



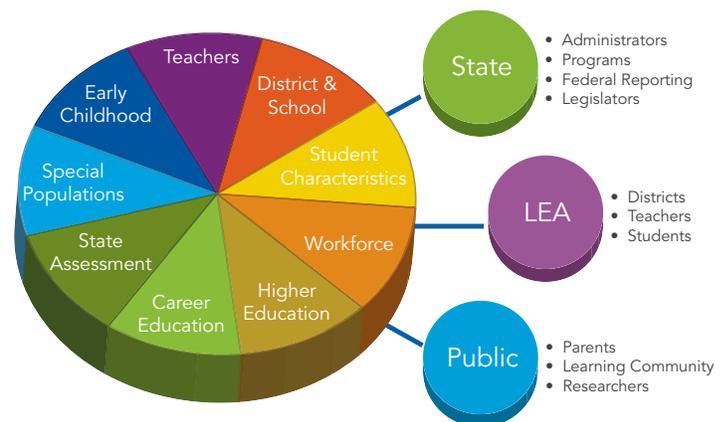
# Education Analytics for Statewide Longitudinal Data Systems (SLDS) from Aspect

A deep, dynamic, analytic data reporting system (DRS) for education agencies

With educational “accountability” being a national buzzword for the last several years, states find themselves without resources that can provide timely, accurate, and/or educator data reporting systems. One of the strategic goals of the American Recovery and Reinvestment Act of 2009 for education is for state education agencies to provide a statewide longitudinal data system that can deliver deeper insights into student and teacher data over time. These insights allow educators at every level to use data to help drive decision making which can facilitate continuous improvement in education for our children.

Our analytic solution can outfit all types of users with the tools they need for analyzing their student and education performance. State Departments of Education, legislators, district staff, administrators, faculty, and parents can be provided secure access to data. Each constituent group can be given views that meet their specific data reporting requirements. Tracking key indicators of education performance over time is vital to measuring how we as a country are competing with the overall global community when it comes to student performance, enrollment trends, teacher activities, special education for students with disabilities, and so on. This is another factor in ensuring that once our children are in the workforce, they have the skills necessary to succeed.

Aspect’s unique understanding of the education industry’s data challenges along with our deep technical know-how and education domain expertise has enabled Aspect to build a framework that offers very dynamic views of multiple data categories across the state. These categories could be student assessment performance, teacher information, student demographics, teacher certifications, early childhood participation, career education performance, and many more data elements that every program within state departments of education are trying to track. Powered by Microsoft Excel, SharePoint Server and SQL Server, SLDS supported by Aspect is a solution accelerator for education agencies needing that jump start into quality education data warehousing and reporting.



Aspect's DRS solution is a single data warehouse and reporting platform that is ideal for creating a centralized reporting environment for a statewide longitudinal data system.

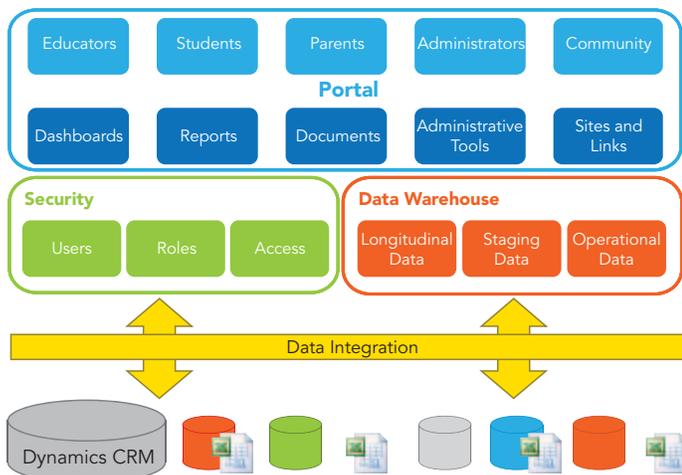
SLDS from Aspect supports decision making and data analysis by:

- Providing timely access to essential education performance metrics
- Offering ad-hoc reporting within boundaries for public and secured users
- Surfacing the right data elements at the appropriate levels for the proper people
- Bringing disparate data sources together into a single data view
- Delivering access to millions of records with fast query performance and deep data mining to the most granular of levels

### Data Warehousing

Managing student and education staff data in multiple legacy databases is a difficult task for education agencies. The data warehousing area of the Aspect solution actually encompasses a number of functional components to create a consolidated data environment at the state level by bringing school district information together in a consistent format. These functional components include:

- Data integration components
- Data staging environment for validation, transformation, monitoring and reporting
- Dimensional data warehouse mapped to standards and specifications



### Highlights

- **Direct self-service access to performance metrics across the state supporting data driven-decision making**
- **Employs custom security measures to 'mask' data when details become too precise, as a way to protect the individual student identities**
- **Employs dynamic dimension security to support secure raw data access for school districts and education consortiums enabling analysis for only their organization's data and preventing access to other organizations data**
- **Millions of records loaded from various data sources on different schedules via Microsoft SQL Server Integration Services**
- **Mapped to national and state goals**
- **Many elements on one comprehensive view**
- **Map to student and educator data**
- **Easily enhanced over time**
- **Build and enhance deep rich data models for data mining**
- **Robust data visualizations**
- **Leverage single reporting environment across multiple programs**
- **Leverages current Microsoft software investments**
- **Integrate with other key line-of-business applications Admissions, SIS Systems, and Learning Management Systems**
- **Easy to use with familiar Microsoft Excel integration along with Microsoft SharePoint**

### Security

The security area of the Aspect solution deals with who may access the system and what they are allowed to do. The implementation of a comprehensive identity management solution that supports the SLDS enables the addition of new groups of constituents in a manageable way over time. States may begin with a core constituency for the longitudinal data system such as Department of Education staff, Legislators and staff, and school district leaders, but the user base can be expanded. Public access is also supported in this architecture and is treated as a separate user role.

This architecture uses dynamic dimension security authorization that relies on role membership of users to present them with the information they need. Information is filtered by individual user based on mapping their security account name to their corresponding identifiers derived from school district or state data. For example, a district administrator will only be presented with data from the schools in their school district as well as the district as a whole and only information about the students assigned to their schools.

### Portal and Reporting

The portal area of the Aspect solution deals with information delivery to end users. It is a web-based framework that enables publishing of content including information views such as reports, dashboards and analytical tools, as well as other informational content, links and resources that the education agencies would like to make available to their constituents. The portal enables the creation of new web sites and publishing of informational content, documents, links, and other resources without requiring additional web development efforts.

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#### About Aspect

Aspect is the only software company with a fully-integrated interaction and workforce optimization platform for enterprise contact centers globally that need to profitably (and seamlessly) orchestrate people, processes and touch points in an era when the contact center is the new center of the customer experience. For more information, visit [www.aspect.com](http://www.aspect.com).

