

# EDFacts D&A

## Dashboards & Analytics



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ESP Solutions Group, Inc.

### Highlights

- *ESP's EDFacts Dashboards and Analytics*
- *Tableau based visualizations*
- *Graphically enhanced views*
- *Any SEA can utilize EDFacts D&A, ES3 partner or not*
- *EDFacts data available immediately upon submission in a secure portal*
- *Dashboards feature questions about the data and possible actions to take*
- *Becoming an EDFacts D&A user is simple and secure*

## EDFacts Dashboards & Analytics

Ready for All SEAs — Not Just ES3 Partners

Try out the dashboards and analytics for EDFacts data at our D&A website. ESP has created the State of Tranquility to demonstrate 15 dashboards with 58 views (Tableau's term for visualizations or graphics). This demo site is a fully functional preview for a state education agency (SEA) to discover the value in **EDFacts Dashboards and Analytics™** (D&A). Any SEA, not just EDFacts

Shared State Solution (ES3) partners can use EDFacts D&A™.

EDFacts D&A provides graphically enhanced, meaningful, and timely dashboards to view 5 years of your EDFacts data. Even better, as soon as a new submission file is ready, it can be uploaded and viewed in dashboards. To enhance the value of these visualizations, ESP has headed up each one with decision questions addressed by the data and

actions informed by the results presented.

To view the complete set of dashboards with a sample five-year database visit [www.ES3Facts.info](http://www.ES3Facts.info) or go directly to <https://public.tableau.com/profile/esp.edfacts.d.a#!/>.

Explore the complete Users Guide on the site. For questions, contact Dr. Evangelina Mangino, ESP's Master Visualizations Designer ([emangino@espsg.com](mailto:emangino@espsg.com)).

## EDFacts D&A Gives Fast and Insightful Feedback

EDFacts reporting is no longer a one-way street. Even better, EDFacts data have become interesting and useful. SEAs can immediately view data not yet submitted to the EDFacts Submission System (ESS) along with their EDFacts submission files for five years. ESP's Master Visualizations Designer, Dr. Evangelina Mangino, and ESP's President, Dr. Glynn

Ligon, worked together to design a format that presents data in a way to answer the questions educators are asking.

1. Data stewards and program managers can review the data for completeness and consistency with expected trends to identify and address possible data quality issues.

2. Program administration and policy makers can identify trends that may require actions such as review of budget allocation policies or staff development needs.

3. SEAs can provide access to the visualizations to districts or local education agencies (LEAs) so they can review their own data and also determine data quality or assistance to other schools.

### Inside this issue:

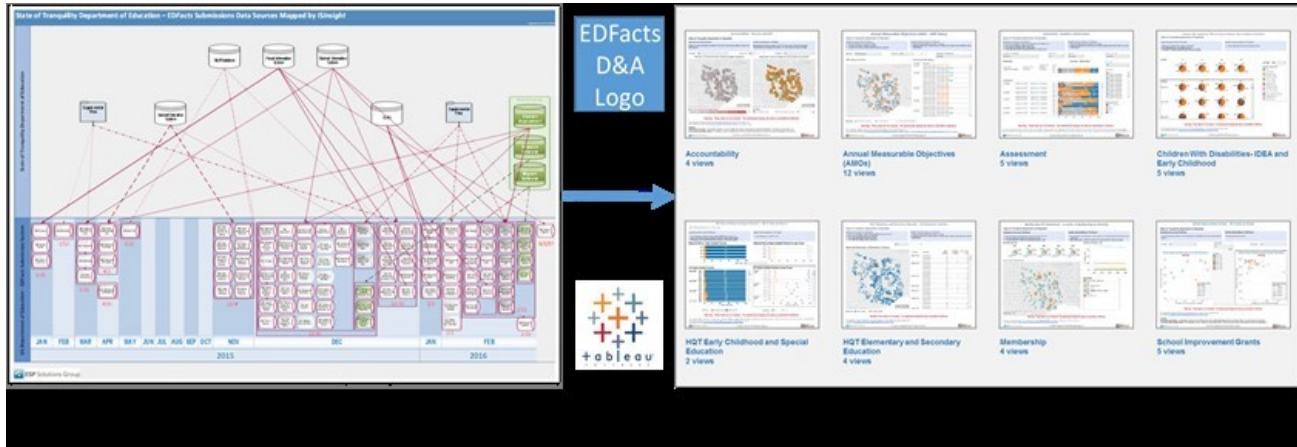
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## EDFacts D&A Dashboards

EDFacts D&A is a set of dashboard visualizations created from the actual data submitted by SEAs to the US Department of Education (USED).

Each SEA uploads their data to a secure SQL Server and is given access to a secured and encrypted portal site to access their EDFacts D&A dashboards. Figure 1 in the newsletter insert represents the landing area you see when you log into your SEA's portal site.

In addition, each high-level dashboard and accompanying visualizations may be accessed, viewed, and downloaded through the portal.



## How EDFacts D&A Evolved: The Story

Every SEA submits EDFacts data annually to the USED. In addition, every SEA has multiple years of submission files in exactly the same format. The problem is that SEAs have a delay of up to two years before they are able to graphically view the data they submitted under the current system in ED Data Express. Unfortunately, the data are far less meaningful at that age, and often, the data are neither viewed nor utilized at the SEA or LEA levels as a result.

ESP believes that EDFacts data are important to SEAs and LEAs and, if made available in a graphically enhanced and timely manner, could provide tremendous benefit as an analytical tool. In addition, the process for viewing and downloading should be uncomplicated, and the cost

for sharing dashboards and visualizations across LEAs should be highly affordable or free.

The following nine goals reflect the guiding principles that ESP followed in developing EDFacts D&A.

1. Any state can use their most recent five cycles of submission files without any modifications.
2. In fact, an SEA can use data not yet submitted if the data are in the submission file format.
3. All the quirks of EDFacts data will be resolved already in the design of the reporting.
4. An SEA literally can be up and running within a few days.
5. The visualizations will be interactive. A user can select districts, schools, years, and other views on demand.
6. The SEA will control distribution of the visualizations within the SEA, out to districts, or to the

public.

7. An SEA will not have to be an EDFacts Shared State Solution (ES3) user to use EDFacts D&A.
8. The visualizations will have the value-added feature of each stating the decision question addressed and the action informed by the data.
9. The SEA can distribute the visualizations to anyone and everyone in print, on a website, or even interactively on the web without paying a fee per user.

ESP engaged in this project to solve issues heard from SEAs around EDFacts data. Through the integration of a graphically powerful business intelligence tool (Tableau), and a mechanism for uploading data to a secured environment, SEAs now have the ability to access and share their EDFacts data easily, immediately, and securely across all environments.

**EDFACTS DATA ARE IMPORTANT TO SEAS AND LEAS AND ARE AVAILABLE IMMEDIATELY UPON SUBMISSION AND IN A GRAPHICALLY ENHANCED FORMAT**

## ISInsight into EDFacts Processes

ESP uses *ISInsight* (see Figure 2 in the newsletter insert) to identify and document the data sources for each *EDFacts* submission. *ISInsight* uses Microsoft Excel templates to capture the metadata of the data sources and Microsoft Visio to display a data roadmap from each SEA office or unit and data repository to an *EDFacts* timeline diagram. This diagram helps understand and explain the complexity of the *EDFacts* submission cycle and the offices and individuals involved.

The *ISInsight* Excel templates are preloaded with the following *EDFacts*

submission information.

- *EDFacts* submission number and name
- Data elements included in the *EDFacts* submission
- Due dates
- Report levels

The Excel template is also used to document specific SEA information for each *EDFacts* submission.

- Office responsible

- Name of the data repository or repositories used to create the *EDFacts* submission files
- Data steward (usually the program contact person responsible for data quality and completeness)
- Data manager (usually the person responsible for maintaining the data repository)
- Whether the *EDFacts* submission is created at the SEA or outsourced

## Six Steps to Becoming an EDFacts D&A User

- 1 Sign up!**
- 2 ESP creates your Tableau site.**
- 3 ESP creates secure database and SQL views.**
- 4 ESP sends you login information.**
- 5 You upload EDFacts submission files for the last 5 years.**
- 6 You access your dashboards.**

Setting up and utilizing *EDFacts* D&A is a simple process.

After your SEA signs up, ESP will create a Tableau site for your state and issue you a Tableau Server license.

You upload *EDFacts* submission files for the last 5 years to a secure SQL database in the same format that you submit to *EDFacts* Submission System.

Once the data are submitted, your state will receive login information for your secure Tableau portal site. You will utilize your Tableau Server license to access the Tableau portal.

In the Tableau portal, you will find your dashboards and visualizations to download and share throughout your SEA and LEAs. Tableau has a free reader that any user in your SEA and LEAs can use to view your dashboards.



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Extraordinary Insight for Support of  
 EDFacts Shared State Solution  
 SEA Partners

[WWW.ES3FACTS.INFO](http://WWW.ES3FACTS.INFO)

## ESP Offers ETL and Implementation Services

ESP Solutions Group is the developer of the EDFacts Shared State Solution (ES3) as an enhancement of its contracts with several SEAs. For newly adopting SEAs, the tasks of installing and configuring the solution, creating the ETL for the local sources to the staging data stores, and managing the process for the first year are available from ESP as contracted services. In future years, the maintenance of the ETL from local sources to the ES3 data stores is also a service provided by ESP.

The design of the EDFacts Shared State Solution is based entirely upon Microsoft tools. These were purposely adopted by the early SEAs to ensure that they and future partners could maintain the solution themselves without an obligation to any vendor. However, the availability of ESP as a service option provides both the risk mitigation and the support alternative when local staffing needs assistance.

Contact ESP at 512-879-5300 or [info@espsg.com](mailto:info@espsg.com).

## EDFacts D&A Follows Model of "Action Reports"

#ESPTwiminars

Four months ago, ESP initiated the concept of using Twitter for seminars on hot topics by tweeting a series of 14 insights about reporting. The visualizations designed for EDFacts data follow the lessons learned and reported as best practices in that "twiminar" entitled Action Reports.

In a related publication, ESP released a new poster, Teacher to Teacher: Informing Decisions (<http://p20wforum.info/a-technology-framework-for-no-child-left-behind/>). This illustration follows questions through the complex processes to the decisions and actions people take once data have been collected, processed, and provided to them.

How does this all relate back to EDFacts? Now with EDFacts D&A, those years of EDFacts data and the timely new data being reported in the current cycle can be visualized for decision makers.

Each dashboard visualization in Tableau has been designed from the beginning with decision questions in mind and related actions.

The expectation is that SEAs will use the dashboard visualizations immediately upon the availability of fresh submission files to provide program offices reports for audit, edit, and resubmission purposes. This gives program offices the ability to compare current submissions with the previous four cycles.

The complete white paper can be downloaded at <http://p20wforum.info/wp-content/uploads/2015/02/Action-Reports-Body-FINAL-1.pdf>.

In March, ESP published a twiminar on the topic of data quality. A central theme in that twiminar is that use of data engenders improvement in the quality of those data. This insight adds to the benefits from EDFacts D&A. Excellent dashboard visualizations will improve the ability of data providers and data users to understand the EDFacts source data as well as the reported aggregate statistics. In turn, they will have more of opportunities to detect and need accurate and timely data.

Keep up-to-date with ES3 and EDFacts D&A at [www.ES3Facts.info](http://www.ES3Facts.info).