



# OCTOBER 2024 DATA SUMMIT

Hyatt Regency Orange County, CA  
October 16-17, 2024

**PESC**<sup>®</sup>

**WELCOME!**

# OCTOBER 2024 DATA SUMMIT

This conference is for you!!!

Ask questions, speak up!

This first day will be a working meeting where we will be announcing some exciting initiatives and working together to see how to make them into reality!

We would also like to thank our Gold Sponsor...

- Introduce yourself
- What organization you represent
- What you hope to accomplish being here

# INTRODUCE ACRONYM BINGO



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**SHANNON T. WILSON**

**VICE PRESIDENT - IT,  
UNIVERSITY OF PHOENIX**

**TechEQ: Mastering  
Results, Relationships &  
Respect in the Digital Age**

**WEDNESDAY, OCTOBER 16, 2024**



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**MICHAEL  
FELDSTEIN,  
IEDTECH**



**ALEX  
JACKL,  
BARDIC SYSTEMS**



**DAVID  
MOLDOFF,  
ACADEMYONE**



**ALEXIS  
ROSSI,  
MEDBIQUITOUS**



**STEVE  
SMITH,  
A4L COMMUNITY**

## **Data Standards United (DSU): Myths & Movement**

**WEDNESDAY, OCTOBER 16, 2024**

Data Standards are stronger together than apart.

No open, voluntary data standard should be in competition with another- collaborative standardization between standards bodies, agencies, and learning organizations is the path to serving learners through their whole journey from cradle to retirement.

Data Standards United is not a new organization, but a voluntary partnership based on shared values.

We are committed to establishing a sustainable collaborative of Data Standards Development Organizations (SDO) & their stakeholders across education, employment, and training sectors to support the global education & workforce digital ecosystem

## Video Interlude

From Jim Ireland, Executive Director of HROS

<https://www.dropbox.com/scl/fi/ot7rk75hnbsqoouzyjza3/20241009-HROpenIntro.mp4?rlkey=el70jzcf4i0at0hdzb9qcvlls&dl=0>

This session we will have leaders from multiple standards engaging the audience in a conversation for what the myths are around standards and the approaches we can take NOW to collaboratively standardize.

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## Our Panelists...



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FELDSTEIN,  
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DSU's goal is to establish a "common ground" mechanism and coordinate and align disparate global data standards across systems, platforms, networks, sectors, and industries – while respecting and supporting the underlying standards body's independence & role

We are also committed to broaden our perspective to customer-centric vs. transactional.

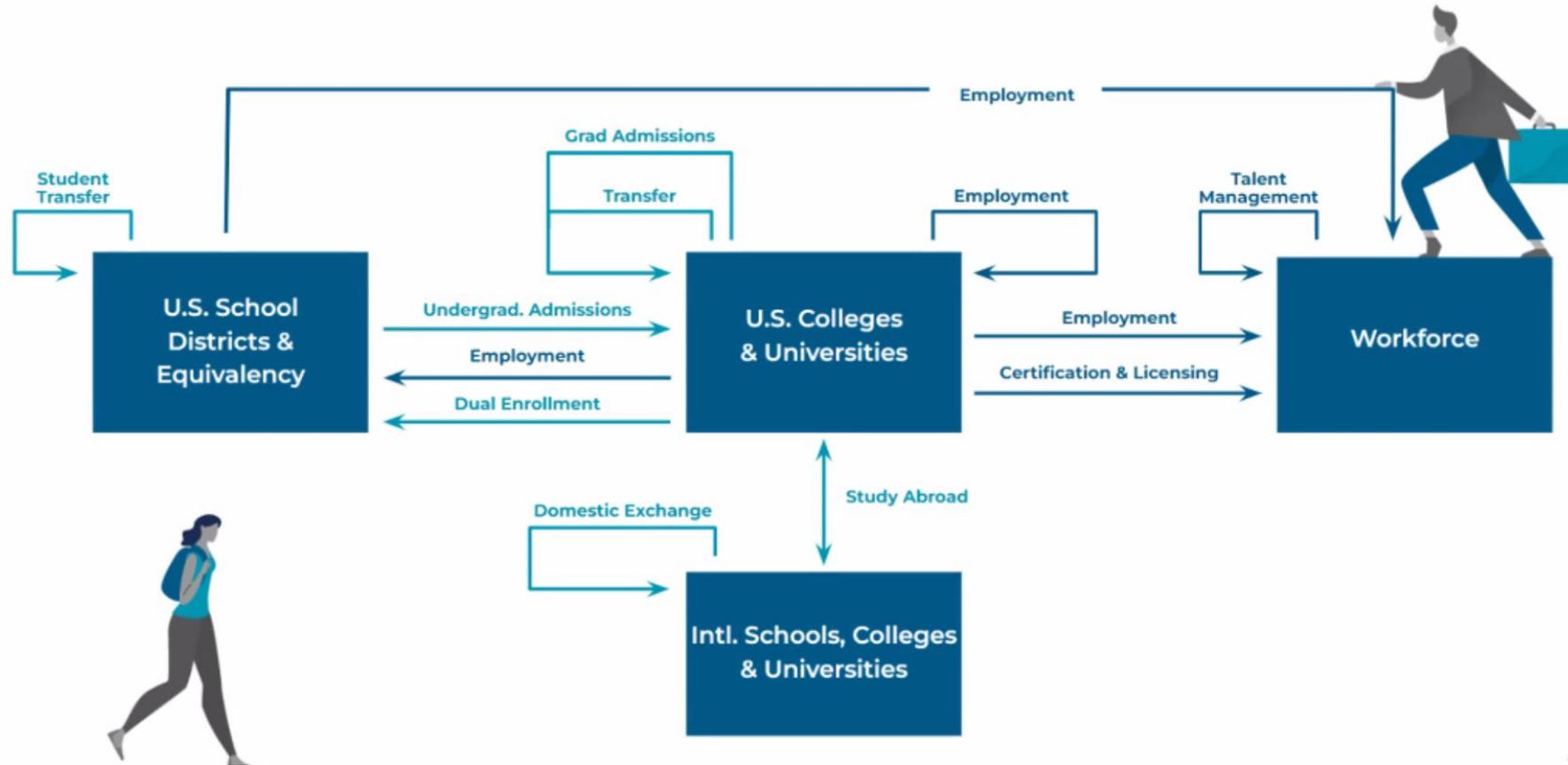
## Video Interlude

From Jim Goodell, Chair of the IEEE LTSC Committee

<https://www.dropbox.com/scl/fi/i6i3b8nge3ohaznf1be9y/Jim-Goodell-DSU-endorsement-at-PESC-Oct-2024.mp4?rlkey=n1f7loqvmt1td1dizybb6r2bd&dl=0>

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Everything Is Connected to Everything



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## Amanda's Data ('My Lifelong Data')



## Business Reasons (Use/Business Cases)

|   |                 |                                   |                        |
|---|-----------------|-----------------------------------|------------------------|
| <b>Education</b><br>PK12<br>Postsecondary           | <b>Military</b> | <b>Workforce &amp; Employment</b> | <b>Health</b>          |
| <b>Citizenry</b><br>Community Service<br>Leadership | <b>Sports</b>   | <b>Government</b>                 | <b>Accomplishments</b> |

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Leadership Changes Have Created a Huge Opportunity



[www.a4l.org](http://www.a4l.org)



[www.pesc.org](http://www.pesc.org)



[www.1edtech.org](http://www.1edtech.org)



<https://www.ed-fi.org/>

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## Signatories to Data Standards United



**MedBiquitous**<sup>®</sup>

[www.medbiq.org](http://www.medbiq.org)



[www.hropenstandards.org](http://www.hropenstandards.org)



 **DublinCore**

[www.dublincore.org](http://www.dublincore.org)



[Ed3](#)

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## Affiliates to Data Standards United



[www.adlnet.gov](http://www.adlnet.gov)



Common  
Education  
Data  
Standards

[ceds.ed.gov](http://ceds.ed.gov)



Credential  
Engine™

[www.credentialengine.org](http://www.credentialengine.org)



**IEEE**

Learning Technology  
Standards Committee  
[sagroups.ieee.org/ltsc](http://sagroups.ieee.org/ltsc)



[www.uschamberfoundation/t3-innovation](http://www.uschamberfoundation/t3-innovation)

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## Types of Interoperability

- Business Case Interoperability
  - wallets, credentials, compliance reporting
- Semantic Interoperability
  - CEDS vocabulary, PESC Transcripts, A4L Unity IEP Data Model, 1EdTech CLR, EdFi Teacher Training Model
- Transport Interoperability
  - SIF Infrastructure, LTI
- Portability
  - LERs, Verified Credentials, CTDL, CASE

## Points of Convergence

- Vocabulary Alignment
- Aligned Data Models
- Standardized Infrastructure
- Privacy and Security Support
- Bridging Technologies
  - *Wallets / Authoring Tools / RESTful APIs / BLOCKCHAIN / JSON-LD-XML-PDF-RDF / Registries / etc.*

## Why Hasn't Collaboration Worked? (I of II)

1. **Personalities:** We are adults - we are working together
2. **Sustainability:** These are hard organizations to keep sustainable and we are all chasing dollars
3. **Friction:** Friction is positive - but good collaboration requires financial support and there is work required
4. **Scaling Adoption - Sustainability beyond one project**

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| KNOWLEDGE AND CONTENT | EDUCATION MANAGEMENT | TRADITIONAL MODELS | NEW MODELS   | EXPERIENCING LEARNING | INTERNATIONAL EDUCATION | LEARNING SUPPORT | ASSESSMENT & VERIFICATION | WORKFORCE AND TALENT | SKILLS AND JOBS |
|-----------------------|----------------------|--------------------|--------------|-----------------------|-------------------------|------------------|---------------------------|----------------------|-----------------|
| KNOWLEDGE             | MANAGEMENT           | PRE-K              | MOOCS        | XR                    | LANGUAGE LEARNING       | TEACHER SUPPORT  | ASSESSMENT                | WORKFORCE PLANNING   | UPSKILLING      |
| OPEN RESEARCH         | ENVIRONMENTS         | SCHOOL             | PROP ONLINE  | ROBOTICS              | LANGUAGE TESTING        | STUDY NOTES      | PORTFOLIO                 | TALENT ACQUISITION   | INTERNSHIPS     |
| CURRICULUM            | CLASSROOM TECH       | VOCATIONAL         | OPM          | AI, VOICE & CHAT      | DISCOVERY               | AFTER SCHOOL     | CREDENTIALING             | CAPABILITY DEV       | APPRENTICESHIPS |
| RESOURCES             | ADMISSIONS           | ALTERNATE          | BOOTCAMP 2.0 | GAMES & SIM           | INTERNATIONAL SCHOOLS   | TUTORING         | CAREER PLANNING           | PERFORMANCE MGMT     | GIGS            |
| Q&A                   | FINANCE              | UNIVERSITY         | APPS         | STEAM & CODING        | INTERNATIONAL STUDY     | TEST PREP        | SKILLS VERIFICATION       | WELLNESS             | MENTORING       |

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## Why Hasn't Collaboration Worked? (II of II)

1. Longevity
2. Marketplaces are difficult to “Control”
3. Lack of Shared Vision of the Landscape, Turf
4. Intent and Alignment of Stakeholders is not easy
5. Process / Getting things done today in isolation (by scope)
6. Technology Challenges
7. Data / Information being disparate
8. Business Cases
9. Turf /Politics
10. Money, resources
11. Trust (Bias, Past Experiences, Fear, Risk avoidance, Loss of Control, Loss of Access)
12. Scope of Vision (Confusion, Noise and Lack of Clarity, Lack of Roadmap, Chaos vs Control)

## Video Interlude

From Duane Brown, of CEDS

[https://www.dropbox.com/scl/fi/4yzgvsvj5s6kg0li5ecjx/Meeting-20241002\\_134517-Meeting-Recording.mp4?rlkey=p7u3bssxveobg3fpiws3d42kv&dl=0](https://www.dropbox.com/scl/fi/4yzgvsvj5s6kg0li5ecjx/Meeting-20241002_134517-Meeting-Recording.mp4?rlkey=p7u3bssxveobg3fpiws3d42kv&dl=0)

## Examples of Successful Collaboration

1. Iowa Transcripts
2. AIF
3. CEDS-A4L
4. MA Data Hub
5. T3 LER Wrapper (VC, CLR, ) - catalyzing
6. 1EdTech-HROS LER-RS
7. JEDx

We want to partner in a way that's going to help the standards community...

and we also need to do it in a way that isn't going to leave us under resourced to provide the support we would be committing to

## Video Interlude

From Jason Tyzco, Executive Vice-President of the US Chamber Foundation

[https://www.dropbox.com/scl/fi/caok3yyhv6gv5mfhawphn/USChamber\\_video1962656561.mp4?rlkey=s0gclypeugvgckwc8e5599hkw&dl=0](https://www.dropbox.com/scl/fi/caok3yyhv6gv5mfhawphn/USChamber_video1962656561.mp4?rlkey=s0gclypeugvgckwc8e5599hkw&dl=0)

## The Digital Freeway Strategy

1. **Establish a Unified Vision and Goals**
2. **Create a Collaborative Framework**
3. **Standardize Data Exchange Protocols**
4. **Develop or Consolidate Shared Resources and Tools**
5. **Foster Innovation Through Challenges, Grants, and Awards**
6. **Educational and Training Programs**
7. **Pilot Projects**
8. **Feedback and Iteration**
9. **Advocacy and Communication**

## Possible Participants

1. 1EdTech (Signatory)
2. ADL (Affiliate)
3. A4L (Signatory)\*
4. CEDS (Affiliate)\*
5. CCSSO (Not Yet Engaged)
6. Credential Engine (Affiliate)\*
7. ED3 (Signatory) \*
8. EdFi (Not Yet Engaged)
9. GDN (Affiliate)
10. HR Open (Signatory)\*
10. IEEE LTSC (Affiliate)\*
11. Internet 2 (Not Yet Engaged)
12. Medbiquitous (Signatory)\*
13. PESC (Signatory)\*
14. T3 Innovation Network (Affiliate)\*
15. W3C (Not Yet Engaged)

## The Digital Freeway Possible Lighthouse Projects

- 1. Harmonize Data Model and Shared Vocabulary**
- 2. Shared Infrastructure**
- 3. Privacy Support**
- 4. Organizational Harmonization**

## Lighthouse Project 1:

### Harmonize Data Model and Shared Vocabulary

- All DSU Standards work together
- Model their key objects and specifications into the CEDS Ontology
- Develop relationships using Credential Transparency Description Language (CTDL)
  - CTDL is a W3C Resource Description Framework (RDF ) standard for data interchange
- Incorporate the new model back into all of our Standards

## Lighthouse Project 2: Shared Infrastructure

- All DSU Standards work together
- Utilize JEDx Work and SIF Infrastructure
- Separate Transport and Content
- Built in Privacy Support
- Establish Shared Registries and Utility Services
- Test Harness, Implementation Guides, and User Groups
- SDKs in multiple languages

## Lighthouse Project 3: Privacy Support

- Privacy Obligation Documents (PODs)
- SPDC Registry
- Expanding to PK20W+

## Lighthouse Project 4: Organizational Harmonization

- Joint Venture Agreements (like PESC-A4L)
- Defined Areas of Expertise and Coordination
- Process Defined for Collaboration and Cross-Segment Change Management
- Outreach and Expansion

## Closing Video Interlude

From Nancy Copa, Director of the Common Education Data Standards

<https://www.dropbox.com/scl/fi/6452q6263t8cq0utimqrm/CEDS-2024-10-16.mp4?rlkey=axp5b55bm5lrli5traqgmq2pb&dl=0>

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## Closing Remarks...



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*If you are interested in having a “what could it be” conversation around these projects across sectors:*

Alex Jackl, Bardic Systems CEO, DSU Chair

[alex@bardicsystems.com](mailto:alex@bardicsystems.com)

David Moldoff, AcademyOne , PESC Board Chair

[ben.silberglitt@cedarlabs.com](mailto:ben.silberglitt@cedarlabs.com)

Steve Smith, A4L, Executive Director

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THANK YOU

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## Bardic Systems: The Future

- An Agent for each learner, employee, employer, and citizen
- Structured input parameters guiding unstructured input
- Structured output
- Standardized metrics for measurement
- What can we do to support this?

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THANK YOU

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