

Improving International Document Exchange

**We WANT
your input!**



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SESSION PRESENTERS



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Agenda

- The PESC GEOCODE Standard and its importance
- Digitary by Parchment – International Document/Data Exchange
- CanPESC – Mission, Collaboration and Opportunities
- Q&A

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International data exchange:

Why the PESCS GEOCODE standard is a key underpinning resource to the global exchange (machine-to-machine) of secondary and postsecondary transcript information for those in our world who engage in data exchange.

The genesis of GEOCODE

Why we built it (and why it took 20 years to happen)

- The foundational issue: PESC members found they could not exchange postsecondary data given current standards, resources and constructs.
- The fundamental challenge: a vast number of native indices exist throughout the various countries and territories, however, a single global index had yet to be developed or published.
- Most native indices (e.g., IPEDS, OPEID, ACTCEEB, ESIS), did not cover all institutions within their borders or territories. In North America alone there are more than 15 native indices, all of which are incomplete in some way.
- Those parties who were engaged in exchanging data within North America for schools where studies happened outside of US borders were unable to identify methods of transmission that did not involve the manufacturing of code sets.

The genesis of GEOCODE

Why we built it (and why it took 20 years to happen)

- Circa mid 1990, PESC recognize this need, however, a critical mass and demand fell short of pushing it forward as a PESC member initiative.
- In 2015, PESC members – fueled by a membership demand, reintroduced the idea of creating an international code set for the use of machine-to-machine exchange of data.
- In 2016, at the AACRAO Technology conference, a formal steering committee was put together to construct and devise a way forward in building and publishing a standard.
- Steering committee was formed, and the hard work of creating the guidelines and principles of agreement began to take shape, and over the coming year, the framework and founding concepts were approved and the country enumerations began to take shape.

The genesis of GEOCODE

Why we built it (and why it took 20 years to happen)

- ECE began the hard work of developing a web-based platform that would allow the publication, distribution, and general use of GEOCODE enumerations for the consumption of the global education sector/the greater post secondary education community.
- Several key members within the PESC organization began compiling and developing lists of postsecondary institutions, based on countries with the most populous institutions of higher education, for inclusion in the GEOCODE directory.
- In late 2017 the standard was formerly published, including a subset of countries that represented the most populous countries.
- Over the next two years, most countries and territories were published with a “starter” list of postsecondary institutions.

Where GEOCODE is today

and how far we have come thanks to the PESC Community

- Currently, all 192 countries are published as an index, including territories within those countries.
- The initial technology stack used to publish the standard and its enumerations in 2017 has evolved to one which includes:
 - ❖ Crosswalk utilities that enable the import of native indices to be added for all countries.
 - ❖ The ability for all communities to participate in the further development and data additions and corrections to the published country index values.
 - ❖ The replacement of the current technology stack to ensure the future of GEOCODE is on solid footing and is poised for longevity.
 - ❖ Further definition and refinement of the GEOCODE institution location identifiers, to minimize, and eliminate, duplicate requests for data additions.
 - ❖ The ability to cross link institutions that have merged, closed, or have otherwise been replaced by new GEOCODE enumerations that represent a change in indexed values.

The state of adoption of GEOCODE

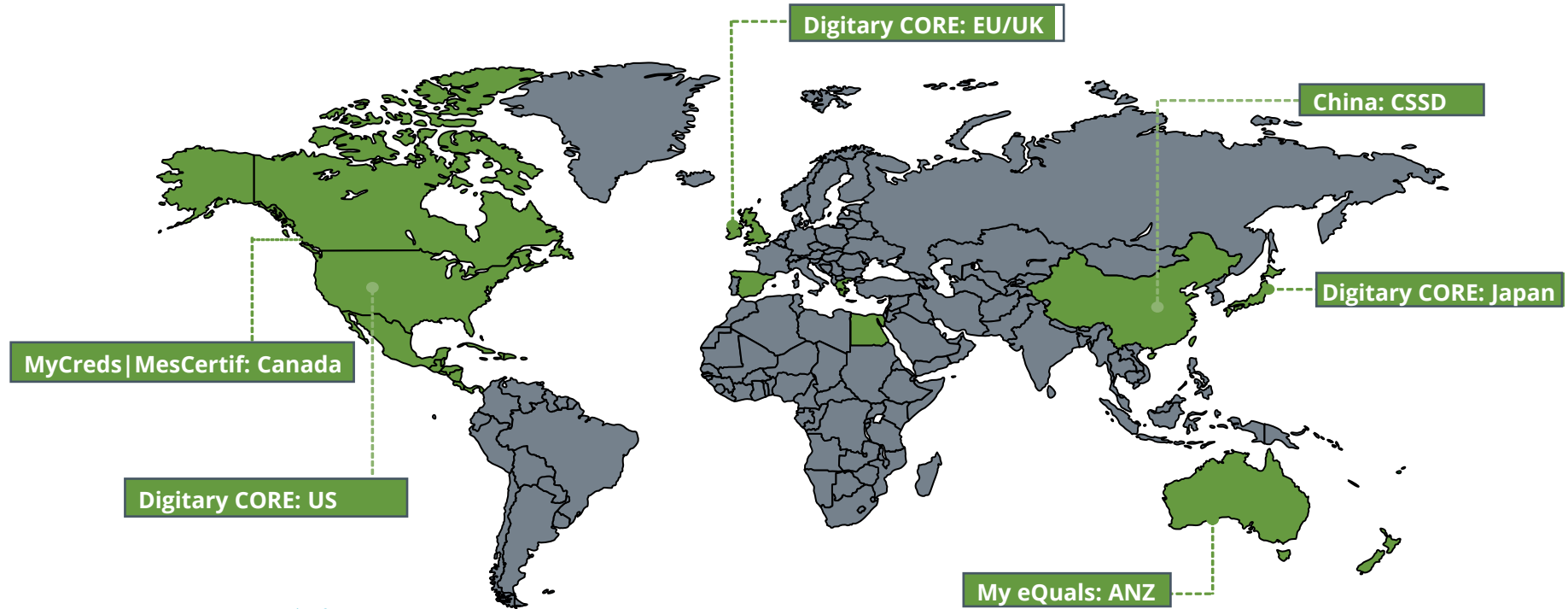
Who is using GEOCODE and why it continues to grow in its adoption across platforms

- NACES members who exchange educational data recognize the need to provide the Source Institutional index in their exchange of EDI, and XML file exchanges.
- Institutions implementing new enterprise-wide systems now have an option of implementing an international code set as opposed to a native index that may not provide all of the necessary institutional information needed as part of their implementation.
- Vendors who exchange EDI and XML data have the ability to crosswalk GEOCODE to institutions who are capable of accepting and mapping GEOCODE information to their current index nomenclature (CollegeSource, International Education Research Foundation – IERF, Education Credentials Evaluators – ECE, to name a few).
- Countrywide adoption where GEOCODE is utilized not only for educational data exchange, but also as part of application processes (e.g., Canada's use for APAS application tracking, transmission of High School data, etc.)
- Other institutions, vendors, and data exchange services who are invited to engage in GEOCODE at anytime, with the full support of the PESC community (irrespective of PESC membership).

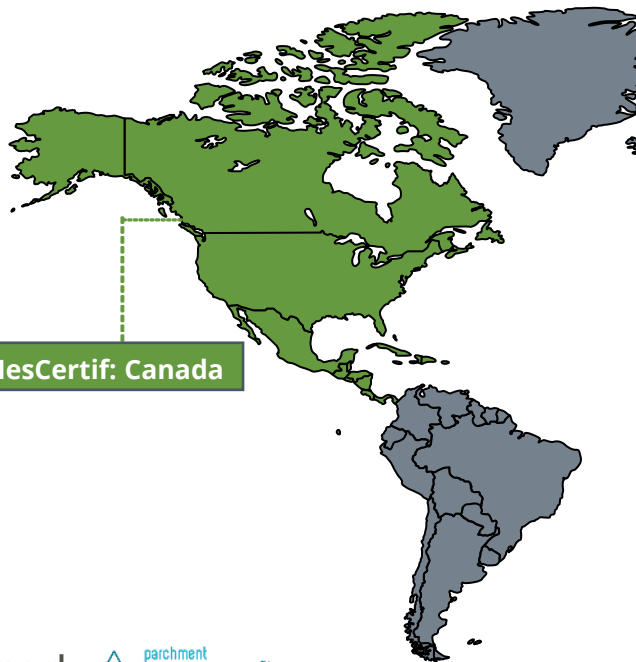
What is on the Horizon for GEOCODE:

- PESC community commitment to provide a five-year review for all published country code index values, through the engagement of the international community (Groningen network, Ministries of Education, PESC workgroup initiatives, user requests for additions).
- Continued PESC response to all community requests, for additions and corrections to published GEOCODE data, through the web services management and Co-chair assignments.
- Continues monthly meetings by workgroup Co-chairs, and periodic calendar meetings for the PESC steering committee and PESC BOD, to ensure transparent and timely management of services.
- Furthering the continued development of GEOCODE web services, to ensure existing technology stacks are reviewed periodically to understand its currency, relevance, and assessing the need for future development.

International Document/Data Exchange



International Document/Data Exchange



MyCreds | MesCertif: Canada

MyCredsTM | MesCertifTM

- Issuers representing Post-Secondary, High School, Governments, Apprenticeship using PDF and XML
- Learners able to share access to their documents instantly anywhere in the world
- Connected to the world-wide Parchment Digitary network for Receive
- PESc XML data for High School and Post-Secondary transcripts
- Data behind every badge using Open Badges standard
- Academic and Micro-credential digital credentials for Digital Wallets based on W3C Verifiable Credentials (using adapted PESc standards)
 - Canada – EU pilot
- Graduation Verification Service

International Document/Data Exchange

My eQuals

- Issuers representing Universities, TAFEs (Technical and Further Education), vocational and tertiary education providers in ANZ and APAC using PDF and XML
- Learners able to share access to their documents instantly anywhere in the world
- Connected to the world-wide Parchment Digitary network for Receive
- Data behind every badge using Open Badges standard
- Integrated Credential evaluation using the Verified International Applicant (VIA) service in both PDF and XML
- Graduation verification

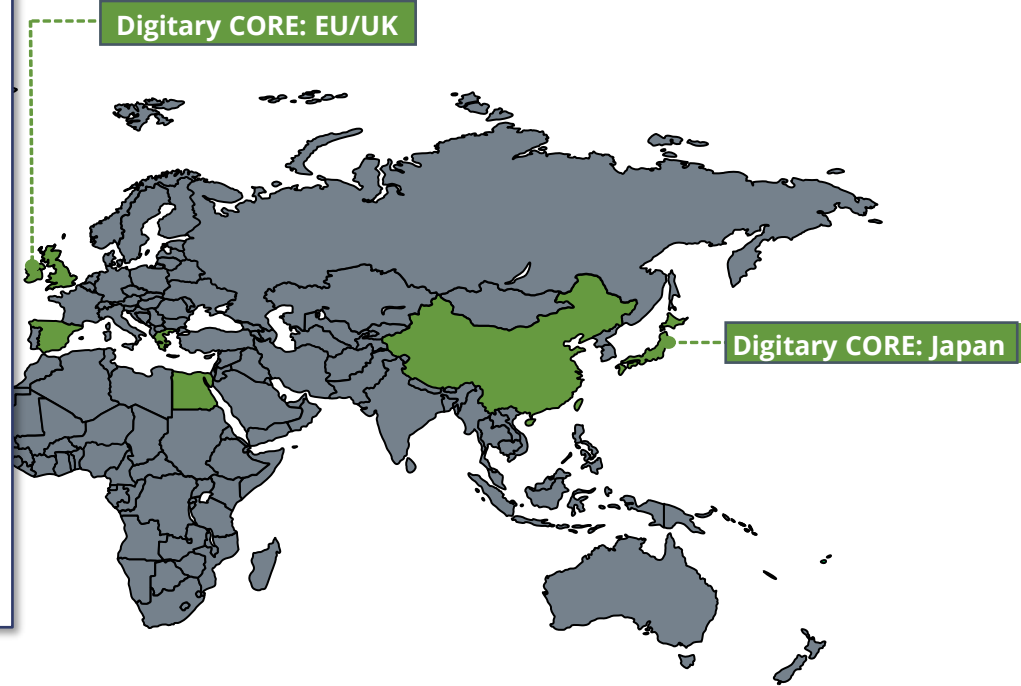


My eQuals: ANZ

International Document/Data Exchange

Digitary CORE

- Issuers representing Universities, Colleges, and other post-secondary education providers in EMEA, Japan and other locations around the world using PDF and XML
- Connected Learner Portal documents to CollegeNet application service in US and Canada using OAuth integration
- Learners able to share access to their documents instantly anywhere in the world
- Connected to the world-wide Parchment Digitary network for Receive
- Data behind every badge using Open Badges standard



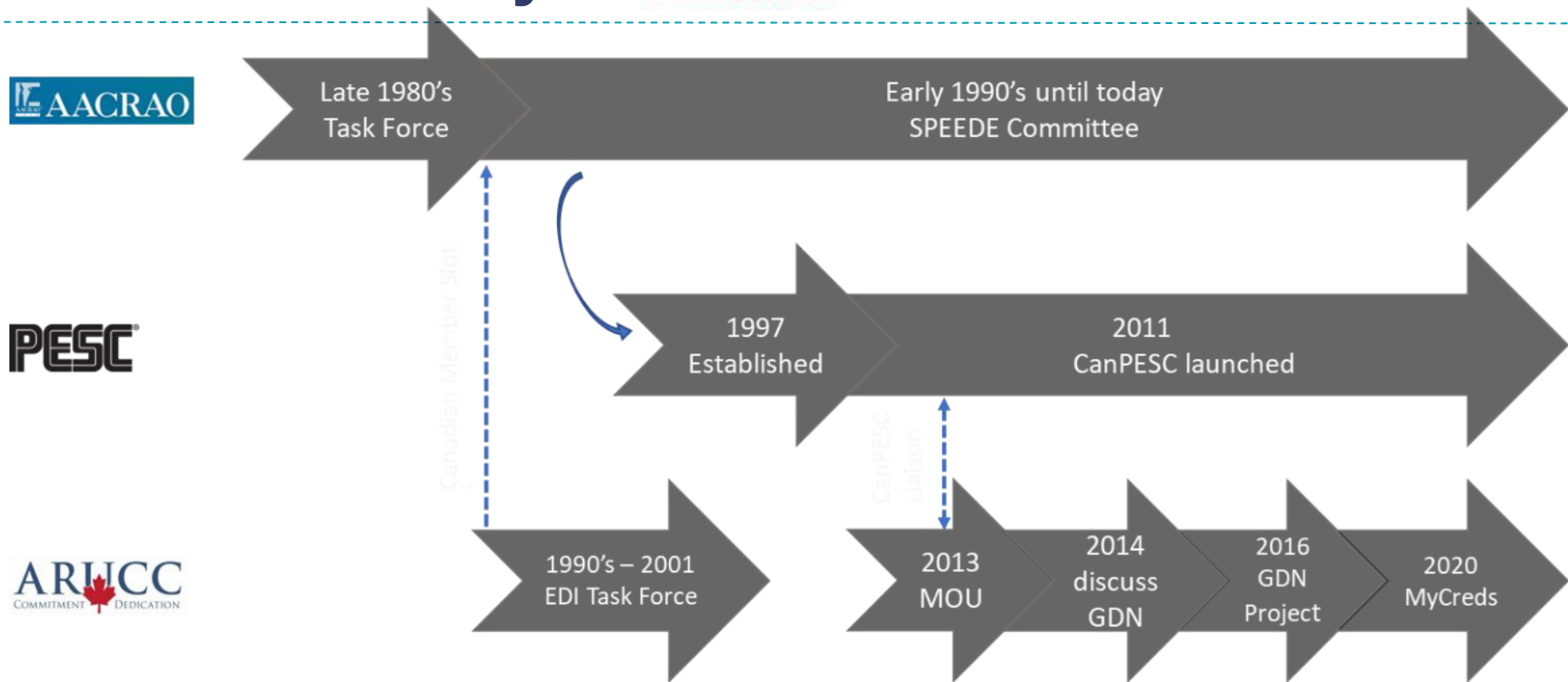
International Document/Data Exchange

- Supporting global mobility
- A number of established and emerging standards across different regions
 - Established - North America, China (through CSSD), Europe (some/most)
 - Emerging - Australia, New Zealand, UK
- Key mobility challenges - translation and crosswalk
- Equivalency services and tools
- Emergence and adoption (albeit slow) of W3C Verifiable Credentials
 - Amplifying standards adoption
 - Digital wallet ubiquity and the future interoperability battles
- Skills frameworks appearing either published or endorsed by Government
 - Publication and broad adoption supporting learner mobility

International Document/Data Exchange

- Parchment actively provides leadership in supporting and advocating for interoperability and open standards across the globe; and backed by significant recognition for this contribution
 - Continued PESC standards participation and support
 - Open Badges are part of a vibrant ecosystem of Digital Credential technologies that is supporting academic recognition, professional and personal development for global talent mobility allowing portability of badges across platforms
 - Continued participation and representation in Comprehensive Learner Record (CLR), Learning and Employment Records (LER) and Interoperable Learning Records (ILR)
 - Micro-credential standards evolution and rationalization around the world
 - W3C Verifiable Credentials and participation in Digital Learner Wallet interoperability
 - Tools enabling translations between standards

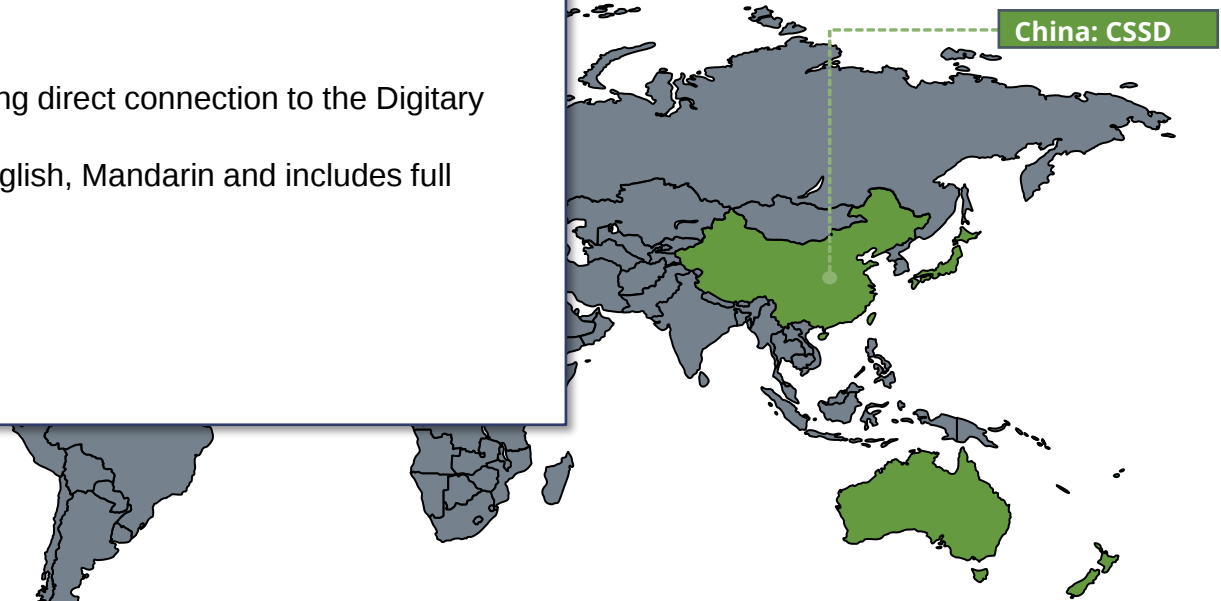
A Brief History of **CANPESC**[®]



International Document/Data Exchange

CSSD - China

- Integration with CSSD enabling direct connection to the Digitary Receive network world-wide
- All documents provided in English, Mandarin and includes full PESC XML data



An Overview of **CAMPESC**[®]

- Canadian PESC User Group

<https://www.pesc.org/canadian-pesc-user-group-1.html>

- Open, volunteer PESC user group
 - Members from Canadian schools, hubs, government, vendors
 - Discuss, promote, coordinate and liaise with groups like:



ARUCC



PESC



AACRAO SPEEDE



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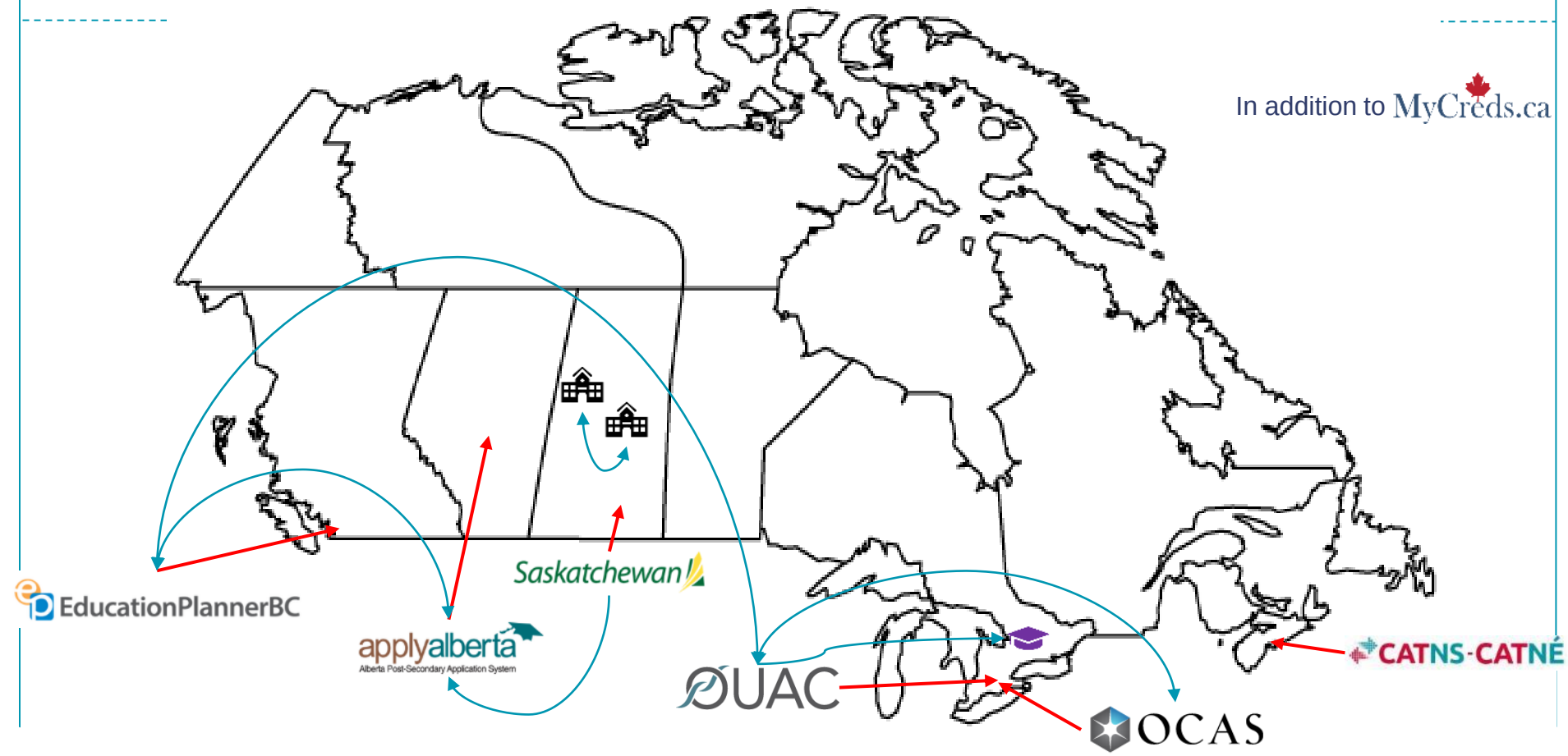


TAICEP

- Ensure PESC's **mission** and **deliverables**, including approved **standards**, both supports and incorporates the needs and interests of Canadian stakeholders

Canadian PESC (XML & EDI) Data Exchanges

In addition to MyCreds.ca



PESC XML Implementation Support

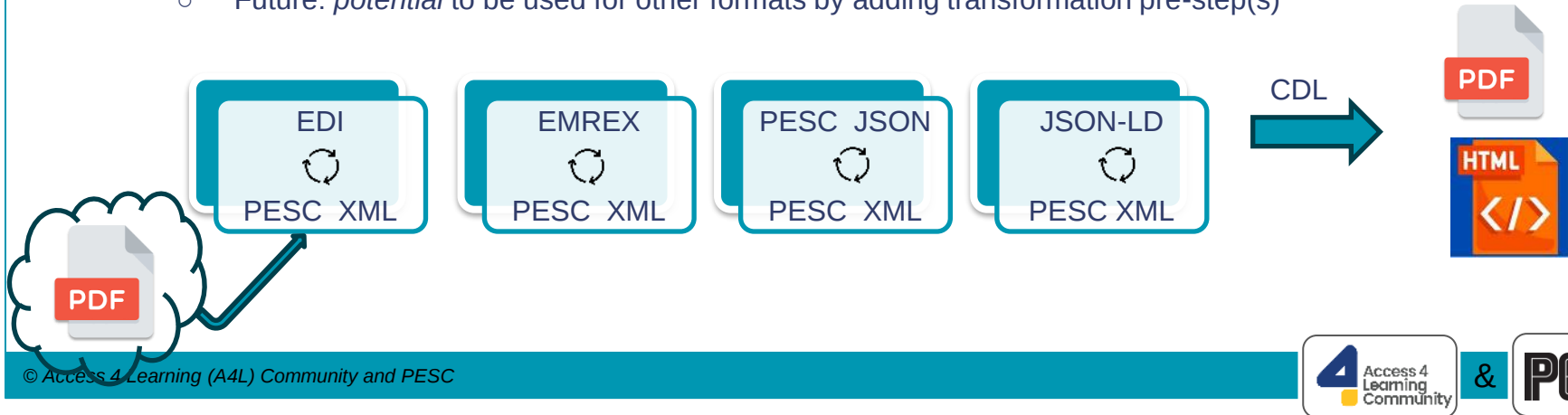
- “Tip sheet” (policy, data mapping, decision awareness)
- Standards Upgrade Pathway
 - White paper
 - Large PESC XML adoption in Canada
 - Eventual version upgrades (likely at different times and rates within and across provinces)
 - How? Tips? Learnings?
- Send and receive beyond Canada!
 - Scalability (both technical and non-technical)



“Bridging” some of the gaps

Common Digital Layout (CDL)

- Transcript is typically *sender-centric*
 - especially College & University
 - High School layout typically government mandated but varies across jurisdictions
- CDL provides consistent *receiver-centric*, human-readable view for PESCS XML College and High School transcripts
 - Today: efficiency for reviewers, assessors, evaluators
 - Future: *potential* to be used for other formats by adding transformation pre-step(s)



Institutional Incentive!



Learner Mobility Incentive!

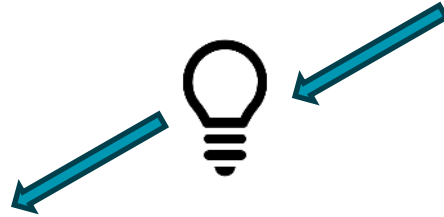
International Credential Evaluations



“The world is getting smaller and credential evaluation is a really important part of exchanging employees and academics and refugees. So we must have ... standards.”

LesLee Clauson Eicher
Past President, TAICEP

Source: <https://thepienews.com/pie-chat/>, The PIE News, Sep 11, 2019



AACRAO **2024** presentation by ECE, IEE, Embry-Riddle and CGFNS

A Case for the Digital Delivery of Credential Evaluations

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