Common Student Information System
Alliance Management Office Report
May, 2010

1. Initiative Overview

The Common Student Information System (known as BCeSIS) is a shared school district application that has replaced many existing standalone student information systems that have become obsolete and/or are unable to keep pace with growing school and school district management needs. The systems replaced include student registration, enrolment, scheduling, recording of marks and outcomes, special education, and reporting. The new common application provides the underlying systems infrastructure needed by school authorities (i.e. Boards of Education, independent school authorities and First Nations school authorities) to improve education management and ultimately drive student achievement.

In March 2004, the Ministry of Education completed a competitive process and purchased student information system software from Administrative Assistants Ltd. (*aal*) of Burlington, Ontario. On June 30, 2005, the Ministry of Education entered into a contract with Fujitsu Consulting (Canada) Inc. to deliver central application hosting and integrated support services to meet the initial and future needs of schools, school authorities, and the Ministry. Fujitsu was originally contracted to provide the following: a secure facility and the servers to operate the shared service; level-two application support and help desk services; training logistics, data loading and conversion, security and privacy, and service delivery management services. In April 2006 the contract was amended and Fujitsu's services were expanded to include the following implementation services roles: BCeSIS training, data conversion support, and application management services.

All 60 school districts, 130 independent schools, 16 First Nations schools and the Yukon have committed to implementing BCeSIS. The project is managed by the Ministry of Education and the Service Management Council (SMC) which represents all participating school authorities. Responsibility and funding for the project is shared between the school authorities and the Ministry.

School authorities are responsible for implementing and supporting the use of the system in their schools. The Ministry of Education is responsible for contracting the centrally-hosted system and delivery of support services to schools. School authorities pay a portion of the annual system operating cost to the Ministry.

The advantages of a common student information system include:
- Improved management of student achievement by schools and school districts, providing them with timely and accurate access to student performance data that enables evidence-based planning;
- Improved economies of scale, especially for smaller school districts;
- Increased control and access to information for more effective management of schools, and improved quality and standardization of data for accurate reporting;
- Shared responsibility between the Ministry and school authorities for the systems that support changes to education practices and policy; and
- Improved benefits and reduced costs of system customization, operation, and maintenance.

2. Status Update

BCeSIS is in the last year of a five-year implementation program. As of May 2010, BCeSIS was implemented in 1462 of the province's 1622 public schools and in 97 of the 130 independent schools that signed agreements to participate. In addition BCeSIS has been deployed in 16 First Nations Schools and 359 StrongStart BC Centres and early learning outreach programs. More than 600,000 active student records are currently contained in BCeSIS. In 2009/10, there were 580,486 students in provincial public schools and 69,466 students in independent schools.

In 2009/10, participating school authorities continued to focus on the high-level priorities that were approved by the Service Management Council in May 2009:

1. *Continue to provide a stable, sustainable service that addresses the operational needs of schools and districts.*
2. *Promote increased BCeSIS use, both by deploying BCeSIS in new schools and by implementing available functionality.*
3. *Support student achievement.*
4. *Create end-user support capacity within schools and districts.*
5. *Implement new functionality when there is demonstrated value.*

Implementing a system of this scale and complexity has been challenging for many users in the schools and school districts. Some of the issues encountered and mitigating strategies include:

Local infrastructure and connectivity	The BCeSIS team has worked with schools, vendors and the Provincial Learning Network to ensure network and workstation issues are minimized.
User training	A train-the-trainer program was developed for districts to use during initial implementation. The service provider has gradually instituted a just-in-time training strategy that is tied to the business cycle. Efforts are being made to develop collective training capacity within districts.
Communications between the BCeSIS team and participating districts/schools	The dissemination of information within school districts has not been consistent. To address this issue a stakeholder engagement strategy has been developed that includes newsletters, regular communications with district contacts, weekly technical conference calls, and websites designed for support personnel and end users. In addition formal procedures for reporting incidents and escalating and resolving issues have been established. In 2010, the annual users' conference was replaced by a series of regional meetings.
Standardizing business practices	Working groups and formal processes have been set up to develop and get agreement regarding standard business practices. A *BCeSIS Standards Manual* contains all business practices approved by school authorities through the Service Management Council. An active network of users has been maturing in the districts to provide mutual support and share best practices.
Implementation planning	An implementation roadmap and templates for planning documents have been developed by the BCeSIS team for use by districts. The team works closely with districts that are doing their first implementation to ensure that there is adequate preparation and planning. Conversion tools and lessons learned by early adopters are shared widely. The Ministry provided one-time implemention grants until March 31, 2010 to encourage early adoption of the system. Implementation funding is not available after this date, but districts are being encouraged to work together to provide mutual support.

The uptake of the system has been steady, and there are indications that users in the schools are working more closely together and adapting to the new software and processes.

The original contract with Fujitsu expires in December 2010. After conducting a review of the service provider's performance and an assessment of the cost and benefits of changing vendors, the Ministry decided to exercise its option to renew the contract for a second five-year term. At the end of the period covered by this report renewal negotiations with Fujitsu were in progress. [1]

3. Contract Objectives

The original contract with Fujitsu Consulting identified the following high-level objectives that would be realized once BCeSIS has been implemented in all participating schools and districts.

1. Allow schools to use the same software and, through centrally hosted application services, reduce the number of systems deployed to provide service;

2. Allow school districts to share administrative services and focus more resources on the delivery of education;

3. Provide permanent student records, reduce administrative burden on schools, enable flexibility and choice for students and parents, and create an integrated network to manage student records;

4. Provide school principals, school planning councils, school districts, and educational leaders with the tools to capture student performance information, report on student results, and make appropriate strategic decisions; and

5. Improve current systems and enable all schools to operate as part of an integrated, flexible, education system.

In January 2009, Fujitsu and the ministry met to set joint goals and objectives for the 2009/10 year. Detailed reporting on the joint goals and objectives for 2009/10 can be found in Appendix A.

4. Service Commitments

The clients of BCeSIS are primarily educators and staff working in schools and school districts. They include teachers, counselors, clerical staff, school-level administrators and district-level administrators. A fully realized goal for BCeSIS includes the option of providing parents and students with direct access to information in BCeSIS.

School authorities are responsible for local infrastructure and for determining how the service and new functionality is to be provided to their stakeholders. Service commitments are not defined at an enterprise/provincial level.

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[1] Renewal negotiations were completed and an agreement was signed in June 2010.

Appendix A – Contract Objectives: Reporting on Results

Objective 1

The Ministry and Fujitsu will work with school districts and *aal* to develop a three-year project plan, including a Java migration plan.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Work with *aal* to determine architectural requirements and impacts.	Conference calls were undertaken with *aal* technical architects to discuss their architectural plans for the next three to five years, and to review their proposed solution for operational reporting. Technical information was acquired at the 2010 *aal* Users' Conference.
Work with the school districts to develop a five-year strategy for implementing new features.	A high level strategy has been developed based upon anticipated software availability and district business requirements. This will guide future implementation activities as funding becomes available.

Objective 2

Develop and/or integrate the remaining in-scope eSIS functionality, including Parent Assistant, Teacher Assistant, Continuous Entry Learning, Data Exchange/Integration, Operational Reporting and Mobile Assistant.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Due to constraints on capital funding no new modules were implemented in 2009/10.	No new modules were implemented in 2009/10.
A survey (the BCeSIS Value Framework) of school district representatives was conducted to determine the business priorities for implementing new modules.	Feedback from school districts has been incorporated into a five-year development strategy.
Work with school districts to make more effective use of existing eSIS functionality.	Developed procedures for using BCeSIS for recording district assessments and supporting summer schools, distributed learning and continuing education. Continued deployment of Student Services (IEP) module to new schools.

Objective 3

Complete initial implementation of districts that signed the Memorandum of Understanding.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Work with school authorities to deploy BCeSIS in B.C. public and independent schools.	As of May 2010, BCeSIS was being used to store records for more than 547,800 students (94.5%) in 1462 public schools (90.1%). BCeSIS has been deployed in schools in 56 of the 60 districts – all provincial districts except for Vernon, Delta, Campbell River and North Okanagan-Shuswap. BCeSIS has been implemented in 97 of the 130 independent schools that have signed a Memorandum of Understanding (74.6%) and contains records for more than 24,600 independent school students.
Work with school districts to deploy BCeSIS in StrongStart BC Centres.	All StrongStart BC Centres, including those in districts that have not yet deployed BCeSIS in their schools, use BCeSIS for recording participation by early learners and to report to the Ministry.
Extend the service to new client groups such as federally-funded First Nations schools and schools in the Yukon.	As of May 2010, BCeSIS was being used to store records for 1344 students in 16 First Nations schools. A Memorandum of Understanding has been negotiated with the Department of Education of the Yukon and BCeSIS is being implemented in 29 schools.

Objective 4

Develop a model for sustainable service delivery and have it agreed to by the Ministry, Fujitsu and the school districts.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Review and redefine service measures for existing Application Management Services (AMS), training and implementation services to ensure alignment with desired outcomes.	Better information is now available about the use of resources and services provided. Fujitsu's Monthly Operating Status Report (MOSR) has also been refined over the year to provide more meaningful information to the Ministry and school districts. This is a continuation of a process begun in 2008 to improve financial reporting and establish performance benchmarks.
Work with the school districts to define a new	A service funding matrix has been prepared

	that identifies (1) common services to be included within the base usage fee; (2) services that districts will provide themselves; and (3) catalogue services that could be ordered from Fujitsu. This matrix replaces the service description in the original Memorandum of Understanding.
service funding model.	
Work with school districts to develop their internal capacity and promote sustainability of BCeSIS.	Recommended guidelines for improving local capacity (including service management, training, technical support, resourcing staff, and reporting) were prepared and distributed to all districts.

Objective 5

Improve the effectiveness of working relationships between Fujitsu, *aal* and the Ministry.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Work with *aal* to determine architectural requirements and impacts.	Conference calls were undertaken with *aal* technical architects to discuss their architectural plans for the next three to five years, and to review their proposed solution for operational reporting.
Schedule semi-annual meetings with *aal*, Fujitsu and the Ministry.	No regular meetings were held. Typically the focus of these meetings would have been upon new initiatives, but no major projects were undertaken in 2009/10.

Objective 6

Implement mechanisms to improve governance of the relationship between Fujitsu and the Ministry.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Implement mechanisms to improve governance of the relationship between the Ministry and Fujitsu, including joint planning sessions and clearer definition of respective roles and responsibilities.	Revisions to contract governance are being made as part of contract renewal negotiations. These include the creation of a new Joint Operations Committee (JOC) and a Joint Executive Committee (JEC) to replace existing management committees.
	Quarterly meetings of the Executive Management Committee (EMC) were held.
	Joint Objectives for FY 2009/10 were adopted on March 2009 and reviewed in January 2010.

Objective 7

Continue to achieve operational stability, meet service level targets, and implement operational efficiencies.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Refine service level definitions.	Service levels were defined for Application Management Services (AMS) and training which were subsequently included in a contract change request.
Improve service level reporting.	Service level reporting was refined in the Monthly Operations Service Report. The report has been shared with the school districts through the Service Management Council.
Ensure that application hosting service can address user demand.	Capacity and availability planning procedures based upon Information Technology Infrastructure Library (ITIL) standards were refined. All service level targets were achieved or exceeded. Hardware upgrades were completed and are meeting forecasted demand.

Objective 8

Improve service quality by defining and implementing continuous improvement plans.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Work with school districts to develop processes for ensuring that changes address the needs of users.	Revised change request process to ensure that client requirements are clearly specified and resources will be focused on high priority items that provide high business value. Worked with the Service Management Council to clarify school district responsibilities in the change request process.
Develop and implement processes for managing software enhancement and release processes.	Processes have been developed which include clearly defined role and responsibilities. Software testing processes were instituted which include user acceptance testing by school districts. All major changes were managed using well-defined release plans. Measures of production incidents caused by software changes were included in the Monthly Operations Service Report.

Objective 9

Improve availability and reliability of the end-to-end system.

Activities (undertaken to achieve objective)	Results (Year-To-Date)
Create opportunities for key service providers (Ministry, Fujitsu, WTS/PLNet) to discuss availability and reliability issues.	The Architectural Working Group was established and met as necessary to discuss infrastructure issues.
Work with school districts to better understand architecture/infrastructure issues.	As school districts increased their experience with the product, the number of infrastructure-related issues dropped substantially. Increasingly district staff communicate amongst themselves before reporting infrastructure issues to Fujitsu.