



CASE STUDY: Horry County Schools, SC

Because some software doesn't have a SIF Agent, data isn't passed to the other applications and this generates issues.

Having a SIF Agent is a major influence on the selection of applications.

- Richard Nadeau
Executive Director
of Technology
Horry County Schools

Overview of Problem

Horry County Schools serves students across a wide area in the northeastern corner of South Carolina. Their challenge was to integrate numerous educational applications and preexisting transactional data stores without a great deal of human interaction. Given a limited staff and relatively routine data entry, a primary requirement was the ability to pass information seamlessly between each of the different county applications, to enhance overall student service.

In this case, it meant providing information from the student information system automatically and securely into the library, food services and learning systems. No vendor specific way to integrate all these applications was available to Horry County Schools, so the SIF Zone Architecture was selected to achieve this.

Demographic Information of Implementation

The Horry County Schools is located in coastal South Carolina. The district comprises:

- 1,134 square miles
- 52 campuses in nine attendance areas
- Over 37,000 students and growing at a rate of 2,000 students per year
- Student Population: 67% White, 21% African American and 12% other minorities
- 60% qualify for free and reduced lunch

Technical Solution and Applications

Richard Nadeau, Executive Director of Technology, carefully monitored the progress of the SIF Specification for a number of years. As the Specification matured, the technology staff determined that it provided the framework for the interoperability they sought.

Vertical Integration

Horry County was one of the first districts to successfully implement the Student Unique Numbering System (SUNS) in 2005-06 school year. The SUNS system is a student ID system based on the SIF Implementation Specification. The State Department of Education used the objects in SIF to automate the transfer of unique student identification numbers from the state-level database to Pearson SASIxp. The district participated in two other vertical integration initiatives connecting Follett Destiny textbook management application as well as Kuder Career Planning System for individualized graduation plans through the ZIS.

Horizontal Integration

As part of their ongoing horizontal integration, Horry County Schools utilized a centralized ZIS to connect Pearson SASI with Follett Destiny. This provided seamless integration with media and textbook management services for students. Each campus was assigned its own Zone and an individual instance of Pearson SASIxp was integrated into it using the Edustructures agent for Pearson SASI. SharpSchools' hosted student email services, including content management and web hosting, was then brought into a SIF Zone (CPSI SIF-Connect Server). School-Link Technologies WinSNAP software and additional applications will be added after this summer when the district plans to migrate to Pearson PowerSchool.

Vertical Reporting Pilot

In 2007, Horry County encouraged the state DOE to leverage their SIF Implementation to flow student data from the district level up to the state level – achieving vertical data reporting via the SIF Specification.

Core data was collected from districts using Pearson SASI via the CPSI-Connect Data Extractor and submitted to the state data warehouse via the CPSI-Connect Vertical Reporting Agent. Data was corrected in real time using a validation rules engine before being collected into the CPSI-Connect Operational Data Store. Data errors were tracked and Horry County was notified via the CPSI-Connect Data Validation Web Framework.

Implementing SIF has provided Horry County Schools, without adding staff, the opportunity to have accurate data available more rapidly, reallocate resources based on data, and time doing mundane tasks is now utilized for analysis, understanding and use of data for instructional and administrative decisions.

District Data Warehouse and Reporting

As the state successfully tested this strategy, Horry County became an integral part of the initiative; serving as a pilot in data population from Pearson SASI to the state along with using SIF-Connect Server and CPSI-Connect District Data Manager which contains the following CPSI-Connect modules: Universal Agent Suite, Data Extractor (used with Pearson SASIxp), Data Proofreader (Validation Rules Engine), Data Validation Web Framework and Data Warehouse.

The District Data Manager is configured to provide both an operational and transactional data store based on the SIF XSD and custom object XML schema. The data is validated and cleansed using the CPSI tool set for Data Validation allowing for better district level reporting.

Benefits Achieved and Results

Horry County Schools has achieved great success and realized numerous benefits with their SIF Implementation.

- Time savings – duplicate entry and export/import procedures have been identified and eliminated
- Immediacy of Data – necessary information is available immediately to allow administrators to make timely decisions for instruction and provide a wider range of services for students and staff
- Data quality – reduction of errors and inconsistencies between applications is a reality
- Cost savings – accurate data is available more rapidly, allowing Horry County Schools to reallocate resources, so that time once spent doing mundane tasks is now utilized for analysis, understanding and use of that data to support instructional and administrative decisions

Lessons Learned

One of the biggest recommendations from Horry County Schools is to invest time in developing a full understanding of the capabilities of a SIF-based solution. The importance of understanding what SIF does prior to implementation is paramount in holding conversations with vendors and in customizing the resulting implementations.

In addition, it is important to understand what SIF Certification represents. Reading the Certification Register and the summaries for SIF Certified applications and agent pairings provides insights as to what each SIF Agent / Application pair supports, and the anticipated level of interoperability that can be achieved “out of the box”.

Get involved in the SIF Association and the SIF Community early on to share best practices, learn from others and provide input back into the SIF Association. This provides the opportunity to discuss any on-site interoperability issues with vendors and educators alike.

The final lesson and recommendation from Horry County Schools is to start by integrating a few applications at a time. Typically the student information system is integrated first, followed by additional applications based on need.

Next Steps

Horry County Schools has great plans for their SIF Implementation, starting with a switch to another SIF Certified student information system which will be used across the entire state of South Carolina.

They intend to leverage their current successes by both adding additional SIF Certified Agent/Application pairings and using them as replacements for existing software which has reached its end of life.

About the SIF Association

The SIF Association is a unique, non-profit collaboration composed of over 2,200 schools, districts, states, U.S. Department of Education, International Ministries of Education, software vendors and consultants who collectively define the rules and regulations for educational software data interoperability. The SIF Implementation Specification enables diverse applications to interact and share data and information efficiently, reliably, and securely regardless of the platform hosting those applications. The SIF Association has united these education technology end users and providers in an unprecedented effort to give teachers more time to do what they do best: teach. For further information, visit <http://www.sifassociation.org>.



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