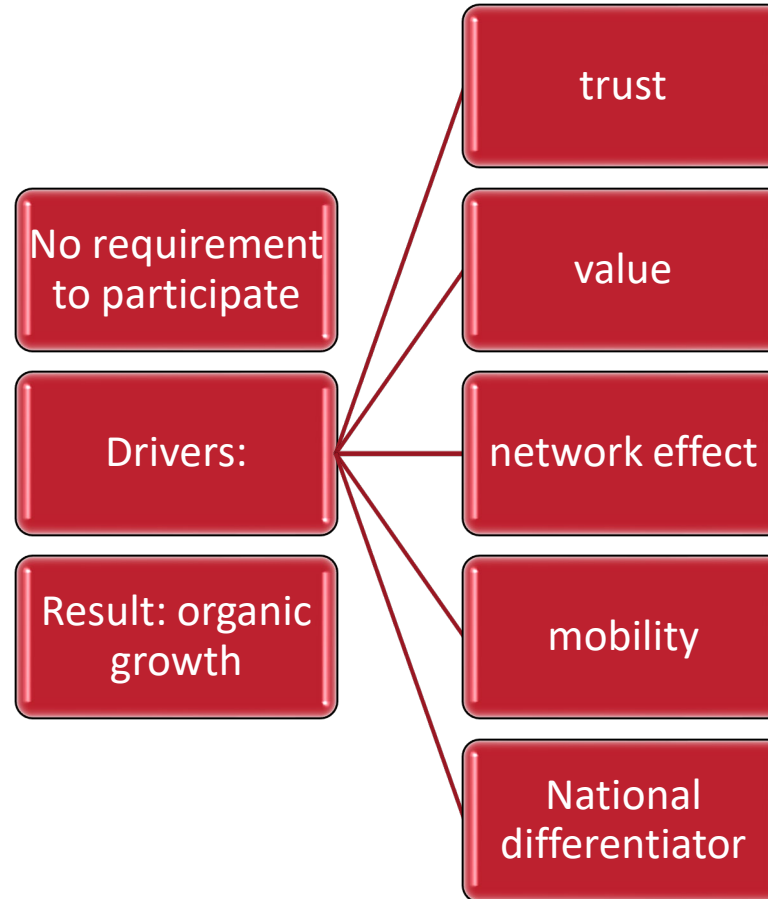
vendor lock-in
reliance on grants



Balancing:

affordability
longevity

Why Institutions Joined



Avoiding a Two-Tier System

- Risk: smaller institutions excluded
- Response:
 - Shared onboarding
 - Cost considerations
 - Coordinated support
 - Targeted programming



Where Governance Meets Technology



Maintaining consistency without control



Standards vs implementation realities



Integrating across:

SIS diversity
Vendor ecosystem

Future Pressures



AI-ENABLED FRAUD



CREDENTIAL SPOOFING



GLOBAL VERIFICATION
DEMANDS



WORKFORCE CREDENTIAL
CUSE

Technology changes, governance endures.



Systems fail at governance, not technology



Governance determines:

Resilience

Trust

Scalability

Key Takeaways

1

Interoperability is necessary, not sufficient

2

Governance is infrastructure

3

Federated models build trust

4

Equity must be intentional

5

Sustainability must be designed

Building Systems that Last

Trust > control

Coordination >
mandate

Governance >
technology



Questions

MyCreds | MesCertif Icons

Copy & Paste the Icon you'd like to use to your slides.

Transcripts

Parchment

Confirmation
Letter

Award


Attestation Letter

Badges

Micro-Credentials

Trade Level or
Accreditation





JSON-LD TRANSCRIPT WORKGROUP UPDATE



Jim Kelly
Principal,
Jim Kelly Technologies





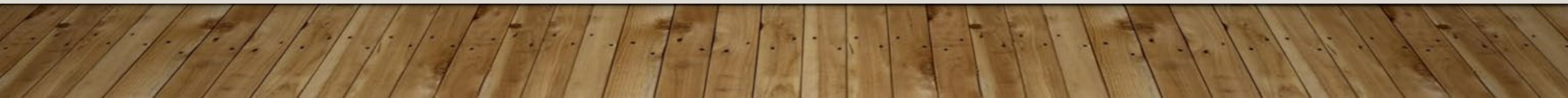
[learn more](#) →

APRIL 2026 DATA SUMMIT

NEW ORLEANS
APRIL 22-23

Begins immediately following the AACRAO Annual Meeting

JSON-LD Transcript Workgroup Roadmap for Release



A QUICK LOOK BACK AT WHY WE ARE MOVING TOWARD A JSON-LD TRANSCRIPT

- **Use Case-Driven Flexibility** – JSON-LD adapts to realworld integration needs rather than enforcing a rigid, prescriptive standard.
- **Evolving Data Models** – Instead of requiring extensive updates or versioning, JSON-LD allows models to evolve naturally as new requirements emerge.
- **Context-Driven Semantics** – By leveraging context, JSON-LD enables dynamic data representation, reducing friction in system integration.
- **Interoperability Without Constraints** – Organizations can extend and align their data models without being locked into predefined structures.
- **Supports Innovation** – The flexible nature of JSON-LD fosters innovation by making data exchange more adaptable and responsive to changing requirements.



WHAT HAS BEEN OUR PATH SO FAR

- Identified First Standard -> T ranscripts
- Organized a Workgroup -> JSON-LD Transcript Workgroup
- Designed a *Flat* Standard
- Creating Supporting Documentation...

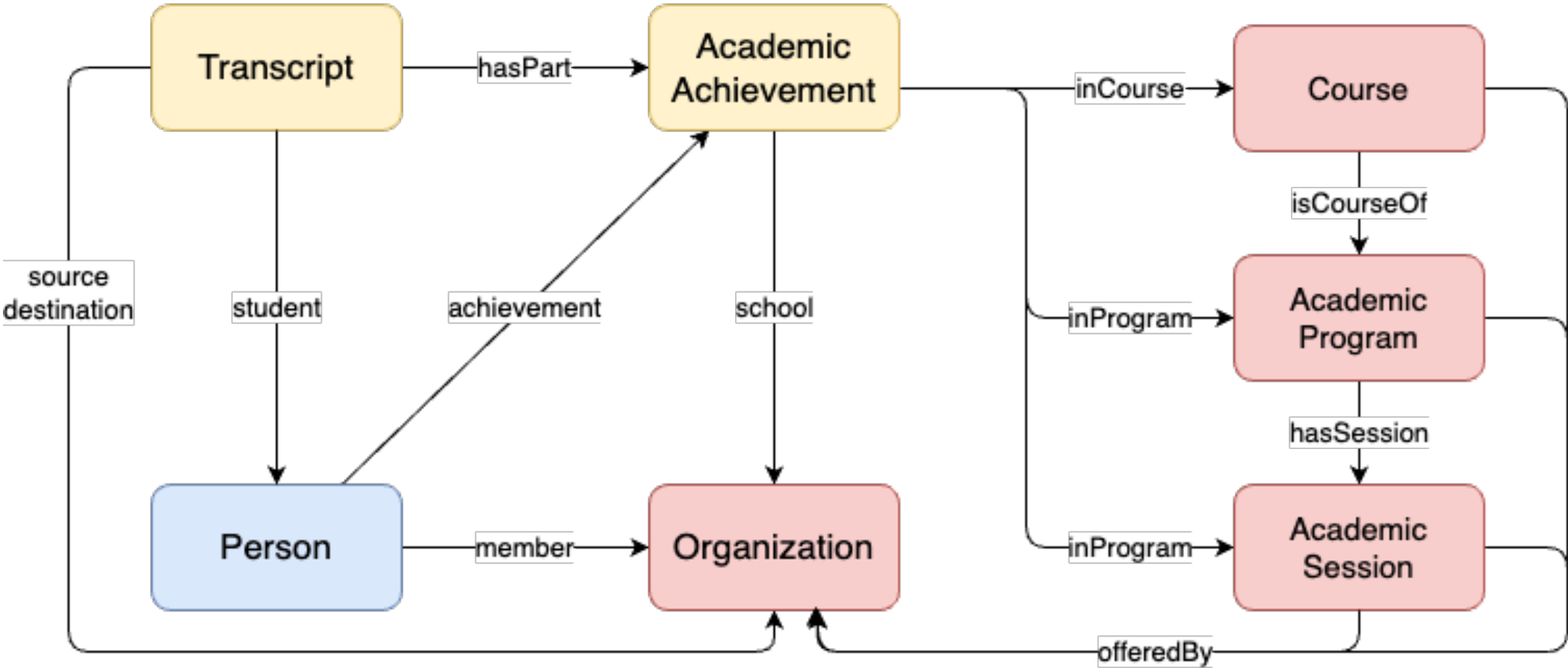
WHAT WE HAVE BEEN DOING ALL THIS TIME

Tasks

- Design Complete
- Tabular Application Profile (TAP)
- Context File
- SHACL Specification
- JSON-LD Instances/Test Cases
- Diagrams
- Simple Overview
- Technical Overview
- **Detailed Model**
- Implementation Guide
- JSON Schema
- JSON-LD Frame

PESC JSON-LD Transcript

Model in development, names of things may change.



OUR ROADMAP GOING FORWARD

- **Make any necessary changes to JSON schema**
- **Refine the DOT Generation program**
- **Create graphic files for Implementation Guide**
- **Merge XML Transcript language into the Implementation Guide**
- **Resolve any verification issues arising from the generation of machine-readable specification documents**



THE BLENDING OF CPL AND RPL WORKFLOWS WITH AI



David Moldoff
Founder & CEO,
AcademyOne.Inc



APRIL 2026 DATA SUMMIT

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Social Media:

Please share your photos and experience from the summit using the following tags:

#PESCApr26summit

#PESCComposingSmarterDataSolutions

You are welcome to tag PESC and the PESC Event team on LinkedIn:

@Postsecondary Electronic Standards Council

@Dennis Becker

@Melissa Buckley

@Mark Cohen

@Bryant Faust

@Hillary Halpern

@Alex Jackl

@Jennifer Kim

@Michael Sessa

@Monterey Sims

@Jodi Tavares

@Vivian Wong



NEW ORLEANS | APRIL 22-23, 2026

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CANPESC USER GROUP UPDATE



Doug Holmes

e-Transcripts Manager, Ontario
Universities' Application Centre
(OUAC), CanPESC Group Chair



CanPESC Update

Presenter

Doug Holmes

- Manager, eTranscripts

doug@ouac.on.ca

- Chair





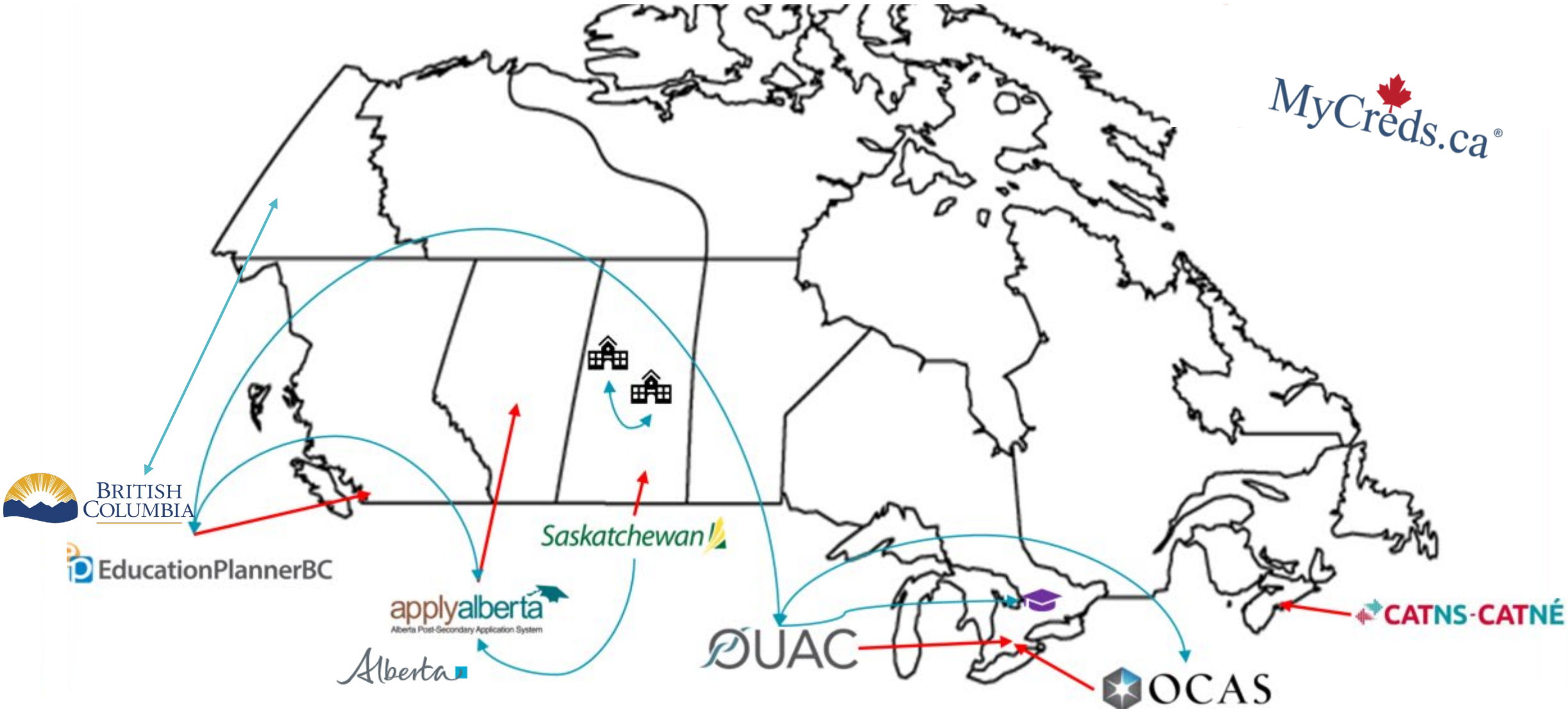
An Overview of CanPESC

- Canadian PESC [User Group](#) (est. 2011)
- Members from Canadian schools, hubs, government, vendors
- Discuss, promote, coordinate and liaise with groups such as:



- Straddle technical, functional and policy areas
- Meet via Zoom: 2nd Thursday, September through June

Canadian PESC Data Exchanges Supporting Admissions & Transfer



Lots of Transcript Data, but ...

- 1) Admissions & Transfer not the only use cases → still need other formats
- 2) PDFs (and paper) direct from senders or via 3rd party services
- 3) Multiple formats can be received for the same student. For example:
 - multiple schools in learning journey
 - systems/procedures allowing multiple formats to be sent
 - user behaviour (order & fulfillment)



PDF (and Paper) Transcripts

- Easy to send and to receive (initially)
- Additional complexity for Admissions & Transfer
 - Typically, *sender-centric*
 - College / University: variable formatting, inclusion & ordering of content
 - High School: typically, government mandated, but vary by jurisdiction
 - Institutions emphasize branding, making uniqueness a feature
 - non-English content



Shifting focus to the receiver

- CanPESC's free Common Digital Layout (CDL) tool
 - both College & High School PESC XML transcripts
- Goals:
 - consistent *receiver-centric* format
 - common layout regardless of sender
 - reusable tools to quickly adopt without major IT investments
 - efficiency gains for Admissions & Transfer (and therefore the students!)



The Layout

- Minimally agreed-upon layout for most Admissions & Transfer use cases
- Emphasizes transcript elements which are typically most important
- Options to tailor layout, content & language to receiver's specific needs

OUAC
OrgID: 10000000000
RequestID: 2024052758015
OUAC RefNo: 20242166880

Georgian College
CSIS: 353900

Issued On:
2024-05-27

Student	Degrees/Diplomas/Certificates Awarded	Academic Summary
<p>College Diploma Degree/Diploma date: April 26, 2024 Level: Postsecondary Certificate or Diploma (one year or more but less than four years)</p> <p>Middle Name: [REDACTED] Date of Birth: [REDACTED] Gender: Unreported [REDACTED]</p>		

Session:	Degrees/Diplomas/Certificates Awarded	Academic Summary
<p>Start Date: [REDACTED] End Date: [REDACTED] Designator: 2024-04</p>	<p>College Diploma Credential: College Diploma Level: Postsecondary Certificate or Diploma (one year or more but less than four years) Program Name: [REDACTED] Distinction: [REDACTED] Degree/Diploma date: April 26, 2024</p>	

Course Information						
Course	Title	Value	Earned	Grade	Grade Scale	Quality Points Earned

Session: Fall 2021	Program	Undergraduate GPA: 69.67
<p>Start Date: September 7, 2021 End Date: December 17, 2021 Designator: 2021-09</p>	<p>Practical Nursing (2.5 yr dip) Field of Study: Practical Nursing (2.5 yr dip)</p>	<p>Credit Hours Earned: 10.5 Credits: Semester Range Minimum: 1.00 Range Maximum: 100.00 Note: NOTATION SUM03=Y</p>

Course Information						
Course	Title	Value	Earned	Grade	Grade Scale	Quality Points Earned
BIOL 1001	Anatomy and Physiology-Intro Note:	3	3	69	89	207
		Basis: Regular Units: Semester Level: Undergraduate				
NRSNG 1004	Intro to Health and Wellness Note:	3	3	66	89	198
		Basis: Regular Units: Semester Level: Undergraduate				
NRSNG 1005	Profession of Nursing 1 Note:	3	3	74	89	222
		Basis: Regular Units: Semester Level: Undergraduate				
NRSNG 1026	Clinical Preparations Note:	1.5	1.5	P	99	
		Basis: Regular Units: Semester Level: Undergraduate				

Session: Winter 2022	Program	Undergraduate GPA: 89
<p>Start Date: January 10, 2022 End Date: April 22, 2022 Designator: 2022-01</p>	<p>Practical Nursing (2.5 yr dip) Field of Study: Practical Nursing (2.5 yr dip)</p>	<p>Credit Hours Earned: 9 Credits: Semester Range Minimum: 1.00 Range Maximum: 100.00 Note: NOTATION SUM03=Y</p>

Course Information						
Course	Title	Value	Earned	Grade	Grade Scale	Quality Points Earned
COMM 1016	Communication Essentials Note:	3	3	89	89	267
		Basis: Regular Units: Semester Level: Undergraduate				
GNED 1044	Sports and Society Note:	3	3	89	89	267
		Basis: Regular Units: Semester Level: Undergraduate				
BIOL 1002	Anatomy and Physiology - Adv. Note:	3	3	89	89	267
		Basis: Regular Units: Semester Level: Undergraduate				

Additional Value-Adds

- Opportunity for use with other formats by adding transformation pre-step(s)
- Coupled with data extraction, also allows PDF transcripts to be transformed
 - Nuance: as with data exchange, receiver still limited to data included in the content from, or referenced by, the sender. However, increasingly PDF and paper transcripts include less than optimal PII for records matching



- Example opportunities for AI & CDL collaboration:
 - Data extraction (learning the incoming PDF layouts and content)
 - Data transformation (*draft* crosswalks between formats, rules automation, etc)
 - Data translation of human languages (specifications, data content, etc)



CanPESCC CDL Docs



bit.ly/canpesc-cdl



Thank You!

Questions?

Contact Doug (doug@ouac.on.ca)



**AI + DATA
STANDARDIZATION
TO SUPPORT
SCALE**



Hillary Halpern
Sr. Director Program Deployment,
University of Phoenix



Embedding AI in the Learning Environment: Data Standardization to Support Scale

Hillary Halpern, Senior Director of Program Deployment



University of Phoenix®
CAREER WITH CONFIDENCE™

The Why Behind This Initiative



Why

Our students and faculty need immediate, reliable support embedded directly within the learning environment; without adding friction, cost, or cognitive load.

How

By embedding governed, role-aware AI assistants into the LMS, powered by structured data and interoperable standards.

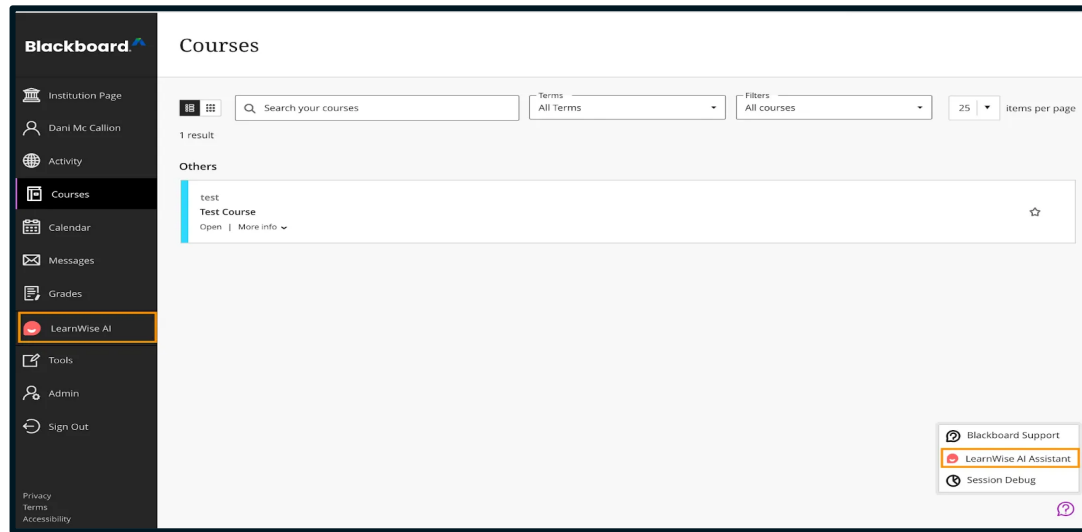
What

AI assistants that support students and faculty in real time while generating structured, reusable data to improve services, policy clarity, and decision-making at scale

Before We Begin a Few Key Points

- What you are about to see was implemented in the span of ~6 months
- Almost no institutional engineering support was used to reach current state
- Current maintenance and support for all three assistants are done at the functional subject matter expert level
- Experiences are currently available to over 100,000 combined users between students, faculty, and staff
- **None of this would have been possible without data hygiene and data standards**

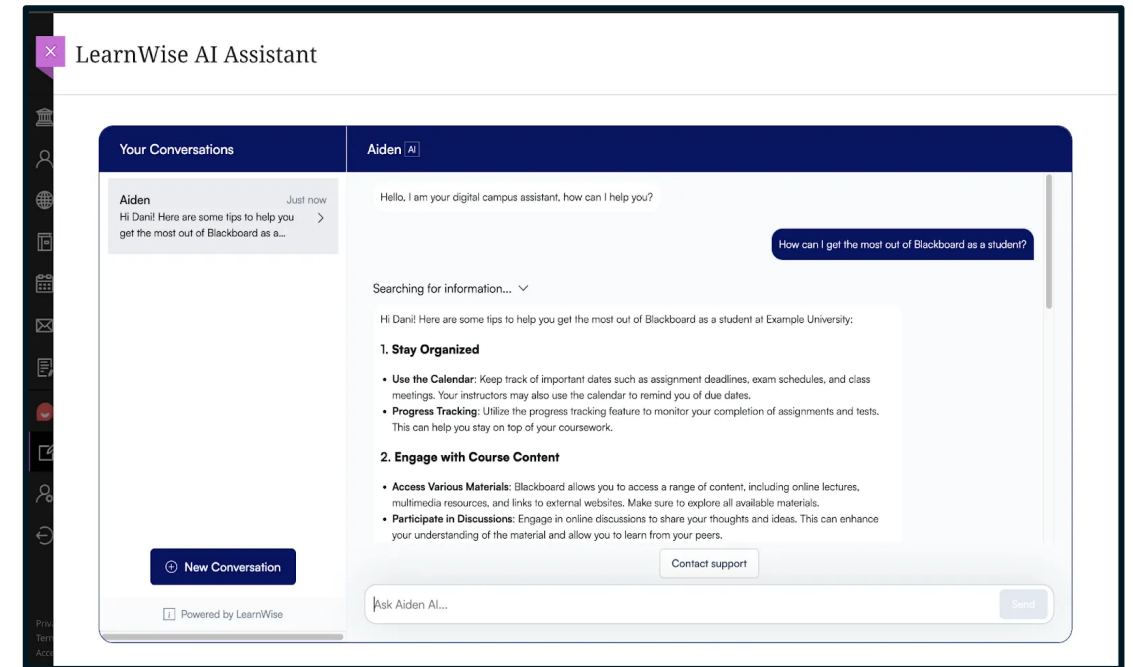
What is Learnwise and Benefits



Learnwise is a generative AI platform designed for higher education that integrates directly into the Blackboard LMS via LTI. It enables embedded, role-aware AI assistants without requiring custom engineering.

Key Benefits

- No custom engineering required
- Role-based assistants with governed knowledge segmentation
- Administrative tools for tuning, knowledge management, and risk mitigation
- Interoperable integrations with core EdTech systems
- Designed to reduce hallucinations and misrepresentation risk

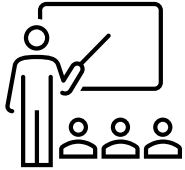


Use Cases



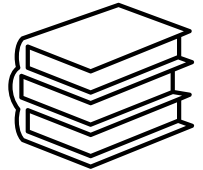
General Student Support

A general AI assistant embedded in Blackboard that supports academic services–related questions and directs students to appropriate resources or staff.



General Faculty Support

A faculty-specific AI assistant supporting teaching-related questions, policies, and resources directly within the instructional environment.



Course-Level Support

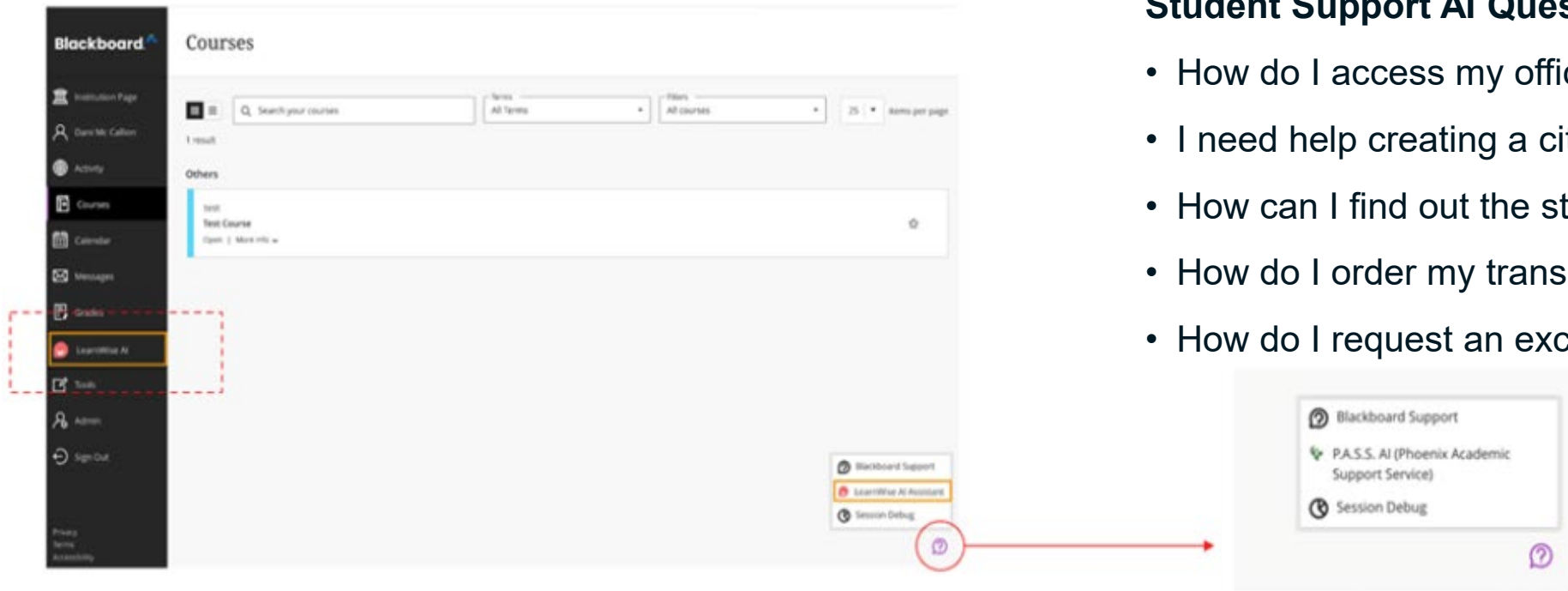
A course-specific assistant that supports students with content, assignment clarification, and curriculum-related questions tied to the course they are enrolled in.

****Shared Problem****

Support resources exist but students and faculty lack real-time, contextual access to them inside the learning environment.

General Student Experience

General Student-support AI assistant focuses on students' support needs, this agent can answer general questions related to the University, while directing them to supporting resources and/or staff. Resources commonly found on phoenix.edu and the student portal (MyPhoenix) are available to this assistant to meet students where they are when they need it. By meeting students where they are, this assistant reduces time-to-answer, improves consistency, and lowers support escalation volume.



Student Support AI Question Examples:

- How do I access my official grades?
- I need help creating a citation
- How can I find out the status of my SAC appeal?
- How do I order my transcripts?
- How do I request an excused absence?








PASS Demo Video

The screenshot shows a chat window titled "Phoenix Academic Support Service (PASS) AI for Courses". The chat content includes:

- Instructions: "Visit the National Student Clearinghouse Transcript Ordering Center." and "Complete the order process as directed."
- Tip: "Before ordering your official transcript, it's a good idea to check your unofficial transcript in the portal to make sure all your coursework and grades have posted."
- Link: "For more detail, you can also review the University of Phoenix transcripts information page."
- Help: "If you have any issues or need further help, you can reach out to the Registrar's Office or check the Find a Record page for more guidance."
- Feedback: "Let me know if you need help with anything else related to your courses!" with a "Score" input field.
- Suggested questions:
 - "Would you prefer to order your transcript online through the student portal or through the National Student Clearinghouse?"
 - "Do you need to verify that your unofficial transcript is up to date before ordering an official transcript?"
 - "Are you looking to request an official transcript or an unofficial transcript?"
- Search: A search bar with the text "Can you help me find an article?".
- Disclaimer: "This AI Assistant is in a beta state. AI answers are not perfect, please double check any critical information during the beta period."
- Privacy: "All chats may be monitored, recorded and used by the University and the Service Provider powering this chatbot, as described in our Privacy Policy at www.phoenix.edu/privacy. If you do not consent, please use a different communication method."

Themes for Student Support Assistant

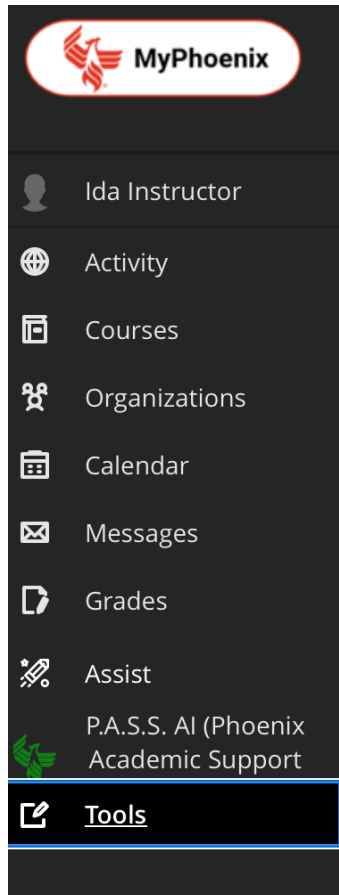
Most Common Interactions:

-  Course Schedule & Academic Planning
-  Library/research related items
-  Graduation (when, how to be eligible, etc.)
-  How to access textbooks
-  Learning activity – support (citations and/or use of AI)
-  Transcripts / Unofficial Grade Requests
-  Grades – what's a passing score for this course?

These interactions generate structured insights into unmet student needs, policy confusion, and service friction

Faculty Experience

The Faculty Support AI assistant focuses on faculty needs by answering policy, process, and teaching-related questions while directing faculty to the correct resources or staff when escalation is required.



Faculty Support AI Question Examples:

- What is the policy for late assignments?
- How do I post an IX grade?
- Where can I find a list of available faculty workshops?
- What is the AI policy?
- Where is the faculty handbook?

Faculty PASS AI (BETA)

Hello I am the virtual Phoenix Academic Support Service (PASS) AI assistant for faculty. How can I help you?

For best results please submit full questions or provide detailed inquiries. Additionally, for coaching support or other matters tied to faculty performance please consult your faculty supervisor, as their feedback or direction supersedes any information I may provide.

[What are the Support Services That I Can Offer](#)

I can help you with a variety of general faculty support questions related to the University of Phoenix, such as:

- Directing you to faculty-specific resources, such as those found on the faculty portal or faculty Sharepoint for teaching support, classroom management, and best practices
- Clarifying university policies and procedures as outlined in the 2026 Faculty Handbook.
- Providing suggestions on classroom announcements or handling basic classroom scenarios and workflows
- Assisting with questions about course structure, available programs, and career-relevant skills tied to specific courses (based on official university sources)
- Explaining general university policies and procedures
- Supporting you with writing mechanics, such as grammar and spelling, if you provide your own content
- Reviewing general math scenarios such as evaluating equations for accuracy; explain basic math concepts; and review algebra problems like walking through algebraic expressions and equations
- Helping you find articles or information that are directly posted on the University library, or point you to library support to help find sources that may live on external databases or websites

However, I do not have access to individual faculty records and do not offer support for faculty supervision actions. Additionally, my knowledge is generally contained to University of Phoenix resources and websites, so I may not be able to provide an answer to questions that fall outside the domain of the University. If you have a question that I can't answer, I will do my best to direct you to the appropriate faculty resource or contact page.








Sources

Ask Faculty PASS AI (BETA)...

▼ This AI Assistant is in a beta state. AI answers are not perfect, please double check any critical information and rely on your standard faculty resources during the beta period.

Themes for Faculty Support Assistant

Most Common Interactions

-  Academic Integrity & AI Use (fast growing)
-  Student Accommodations - ADA/Title IX
-  Grading, Late Work & Policies
-  Technology & Systems - Blackboard + Tools
-  Templates, Messaging & Communication
-  Escalation & Compliance Pathways
-  Course Operations & Faculty Requirements

** These interactions highlight policy ambiguity, compliance pathways, and high-friction operational tasks**

Course Experience

Course P.A.S.S. provides immediate, 24/7 support by guiding students to course resources, assignment clarity, course policies, and frequently asked questions—without completing graded work for them.

GEN_201_60307809
GEN/201: Foundations For University Success

Course Content

Course P.A.S.S. AI (BETA)
Phoenix Academic Support Service AI for Courses (BETA)

Using AI at UOPX
Visit the Center for AI Resources to explore tools, tips, and examples to help you thrive in an AI-powered world. Check back regularly for updates.

Earn Skills Badges in This Course!
Learn how to earn a digital badge, which will help you showcase your skills to current or future employers, friends, family, or colleagues before you even g

GEN/201: Foundations For University Success
Course P.A.S.S. AI (BETA)

Phoenix Academic Support Service (PASS) AI for Courses

Hello I am your virtual course support assistant, how can I help you with the course you are currently accessing and enrolled in?

For best results please submit full questions or provide detailed inquiries.

What are the services this AI assistant can provide? [Click on button for overview of services.](#)

Students can begin with typing full questions or detailed inquires.








Ask about your course content...

⌵ This AI Assistant is in a beta state. AI answers are not perfect, please double check any critical information during the beta period.

Focusing on students, Course P.A.S.S. appears within the classroom and helps students with content and curriculum-related questions directly tied to the course the student is enrolled in.

Themes from Course Assistant

Most Common Interactions

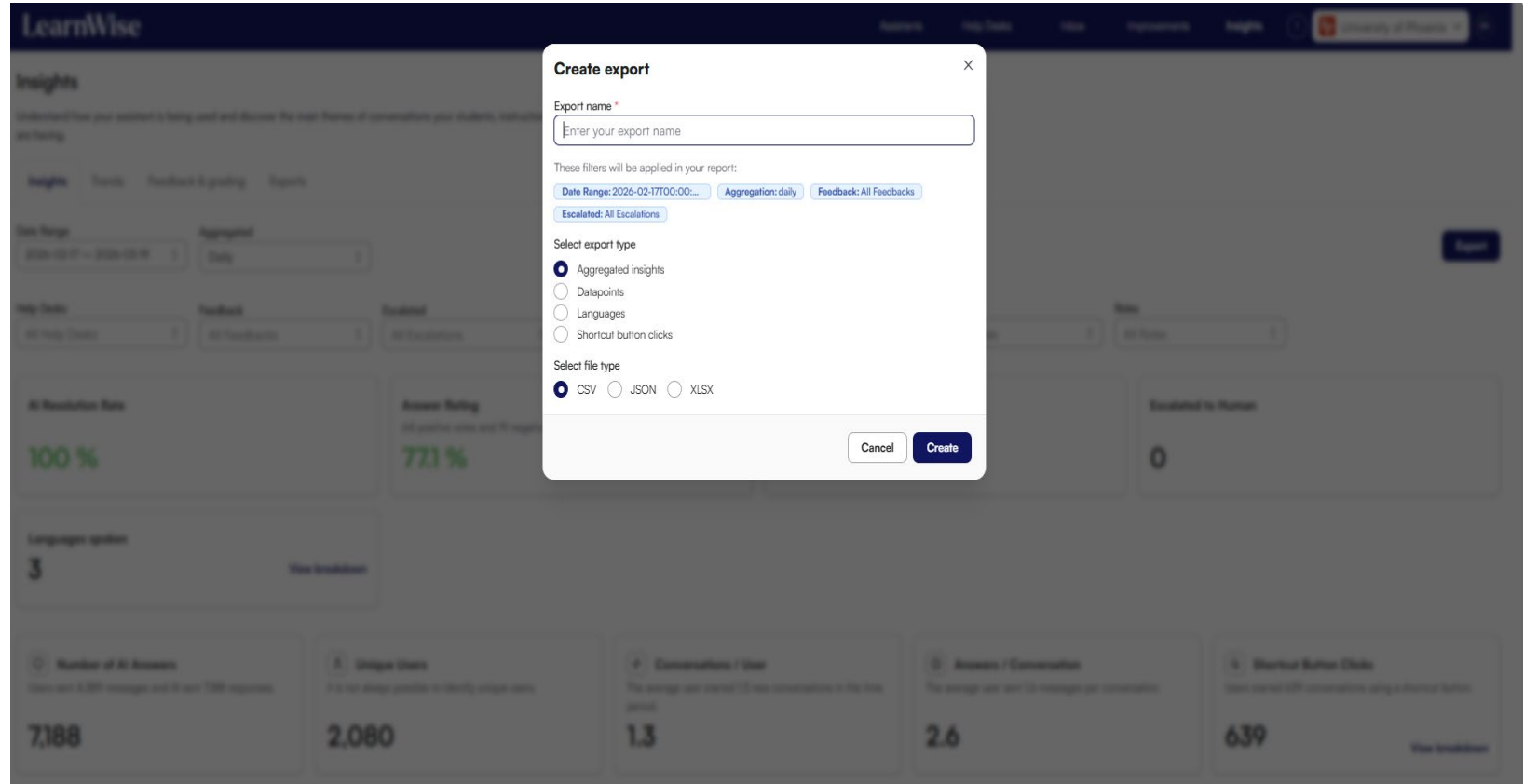
-  Assignment Clarity & Instructions
-  Getting Started & Brainstorming
-  Course Concepts & Understanding
-  Verifying Requirements
-  Discussion Support (Understanding)
-  Draft Refinement
-  Feedback interpretation & Improvement

Among students who used the Course P.A.S.S. Assistant, the tool is viewed as helpful, credible, and increasingly valuable.

The primary opportunities are not about usefulness—but execution: improving readability, strengthening reliability, and reinforcing clear, responsible-use guidance.

Reporting & Data Insights

- Exportable interaction data (CSV / JSON) to support institutional analysis
- AI-assisted identification of trends across conversations
- Structured outputs that support downstream reporting, documentation, and analytics
- Enables continuous tuning, policy refinement, and service improvement



Data Standards Matter

Learnwise leverages established interoperability standards (LTI) and structured, machine-readable data outputs (CSV/JSON) to embed AI within the LMS while supporting governed access, interoperable reporting, and continuous institutional learning.

- **Standards-Based LMS Integration:** Integrates directly into the Blackboard LMS using the LTI (Learning Tools Interoperability) standard, enabling seamless, interoperable deployment of AI assistants within the learning environment.
- **Role-Based Data Governance:** AI assistants and knowledge sources are segmented by user role (student, faculty), supporting governed access, appropriate data use, and institutional control.
- **Structured, Interoperable Reporting:** Usage and interaction data are generated in CSV and JSON formats, enabling standards-friendly reporting, downstream analysis, and integration with institutional analytics and reporting systems.
- **Reusable Knowledge Assets:** AI interactions contribute to a growing institutional corpus and lexicon, supporting iterative tuning, improved accuracy, and reduced misrepresentation risk.
- **Connected EdTech Ecosystem:** Out-of-the-box integration with common higher education systems (e.g., Salesforce, Kaltura) reinforces an interoperable, standards-aware architecture.
- **Leverage Data for Continuous Improvement to Gain Insights:** Common standards and common architectures allow for ability to identify blind spots or areas for improvement much more quickly than before

Standards matter—they enable scalable AI, trusted data, and continuous institutional learning.

AI at scale requires standards, not siloed tools.

Questions?

Thank you!



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BEYOND RECORDS: HIGHER ED IN THE AI ERA



Vivian Wong

Group VP,
Oracle Higher Ed



ORACLE

From System of Records to System of Outcomes

The Case for AI-Ready Higher Ed Data

Vivian Wong

Group Vice President

April 23, 2026

Is AI Real?

THE EVIDENCE

88%

of organizations now use AI
up from ~33% two years ago

Source: McKinsey & Company – Global AI Survey 2025

WHAT IT MEANS

Adoption is mainstream

AI is no longer a pilot conversation — it is a boardroom conversation.

Gen AI tripled in 2 years

The fastest enterprise technology adoption curve on record.

5x investment gap

High performers invest 5x more in AI than the rest of the field.

Workflow redesign wins

The difference isn't the model — it's redesigning how work gets done.



Higher Ed Reality Check

Every industry that scaled AI standardized its data first. Higher ed hasn't — yet.

INDUSTRY	AI MATURITY	CORE DATA STATE	PRIMARY USE CASES
Finance	High	Standardized transactions, risk scores	Fraud detection, credit decisions, robo-advising
Healthcare	High	FHIR, ICD-10, EHR interoperability	Clinical decision support, claims automation
Retail / E-comm	High	Event streams, SKU graphs, identity	Personalization, demand forecast, pricing
Higher Ed	Emerging	Documents & academic terms	Chatbots, early alerts, content gen



The Inflection Point

AI is redefining expectations across industries

System of Records Don't Answer the Questions That Matter

Stakeholders need outcome based answers (skills, progress, and ROI)



Learners expect answers:

what jobs can I get? Which skill am I missing? Will this course pay off?



AI agents (and advisors) need context:

Are they on track to graduate on time, and if not, where's the drift?



Policy ties dollars to outcomes:

Which programs actually lead to family-sustaining wages? What data proves ROI for taxpayer funding?



Employers hire on skills:

Do candidates have the skills my roles require? How do I verify competency beyond the degree?



**None of the questions can be answered
by the PDF.**

Shift to System of Outcomes

Converging stakeholder demands are forcing the shift



Learners expect answers

Credentials must be explainable — not just issued.



AI agents (and advisors) need context

Records must be machine-readable — not just human-readable.



Policy makers tie dollars to outcomes

Evidence must be portable, verifiable, and auditable.



Employers hire on skills

Shifting to skills based screening. Degrees alone no longer signal job readiness.



The Record Is the Foundation. The Outcome Is the Point.

Records Capture the Past. Outcomes Drive the Future.



T O D A Y

System of Records

“What happened?”

Artifacts Transcripts, credits, degrees

Purpose Compliance, audit, registrar

Audience Humans read PDFs



T O M O R R O W

System of Outcomes

“What did you learn, prove, and earn?”

Artifacts Skills, evidence, portable credentials

Purpose Decisions, action, next steps

Audience AI agents read structured data



From Signal to Proof – At Scale

Moving from *credential-as-proxy* to **credential-as-proof**

Before AI

Human reads transcript. Infers skills from course titles.

Slow, inconsistent, biased.



With AI

Machine reads credentials, extracts verified skills, projects, assessments.

Instant, comparable, evidence-based, at scale.



Meet Kayley

- *Data analytics major.*
- *Took DATA 301 (Data Visualization).*
- *Applying to analyst roles.*



Meet Kayley

A learner's story — same skills, invisible to one system.



TODAY · SYSTEM OF RECORDS

Kayley applies for a job

- 1 Kayley downloads her PDF transcript. 40 course names, grades and a GPA.
- 2 She uploads it to the job portal. Employer scans for skills (D3.js, SQL), her transcript shows course titles (Data Visualization).
- 3 Her transcript names the course, not the capability. She's invisible - filtered out before a human sees her application.

Result: *No interview. No signal. Her best work invisible.*



TOMORROW · SYSTEM OF OUTCOMES

Kayley applies for a job

- 1 Kayley shares her credentials — skills, evidence, attestations, all verifiable.
- 2 AI reads verified skills and evidence: data visualization (advanced), SQL, A/B testing, linked work.
- 3 Matched to high-fit roles her transcript would've hidden.

Result: *Interview for a role her transcript would've hidden.*

Same transcript. Same learner. Different outcomes – driven by the data model.

What System of Outcomes Data Look Like

Same transcript row — enriched with machine-readable evidence.

TRADITIONAL RECORD

DATA 301: Data Visualization

3 credits

Grade: A

Term: Fall 2025

That's the entire record.

Internship: Marketing Analytics

0 credits

Grade: P

Pass/fail — no texture, no proof.

OUTCOMES LAYER (MACHINE-READABLE)

Skills demonstrated: D3.js, Tableau, Narrative Storytelling, Data Ethics

Evidence: Link to public dashboard + rubric score: 4/4

Assessed by: Dr. Lee [DID: did:web:univ.edu]

Signed: 2025-12-12

Competencies: Campaign Analysis, A/B Testing, Stakeholder Reporting

Evidence: Supervisor attestation + redacted client report

Duration: 240 hours | Level: Applied



Why PESC Standards Are the Foundation for AI

Enabling AI-ready education data

With portable, standards-based records: AI becomes an **outcomes engine**.



THE CORE

Machine-Readable

XML/JSON transcripts, CLR, and verifiable credentials let AI systems parse meaning — not pixel-scrape PDFs.



THE MOBILITY

Portable Context

Learner data moves with them—no re-entry, no loss of context.



THE GUARANTEE

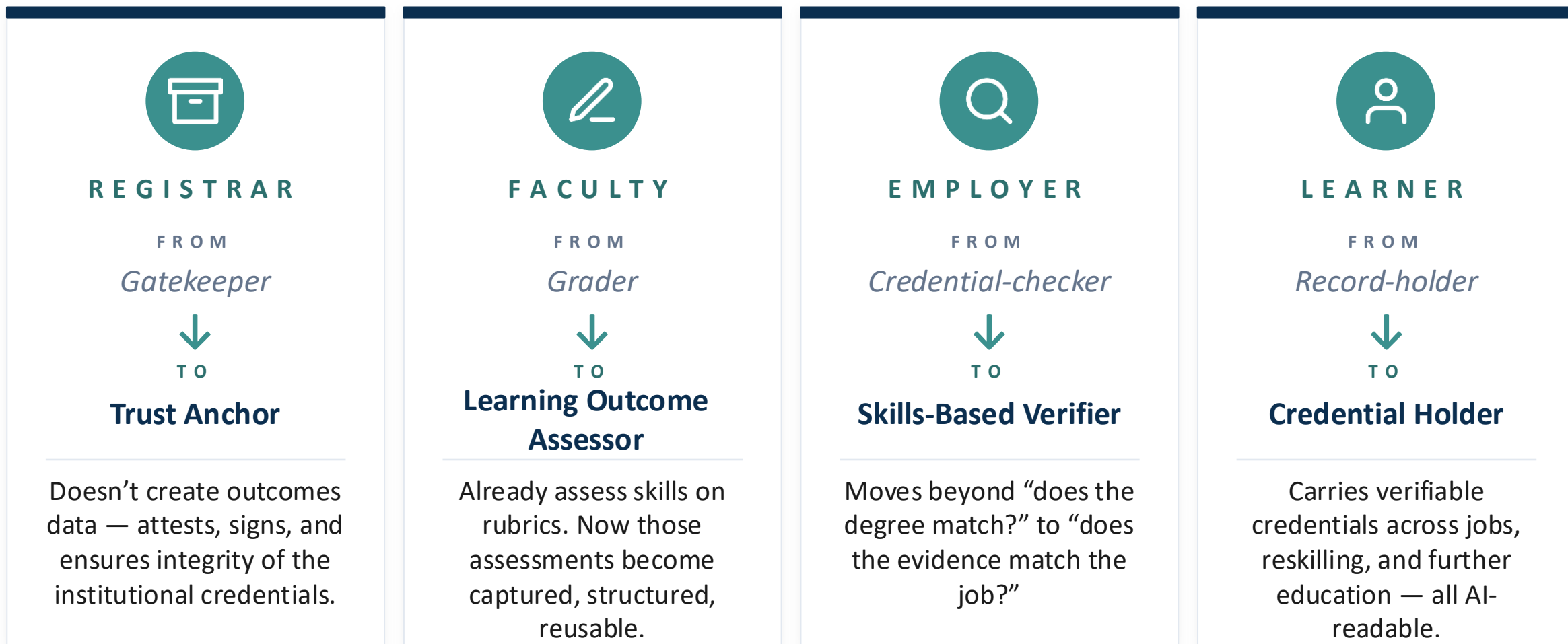
Trust & Verification

Standards and signatures ensure data provenance for high-stakes decisions



What Changes for Each Stakeholder

The shift doesn't eliminate roles — it elevates them.



No one loses their role. Every role becomes more strategic.



PESC Three Moves – Unlocking AI-Driven Outcomes

01



Map

Make skills machine-readable

- **Extend the standard**
Add an optional "skills" node to the PESC XML transcript — backward compatible.
- **Publish guidelines**
PESC reference for mapping course outcomes to a shared skills.
- **Pilot with 10 institutions**
Dual-format issuance: PDF transcript + VC with skills.

02



Verify, don't just send

Trust the source, not the PDF

- **Stand up a Trust Registry**
PESC registry of issuer DIDs — any employer can confirm "did this come from an accredited school?"
- **Define Evidence Schema 1.0**
A shared definition of what counts as proof for a skill claim in higher ed.

03



Measure, don't just count

From graduation to demonstrated value

- **Shift the accountability metric**
Move from "graduated" to "demonstrated outcomes"
- **Make credentials portable**
Learners carry credentials across jobs, reskilling, and grad school — all AI-readable.



Fusion Applications reinvent
how work
works.

The evolution of enterprise software



Systems of record
document the business

Follow fixed rules

Record what happens

Retrieve information

Complete tasks



Systems of outcomes
run the business

Work toward objectives

Make things happen

Solve problems

Achieve outcomes

Enterprise
data
Business
objects

Policies
Approval
hierarchies

**One source
of truth**
for transactions

Permissions
Role-based
access control

Processes
History

Progression of Oracle AI in Fusion Applications

Agentic Apps



22

brand-new agentic applications powered by AI agents and workflow agents

AI Workflows



Execute multi-step, predefined workflows

AI Agent Studio



Includes
Agentic App Builder
and
AI Agent Marketplace

AI Agents



Hundreds
of AI agents
and counting



Agentic Applications

AI that doesn't just advise — it acts, within your guardrails.



Driven by outcomes

Based on specific business objectives — reduce attrition, improve yield.



Built for enterprise execution

Operates within your data governance, security, and approval frameworks — with full auditability.



Dynamic workflows

Adjust to changing conditions in real time to solve problems and achieve the objective.



Powered by specialized agents

Teams of agents share context and memory across end-to-end processes — not isolated bots.

Admissions Agent · Live

Priority actions

- 12 melt-risk applicants — draft outreach?
- Aid packaging: 34 pending deadline review
- Term registration: 98% confirmed
- Advising follow-ups ready for 7 students

Context synced · audit trail on · policy-aware



Connecting AI with Outcome Based Data....

Reinventing How Work Works

Produce outcomes

Increase

Enrollment yield
Retention & graduation rates
Donor giving participation

Reduce

Time-to-degree
Melt between admit and enroll
Financial aid processing time
Student support wait times



Humanize work

What humans do

Mentorship & teaching
Student advising
Research direction
Strategic decisions

What the apps do

Enrollment ops Compliance
Aid processing Grant admin
Advising nudges Reporting
Scheduling Transcript eval

Redefine what's possible

Access

Personalized support at scale for every student

Capacity

Faculty & staff freed from administrative overhead

Student success

Earlier interventions, fewer students falling through the cracks

How institutions can prepare

The goal isn't to predict the end state — it's to *build readiness, step by step.*



Readiness compounds. Each step makes the next one easier.



AI will decide based on the data it can read.

*The question is: **will higher education data be readable?***

*If we get this right, **every learner becomes visible.***

*If we don't, **many never will be.***

This is our moment.

*Let's moving from recording history to **driving outcomes**.*

ORACLE



AACRAO SPEEDE COMMITTEE UPDATE



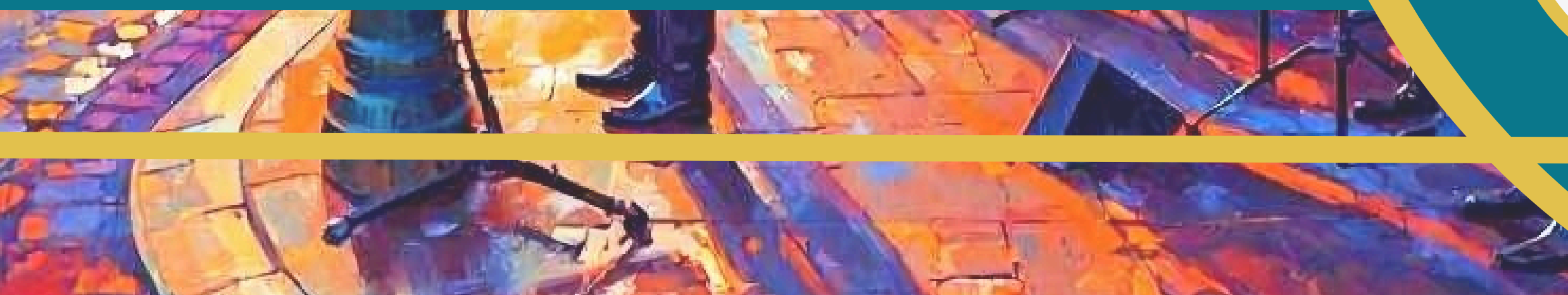
Monterey Sims
Director of Admissions &
Evaluation Document Processing,
University of Phoenix



Sue Reyes
Manager, Workflow and
Content,
San Diego State University



Thad Brown
Director ComTech,
Student Academic
& Advisement
Services, BYU





AACRAO SPEEDE COMMITTEE UPDATE

PESC SUMMIT 2026

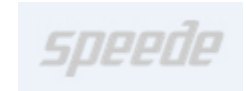
Sue Reyes Manager, Workflow & Content IT Division ERP Systems San Diego State University

Monterey Sims, Director Admissions & Evaluation, University of Phoenix

Thad Brown, Director ComTech, Student Academic & Advisement Services BYU

AACRAO SPEEDE Advisory Council

- What is AACRAO SPEEDE Advisory Council (ASAC)
- What it matters
- Why it changed
- How this helps you



What is SPEEDE?

SPEEDE is an acronym for Standardization of Postsecondary Education Electronic Data Exchange (EDX)
ASAC is an acronym for AACRAO SPEEDE Advisory Council
ATAC is an acronym for AACRAO Technical Advisory Council

- 1989 AACRAO Task Force appointed to develop a national format for electronic college transcripts
- 1990 Education Record Transaction Sets in the EDI format released
- 1991 SPEEDE acronym adopted by AACRAO Task Force & NCES (National Center for Education Statistics) K-12 workgroup
- 1993 AACRAO SPEEDE Committee Professional Activity Committee (PAC) formed
- 1997 Post Secondary Electronic Standards Council (PESC) created as an umbrella for standards work
- 2026 AACRAO SPEEDE Committee restructured into an Advisory Council under ATAC

*SPEEDE is also the name the *free and open* server previously hosted originally by UT Austin and more recently by the National Student Clearinghouse since 2012 to facilitate electronic data exchange of education records which are formatted using PESC EDI & XML standards.

Why it matters

The **AACRAO SPEEDE Advisory Council (ASAC)** exists to foster the adoption of electronic transcripts and education records through education and outreach by...

- promoting standards, best practices & adoption
- providing advisement, training, resources & implementation support
- developing & maintaining standards

Why SPEEDE changed from a PAC to an Advisory Council

To better support AACRAO's broader Learning Mobility initiative the AACRAO Board determined that SPEEDE should be an advisory group rather than a PAC.

Since the committee deals exclusively with technology the Board further decided that SPEEDE should be a subadvisory group under ATAC making SPEEDE's work part of the ATAC overall purview.

SPEEDE will continue to hold meetings and promote services related to adoption of data exchange as well as connect to larger conversations as the credential ecosystem evolves.

This change is effective after the AACRAO Annual Meeting 2026.

How this helps you

The **AACRAO SPEEDE Advisory Council** supports those interested in learning about and/or implementing EDX improvements in their institutions, region or state. The council provides support at no cost on behalf of AACRAO. Council members have various institutional experiences and levels of functional and technical experience to assist with...

- Knowledge sharing & guidance
- Access to free & open tools and resources
- Assistance in planning & implementation (testing)



Appendix



STRATEGIC GOALS ENGAGEMENT

- Collaborate with AACRAO Technology Advisory Council to identify needs as ecosystem evolves
- Participate in the development and implementation of relevant EDX standards, resources, best practices, education materials and presentations
- Ensure mission/vision, objectives and strategic goals continue to align with AACRAO, ATAC & PESC community needs
- Recruit diverse and talented AACRAO members to serve on and/or assist the AACRAO SPEEDE Advisory Council in pursuing strategic goals
- Continue to advance understanding and adoption of electronic exchange of education records through networking, webinars, sessions and workshops:
 - AACRAO Meetings
 - State and Regional efforts & events
 - PESC Summits
 - Other relevant education industry convenings
 - Advisory boards

STRATEGIC OBJECTIVE 5 CREATE & MAINTAIN STANDARDS

Develop and maintain standards for the electronic exchange of education records in conjunction with the appropriate national/international standards-setting bodies:

- Post Secondary Education Standards Council (PESC)
- AACRAO & ATAC
- Other relevant industry initiatives as identified and approved by AACRAO

STRATEGIC OBJECTIVES TOOLS & SUPPORT

- AACRAO EDX publications
 - [Store - Basic Guide to Electronic Data Exchange - AACRAO Hub](#)
- AACRAO website resources
 - <https://www.aacrao.org/resources/electronic-records-data-exchange>
- PESC website resources
 - [PESC Approved Standards - Course Inventory – PESC](#)
- Collaboration
 - listservs speede-g@vt.edu
 - AACRAO SPEEDE Community of Practice (QR code/login required)



WHAT IS EDX

- Electronic Data Exchange (EDX) is an acronym used to describe various formats of electronic data exchange.
- Most common formats used today in North America and Canada are EDI and XML structured data formats.
- Transactions are transmitted electronically between institutions and or their service providers through various secure networks then run through any variety of software translators in order to communicate information between computer systems.
- Institutions exchanging electronic education data agree to use the standard EDI and XML data formats which can be referenced at no charge on the Post Secondary Electronic Standards Council (PESC) PESC website www.pesc.org

WHAT IS EDX

- There are schemas, implementation guides and recommended implementation practices available for a variety of education record types such as the College Transcript, High School Transcript, Request and Response, Financial Aid and the Application for Admissions.
- The use of standard EDI or XML formats enables institutions to exchange education records electronically between each other in a secure and efficient manner.
- The main benefits of EDX are secure data exchange, efficiency gains, automation opportunities and improved student experience due to decreased errors and processing time.
- Portable Document Format (PDF) is another popular method of electronic transcript exchange and does not natively contain machine readable data without the use of extraction tools.

HOW IS EDX USED IN HIGHER EDUCATION

EDX is a way to replace sending paper education records such as transcripts with electronic delivery and exchange of data making it possible for two computer systems to communicate. Normally institution to institution exchange for the purpose of admission and transfer credit evaluation activities, EDX trading partners realize the following benefits:

- Time savings in getting information from the sender to the destination institution
- Increased accuracy & privacy of data
- Elimination of data entry at the destination institution
- Cost savings as manual systems are replaced by electronic ones

RESOURCES

Planning Resources

- [How to get started](#)
- [Questions to ask service providers](#)
- [ROI Tools: Open and save to desktop cost calculator](#)

Implementation resources & support

- [Testing support](#)
- [Guidance for institution, state and district initiatives](#)

Technical Resources

- [EDI - Electronic Exchange of Student Records - PESC](#)
- [Free Open SPEEDE Server](#)
- [Using SPEEDE | SPEEDE Server](#)
- [Welcome | PESC CDL API | PESC CDL API](#)

WE ARE HERE TO HELP





GEO CODE USER GROUP UPDATE



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Associate Registrar,
USC



Ann Marie Lyseng
Senior Manager,
ACAT Secretariat/Learner
Pathways



Anthony Uljanec
Senior Director of Technology,
Educational Credential Evaluators (ECE)





NEW DATA PARADIGM



ALEX JACKL
Chair, DSU
CEO/Founder,
Bardic Systems



Jason Tyszko
Senior Vice President,
Policy & Programs
US Chamber of Commerce
Foundation





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New Data Paradigm

New Data Paradigm Project: Exploring a Public-Private Data and Technology Infrastructure

April 23, 2026



New Data Paradigm Brief

- Why Now? Need for a New Data Paradigm
- Guiding Principles and Priorities
- Major Types of Use Case Applications
- Design Features of a National Public-Private Data and Technology Infrastructure (Data Utility)
- Next Steps

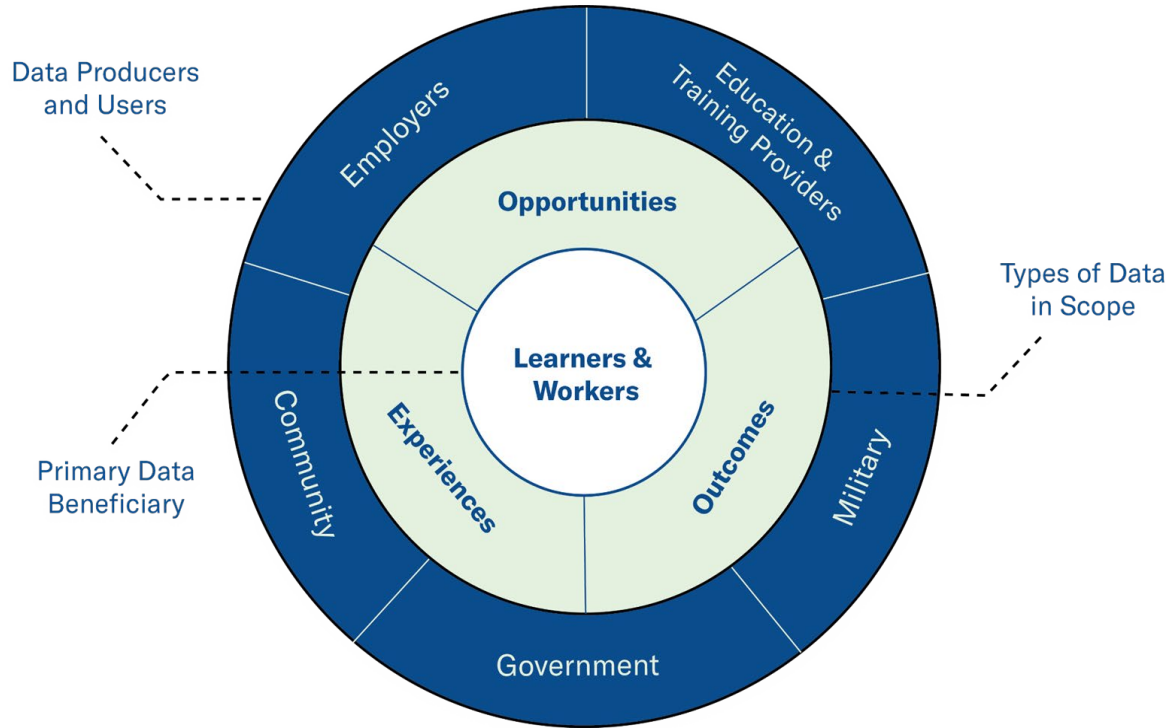


New Data Paradigm

Guiding Principles

Public-Private Collaboration: Moving from “By Government for Government Actions” to “Public-Private Partnerships for Public and Private Actions”

New Priority: Empowering learners and workers to pursue opportunities in more transparent, interoperable, and connected talent markets; and enabling public and private action



NDP Project Progress to April 2026

- Conducted analysis of government work-related and education administrative data reporting systems and the LER ecosystem and how they could be improved and coordinated to empower workers with data and issue LERs at scale
- Convened two national virtual meetings on December 2, 2025 and January 28 2026 to review the analysis and get feedback on a proposed approach to coordinating enhanced administrative data reporting and LER initiatives
- Conducted an analysis of how to improve skills data in administrative data reporting and LERs

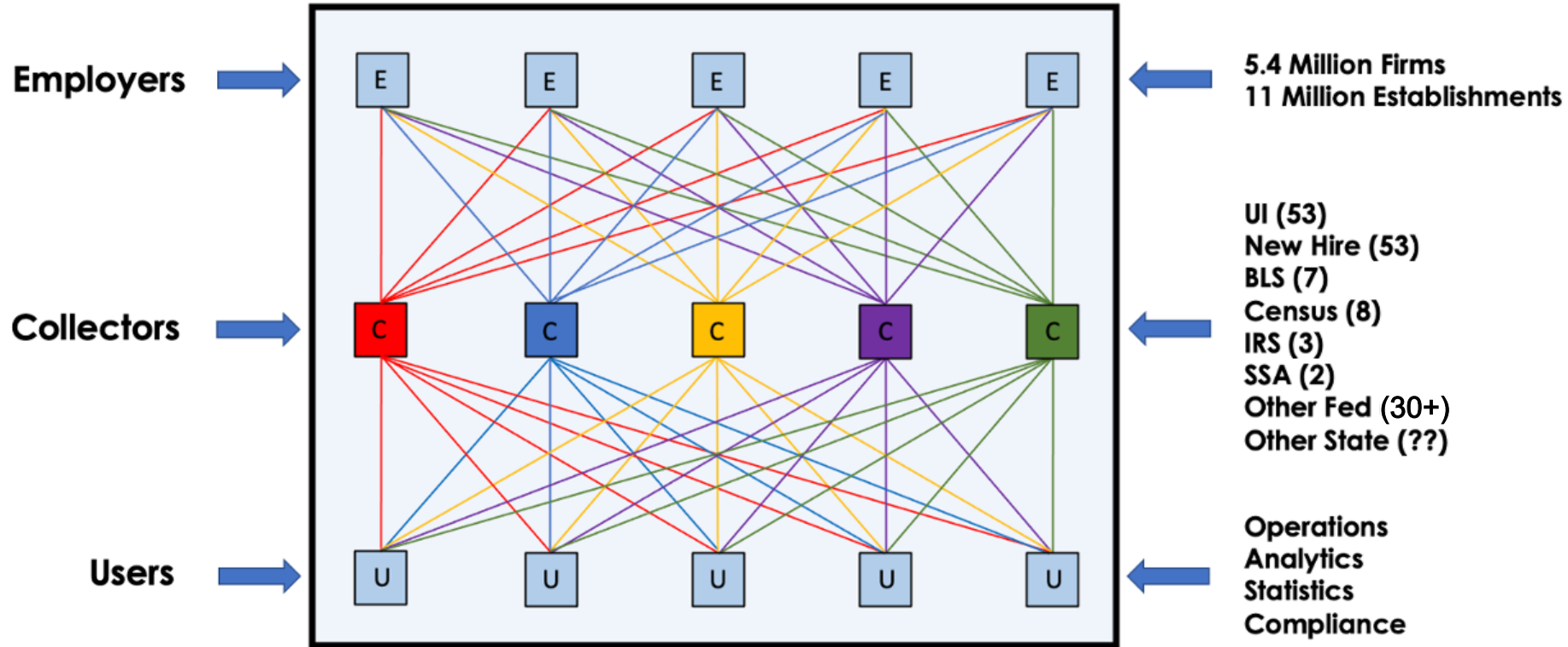
NDP Project Progress to April 2026

- Convened national virtual meeting on improving skills data on March 25, 2026
- Conducted analysis of how to improve and coordinate government reporting and the sharing and alignment of job and learning opportunity data
- Developed interim report on designing a public-private data and technology infrastructure with improved skills data that could support an open marketplace of AI-powered applications to empower workers

Jobs and Employment Data Exchange (JEDx)

- A public-private, standards-based initiative to promote the consistent sharing and use of data on jobs and employment.
- Initial focus: improve government reporting, starting with Unemployment Insurance
- Additional priorities: (1) workforce analytics and (2) consistent and coordinated data sharing of job postings and descriptions and issuing LERs

Landscape Analysis of Work-Related Data Collection



JEDx Approach to Work-Related Data Collection

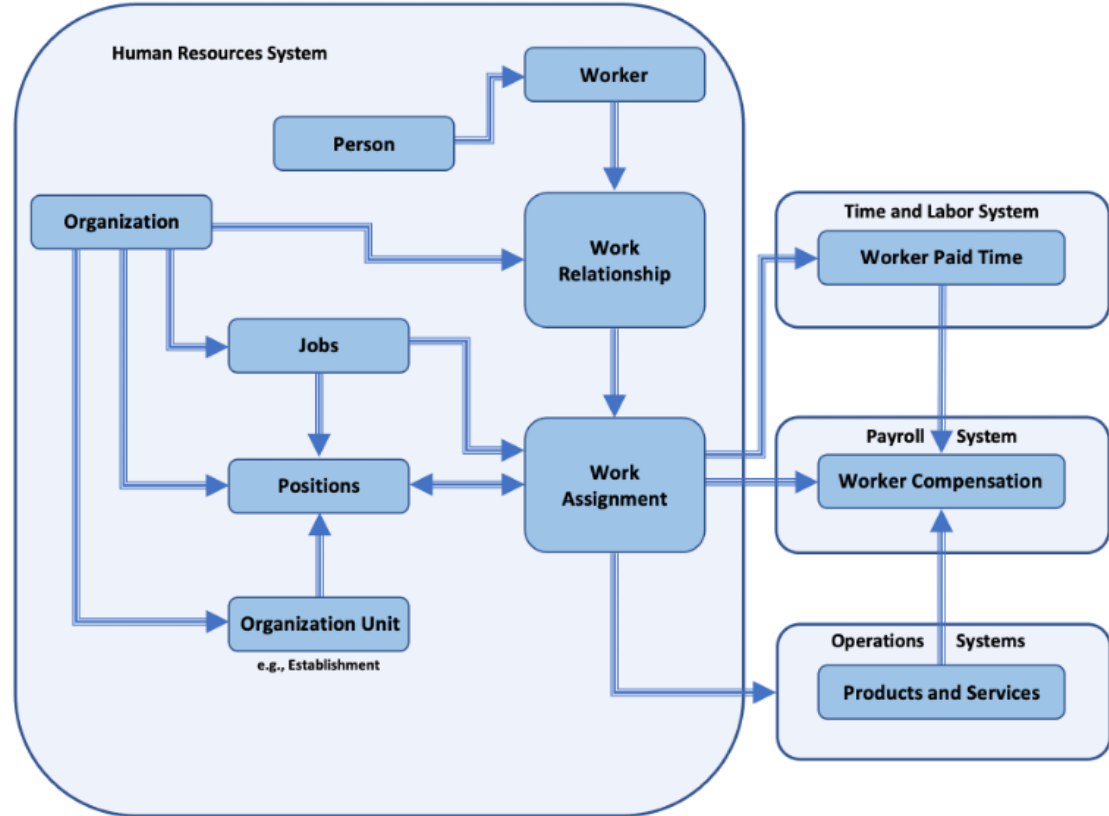
Reduce reporting/collection costs for employers and government agencies while improving data quality and timeliness through:

- **Standardization** of data elements and definitions
- **Modernization** of reporting systems
- **Consolidation** of reporting

JEDx Accomplishments

- Cataloged work-related data collected across federal and state agencies
- Developed conceptual and logical data models
- Created a standardized [data dictionary](#)
- Assessed employer feedback to JEDx value proposition based on SHRM survey

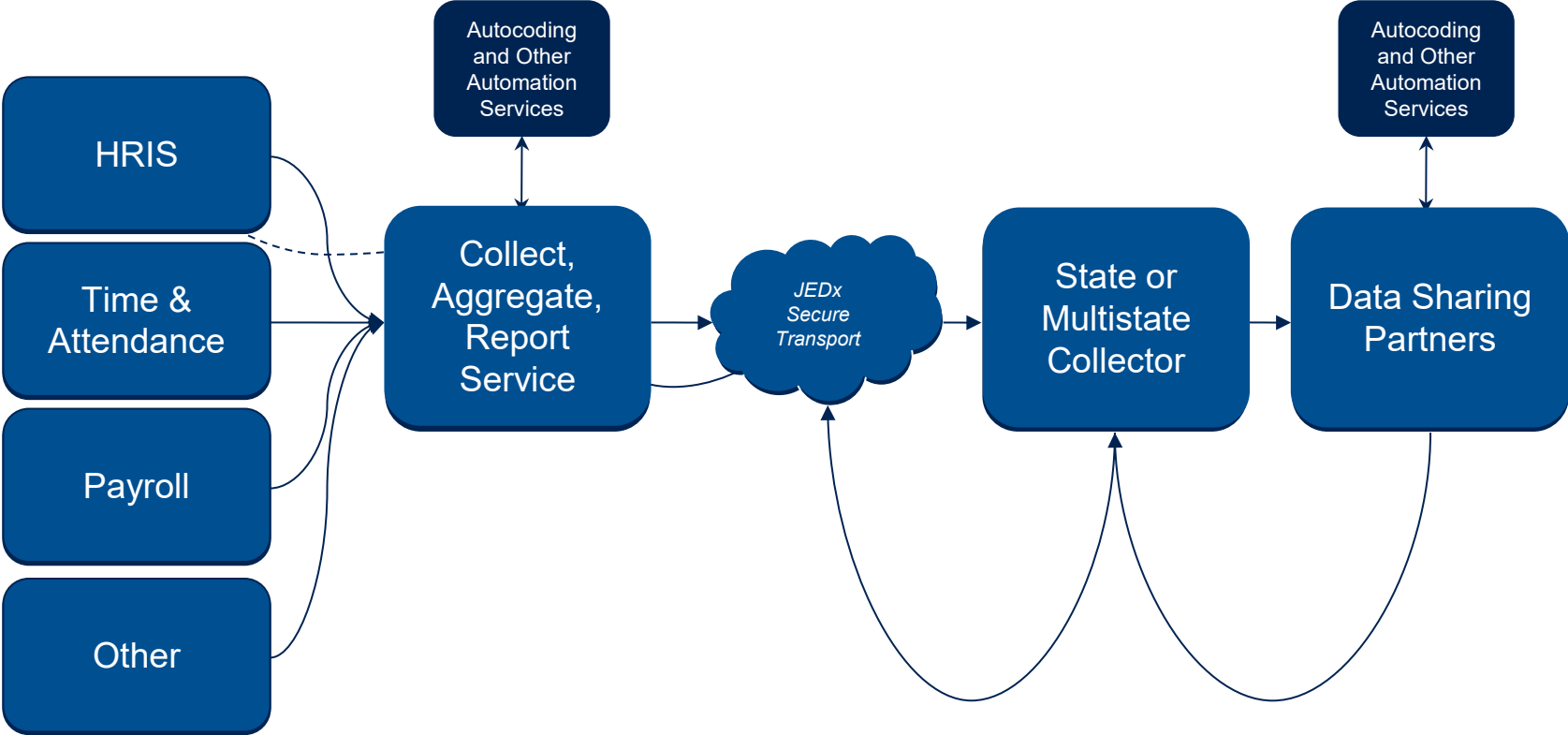
JEDx Conceptual Data Model



JEDx Accomplishments (cont'd)

- Developed API standards in cooperation with HR Open Standards Consortium and Access For Learning (A4L)
- Developed prototype Collection, Aggregation and Reporting (CAR) service and receiving API with integrated occupational autocoding system
- Identified initial consolidation opportunities: UI, ARS, MWR, OEWS
- Created standardized, high-value data package for pilot testing
- Executed successfully two phases of pilot testing with partners: Arkansas, South Carolina, and the Bureau of Labor Statistics (BLS)

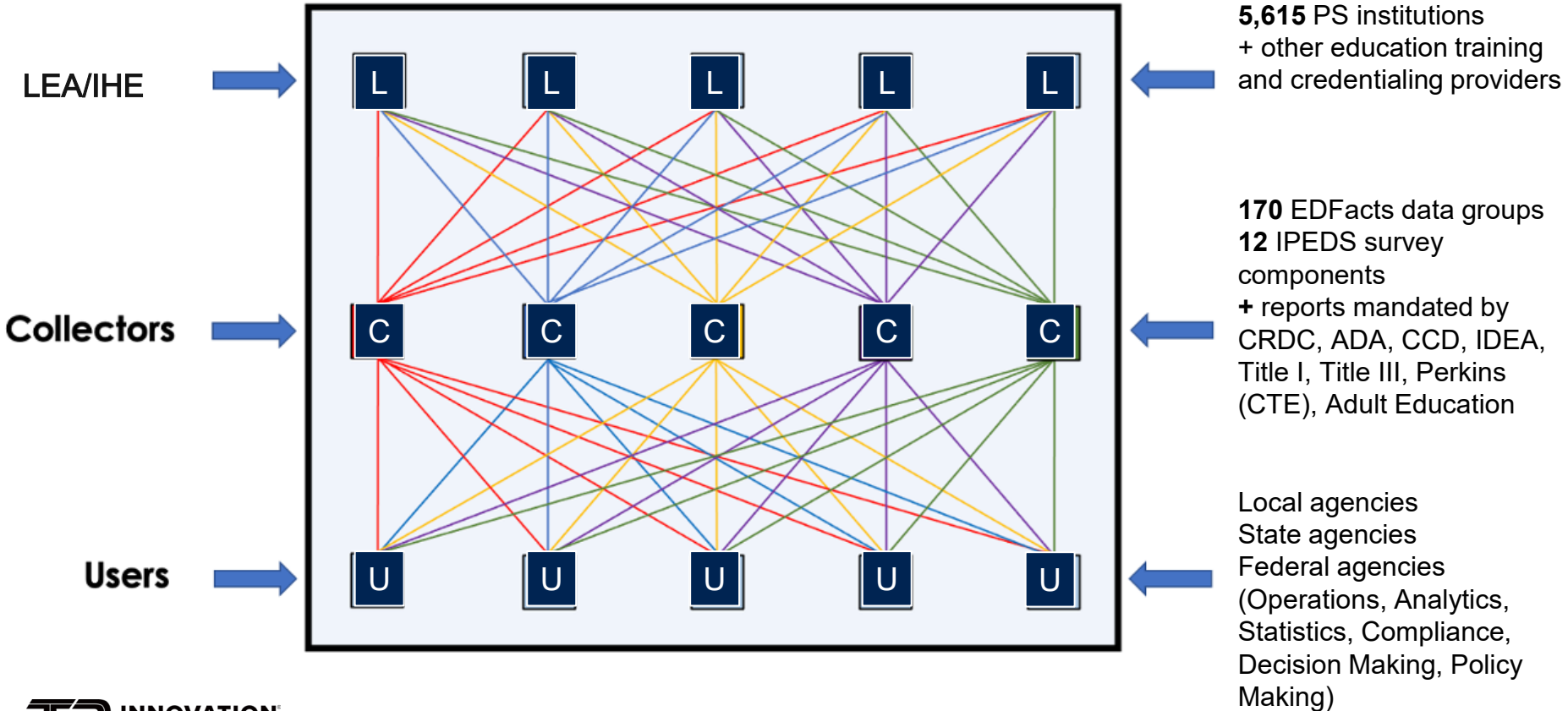
JEDx Approach



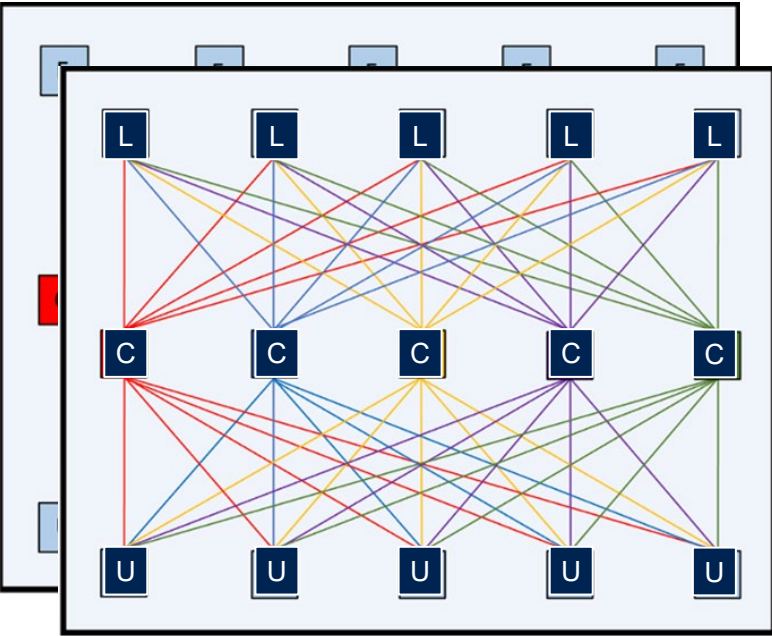
JEDx Next Steps

- Update JEDx data dictionary and state UI benchmarking
- Develop a minimum JEDx data package and related guidance that is aligned with Strada Foundation UI enhancement implementation guide
- Develop a standard employment record for issuing LERs that address major work verification use cases including Medicaid and SNAP
- Improve JEDx tools and user documentation
- Investigate additional consolidation opportunities
- Conduct additional pilot -testing of JEDx data package and tools for state UI enhancement and consolidated reporting including Medicaid
- Coordinate with New Data Paradigm project moving forward

Landscape Analysis of Education Data



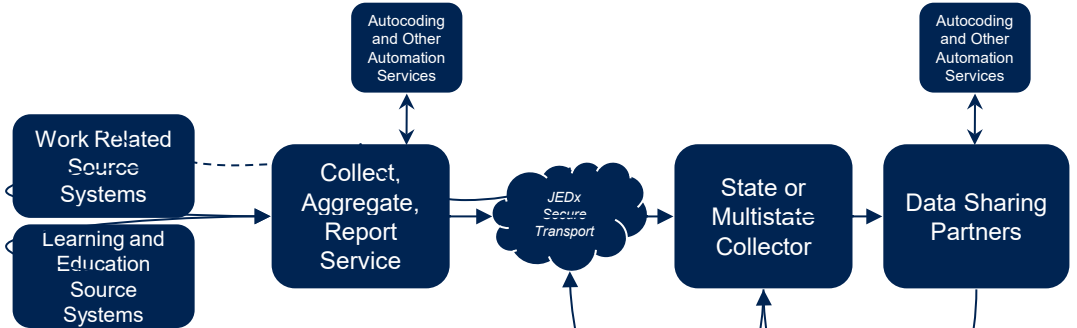
Before



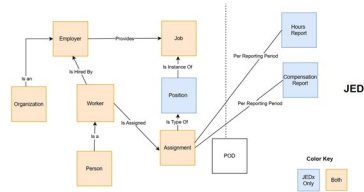
170 EDFacts data groups
12 IPEDS survey components
100s of employment record reports

After

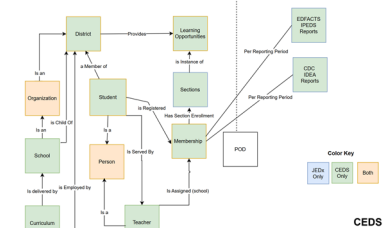
Privacy Architecture



Workforce Data Model



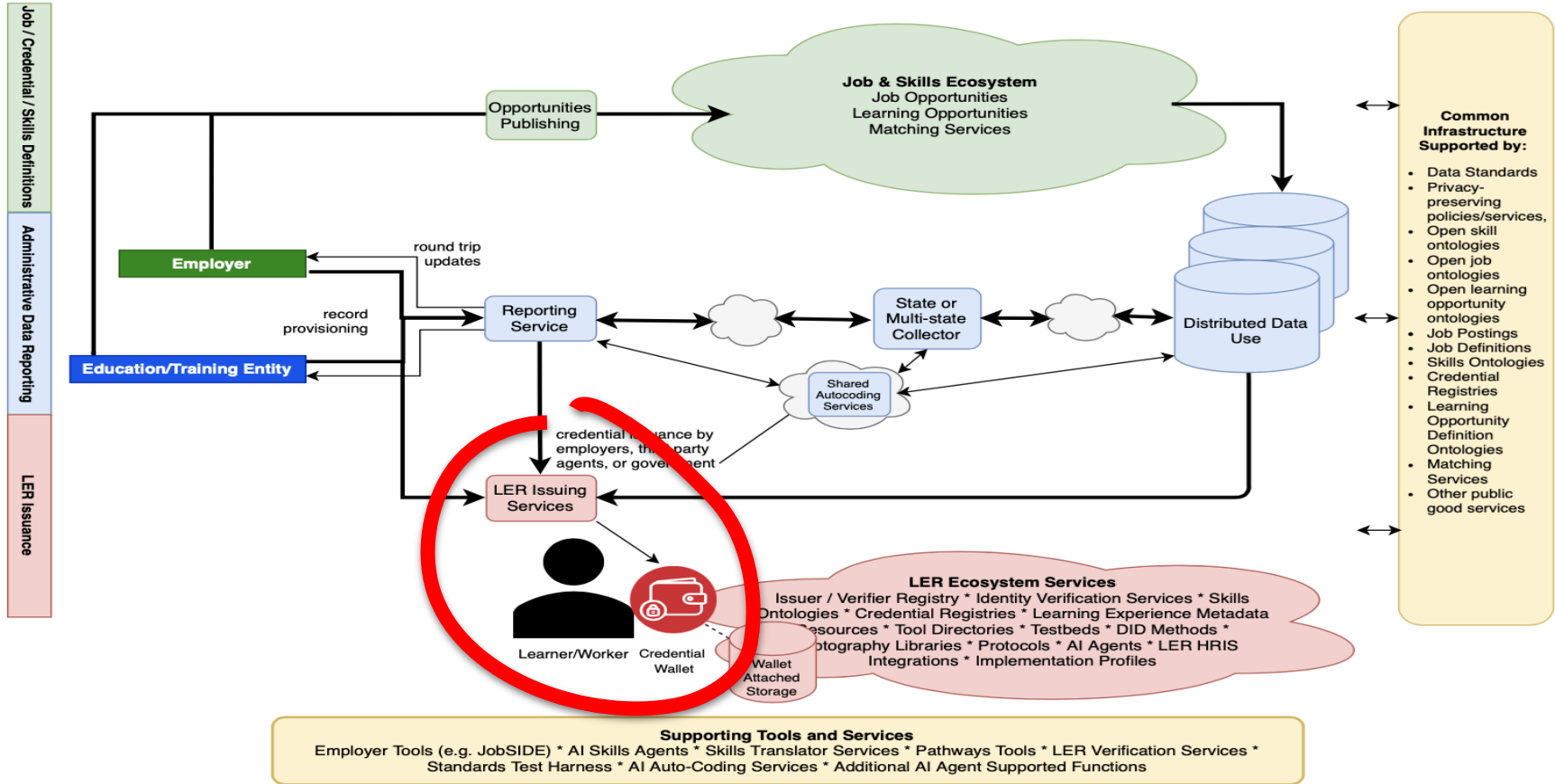
Education Data Model



Where We Are Now

- **Employee Self-Service Portals.** Leading employers and their HR system partners have pioneered the use of “self-service” online portals making it easy for employees to view and update their information and make requests
- **Student Portals.** Leading providers and their education technology partners have pioneered similar self-service portals for students to view and update personal information, view academic records (e.g., course enrollment, transcripts), and manage degree progress
- **Using State Administrative Data for Issuing LERs.** States have explored how to use their education and work-related administrative data to issue LERs

New Data Paradigm Functional Diagram



Recommendations

- Further explore how to promote and support employers and providers offering self-service portals to learners and workers and use them as a vehicle to request and provide LERs through issuing platforms
- Explore how states can work together to provide self-service portals for learners and workers to view their own data and request LERs through issuing platforms based on government administrative data
- Develop pilot-test plans with state partners to issue LERs from government administrative data systems through these portals and issuing platforms

Building on LER Initiatives and Readiness Assessment

- Many promising public and private initiatives to build an LER ecosystem that can support LER access and use such as:
 - Issuing LERs starting with academic records such as transcripts
 - Access to wallets to manage and use LERs
 - Identity management
 - Issuer registries
- NDP project explored how to build on these initiatives to support the further development of the LER ecosystem. The NDP project conducted an analysis of the readiness of the LER ecosystem based on a core LER Architectural Blueprint



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Questions and Comments



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Improving Skills Data

Where We Are Now: Challenges and Opportunities

- Progress in developing and communicating skills data in more standardized language with machine-actionable data formats with many active and diverse communities of practice continuing to grow
- Key challenge and opportunity is improving the transparency, interoperability and trust of skills data across communities of practice
- Addressing the key data requirements for AI-powered tools including:
 - access to talent market data,
 - open and fully developed and validated skills ontologies,
 - data standards and guidance and recommended practices,
 - human input and validation from domain experts,
 - provenance data (e.g., reference and use of frameworks), and
 - performance and feedback data

Recommendations

Develop and Support Open Skills Ontology Ecosystems. Promote the development and use of open public and private skills ontologies and alignment and translation services that provide the basis for comparable languages for skills data

- **Skills Ontology Standards and Practices.** Promote wide-scale adoption of standards and recommended practices for definition and use of interoperable, comparable, and machine-actionable skills ontologies
- **Support Development and Use of Open Skills Ontology Ecosystems.** Support public-private ecosystem of open standards-based ontologies and mapping services between ontologies

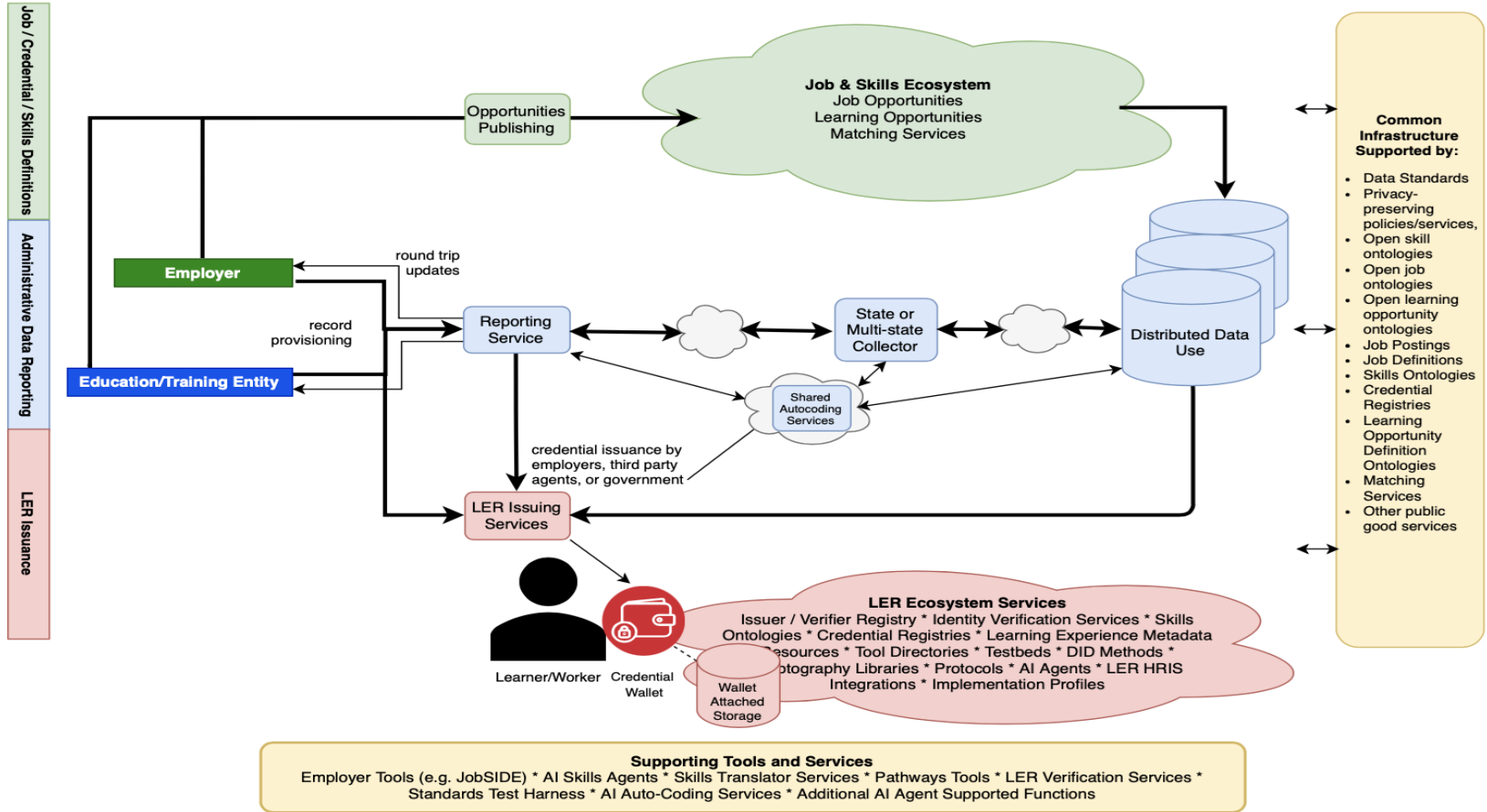
Recommendations

- **Skills Definition Guardrails for AI.** Develop open resources, including model context resources, that serve as guardrails for generative AI to generate well-defined skills definitions
- **Skills Ontology Reference Architecture.** Draft reference architecture for future skills ontology ecosystems and recommended practices for reusable context attributes to support robust skills definitions across contexts and use cases.
- **Skills Tools (including AI tools) Interoperability Guidelines.** Develop approaches and guidelines for the use of AI and other technology to support a more automated and precise skills ecosystem that addresses comparability and variability for use across contexts

Recommendations

- **Skills Data Tools (AI) R&D.** Develop AI models and reference applications as public good demonstrations of automation to serve the skills ontology ecosystem. These tools should apply available AI technology according to standards and recommended practices for well-defined, interoperable and comparable skills as open linked data in the ecosystem
- **Ontology Use.** Promote and support open marketplace of AI agents and tools using standards-based open skills ontologies and encourage development of provenance data on skill ontology use and changes/additions
- **Incentives for Use.** Explore incentives for standards-based open skill ontologies and AI agents and tools using them

New Data Paradigm Functional Diagram



Recommendations

- **Align and Enhance Data Standards.** Align and enhance standards to address infrastructure requirements for the proposed data infrastructure addressing government reporting, job and learning opportunity data sharing, LER ecosystem and open skills ontologies in cooperation with Data Standards United and all relevant standards organizations.
- **Explore Privacy and Security Standards and Practices.** Engage leading experts in identifying leading public-private standards and privacy-preserving practices including privacy obligation documents and how they should be applied for the NDP infrastructure

Recommendations

- **Develop Governance Framework.** Engage governance experts to develop a public-private governance framework for the NDP data and technology infrastructure
- **Continue Infrastructure Design.** Continue the design of the infrastructure including:
 - Further explore public and private sector leading practices in distributed data analytics
 - Design the NDP distributed data services infrastructure for supporting secure, privacy preserving data analytics
 - Develop pilot test plan with public and private partners to demonstrate the implementation and use of near real-time distributed workforce data analytics



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NDP Roadmap and Next Steps

NDP Roadmap

NDP Phase	Timelines
Design Phase: Focus on aligning and enhancing data standards, privacy and security standards and practices and the governance framework for the NDP infrastructure as well as further design and develop pilot-test plans for key features of the infrastructure. Recommendations Proposed Today	2026- 2027
Pilot Phase: Continue design work as needed and focus on conducting pilot-tests of key design features of the infrastructure publishing and aligning learning and job opportunities, improving government reporting, and building on the LER ecosystem.	2027- 2028
Scaled Implementation. Continue design and pilot-testing work as needed and begin the implementation of standards and privacy practices and the governance framework and scaled implementation of the key features of the infrastructure that have been successfully pilot-tested and supported by partners	2029 and beyond

Next Steps

- Continue follow up meetings based on draft recommendations with more references to building on existing initiatives
- Incorporate input and feedback on draft interim report
- Issue final interim report
- Utilize interim report to further engage public and private stakeholders and partners in further exploring the New Data Paradigm vision and the proposed three-phase roadmap and design phase recommendations



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New Data Paradigm

For Further Information

Jason A. Tyszko

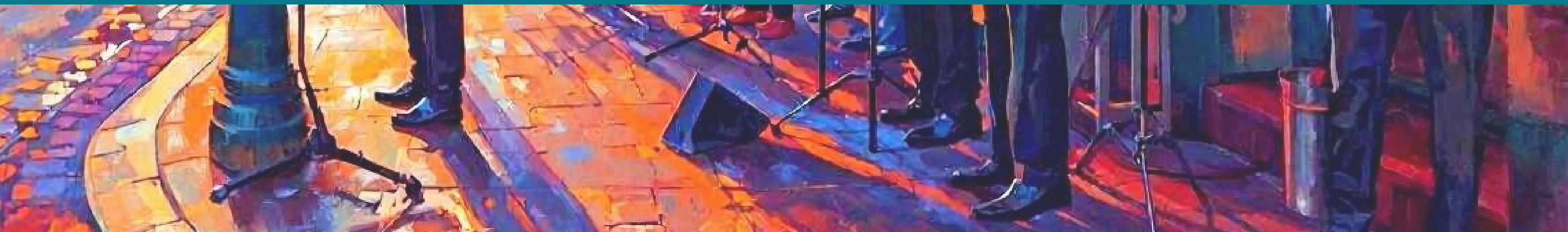
Senior Vice President

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CLOSING REMARKS



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**DAVID MOLDOFF
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**FRANCISCO
VALINES
FL INTERNATIONAL
UNIVERSITY**



**VIVIAN WONG
ORACLE**

GET INVOLVED

- CanPESC Next meeting is scheduled for May 14th @ 12 PM EST
- PESC JSON-LD Task Force Next meeting scheduled for May 13th @ 11 AM EST
- PESC Marketing & Communication / Partnerships & Sponsorships Committee 2nd Thursday 1 pm EST
- PESC Strategy & Governance / Technology & Development Committee 3rd Tuesday of the month from 3-4pm EST

For all PESC involvement contact info@pesc.org

- ED3 Webinars (standards incubator) Webinars 3rd Friday every month & ED3 Conversations each Thursday at 11AM ET to get involved gregnadeau7@gmail.com

UPCOMING EVENTS

Be on the lookout for these events:

- Board Nominations and voting: Coming in May 2026
- Next Summit: October/November 2026
 - Planning committee volunteers welcome

Your feedback in the survey helps the team plan!

THANK YOU!

Social Media:

Please share your photos and experience from the summit using the following tags:

#PESCapr26summit

#PESCComposingSmarterDataSolutions

You are welcome to tag PESC and the PESC Event team on LinkedIn:

@Postsecondary Electronic Standards Council

@Dennis Becker

@Melissa Buckley

@Mark Cohen

@Bryant Faust

@Hillary Halpern

@Alex Jackl

@Jennifer Kim

@Michael Sessa

@Monterey Sims

@Jodi Tavares

@Vivian Wong