Ed-Fi Badge Application

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Name of product	TEA Insight to Impact Dashboards
Ed-Fi Badge	Ed-Fi ODS Platform Consumer Badge
Under any circumstances, can access to the badged functionality require a separate fee?	No
Optional: is there a Web page that describes the badged functionality – if so, you may provide the URL.	https://insighttoimpact.tea.texas.gov/

Narrative

In 1000 words or less, please describe the functionality that is the basis for the badge application. (May be attached on a separate page.)

The Texas Education Agency (TEA) and Crocus worked together from Fall 2021 through Spring of 2023 to develop and implement a series of seven Essential Questions (EQs) for Texas EPPs as part of the Insight to Impact (I2I) dashboard project. The technical approach was designed to utilize the Ed-Fi Educator Preparation Data Model (EPDM). The integration of this data into the Ed-Fi ODS and the subsequent dashboards built from this data provides significant value to EPPs and the TEA personnel who are product end users. These users are able to login into the dashboards to see how their EPPs are doing across the different essential questions and gain insights into areas that they are doing well and areas which require improvement.

The Crocus team helped develop EPDM as an extension to the Ed-Fi Data Standard specifically to accommodate the structure and data of EPPs. The full EPDM captures data through the entire lifecycle of a candidate from entry into the program, then capturing knowledge and skills during the program or during fieldwork and finally to the placement after program completion. The EPDM has been successfully implemented in many EPPs across the country and continues to be updated in response to feedback from those who review and use the tool in their programs.

The I2I system is set up to extract and transform the data from the data source systems using SSIS packages to produce csv output files, which are then consumed by the Data Import Tool to load the applicable domain entities in the Ed-Fi ODS via the Ed-Fi API. The loaded data in the Ed-Fi ODS is used as the base for the customized TEA specific views that forms the Analytics Middle Tier(AMT) which inturn is the base for the SSAS tabular model. The tabular model is referenced by the Power BI reports which are embedded in a web application to produce the final output in the form of the I2I dashboards.

The I2I system runs within the TEA local IT context. The dashboards consume data from the Ed-Fi ODS platform via standard SQL Server database connections, connecting the tabular model to the Ed-Fi ODS.

The overall technical approach of the I2I solution:

- The main data sources are ECOS and PEIMS which are TEA data systems. There are several additional flat files that are ingested into the data flow architecture.
- The Data Import Tool and Ed-Fi API is developed by the Ed-Fi Alliance. API version 5.3
- The ODS is based on the Ed-Fi TPDM community model version 1.0
- The Analytics Middle Tier (AMT) views and Tabular Model are designed custom for TEA and this project
- TEA is required to use their secure user access tool TEAL for EPP access to the dashboards
- EPPs will access the dashboards through a web application developed to give them access to their specific program data

The technical architecture approach included providing a solution for TEA to automate the data update process through the model and to the dashboards. To simplify this for TEA, the solution is designed to have an automated weekly and annual package for data updates.

Each I2I Essential Question (EQ) was designed with input from a select group of EPP stakeholders. The design of the EQ dashboard was then aligned with the data and technical solution. Crocus developed each EQ following an Agile based iterative process. Each EQ iteration included the following development deliverables:

1. Dashboard design
2. Data Requirements
3. Data Source Analysis

4. Data Mapping
   5. Data Loading
   6. Data Testing
   7. Analytics Middle Tier (AMT)
   8. Tabular Model Data Mart
   9. Dashboard development
   10. Dashboard Validation
   11. User Acceptance Testing (UAT)

On April 5, 2023, TEA publicly released the I2I dashboards statewide. The launch was initiated with a public convening of EPPs where the solution was demonstrated and reviewed. WIthin the first week of the launch, over 200 EPPs registered for user accounts for the I2I dashboards.

Version Compatibility

Please include the versions of Ed-Fi APIs or technologies with which this product works.

Ed-Fi Data Standard 3.3.1-b

Ed-Fi ODS/API Suite 3v5.3/TPDM Community v1.0

Ed-Fi Data Import Tool

Availability Information

The Ed-Fi related product functionality in the Product [referenced above] used to meet the requirements for the Ed-Fi Badge [referenced above] is available in its entirety in the following geographies and product versions.

Instructions: use the space below to list the geographies and versions where the functionality is available. If required, geography and version information can be combined (e.g. "State of X version 9.2 and above").

The I2I dashboards are available to all Educator Preparation Programs in the state of Texas.

This form should be completed and sent (signed) to certification@ed-fi.org

Information on this form will be published to the Ed-Fi community as public documentation of the badge. Thank you!