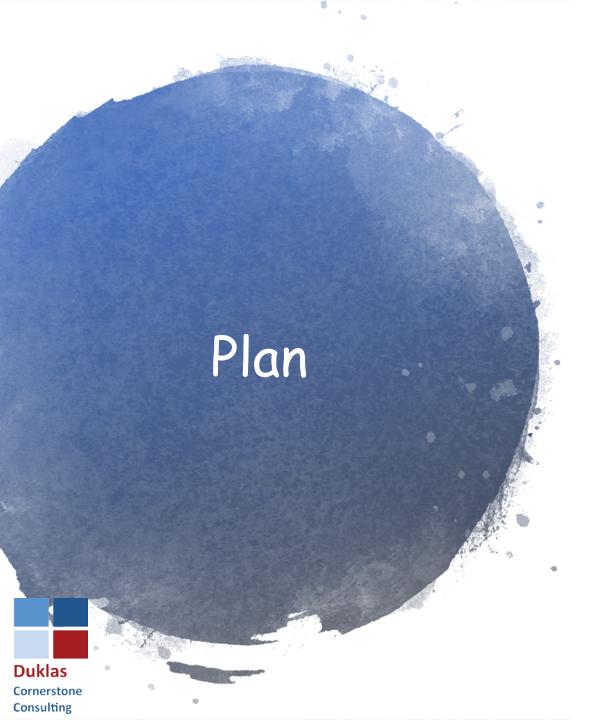


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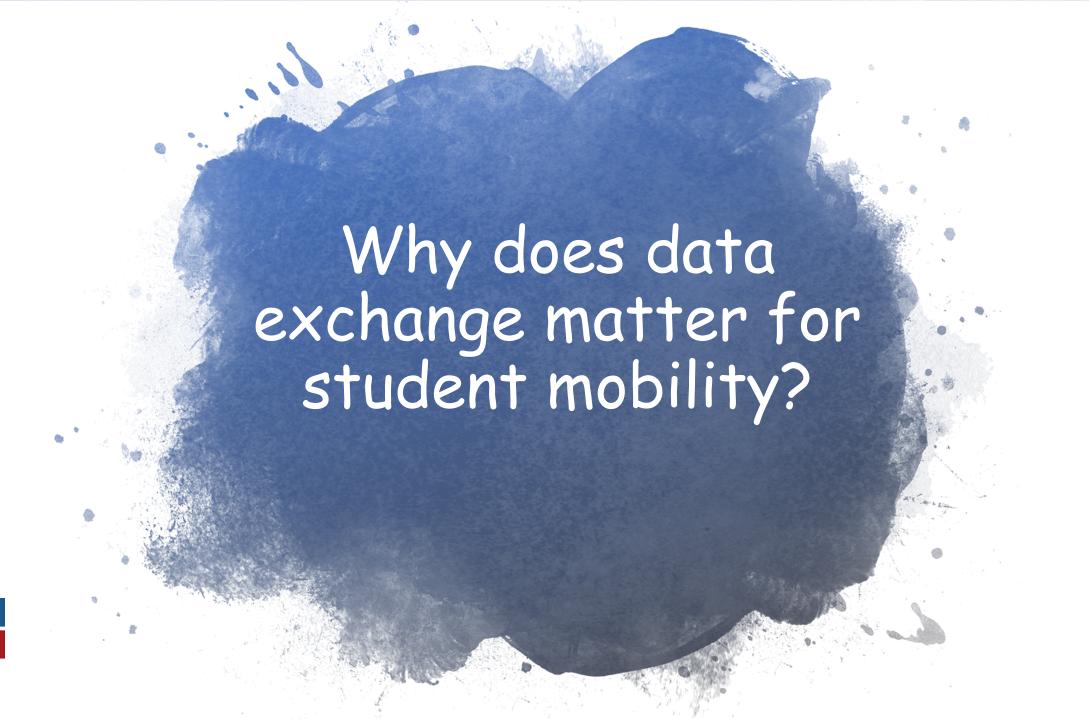
Sharing ideas

Quick overview: Groningen and ARUCC

Top 10 lessons learned

Exploring the implications

Wrap up



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Data Mobility Student Mobility Cultural Mobility







Groningendeclaration.org





ARUCC Groningen & Student Mobility Project

Arucc.ca Click on "Task Force: Groningen"





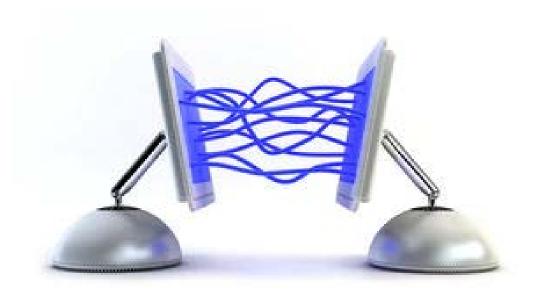












Definition for 'Data Exchange'?

A "process of taking data structured under a source schema and transforming it into data structured under a target schema, so that the target data is an accurate representation of the source data."



Another way of looking at this?

It's about sharing information in a trusted and consistent way without changing its meaning.



Relevance for Mobility and Transfer?

Standardizing content isn't the end goal.



Lesson 2 - It's Technical Emphasis adds Opaqueness

- Data exchange languages? JSON, XML, RDF, Atom, etc.
- Schema? Is it in computer interpretable form?
- Is it 'flexible'? Meaning... can you extend its capabilities without modifying the schema?
- Does it have a dictionary?

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- Dialecting? Is the language definition available in multiple languages?
- Transformations? Does it include translations to other standards?
- Human readable? Readable by people with no training?

Relevance for Mobility and Transfer?

Its opaqueness makes it difficult to understand and, as a result, to create collaboration and connectivity.



Lesson 3 - Most of Canada is Well Positioned

Data exchange conversations are actively occurring in Canada.

- Crosswalks exist between data exchange languages in at least one application centre.
- XML has become well entrenched.
- Applause goes to the members of ARUCC; PCCAT and provincial Councils like BCCAT; CanPESC and PESC; CUCCIO; and to the application centres like EducationPlannerBC.



Relevance for Mobility and Transfer in Canada?

It opens the doors for greater

collaboration, connectivity, and

mobility.



Builds Trust if done right!

Lesson 4 - Data Exchange matters for institutions





Sharing trusted information in a trusted way using platforms for exchange that offer security and privacy mitigates fraud, protects student information, and enhances efficiencies

It empowers students.

Lesson 5 - Data Exchange matters for students





Effective data exchange facilitates a student's journey between institutions, regulatory bodies, government, and employers.

Lesson 6 -Collaborating with Trusted Partners is Key for Exchanging Student Data

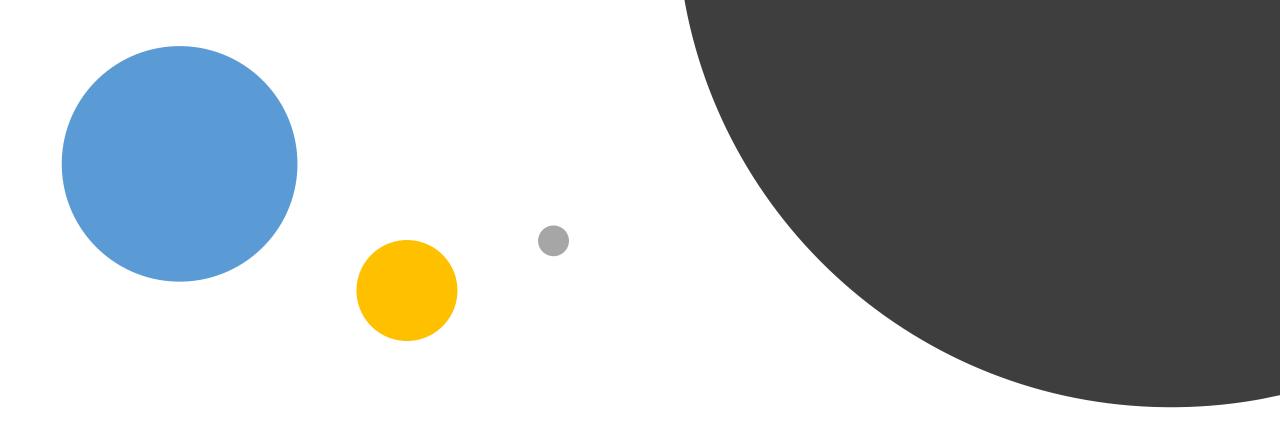




Relevance for Mobility and Transfer? Supports quality assured practices.

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Lesson 7 - Figuring out who to partner with for effective Student Data Exchange is tough!

There are many vendors and options



Relevance for Mobility and Transfer?

There are implications if data exchange occurs in closed systems.



Lesson 8 - The landscape is constantly changing

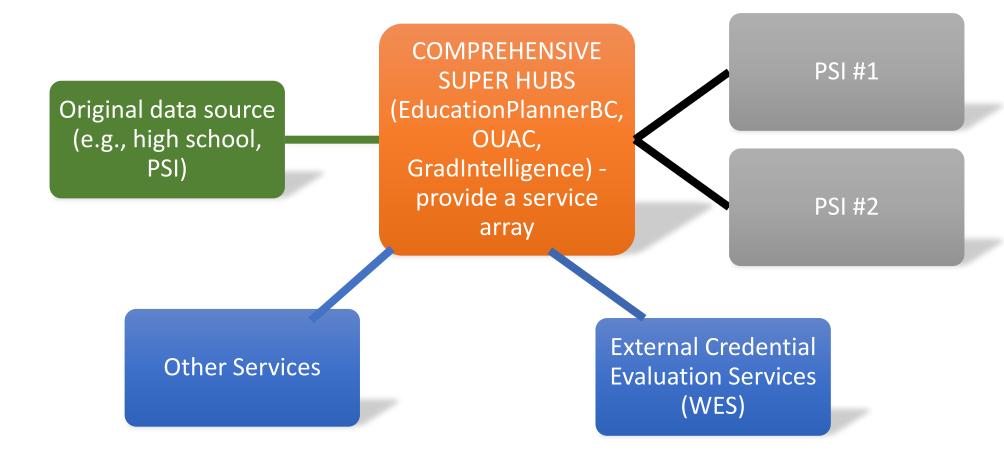


Peer-to-Peer Examples

- EducationPlannerBC to OUAC data exchange
- PSI to PSI data exchange
- PSI to PSI using EDexchange



More Complex Approaches: Online Portals, e-portfolios or Wallets





Lesson 9 - Learner Focused Options Exist & are Complementary to Peer-to-Peer Models

Blockchain model

• "The blockchain is an incorruptible digital ledger of ... transactions that can be programmed to record..." actions impacting something, for example, a student's academic record being sent to 'xx' institution.



Request made



Someone requests a transaction.

Request broadcast

The requested transaction is broadcast to a P2P network consisting of computers, known as nodes.

Validation

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

validates the transaction

Validation

occurs

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

How Blockchain Works

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

cryptocurrency

Request noted in transaction ledger

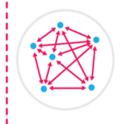
Once verified, the transaction is combined with other transactions to create a new block of data for the ledger,



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



Has no physical form and exists only in the network.



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

The transaction is complete.

No further action required

Source: https://blockgeeks.com/guides/what-is-blockchain-technology/

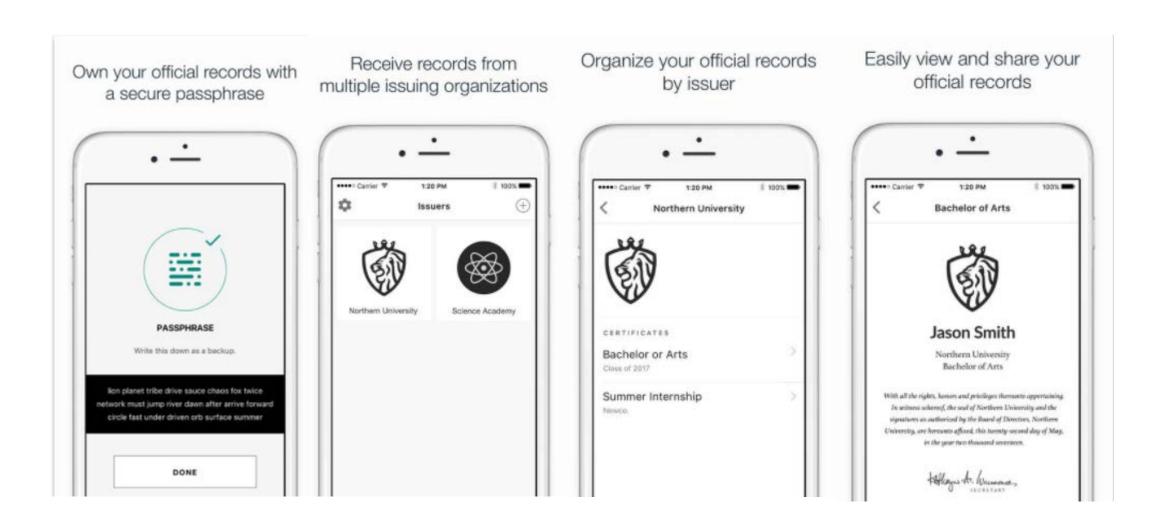
Varying Levels of Learner Controlled Data Exchange Options - Blockchain

- Institution controls blockchain ledger Stanford model
- Data exchange vendor or superuser controls blockchain ledger - Digitary and others exploring this space
- Student controls ledger Learning Machine/MIT model

Core question: Who owns and controls the verification?



One Blockchain Model





Relevance for Mobility and Transfer?

Truly visionary opportunities exist to support students throughout their entire learning journey through more advanced data exchange.



Lesson 10 - Working Together Makes Sense

Potential for

- Information sharing
- Cost savings
- Efficiencies
- Economies of scale and scope
- Enhancing flexibility
- Supporting the full spirit of student mobility



Collaboration + Connectivity = Data Mobility

Lessons

- 1 The data exchange world is complex...
- 2- And opaque!
- 3 Canada is well positioned....but more work is needed.
- 4 Effective, trusted data exchange matters for institutions...
- 5- And it empowers students.
- 6 Collaborating with trusted partners is key....
- 7 But figuring out who to partner with is challenging.
- 8 The landscape is changing constantly.
- 9 Learner controlled options exist & are complementary.
- 10 Collaboration + Connectivity = Data Mobility



Data Mobility Student Mobility Cultural Mobility

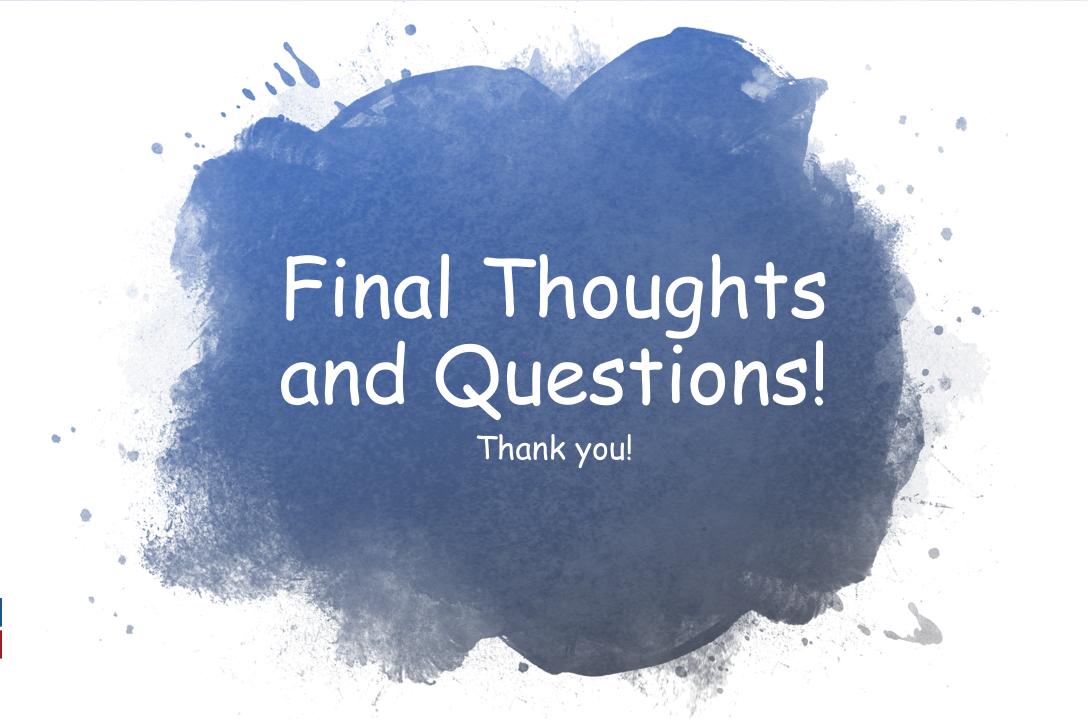


What does this mean for PSIs?

- The work of allied bodies like EducationPlannerBC and BCCAT are critically important.
 - Examples: facilitate capacity and change, develop data exchange nodes, ensure discussion and alignment through groups such as articulation committees, etc.
- Facilitating mobility through effective data exchange provincially, nationally, and internationally is an important strategic priority.
- Maintaining a learner focus is achievable through visionary approaches to data exchange.



Context and flexibility matter.



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