Building upon the Canadian Digital Data Mosaic Creating a National Student Data Exchange Network

ARUCC Groningen and Student Mobility Steering Group 2018

CanHEIT Conference June 2018











Agenda

Introductions

Creating a National Node

Project Status Update

Next Steps

Discussion/Questions











Presenters



Brian StewartCUCCIO Representative
CIO, University of Alberta



Lori MacMullen
CUCCIO Representative
Executive Director, CUCCIO











Steering Committee

ARUCC

Charmaine Hack, Ryerson
University (Chair)
Andrew Arida, UBC
Romesh Vadivel, McGill
University

PCCAT

Dr. Rob Fleming, BCCAT
(Vice Chair)

Dr. Robert Adamoski, BCCAT

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Possibilities & Problems to Solve



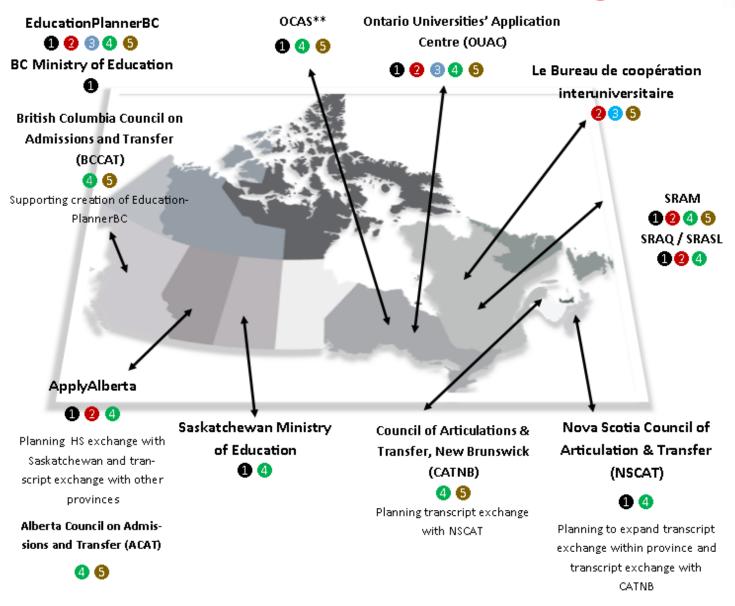








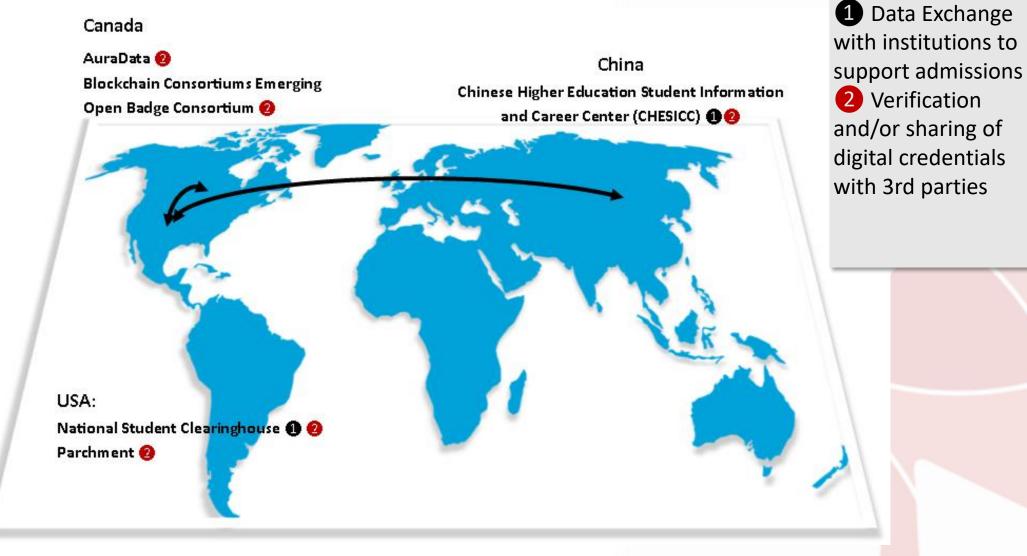
Internal Provincial Strengths



- 1 Data exchange of high school data with post-secondary institutions to support admissions within province
- 2 Data exchange between postsecondary institutions to support intra-provincial exchange
- 3 Data exchange with data hub or post-secondary institution located in another province (in any capacity)
- 4 Information resources on higher education pathways, transfer agreements, etc.
- 5 Other support services (e.g., research, transfer policy guidelines, link various government bodies, etc.)

** Full information not available

International Exchange





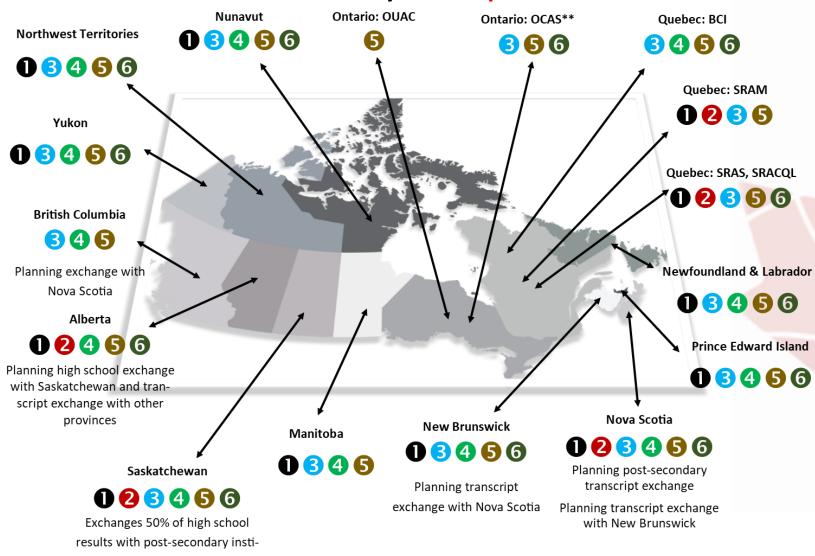








Post-Secondary Gaps



- 1 No inter-provincial data exchange
- 2 Provides exchange of high school or CEGEP data only
- 3 No graduate student data exchange
- 4 No connection to trusted third parties other than government (e.g., WES, regulatory bodies, etc.)
- 5 No pan-sector, provincial or national exchange/service for outbound post-secondary credential verification (not incl. apps/transcripts)
- 6 No pan-sector, provincial or national exchange/service for inbound post-secondary credential verification (e.g., WES)
- ** Full information not available

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^{**} Full information not available

Other Gaps to Close

- Very Limited online credential verification capacities Existing options are either at the institutional level or through a few 3rd party vendors partnering with institutions (e.g., Notarius, Parchment, AuraData, National Student Clearinghouse, etc.)
- No international connectivity to global nodes (except McGill exchange with CHESICC via NSC; OUAC capturing LSAT and MCAT scores; as above)
- No member owned provincial or Canada-wide exchange of microcredentials/badges, co-curricular records, etc. Select vendor options available including the Cdn Open Badge Consortium.
- Initial research into blockchain options (although Cdn govt recently launched a supply chain initiative)











Project Overview













SC Mandate Endorsed by Members (2016)

- Continue the exploration and development of a Canadian dataexchange model
- Guide the development of a Canadian data-exchange model
- Embed core benefits into the model improve student service; improve student mobility through efficient data-sharing; encourage national dialogue around student mobility and success; align with the national and international goals of other Canadian postsecondary and pathway organizations
- With ARUCC leading, create a governance model a national Steering Committee to provide project oversight







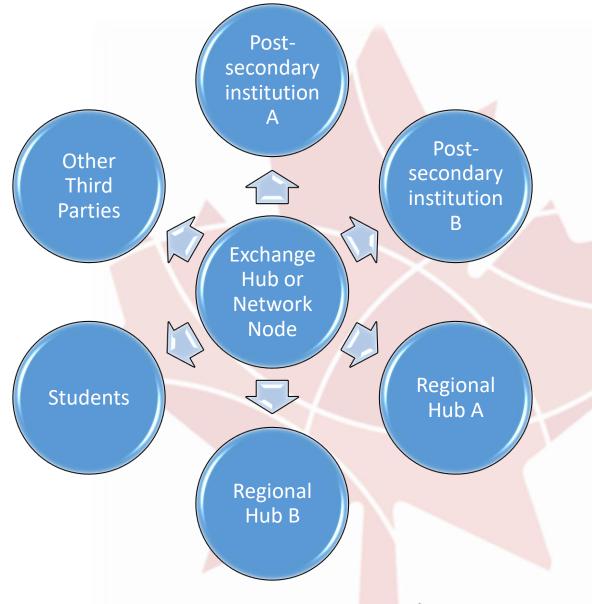






National Model

- Facilitates trusted connections
- Enables data exchange between two parties
- Provides connection point for international nodes
- Facilitates secure, permission based sharing of data
- Supports Canada's diversity
- Does not imply creation of an online wallet or portal for students although that could represent a value-added service when sharing credentials with other third parties.













National Coalition









Project Principles

- Improve student service
- Preserve and support institutional and provincial/territorial diversity, autonomy, and authority
- Advance improvements and enhancements that support student mobility and data portability
- Build on and complement existing student application and data exchange hubs supporting postsecondary
- Ensure national, evidence-based solution
- Close gaps















oncat

Ontario Council on Articulation and Transfer









Canadian Bureau for

International Education



University

CAMPUS

Manitoba

Cape

Communication / Collaboration / Innovation































Saskatchewan Trans fer Credit & **Learner Pathway** Council





















Highlights of Work Completed (April 2017 to Present)

- Resources: hired a project consultant
- Presentations: conducted 500+ registrarial and data exchange experts (provincial, national, international)
- Formal research request: consulted with 1400+ data exchange and student mobility experts through the Groningen Network and at the GDN Meetings
- Direct consultation: engaged 100+ organizations, vendors, government, and people with expertise in national and international data exchange
- Sample Research: Information Request, Web site reviews, presentations, meetings, survey, different models
- Additional Consultation: Ontario and BC Projects, spring session series



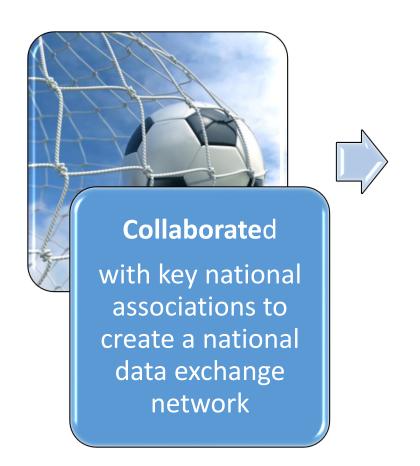








✓ Steering Mandated Deliverables Accomplished

















Steering Mandated Deliverables Remaining

Develop business requirements

IN PROGESS

Develop

Validate

 Confirm business requirements

IN PROGRESS

Execute RFP +
 Establish

 Implementation
 Foundation

After Conference

Implement









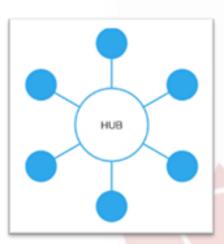




National Data Repository



Peer-to-Peer Network Service Model



Hub-and-Spoke Model



Blockchain Model

Typology of Models

Someone requests a transaction.

The requested transaction is broadcast to a P2P network consisting of computers,

known as nodes.

Validation

The network of nodes validates the transaction and the user's status using known algorithms.



A verified transaction can involve cryptocurrency, contracts, records, or other information.

cryptocurrency

How Blockchain Works



Has no intrinsic value in that is not redeemable for another commodity such as gold.

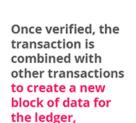
Has no physical

in the network.

form and exists only



Its supply is not determined by a central bank and the network is completely decentralized.

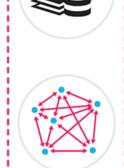




The transaction is complete.



The new block is then added to the existing blockchain, in a way that is permanent and unalterable.



Discussion, Advice & Questions











Discussion Questions

- What gaps exist in your jurisdictions that we should consider?
- What business requirements would you suggest?
- What would you suggest is required institutionally and provincially to advance this project further?











For more information

ARUCC Groningen Website http://arucc.ca/en/resources/task-force-groningen.html

Contact Joanne Duklas if you have questions about the sessions (joanne@duklascornerston.ca)



