SIF Unity Story: Oklahoma

Started in 1997 by vendors and schools collaborating, the SIF Association – now the Access 4 Learning (A4L) Community – is a unique, non-profit collaboration composed of more than 3,000 schools, districts, local authorities, states, US and International Ministries of Education, software vendors and consultants who collectively address all aspects of information management and access to support learning. The A4L Community supports these educational stakeholders in establishing common expectations in the "connecting and securing effective learning ecosystems" regardless of the platform hosting those applications to give teachers more time to do what they do best: teach.

The "SIF Unity Story" focusing on Oklahoma marks the first in a series of SIF Unity Stories. Initially developed over 25 years ago, the SIF Specification is now leveraged in more than a dozen states as a key component of their statewide data systems. SIF Unity represents the latest implementation approach, seamlessly integrating the global SIF Infrastructure Specification with the North American SIF Data Model Specification to ensure future-ready data interoperability.

For many years, the SIF Specification has served as the backbone of data collection and management systems in several states—Oklahoma being one of them.

The Oklahoma State Department of Education (OSDE) has been utilizing SIF Specifications for over two decades. According to June Gerred, Program Director of Data and Information Systems: "SIF is the protocol for all student data collection from district vendors. 4.3 is used for API integration with inbound and outbound data for Special Education, API for inbound data for EduSkills, and 4.3 API is currently in testing with district SIS vendors." The OSDE is now in the process of transitioning all SIS vendors in the state to the latest SIF Unity specification.

Since 2007, the SIF Data Model and Infrastructure has enabled the State of Oklahoma to automate the assignment of State Testing Numbers (Unique IDs) to students, ensuring student privacy and de-

identification for testing. As a robust data integration framework, the SIF model facilitates secure and private data sharing between applications, eliminating the challenges of managing and tracking student data stored in static files.

The OSDE works with CPSI to develop and support their data infrastructure. According to Aziz Elia, CTO of CPSI, Oklahoma's move to Unity will leverage event-driven messaging, allowing real-time updates from districts. This transformation will enhance the state's ability to collect attendance, enrollment, and assessment data with minimal latency.

"The SIF 3.6 infrastructure plays a pivotal role in our projects due to its modern features," says Elia, highlighting key capabilities:

- Support for RESTful APIs – Enables seamless integration with cloud-based systems and modern SaaS applications.
- Multi-Tenant Support – Allows state and district systems to share infrastructure while ensuring data privacy and security.
- Enhanced Security – Built-in encryption, authentication, and access control ensure compliance with regulations like FERPA.
- Cross-Model Mapping – Facilitates interoperability between different data models (Ed-Fi, CEDS, OneRoster), simplifying ecosystem management.

Elia also emphasizes the key benefits of leveraging SIF in Oklahoma's data systems:

- Real-Time and Accurate Data Exchange – Supports both batch and real-time updates, improving data accuracy and timeliness.
- Cost Efficiency – Reduces custom integration costs through a standardized framework.
- Future-Ready Infrastructure – Ensures backward compatibility and scalability to support evolving educational data needs.

Currently, OSDE collects data from 542 districts and 1,779 schools, covering 697,358 students across four SIS vendors—a process that has relied on SIF Specifications for over 20 years. As Gerred affirms, the SIF Specification is "very robust, evolving to meet education data needs, dependable, and adaptable."

For more information on the SIF Specifications, please visit: https://data.A4L.org