## The Ed-Fi Data Standard, INsite, and the IDOE Data Exchange: A Comparative Overview

Rosh Dhanawade, Data Architect, <u>INsite Consortium at Indiana University</u> January 2021

## **Ed-Fi Data Standard**

- A technology suite that allows for data transfer from multiple source systems to a centralized data store (www.ed-fi.org).
- The data is transferred from the source system into a standard data format that can be populated by various systems (SIS, assessment vendors, etc.).
- Data transfer is done via an API which allows for data to securely be moved from one system to another without manual manipulation of data or transferring into CSV and then uploading that CSV.
- Using an API allows for real-time or near-realtime updating of data in the central data store, which is called the ODS (operational data store).
- Once data is in an ODS it can then be used for a variety of business cases including state reporting and local operational reporting.
- The ODS and API can be modified or "extended" to allow different organizations to capture various data points.
- The Ed-Fi API can have various profiles to allow for different data points to be sent to different locations.

## **INsite**

- INsite is a collaborative of school districts, hosted at Indiana University, which enables school districts to use Ed-Fi for local operational reporting.
- Membership in INsite allows districts to use Ed-Fi without a large investment in infrastructure and product expertise.
- INsite uses the Data Center resources at Indiana University to provide districts with the benefits of a commercial cloud infrastructure while maintaining an affordable membership fee.
- INsite deploys an ODS for each member district, which houses data for each school year. This ODS is populated directly from the SIS vendor (PowerSchool, Skyward, Harmony) using the Ed-Fi API and is transferred in real time.
- INsite also works with assessment vendors to develop real-time result set transfer into the ODS.
  For vendors who do have an API developed,
  INsite provides data maps to assist in loading data into the ODS.
- INsite ODS data encompasses the full array of data that a district can collect. There are no restrictions on SIS data types or assessment data types that can be loaded into an INsite ODS.
- INsite offers a wide range of options for districts who would like to visualize and extract their data. Some options include scheduled data sends, a web-based dashboard for Discipline and Early Warning, and connector options for tools like Tableau and Power BI.

## **IDOE Data Exchange**

- Data Exchange is an initiative from the Indiana Department of Education which aims to enhance and streamline the flow of data from districts and schools for the purpose of state Reporting.
- Data Exchange uses the Ed-Fi API and ODS but have restricted certain domains that are not required for state reporting and have added additional extensions that accommodate specific state accountability measures.
- Data Exchange hosts their ODS in a Microsoft Azure Serverless environment which is used exclusively for state reporting purposes.
- Data points required by the Data Exchange are documented on the DOE Data Exchange website (<a href="https://www.doe.in.gov/link/data-exchange">https://www.doe.in.gov/link/data-exchange</a>) and include data from the SIS, HR, and discipline domains.
- Data Exchange requires SIS vendors to send data exclusively via API and provides a certification process for vendors to develop their API.
- Currently there are no plans for districts to retrieve their data for reporting purposes except for state accountability measures.