



## CASE STUDY: Wyoming Department of Education

The Wyoming State Department of Education desired to empower each school district in accomplishing horizontal interoperability between their own applications - vertical interoperability up to the state was an added benefit.

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### Overview of Problem

The school districts in the State of Wyoming faced ongoing challenges with interoperability between school-based and district-based software applications – horizontal data interoperability. Further, the Wyoming state legislature passed a requirement that the department of education to build a statewide data system – the Wyoming Integrated Statewide Education Data System (WISE).

In an effort to resolve these two needs, the state generated a feasibility study to focus on horizontal and vertical data interoperability. Results of the study persuaded the state department of education to establish local horizontal interoperability in each school district while viewing vertical interoperability as an added benefit.

Additionally, as the state department of education provides online assessments to the students in Wyoming, an easy, seamless, secure and accurate solution was needed to move assessment data and information for reporting and for instructional applications.

### Demographic Information of Implementation

The State of Wyoming incorporates a large geographic area. The state department of education supports:

- 48 school districts, the largest student population of 13,400 and the smallest of 150
- 87,000 students
- 10,000 teachers

### Technical Solution and Applications

The Wyoming Department of Education was one of the first statewide SIF Implementations and once the state department of education deployed all 48 school districts with a SIF Agent for each student information system (as part of the initial implementation), the support for state vertical reporting was enabled.

Beginning in 2005, the Wyoming Department of Education focused on vertical reporting, working with Edustructures for the SIFWorks ZIS, SIFWorks Vertical Reporting Framework and SIFWorks Student Locator Framework to provide vertical reporting and unique student ID management. Further, ESP Solutions Group delivered the State Report Manager, a solution that feeds data and information into the state data warehouse.

Years three and four of the SIF Implementation focused on enabling horizontal interoperability with each local school district. Each school district utilizes their own student information system (SIS). There are three SISs used throughout the state – Infinite Campus Infinite Campus, Pearson Power School and Rediker Administrator's Plus – each with a SIF Agent providing valuable data and information about students between applications within the local school district as well as for state reporting.

In continuing support for each horizontal implementation, the state department of education provides SIF agents for every school district, including monies for set-up, installation and configuration. Each district selects application and agent pairings that meet their unique needs. To date, most districts have three agent/application pairings, with the greatest number within a school district being seven.

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## Benefits Achieved and Results

The Wyoming Department of Education and the Wyoming School Districts have seen numerous benefits. For example, each school district has realized both improved data quality and staff efficiency. In practice, data entry staff in a school district enters the information once and it appears in all applications asking for that information. As one school district states, "staff like it better and we want all of our applications using SIF."

For state reporting, the number of reports has been significantly reduced. Twenty-three aggregate reports have been eliminated which in turn has reduced eight hours per school district per report; equating to reduced reporting per school district of 70,000 hours per school, 18,000 hours per district and an estimated state report savings of over \$1.7 million!

Finally, information from the state department of education is automatically provided back to the local school district in a timely and accurate fashion. With SIF, schools have been accustomed to the immediacy of data exchange; in one example, when the Student Locator Framework was temporarily offline, the districts became upset because the student identification information was not automatically populated back to the local SIS from the state.

## Lessons Learned

As a state department of education, helping the districts with horizontal implementations was the most important component of the SIF Implementation. The districts quickly realize the benefits and rely on SIF. Looking back, the state department of education would have done more to restructure and facilitate the process for districts from the start, including districts in all program decisions, SIF Implementations and pilots.

The Wyoming Department of Education encourages other state agencies to set the appropriate expectations with districts, and not to overpromise. Further, they recommend spending time with the school districts discussing data quality and business processes. In some instances, districts do not make corrections at the data source or have limited business processes in place for data management. SIF will reveal data issues and lack of business processes.

Another recommendation from a state level is including vendors early in the planning process; collaborate early with vendors in setting requirements, establishing timelines and informing development cycles to assure project success. Invite every software vendor and application fathomable to be a part of the process from the inception— for both horizontal and vertical implementations.

Finally, the Wyoming Department of Education encourages other state agencies to establish pilots that accomplish specific business and use cases. Developing and implementing SIF Pilots on a small scale provide valuable lessons-learned and allow for planning for scalability.

## Next Steps

In terms of information and data management and statewide infrastructure, Wyoming is evolving into a different state. SIF is intrinsic to WISE. SIF is quickly becoming a part of the background infrastructure; allowing for the emphasis to be directed away from the specific project and focusing on our specific needs at the district and state level. A focus for the Wyoming Department of Education is to continue to provide support for the school districts in horizontal interoperability with SIF. Horizontal, SIF Interoperability is where local school districts find the most benefit and have access to data and information never before possible. Continuing expansion of SIF interoperability at the state department of education level will enable student record exchange. This capability will allow districts to exchange data and information within the district, between districts and with post secondary institutions. They will also continue to advance their E-transcript project to include SIF elements to make the transcript submission process easier for the districts.

## 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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