Session: Wisconsin’s WISEdata system: What’s New? What’s Next
2016 Ed-Fi Summit
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Presenters:
Dan Retzlaff - Director of Applications Development
John Raub - WISEdata Product Owner
Wisconsin Graduates are College and Career READY

Knowledge
Proficiency in academic content

Skills
Application of knowledge through skills such as critical thinking, communication, collaboration, and creativity

Habits
Behaviors such as perseverance, responsibility, adaptability, and leadership

All students in Wisconsin graduate from high school academically prepared and socially and emotionally competent by possessing and demonstrating...

These proficiencies and attributes come from rigorous, rich, and well-rounded public school experiences.
**Wisconsin Information Systems for Education**

- **Open data collection system**
- **A data portal that uses “dashboards” to provide multi-year education data about Wisconsin schools**
- **Cost-effective, efficient way of making top-quality resources available to the whole state through one easy-to-use portal**
- **Data-driven school improvement planning**

http://dpi.wi.gov/wise
Why WISEdata?

Challenges with the “old way” of DPI Systems

- Hurdles to Eliminate
  - Legacy systems / technology
  - Inefficient processes
  - Data Quality Issues
  - Multiple data collections with the same data elements
How we want our school and district staff to feel...

- Streamline Processes
- Add value
- Meet State and Federal reporting requirements
- Improve data quality
EDFacts Reporting
Wisconsin Fast Facts

- 453 School Districts (LEAs)
- 2,221 Schools
- Agency Organizational Types
  - Districts (LEA)
  - 12 CESA
  - 2R Charter Schools
  - CMO
  - Private Choice Schools
- Approximately
  - 870,000 Students
  - 101,000 educators
Our Team

- Applications Development Team
- Data Warehouse & Decision Support
- Customer Services
- Technical Services / Infrastructure

- Scrum Team
  - Product Owner / Scrum Master
  - 5 developers
  - Quality Assurance Analyst
  - Systems Analyst
  - Business Analyst / SME

- 3.4M annual budget
The Pieces and Parts

District A

District B

School 1

API

WISEdash

ed-fi ALLIANCE

EDFacts
WISEdata Project Timeline

2014-2015
○ WISEid System released
○ WISEstaff System released
○ Decision to implement Ed-Fi data model and API

2015-2016
○ WISEid for Choice Students released
○ Wisconsin Ed-Fi API Released for choice schools released (enrollment/child count)

2016-2017
○ WISEid for public schools released
○ Wisconsin Ed-Fi API Released for public schools (child count)

Future Milestones
○ Child count snapshot
○ Roster
• **Where We Are**
  ○ **Pipeline**: the pipeline is built with data flowing from SIS all the way to the WI DPI Data Warehouse
  ○ **Domains and Resources**: Focus is enrollment, attendance, SPED, high school completion, exit and retention, dropout (S, SSA, SSAWE, SAR, SSEPA, SPA endpoints)
  ○ **SIS Vendors**: 15 certified SIS vendors
  ○ **Some Statistics**:
    ■ Private Choice and Public Districts (diff data properties / validations)
    ■ Collecting 15/16 and 16/17 data in parallel
    ■ Receiving data from **264 of 453** Public LEAs for 16/17, **550k enrollments** records thus far for Public LEAs (800k plus expected)
WISEdata Ed-Fi Integration Highlights

● The Pipeline
  ■ Credential issuance app with acknowledgement and audit
  ■ API with L1 customizations and extensions and school year specific databases; **no bulk loads via XML**
  ■ ETL for data transport, retrieval of internal DPI data, calculations
  ■ Collections ODS database (all years in one db, calculated values, other data pulled in for validations and WISEdata Portal)
  ■ Data Quality - WISEdata Portal & Validation Engine
  ■ Data Warehouse Views
WISEdata Ed-Fi Integration Highlights

- WISEdata Portal Demo
  - High Level Metrics
  - Validation Results
  - Student Detail

http://screencast.com/t/p1eKYT9BcjS
WISEdata Ed-Fi Integration Highlights

- The Challenges and Gaps
  - **SIS Certification / Integration Testing**: high effort, many vendors new to RESTful, JSON
  - **API Load / Sys Configuration**: no baselines on # servers, CPU, memory, etc.; utilized ReadyAPI (SmartBear) to load / stress API
  - **L1 Validation**: some data properties / end-points need immediate validation (state id, school year, end dates before begin dates, etc.)
  - **Extensions**: two different methods implemented
  - **Current Enrollment Owner**: /student resource LEP / economic status could be overwritten by a re-sync student not at school anymore
  - **Multi-year database**: needed for WISEdata Portal validation
  - **Validation engine**: make sure data received is of high quality, else tell user and fix in SIS
• What’s Next
  ■ Roster: replace legacy collection system
  ■ Discipline: replace legacy collection system
  ■ Performance enhancements
  ■ L2 validations: ongoing as we see opportunities to improve data quality
  ■ WISEdata Portal Admin Tools
Questions?