



Student Information Systems:

From BCeSIS to MyEducation BC

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Fall 2014 Representative Assembly

Purposes of collecting and storing data on K–12 students

- historical—small amounts of data kept permanently
- record of a student—demographics attendance, courses of study/grade level, performance, completion
- Permanent Record Card
- transcript for Grades 10–12
- “Dogwood” graduation certificate.

MyEducation BC

Proposed—More data to be collected

- track students throughout their K–12 career with a portfolio
- report on student behaviour
- define and monitor Individual Education Plans for students with special needs
- maintain data on learning outcomes, tests, and “competencies”
- private “cloud” for all student work, teacher plans, and for learning resources.

What is the purpose of each of the types of information in MyEdBC?

“...ensure that these digital constructs are not used in new ways, for administrative or other government purposes unrelated to the original purposes for which the constituent data elements were collected.”

—Information and Privacy Commissioner

Potentially, how much data in MyEdBC?

- * *Standard demographic/tracking*
—600,000 students
- “Formative Assessment”
- “Summative Assessment”
- daily/hourly data reflecting teacher decisions
—up to 200 decisions/hour
- “cloud” with student work and portfolios
- “cloud” with teacher work, lesson plans, etc.

Cross-curricular competencies

—Amount of data to be collected

There are three cross-curricular competencies, each with a number of sub-domains:

Thinking Competency

- critical thinking
- creative thinking
- reflective thinking.

Personal and Social Competency

- positive personal and cultural identity
- personal awareness and responsibility
- social awareness and responsibility.

Communication Competency

- language and symbols
- digital literacy.

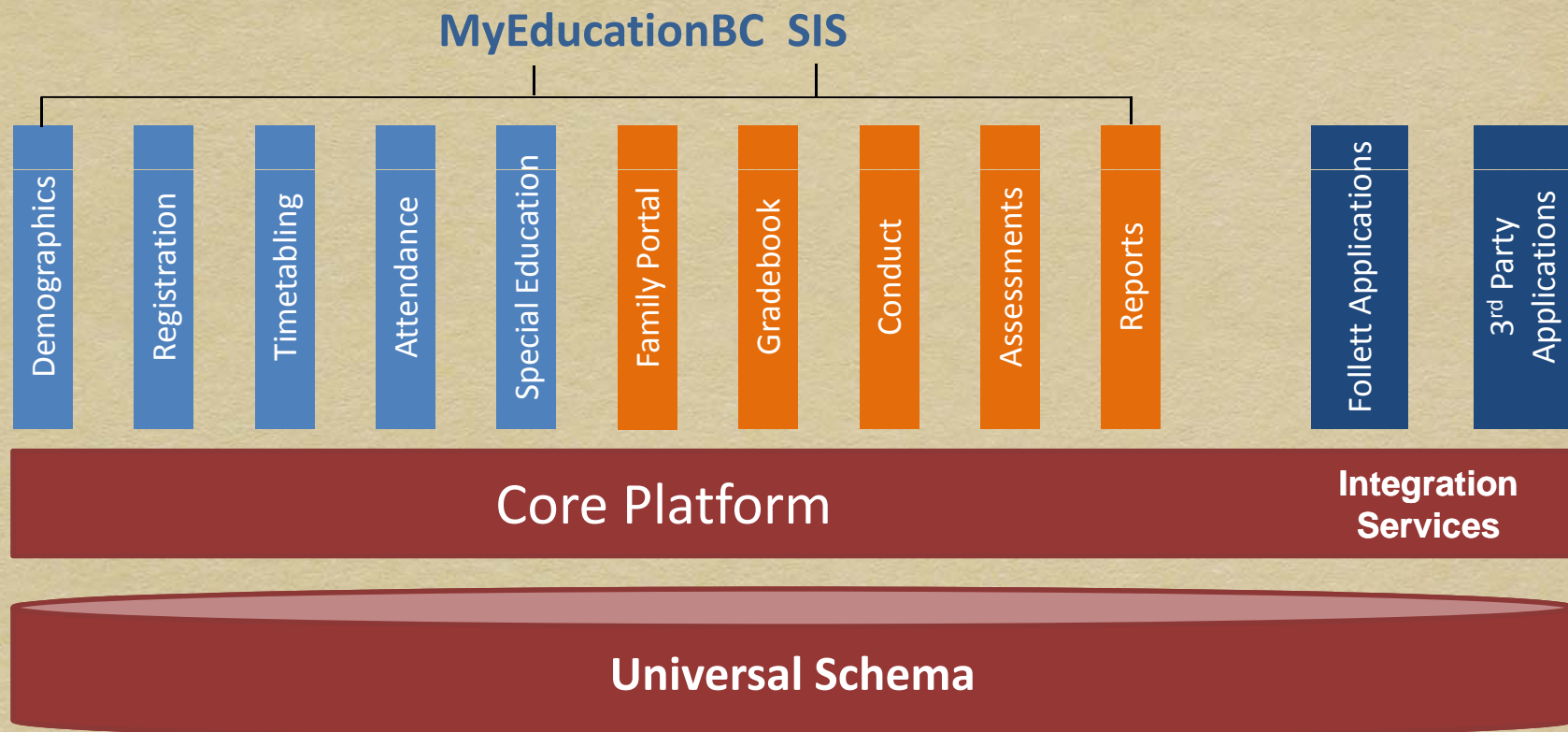
In the following section, each sub-domain of the cross-curricular competency is described in three parts:

- a definition that summarizes the key features of the sub-domain
- a description of how the sub-domain is characterized for the purposes of assessment
- a description of how the development of the sub-domain may be supported through learning and teaching.

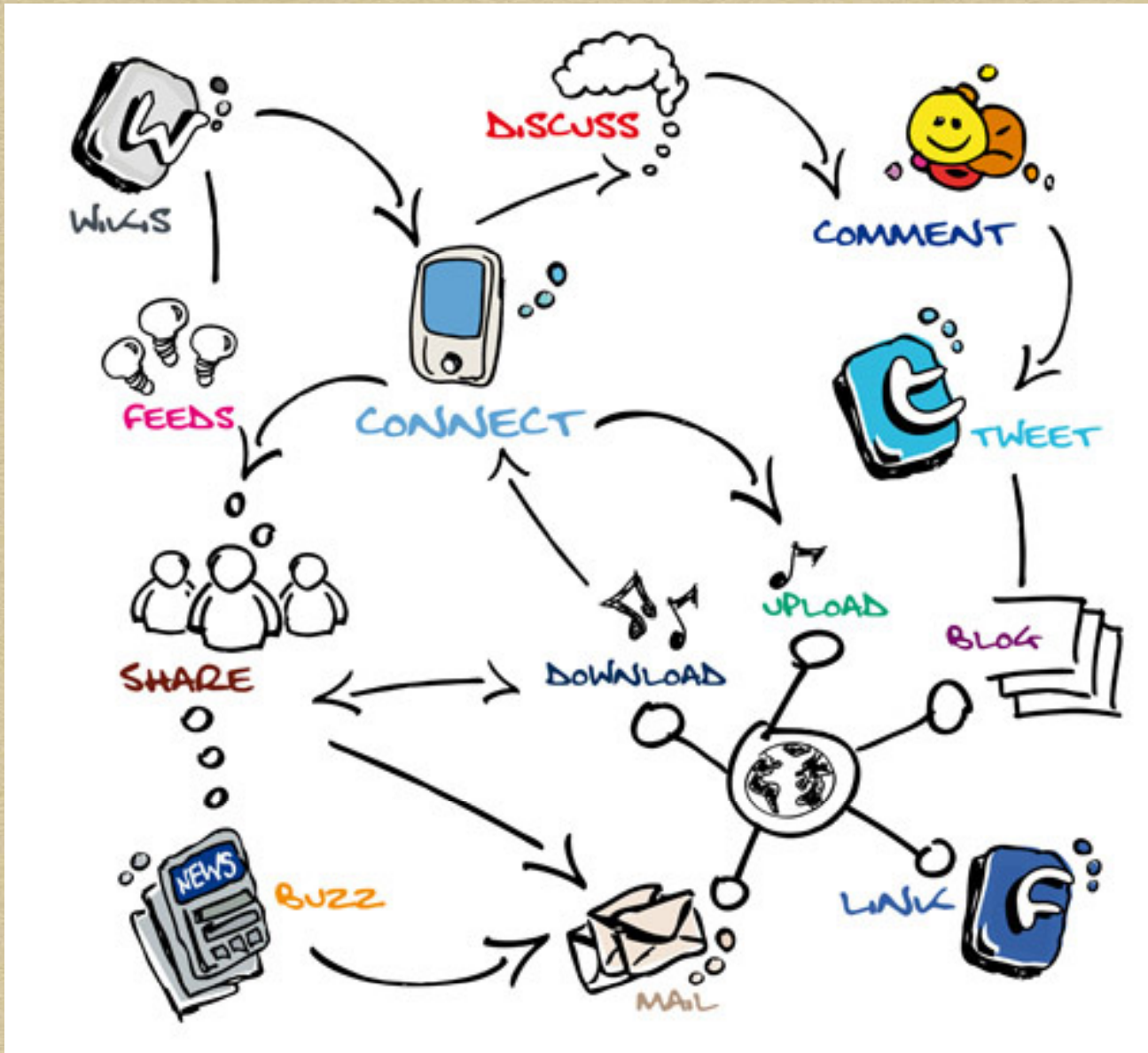
How many people will have access? —2 million, in theory

- administrators—4,000
- clerical staff—5,000
- counsellors—600
- teachers—38,000
- students—600,000
- parents/guardians—1,200,000
- ministry staff—(?)
- researchers/data miners—(?)

9. Architecture



Proprietary and confidential – Fujitsu Consulting (Canada) Inc.



Some issues—Overreaching

- the amount of data that is supposed to be collected and entered
- the number of people who are supposed to have access
- bandwidth of the online carrier (Provincial Learning Network)
- the amount of storage/place of storage
- no existing user-base of Aspen as large as the size of BC education.

Privacy risks

- the “right to be forgotten” for behaviour as a child
- “...‘social sorting,’ which uses personal information to slot individuals, through their digital profiles, into risk or desirability categories.”
- “...proliferation of inaccurate information about an individual.”

—Information and Privacy Commissioner

More issues—Costs

Costs:

- \$20 per student—\$10 of that from the district

Downloaded costs:

- adequate hardware and software
- adequate access to the Internet in the district and school
- training for teachers
- administering the system
- time to put information in the system and process it
- administering user names and passwords for all users
- training for parents/guardians.

Additional applications

Additional storage

Further issues—Surveillance

Hierarchical access and use for surveillance of students and teachers

“...‘digital personas’ may be threatening phenomena given the propensity for governments to use data surveillance to control individual behaviour.”

—Information and Privacy Commissioner

Still more issues—Intellectual property

Who owns the student information?

The student?

The school district? The ministry?

The contractor who stores it?

Who owns the teacher work?

The teacher? The school district? The ministry?

The contractor?

Why?

According to the promoters:

- objective of having all education data in one system—insisted on an “enterprise solution”
- developing data mining and analytics within education
- ability to link education data to other government databases.

The Circle by Dave Eggers

- *The Circle* is a dystopian novel—a 2020 version of 1984
- *The Circle* is the “universal database” and the greatest crime is “the criminality of privacy”
- it provides a description of “adaptive” personalization in education.

“Data is the new oil”

“What does it mean if we view students (and their data) as a resource to be mined and extracted? What’s gained? What’s lost? What’s depleted? Who profits? Who benefits?”

—Audrey Watters, Edtech critic

Key questions for teachers and parents

- How much information should be collected on students?
- What is the purpose of the information collected?
- Who should have access to the data and for what purposes?
- Who should decide?
- What is the governance mechanism?

What should be the privacy requirements?

- What should be the limits to access?
- What is the balance between being able to track students for educational reasons and privacy rights?
- What about the “right to be forgotten”?
- Should data be linked across government databases?
- How much should parents have access to?

What are the requirements for successful implementation?

- What training is required? For teachers, for administrators, for students, for parents?
- What technical support is needed on an ongoing basis?
- What bandwidth is required? What school-based access?
- What hardware and software is required?
- Who is going to pay for all this?

What should be the relationship to teacher autonomy?

What is the individual teacher able to determine of the use of MyEdBC?

- Can the teacher use alternative technology?
- How much is the administrator able to override teacher decisions?
- How might it affect teacher relationships with students and with parents?
- How might the information in MyEdBC be used for personnel decisions?

What should be the role of the union in the issues around MyEdBC?

- Teacher participation in committees deciding on issues related to scope and boundaries through committees set out in Section 53 of the Labour Code.
- BCTF policy framework?
- Local policy and committees?
- Training teachers on issues?
- Defending teachers' rights?

Executive motions on MyEdBC

Recommendation 1:

That the BCTF recommend to locals that a district committee be created and charged with developing a plan for the district implementation of MyEducation BC.

Recommendation 2:

That the BCTF identify key issues that should be dealt with by local committees in developing and carrying out implementation plans.

These should include:

1. adherence to provisions in existing collective agreements.
2. protection of privacy for students, families, and teachers.
3. defining limited boundaries of required use of the student information system.
4. policies on electronic communications among parents, students, and teachers—within MyEd BC as well as in social media external to MyEd BC.
5. adequate time, training, and support for the implementation of MyEd BC.
6. clear policies on who has access to each level of data and clear guidelines for how information may be used.

Recommendation 3:

That the BCTF carry out consultations with members about issues of privacy, boundaries, required uses, implementation, resources, training, the impact on teaching and learning, and ongoing support for members with regard to MyEd BC.

Recommendation 4:

That the BCTF inform the Ministry of Education about the importance of informing districts that they must include locals as representing teachers if the implementation of MyEducation BC is to be carried out ethically and with a minimum of conflict.

Recommendation 5:

That the BCTF develop a research report on the potential implications of a government objective of linking information from the MyEducation BC database with other government databases such as the Integrated Case Management system.

Recommendation 6:

That the BCTF inform BCCPAC and request locals to inform DPACs and PACs about issues that may be of concern to parents related to MyEducation BC.