

Edmonton Catholic Schools Integration of Administrative Data A CentreView Approach

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A firm's IQ is determined by the degree to which its IT infrastructure connects, shares, and structures information. Isolated applications and data, no matter how impressive, can produce idiot savants but not a highly functional corporate behavior.

-Steve H. Haeckel and Richard L. Nolan.

"Managing by Wire: Using IT to Transform a Business"

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Executive Summary

Edmonton Catholic Schools has and will continue to have many discrete Administrative Data sets that are purchased by various departments for their specific needs. Currently Educational and Administrative Technology Services is responsible for the maintenance, training and support of most of these data sets. The individual departments are responsible for the accuracy of the data.

As our need for effective communication increases, Edmonton Catholic Schools needs information that can only be obtained from multiple data sets owned by various departments. Edmonton Catholic Schools needs a process and vehicle by which it can draw upon information from various data sets and produce reports from the information obtained.

Edmonton Catholic Schools' data strategy will include the development of web enabled applications to integrate discrete data sets for both inputting and accessing information. Educational and Administrative Technology Services take a major role in maintenance, training and support while various departments are responsible for the integrity of the data.

Recommendations

1. EATS ensure that all Division data sets are ODBC compliant.
2. EATS use SQL as its basic data structure.
3. EATS develop CentreView as the Division web enabled application strategy to input, integrate and report information that access multiple data sets.
4. EATS to be responsible for the maintenance, end user training and support of all Division administrative data applications.
5. Various departments own the Division data applications and are responsible for the accuracy of the data within their application.
6. All departments must seek advice and approval from EATS before purchasing new administrative data applications.

Overview

Edmonton Catholic Schools uses various software pieces providing informational needs to improve student learning. These include:

<u>Data Sets</u>	<u>Data Applications</u>
◆ Student Records	SASI, Edulink, RACERS
◆ Finance	SFG, now CAYENTA
◆ Human Resources/Payroll	Peoplesoft
◆ Transportation	MAPNET
◆ Customer Service Tracking	HEAT
◆ Standardized Testing	CentreView
◆ Instructional Media	CentreView

The challenge for ECS is threefold.

First is to provide transparent maintenance, training and support for educational and administrative software to maximize the advantage the software provides for the organization.

Second is to define the data information required, the report format and the time line for data presentation.

Third is to integrate data sets producing a synergism of new knowledge by putting information from various sources together in new and creative ways for users.

Various organizational entities own their application software, data and the information generated. Each department after consultation with EATS has the responsibility of choosing their software. They define the information needs, reporting format and time lines needed for the data. Departments and schools are also responsible for the accuracy of the data. With every department discretely involved with their own data, ECS must have a unifying strategy to gain the advantage of knowledge acquired from multiple data sets.

In order to create this synergism it is necessary that one department, i.e. Educational and Administrative Technology Services, be charged with the responsibility of maintenance, training and support and other required data services as defined by the organization. For this model to have the greatest efficiency, all data sets need to be warehoused and maintained by one department so effective seamless integration can occur. Having all resources dedicated to organizational data managed within one department will also ensure the efficient use of those resources allowing for overlap of functions.

Proposed Organizational Data Strategy

ECS requires transparent use of its data sets along with reports that access data from multiple discrete software applications. This organizational knowledge is gathered from information residing in different applications that have different structures and formats. This occurs in an environment where different departments choose the applications and are responsible for the accuracy of the data. These applications, for the most part, are works in progress, needing ongoing updates and Division customization.

In achieving the goal of ECS data integration, one department needs to be responsible for managing the overall Division data strategy. This includes the maintenance, training, support, reporting and integration of the data sets. Part of this strategy includes the development of an ECS designed web enabled application that has the ability to integrate data sets.

Educational and Administrative Technology Services' role in data stewardship is to provide service to the departments and end users of the data. The various departments and schools who own the application and data are responsible for:

- the accuracy of the data,
- defining how the data is to be reported and
- setting time lines for the presentation of the data.

Proposed Data Strategy

Application	Maintenance, Training & Support	Responsibility for Accuracy of Data	Ownership of Application
SASI	EATS	School	EPAS
Schedule Pro	EATS	School	EPAS
Classxp	EATS	School	EPAS
EduLink	EATS	School	EPAS
RACERS	EATS	FS	FS
CAYENTA (SFG)			
Financials	EATS	FS	FS
Purchasing	EATS	F&M	FS
Mapnet	EATS	EPAS	EPAS
Peoplesoft			
Human Resources	EATS	HR	HR
Payroll	EATS	FS	HR
HEAT	EATS	EATS	EATS
MS Office	EATS	End User	EATS
ECS Developed			
IMC	EATS	LSS	LSS
Standardized Tests	EATS	EPAS	EPAS
Report Cards	EATS	School	EPAS
Warehouse Rental	EATS	F&M	F&M
Maintenance WO	EATS	F&M	F&M
Docutech	EATS	F&M	F&M

Educational and Administrative Technology Services Data Responsibilities

For effective use and integration of data, Educational and Administrative Technology Services needs to be charged with the maintenance, end user training and level 1 support of all critical organizational software pieces. Each of these three responsibilities has specific interrelated functions.

Maintenance

- ◆ Application version upgrades
- ◆ Application patches and fixes
- ◆ Negotiating licenses
- ◆ Negotiating and maintaining maintenance contracts
- ◆ Software development and engineering

- ◆ Data integration

Training

- ◆ Formal end user training
- ◆ Individual site training
- ◆ End user document production

Support

- ◆ Operate call centre to process all Level 1 inquires
- ◆ Individual site support
- ◆ Management of data time lines
- ◆ Supportive intervention

Reporting

- ◆ Prepare timely reports
- ◆ Production of needed reports
- ◆ Distribution of reports and data

Integration

- ◆ Development of CentreView
- ◆ Re-establishing links after software updates
- ◆ Development of integration links between different data sets
- ◆ Development of reports that collect information from multiple data sets

Accuracy Responsibilities

Each department or school will be responsible for the accuracy of the data produced by the application they use. This includes entering the data correctly and making changes to the data that may become necessary. EATS will communicate with the end users to help maintain integrity of their data. Educational and Administrative Technology Services will partner with the various departments to support and aid them in their responsibilities.

Ownership Responsibilities

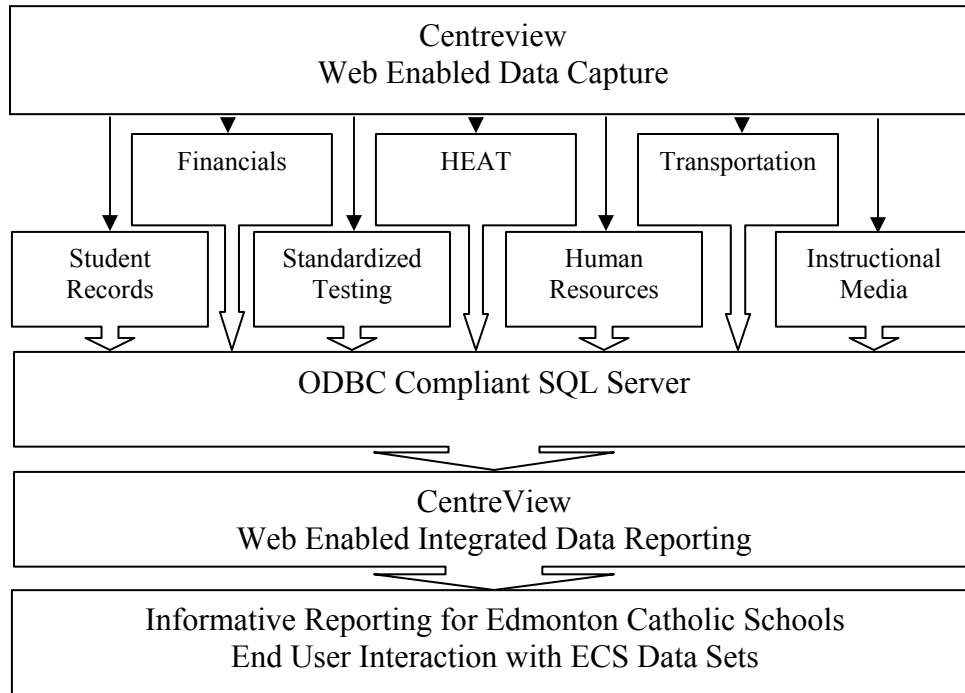
Each department will be responsible to purchase and oversee implementation of the data applications that they need to do their work. Departments will consult with Educational and Administrative Technology Services before purchase and upgrade to ensure compatibility with other data sets. EATS will work with various departments to ensure successful purchase and implementation of their applications.

ECS's Future Centreview of Data

Centreview is a work in progress application developed within Edmonton Catholic Schools to integrate different data sets using web-enabling tools. End users will use the capabilities of Centreview to view and generate reports that draw information from

various data sets. End users will also be able to enter information into Centreview that will automatically be entered in discrete data sets. This will allow ECS to gain greater knowledge from the information it gathers. This will increase our ability to achieve our objectives.

Data Integration Flow



Centreview will provide many advantages for the organization. They include:

- ◆ Integration of discrete data sets
- ◆ Increased flexibility of reporting for users
- ◆ Production of knowledge in a timely fashion
- ◆ Increased data mining
- ◆ Allow for smoother transition when implementing new application software

Data Reorganization Strategy

There are actions that need to be taken both generally and within specific applications in the near future in order to improve ECS' data environment.

Generally

- ◆ Move all Data sets to ODBC compatibility
- ◆ Direct all support calls through the Call Centre
- ◆ Establish and publish milestones of specific application data events
- ◆ Increase the functionality of Web enabled CentreView
- ◆ Migrate all maintenance, development, level I support and training of applications to Educational and Administrative Technology Services

- ◆ Increase the knowledge and resource base of the training department
- ◆ Designate an Application Analyst within EATS to each critical application
- ◆ Ensure there is a backup Application Analyst for each data set

Peoplesoft

- ◆ Establish a relationship with MBIM and EATS
- ◆ Establish a committee of HR, FS and EATS to oversee day to day workflow and set development strategy
- ◆ Acquire itemized invoices for all work done by MBIM
- ◆ Send an Application Analyst III for Peoplesoft Tools Training
- ◆ Have the Application Analyst III work in the Peoplesoft office and be involved in all day to day maintenance activities
- ◆ Move Level 1 support calls to call centre
- ◆ EATS provides Level 1 end user training
- ◆ Decrease MBIM maintenance charges to zero
- ◆ Retain MBIM for development and high level support
- ◆ Develop an internal backup for the Application Analyst III during 2001-2002 school year

Cayenta (SFG)

- ◆ Move Level 1 support calls to call centre
- ◆ EATS provides Level 1 end user training

SASlxp

- ◆ Increase the knowledge base of SASlxp at the schools
- ◆ Acquire central knowledge of scheduling for training and support
- ◆ Implement Classxp
- ◆ Research Parent Connect

RACERS

- ◆ Install RACERS at all sites
- ◆ Increase the knowledge base of RACERS

Centreview

- ◆ Advocate for increased bandwidth
- ◆ Acquire resource to improve the presentation level
- ◆ Add IMC booking services
- ◆ Add financial reporting
- ◆ Add honors reporting

Call Centre

- ◆ Implement HEAT application software
- ◆ Increase the human resource dedicated to call centre

- ◆ Develop a resource of support information

Summary

For multiple reasons, ECS' data strategy has become cloudy and without a clear division of responsibilities. This resulted in good people doing the best they could in the environment provided for them. This situation needs to be improved. Improvement can occur by giving EATS the mandate to take several actions. First is to establish ongoing meetings with departments to communicate needs and time lines. Second is for EATS to be responsible for maintenance, training and support of Division applications. Also individual departments need to understand their ownership of their application and their responsibility for the accuracy of the data. Thirdly EATS needs to develop a strategy/application to allow the integration of various data sets and create synergism from accessing multiple discrete data sets.

Glossary

Cayenta	The general accounting software use by Financial Services
Centreview	Web enabled database application develop by EATS
Classxp	A component of SASIxp used to record attendance and discipline incidents.
EATS	Educational and Administrative Technology Services
EPAS	Educational Planning and Administrative Services
EduLink	An application used by Learning Support Services to validate student records sent to Albert Learning
F&M	Facilities and Maintenance Department
FS	Financial Services Department
HEAT	Software use to track requests for service by callers.
HR	Human Resource Department
LSS	Learning Support Services Department
Mapnet	Transportation software used by Administrative and Planning Services
MBIM	Consultants company used to maintain and develop the peoplesoft application.

- ODBC Open DataBase Connectivity provides data bases with the capability to connect to other data bases.
- Peoplesoft The software used by Human Resources/Financial Services to tracking staff and payroll information.
- RACERS Revenue Allocation and Credit Enrollment Reporting System is the software used by Alberta Learning to report income to the Division
- SASIXp School Administrative Student Information cross platform is a student record application used by Learning Support Services
- SQL Structured Query Language is a common language of client/server database management. The principal advantage of SQL is that it's standardized – you can use a common set of SQL statements with all SQL-compliant database management systems.