



# Sunshine Connections

## Database Management Overview, DataSources, and Longitudinal Data

Final

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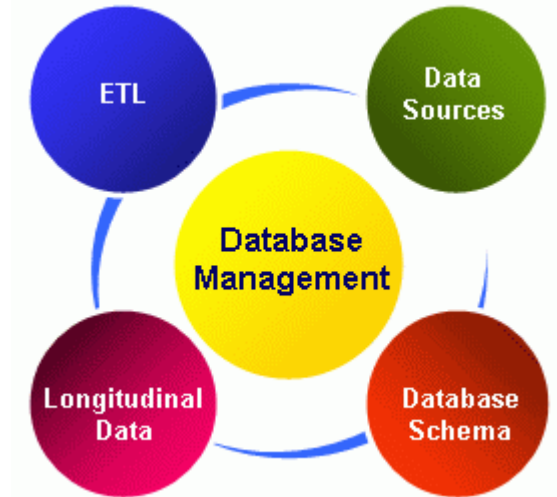
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## Overview

The primary objective of the Sunshine Connections Data Warehouse is to bring together information from disparate sources and put the information into a format that is conducive to making strategic educational decisions for all Sunshine Connections stakeholders. The data environment for Sunshine Connections supports robust data reporting and analysis of state-level data, and will support data integration processes and store data for state wide systems such as the on-line individual education plan (IEP) system and Florida Comprehensive Assessment Test scores.

## Database Server

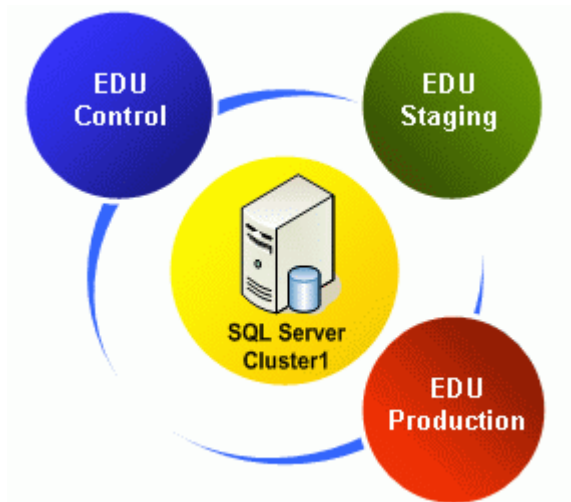
This is a dedicated database server. The current version of database management system running on the server is SQL Server 2005 Enterprise Edition.



## Databases

There are three databases with distinct database schemas.

**The Production database** is the primary source for all Sunshine Connections student, teacher, course and school level data. This data is accessed through the web services layer and presented to the end user in reports, web parts or analytic cubes.



## DOE Education Data Warehouse (EDW): Florida Comprehensive Assessment Test (FCAT) Data Source

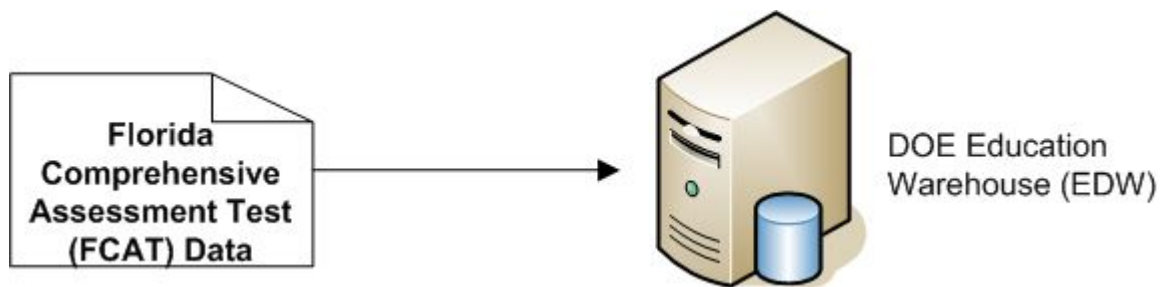
The present design for the Sunshine Connection application is limited to data collection and consolidation of FCAT related information for students enrolled in Florida schools. Data is

collected from existing school district records and is validated using multiple key fields to identify and reject duplicate records.

Access is limited to teachers and school administrators. The only access to individual student records is by the teacher to whom the student has been assigned. Administrators can only access aggregate totals for the purpose of scheduling, capacity management and curriculum development.

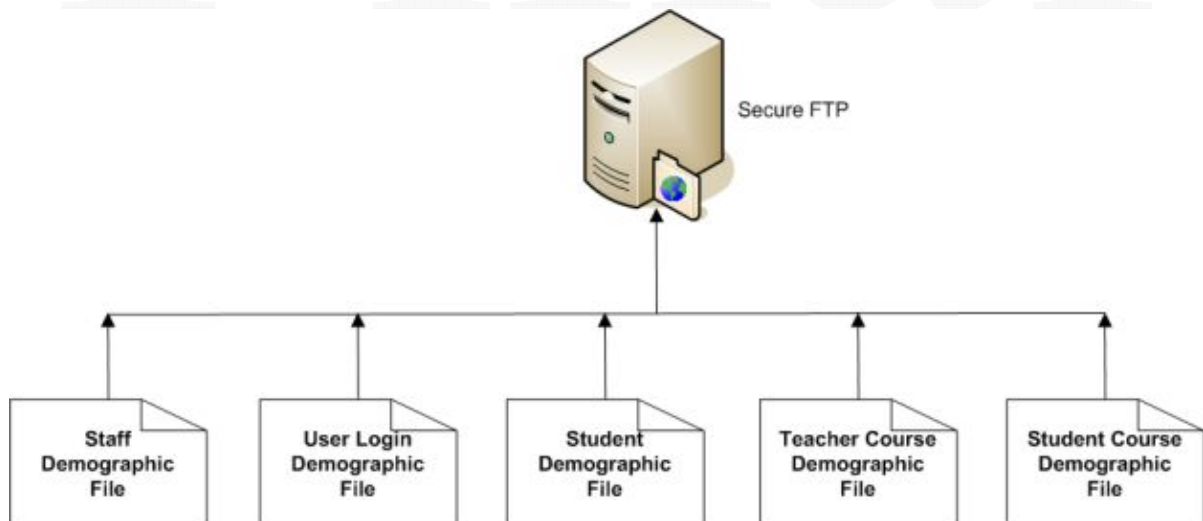
No data is returned to the schools or the district files from the application, and no changes are made directly to school district data from the Sunshine Connection application.

Authentication to the application is granted through the access permission administered by the district system administrators using the standard MS Windows and Active Directory infrastructure.



### District Data Source

The data elements that Sunshine Connections uses from school district submissions are extracted from a secure FTP site. There are five files district files involved in the first phase.



These files, except for the user login file, are submitted in Survey 2 format, but this doesn't mean that this is another Survey 2 submission for DOE use. The Survey 2 data elements contain the information that enables Sunshine Connections to map teachers to the courses they teach, and students to those courses so that teachers can see information about their current students. Working with the Phase I pilot school districts, use of the Survey 2 format

was deemed the most convenient way for districts to submit and update class roster information.

The user login file is used to create accounts in the Sunshine Connections Active Directory for user authentication and authorization. It contains user information provided by school districts from their local directory service, or other district sources of user information.

Based on initial design, development and testing activities with the Phase I pilot districts, the teacher SSN is used to match the records between the user login File, the staff demographic file, and the teacher course file.

This data is not used by the DOE for any purpose, it only serves Sunshine Connections. The files are submitted via FTP over a secure connection. Sunshine Connections reads the files from the FTP site and loads the district data, along with information from the DOE Education Data Warehouse into a SQL Server database that serves as the source for FCAT reports.

The following pages show the data elements in each of the files submitted by school districts to Sunshine Connections. The data elements that Sunshine Connections uses are highlighted in green. Other data elements may contain zeros or spaces since Sunshine Connections does not use them. The Sunshine Connections loading processes depend on the fixed-length format shown in the following pages.

### **Data Loading (ETL)**

The data environment for Sunshine Connections supports data reporting and analysis of state-level data, and will support data integration processes and store data for state wide systems such as the on-line individual education plan (IEP) system.

The data environment for Sunshine Connections uses Microsoft SQL Server for relational databases, dimensional databases, and extraction, transformation and loading (ETL) processes. Data stored in this environment is loaded from other DOE data sources with the DOE education data warehouse (EDW) being the primary source, and from district data files that provide data to map teachers to their students.

### **Longitudinal Data**

The core objective of the first release of Sunshine Connections is to provide teachers visibility to student longitudinal data. This information will allow teacher preparation time to find and/or design curricular materials around the unique needs of each class/student that can be implemented beginning the first day of class.

FCAT scores are organized in easy-to-use charts and graphs. Reports are developed using the [Microsoft Reporting Services](#) platform.

The report examples below are based on sample data.

## Welcome Report

6/3/2007 11:44:07 PM



## Welcome to FCAT Analysis and Reporting:

Wendy Richardson

My Groups
<a href="#">M/J Mathematics 1</a>
<a href="#">M/J Mathematics 1</a>
<a href="#">M/J Mathematics 2</a>
<a href="#">M/J Mathematics 2</a>
<a href="#">M/J Mathematics 3</a>
<a href="#">M/J Mathematics 3</a>

Please select from the list of available students or groups of students to see summary and detailed FCAT analysis information and reports.

## Student Achievement Levels Report

### Achievement Levels:

<a href="#">Back to Student FCAT Report</a>	
Achievement Level	Definition
1	This student has little success with the challenging content of the Sunshine State Standards.
2	This student has limited success with the challenging content of the Sunshine State Standards.
3	This student has partial success with the challenging content of the Sunshine State Standards, but performance is inconsistent. A student scoring in Level 3 answers many of the test questions correctly but is generally less successful with questions that are the most challenging.
4	This student has success with the challenging content of the Sunshine State Standards. A student scoring in Level 4 answers most of the test questions correctly, but may have only some success with questions that reflect the most challenging content.
5	This student has success with the most challenging content of the Sunshine State Standards. A student scoring in Level 5 answers most of the test questions correctly, including the most challenging questions.

## Student My Group List Report

### My Group List:

Click on the student name to see FCAT analysis reports and scores for that student.

<a href="#">Back to Welcome Page</a>			
Student Name ↕	Date of Birth ↕	Grade Level ↕	Gender ↕
1 <a href="#">Barbariol, Angela L</a>	07/24/1993	06	M
2 <a href="#">Chow, John E</a>	01/15/1993	06	M
3 <a href="#">Ganio, Jon R</a>	08/18/1994	06	M
4 <a href="#">Huff, Arlene N</a>	10/07/1993	06	M
5 <a href="#">Miller, Frank</a>	08/12/1994	06	M
6 <a href="#">Osborn, Stu K</a>	09/11/1993	06	F
7 <a href="#">Reding, Jamie J</a>	04/23/1993	06	F
8 <a href="#">Rockfeld, Scott M</a>	04/04/1994	06	F
9 <a href="#">Vietzen, Nina A</a>	05/27/1995	06	F
10 <a href="#">Weber, Gregory C</a>	03/11/1993	06	M

Final

## Student FCAT Math Content Report

### Student FCAT Math Content Focus:

Angela Barbariol

[Back to Student FCAT Report](#)

#### Student FCAT Content Area Scores

The data below shows student achievement by content area. Compare this data to the school, district, and state averages for the same year to make the best interpretation of this student's achievement. These content area scores should not be compared across years.

#### Student FCAT Math Content Area Scores

Number Sense							
Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	1	13	8 %			
2005	04	5	11	45 %			
2004	03	5	12	42 %			

Measurement							
Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	4	11	36 %			
2005	04	4	8	50 %			
2004	03	3	8	38 %			

Geometry							
Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	2	13	15 %			
2005	04	1	7	14 %			
2004	03	2	7	29 %			

Algebraic Thinking							
Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	2	11	18 %			
2005	04	3	7	43 %			
2004	03	1	6	17 %			

Data Analysis							
Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	2	12	17 %			
2005	04		7	0 %			
2004	03	2	7	29 %			

## Student FCAT Reading Content Report

### Student FCAT Reading Content Focus:

Angela Barbariol

[Back to Student FCAT Report](#)

#### Student FCAT Content Area Scores

The data below shows student achievement by content area. Compare this data to the school, district, and state averages for the same year to make the best interpretation of this student's achievement. These content area scores should not be compared across years.

#### Student FCAT Reading Content Area Scores

##### WORDS & PHRASES IN CONTEXT

Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	1	7	14 %			
2005	04	3	7	43 %			
2004	03	5	10	50 %			

##### MAIN IDEA, PLOT & PURPOSE

Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	1	17	6 %			
2005	04	5	23	22 %			
2004	03	5	15	33 %			

##### COMPARISONS & CAUSE/EFFECT

Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	6	15	40 %			
2005	04	5	19	26 %			
2004	03	4	16	25 %			

##### Reference & Research

Test Year	Test Grade	Points Earned	Points Possible	Student Score	School Avg	District Avg	State Avg
2006	05	2	6	33 %			
2005	04		2	0 %			
2004	03	1	4	25 %			

## Student FCAT Report

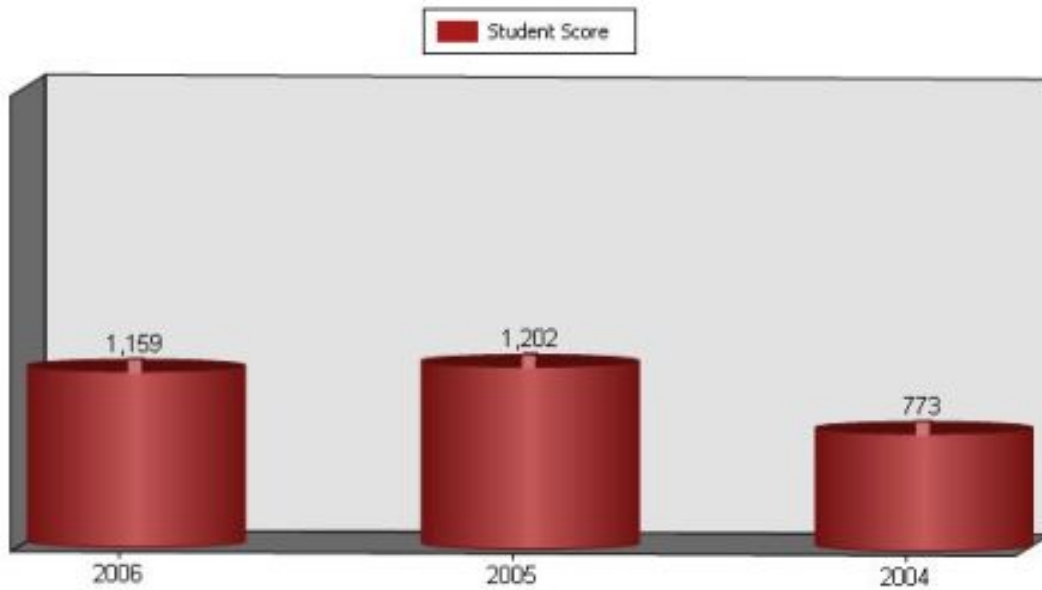
Student FCAT Longitudinal Analysis:										
Barbariol, Angela L										
<a href="#">Back to My Groups Page</a>										
Grade Level	Course				Educator					
06	M/J Intensive Reading (MC)									
06	M/J Language Arts 1									
06	M/J Mathematics 1				Richardson, Wendy P					
06	M/J Comprehensive Physical Education 1									
06	M/J Earth/Space Science									
06	M/J World History									
06	Language Therapy: 6-8									
FCAT MATH(click to see graph version)										
Test Year	Test Grade	Student			School Avg		District Avg		State Avg	
		Ach Level	Scale Score	DSS	Scale Score	DSS	Scale Score	DSS	Scale Score	DSS
2006	05	<u>1</u>	225	1,159						
2005	04	<u>1</u>	242	1,202						
2004	03	<u>1</u>	186	773						
FCAT Reading(click to see graph version)										
Test Year	Test Grade	Student			School Avg		District Avg		State Avg	
		Ach Level	Scale Score	DSS	Scale Score	DSS	Scale Score	DSS	Scale Score	DSS
2006	05	<u>1</u>	148	742						
2005	04	<u>1</u>	100	295						
2004	03	<u>1</u>	214	778						
Student FCAT Content Areas Scores										
<a href="#">FCAT Math Content Areas Scores</a>						<a href="#">FCAT Reading Content Areas Scores</a>				

### Student FCAT Math Longitudinal Analysis:

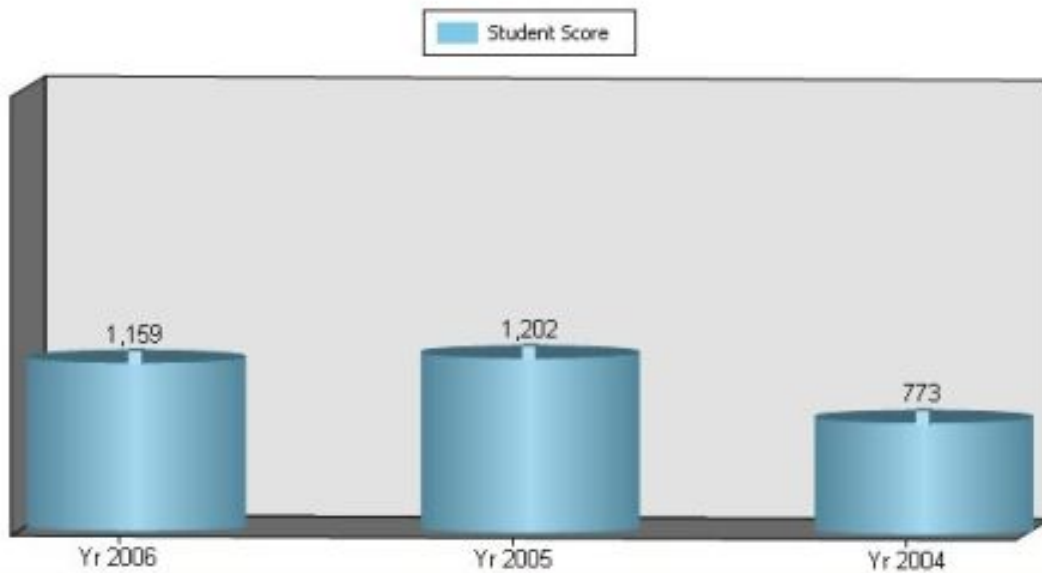
3

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Scale Score



Dev Scale Score

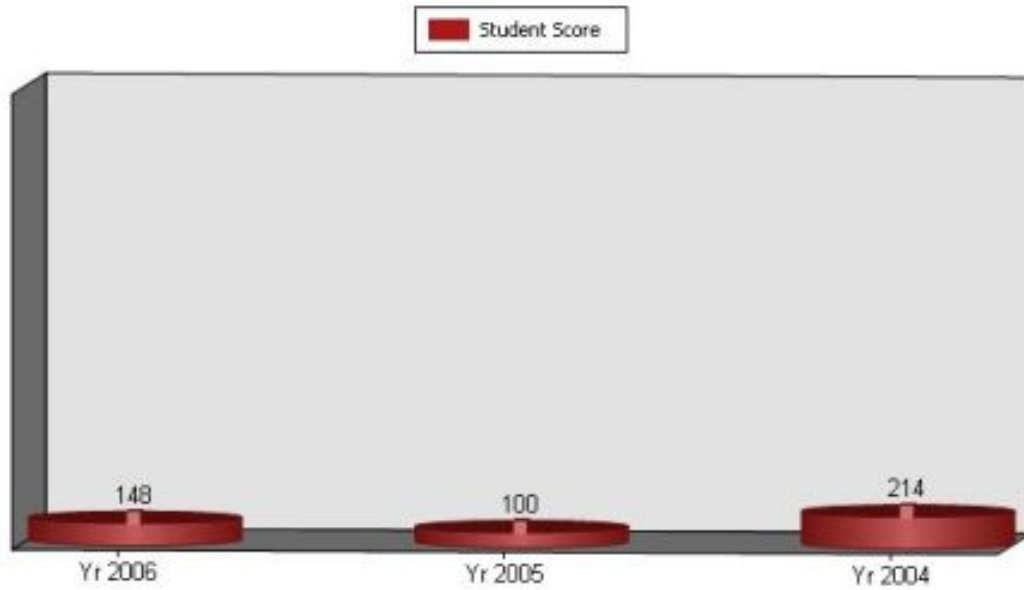


### Student FCAT Reading Longitudinal Analysis:

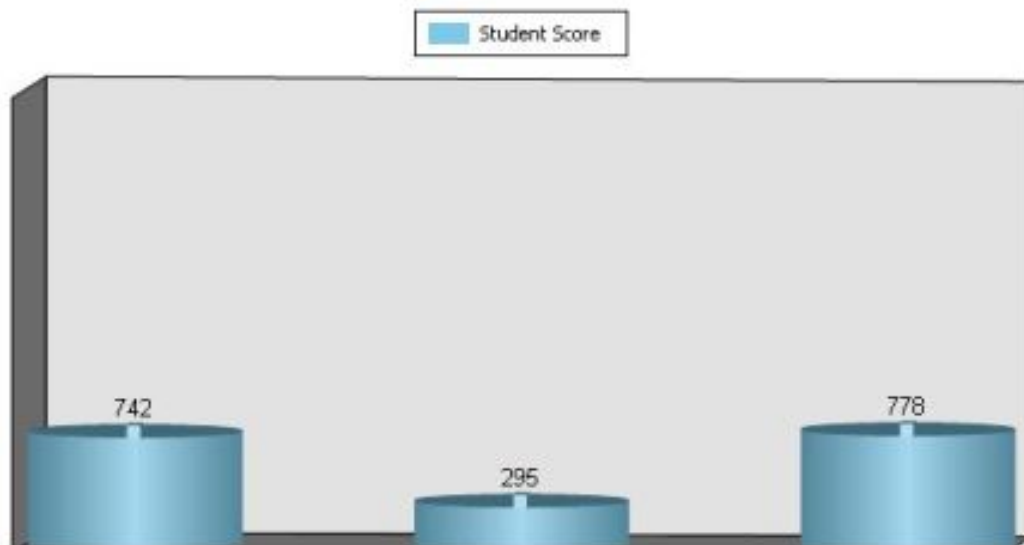
3

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Scale Score



Dev Scale Score



Sunshine Connections use [Microsoft Sql Server Integration Services \(SSIS\)](#) to extract, transform and load data.

