

#### VOLUME 4, ISSUE 1 ESP Solutions Group, Inc.

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#### Highlights

ES3 provides application content for SEAs

 Project & Budget Narratives for SLDS Grants

- www.ES3Facts.info
- All 6 Priorities
- UI Manages EDFacts Processes
- 5 Years of EDFacts Data in Visualizations
- Viz For ES3 Leverages Available Submission Files
- ES3 Developed with Partner SEAs
- No License Fee for the SEA
- Support Services Available from ESP

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State education agencies may "describe how the (EDFacts) requirements will be developed through the project" in their application for Statewide, Longitudinal Data Systems grants (CFDA #84.372). IES/ NCES really expects SEAs to be meeting those requirements now, and every SEA is—to some extent. However, this is a great opportunity to upgrade to the ED*Facts* Shared State Solution (ES3). Because ED*Facts* reporting is a technical requirement, it relates to all six of the SLDS Data Use Priorities in the application.

SLDS Grants Offer Aid for EDFacts Reporting

These grants offer SEAs an opportunity to implement or expand ES3 with federal support. ESP's ED*Facts* experts will write for you the required

grant application Project Narrative and Budget Narrative (Justification) for ES3. Go to www.ES3Facts.com to download a copy.

ESP's contact for assistance with SLDS grant applications is Greg Palmer, 512-879-5326, or gpalmer@espsg.com. Ask Greg about ESP's other products and services for SLDS projects.

#### **UI Triggers Package Execution & Watches Results in Real Time**

ESP's Chief Architect, Steve King, has been installing the latest user interface for ES3 across the partner SEAs for enthusiastic ED*Facts* coordinators. There are so many new features, that we've included a four-page insert in this newsletter to describe them all.

"I believe this UI is the tipping point that makes ES3 universally useful to SEAs," stated Glynn Ligon, ESP's President. "Combined with ES3's process for movement of an SEA's data from source files to the ED*Facts* submission files, the UI puts the ED- Facts coordinator at the control panel and in full control."

The UI is a standard feature of ES3 now for all partner SEAs. Coordinators and program offices can manage their files, trigger package execution, and monitor results in real time (sking@espsg.com).

# **Viz for ES3 Visualizations Deliver Added Value from ED***Facts* **Data** ES3 Viz Runs off 5-Years of Submission Files

For years, you, your program offices, and districts have invested many hours and significant burden submitting ED-*Facts* data. Now outstanding visualizations provide immediate and useful insights into what those data show about schools, districts, and your state. ESP has designed visuali-

zations to go well beyond NCES's ED Data Express both in timeliness and longitudinal reach. Waiting many months to see reports from ED*Facts* data limits the ROI for SEAs. Moreover, the program offices need immediate reports to verify their trends and data completeness. **Viz for**  **ES3**'s interactive Tableau reports are striking. The filters are already set up for selections. The titles and labels are generated with your directory information. The ED*Facts* definitions, disclaimers, and explanations are preloaded. Oh,

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Keep up-to-date with ES3 & EDFacts at www.ES3Facts.info.

### EDFacts/ES3 Integration into SLDS Solutions

ES3 should be an essential component of an SEA's SLDS solution. ES3 doesn't need to wait for the SLDS data warehouse to be complete and loaded with all ED*Facts* data sources. The ETL into ES3 will adapt annually as sources evolve.

ES3 was built based upon best practices for meeting the demands of ED-*Facts* reporting. These include:

Keeping up with the updates; finding new and changed source data across the SEA; making changes to the local ETL processes; keeping the SEA data providers up-to-date (conducting an annual meeting, publishing an annual calendar, communicating requirements changes, communicating changes in processes); updating the submission file formats; creating/maintaining the data dictionary; creating error, edit reports for data stewards and providers; maintaining business rules.

Tasks that seldom or never get done:

Creating a longitudinal data store of EDFacts submissions; creating

enough edit reports; providing longitudinal analytics and reports; and creating a comprehensive training program for ED*Facts* data stewards and providers.

Tough job! These last three tasks have become the roadmap for ES3.

Integrating these into an SLDS solution is one of ESP's strengths. From establishing metadata standards to adopting data governance policies and procedures, ED*Facts* reporting must be considered every step of the way.

### **How ESP Supports ES3 Implementation**

A team of seasoned experts works quietly on the top floor overlooking one of Austin's high-tech intersections. The signs on neighboring buildings say Google, Microsoft, SAS, and Mighty Fine Burgers (winners of the Malcom Baldrige Award for Excellence). The team possesses more combined years experience of ED*Facts* and its many relatives and predecessors (PBDMI, CCD, OCR, etc.) than any other they know—having worked directly now with 10 SEAs to submit successfully ED*Facts* files. Calls come in formally and informally daily asking advice on ETL, business rules, formatting, nuances about N or D, or whether an entity is an LEA or not. This isn't NCES. This is ESP's ED*Facts* Shared State Solution (ES3) development and support team—plus its Chief Architect, Steve King, who Lyncs in from Cheyenne.

Steve inspired ES3, along with Glynn Ligon and Barbara Clements, who all knew there was a lot of duplicate effort going on learning changing rules and aligning local data to submission formats every cycle. Now that the concept is proven and ES3 is in production, Evangelina Mangino, Darrell Prather, Pierre van Eck, Rebecca Fanestiel, Jim Rife, Tuan Nguyen, Greg Palmer, Josh Goodman, Neetu Toor, Raj Dhanwada, and other names will be heard on partner calls implementing and enhancing ES3.

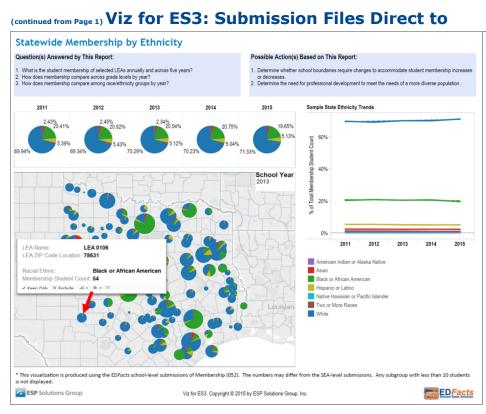
We created www.ES3Facts.info to ensure all documentation and communications among partners are easily accessible to everyone. In addition, ESP maintains a SharePoint account for each partner for SEA-specific communications.

During the initial phases of implementation for an SEA, ESP assigns a project manager. That person conducts scheduled project meetings and tracks issues, risks, and tasks. We have developed detailed implementation status charts showing each submission file and tracking the responsibilities for each step toward completing them.

The story and the insert in this newsletter describing the ES3 User Interface illustrate how easily ED *Facts* Coordinators and data providers can manage their source data and results. Comparing current data to past years is a crucial step in ensuring data quality during each cycle, and the new Viz for ES3 visualizations are a significant value add to that process.

With ES3 being in its fourth year and having a full set of submission packages in production, implementation support is now a demonstrated strength of the solution by our ESP team.

• Visit *www.ES3Facts.info* for complete information about ED*Facts* Shared State Solution.



that's not the best part. These visualizations are all engineered to read your previously cleaned and rules-checked submission files from the past five submission cycles. No additional transformations or rules must be met.

ESP's designers, developers, and Tableau experts have waded through the issues to make the process for an SEA almost as simple as pointing to your submission file locations.

Each Viz for ES3 visualization has a header with a question and an action associated with the data being reported. That's our contribution to a real value add.

Go to <u>www.ES3*Facts*.info</u> for more details.

## How ES3 Evolved: The History

The U.S. Department of Education automated state-to-federal reporting with the ED*Facts* system. The task of compiling a state's data into compliant files for uploading was left to be

BIG ED COULD NOT DEVELOP AND MANDATE A SINGLE SOFTWARE PRODUCT FOR EVERY SEA. ES3 EVOLVED AS AN OPTIONAL STANDARD SOLUTION. solved by each one. Most of the core processes are duplicated within every SEA.

Many SEAs have looked across their borders over the years and wondered which of their processes and software applications they could share—and by doing so save time, effort, and money. However, their time and resources were concentrated on meeting the immediate ED*Facts* requirements and deadlines and not on software product development.

The SEAs working with ESP consolidated best practices with development resources across their projects to create a new dynamic. ES3 was developed upon this foundation.

- Microsoft tools are common, standardized, affordable, and easy to use.
- SEAs know enough about the EDFacts processes to pinpoint where the commonalities are and where the uniqueness of each SEA remains.
- ESP has enough clients to allow it to devote sufficient resources to building the common data model, databases, documentation, UI, and ETL processes.
- The ES3 SEA Partnership Association model with an annual fee to support updates and on-going enhancements will be viable as enough states adopt a common architecture.
- Documentation and visualizations are value adds that ES3 can provide beyond an SEA's capacity.

What are the common ES3 components?

- A user interface to manage the processes
- Two Staging Databases (allowing the SEA to ETL and process either unit or aggregate records and to transform unit records to aggregate) in SQL Server
- Three Types of Reporting (providing feedback to the ED*Facts* Coordinator, data providers, and analysts/decision makers) using SSRS
- ED*Facts* Submission Data Store (creating a longitudinal data system for verification and analytics)
- EDFacts Submission File Engine (creating EDFacts-compliant files for uploading)

Unique to every SEA is the ETL into staging databases from data sources.

Student Class

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Extraordinary Insight for Support of ED*Facts* Shared State Solution SEA Partners

#### WWW.ES3FACTS.INFO

# **ESP Offers ETL and Implementation Services**

ESP Solutions Group is the developer of the ED*Facts* 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.

## Viz for ES3 Follows Insights from Twiminars

#### #ESPTwiminars

Last month, 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 ED*Facts* data follow the lessons learned and reported as best practices in that "twiminar" entitled Action Reports.

Download the complete white paper at http://p20wforum.info/actionreports-white-paper/

The current twiminar is 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 Viz for ES3. Excellent visualizations will improve the ability of data providers and data users to understand the ED*Facts* 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.

In a related publication, ESP released a new poster, Teacher to Teacher: Informing Decisions (http:// p20wforum.info/a-technologyframework-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 ED-

*Facts*? Now with Viz for ES3, those years of ED*Facts* data and the timely new data being reported in the current cycle can be visualized for decision makers.

Each 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 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.

Keep up-to-date with ES3 & EDFacts at www.ES3Facts.info.

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