



SLDS Spotlight

Showcase of Arizona's Dashboards

The Arizona Department of Education (ADE) has been on a mission to create a “single source of truth”: a system that provides accurate, consistent, near real-time data for ADE’s stakeholders, including educators, administrators, and legislators. By building on existing resources, partnering with another state education agency (SEA), engaging stakeholders, and garnering educator feedback, ADE delivered 27 interactive dashboards to nearly 300 local education agencies (LEAs) in under a year.

Development of the Arizona Education Learning and Accountability System (AELAS)

In the past, ADE relied on disparate data systems and sources, leading to inconsistent and often redundant information. Its data warehouse was built by, and for, information technology (IT) staff, without consulting LEAs about what state initiatives could help them in their work. There were no technology standards for reporting and business intelligence, and legislative support was so lacking that the governor’s office had recommended outsourcing all IT projects within ADE.

In 2010, Arizona Revised Statutes 15-249 called on ADE to “develop and implement the education learning and accountability system to collect, compile, maintain and report student level data for students attending public educational institutions that provide instruction to pupils in preschool programs, kindergarten programs, grades one through twelve and postsecondary educational programs in this state.” The result was the Arizona Education Learning and Accountability System (AELAS), which had the following high-level objectives:

- Save LEAs and ADE time and money by offering statewide procurement of secure, integrated systems
- Improve student achievement by providing educators with tools to support instruction and professional development
- Link data between systems to create tools to intervene in real time

It is this third objective that led to ADE’s system of interactive dashboards, known as AZDash.

AZDash: Interactive Dashboards for Educators

Vision

The goal of AZDash is to bring together all the reporting and analysis tools necessary to provide actionable information to teachers and administrators so that they can make strategic, data-driven decisions. In building the system, ADE strove to reuse any existing tools it could so as not to begin from scratch. However, ADE chose to focus on creating tools for teachers and administrators, meaning ADE could not simply use most existing tools on the market, which were created primarily for researcher use. ADE already had beneficial resources in its 2007 data warehouse, which had useful data but needed updates, and in its ongoing single sign-on pilot, now known as ADEConnect, which places role and access management with local IT departments instead of at the state level and seamlessly connects each LEA’s student information system (SIS) with AELAS.

The ADE IT team visited Georgia for a demonstration of its existing dashboards, and to learn from Georgia’s already-deployed SLDS and existing, structured data governance.

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For more information on the IES SLDS Grant Program or for support with system development, please visit <http://nces.ed.gov/programs/SLDS>.



ADE was unable to adopt Georgia’s system directly because the data the two states collect were so different. However, the ADE team was able to capture how the Georgia SLDS worked and modify it to be useful for Arizona, ultimately using some of Georgia’s visualizations for its first five dashboards.

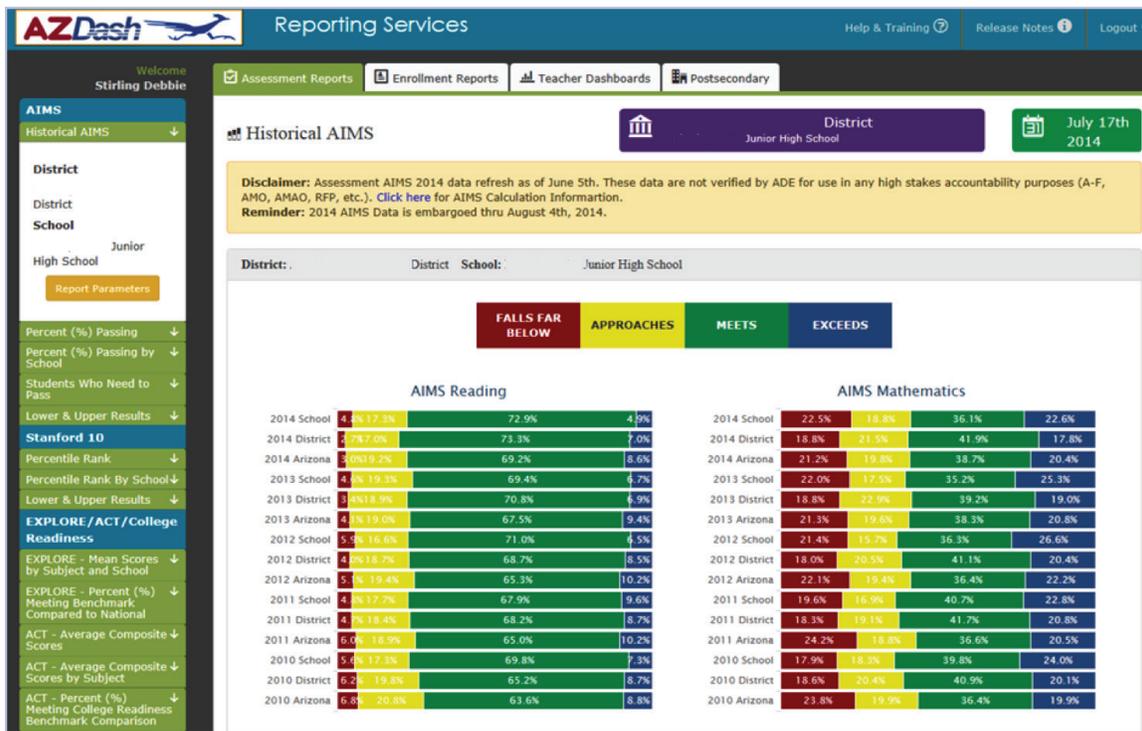


Figure 1. The “Assessment Reports” section of AZDash. The ranking system (Falls Far Below, Approaches, Meets, Exceeds) was vetted by focus groups.

Stakeholder Input

ADE’s approach was to build AZDash for teacher and administrator use, so the decision was made not to include statistical tools or representations such as scatter plots for the dashboards. Instead, ADE formed a pilot group of 10 to 12 LEAs (representing a variety of district sizes and locations), district administrators, school administrators, and teachers to pilot the system, identify needs, offer input into the system’s visualizations, and prioritize future dashboards. The focus group was so productive and beneficial that its input led to the development of 40 additional dashboards.

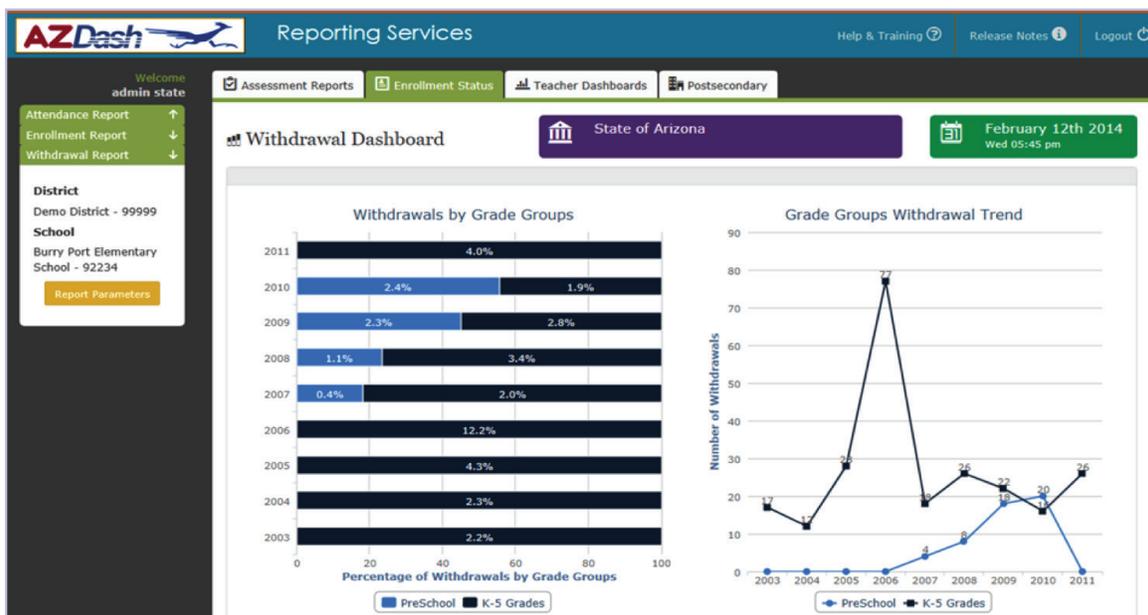


Figure 2. The “Enrollment Status” tab offers information on attendance, enrollment, and withdrawals.

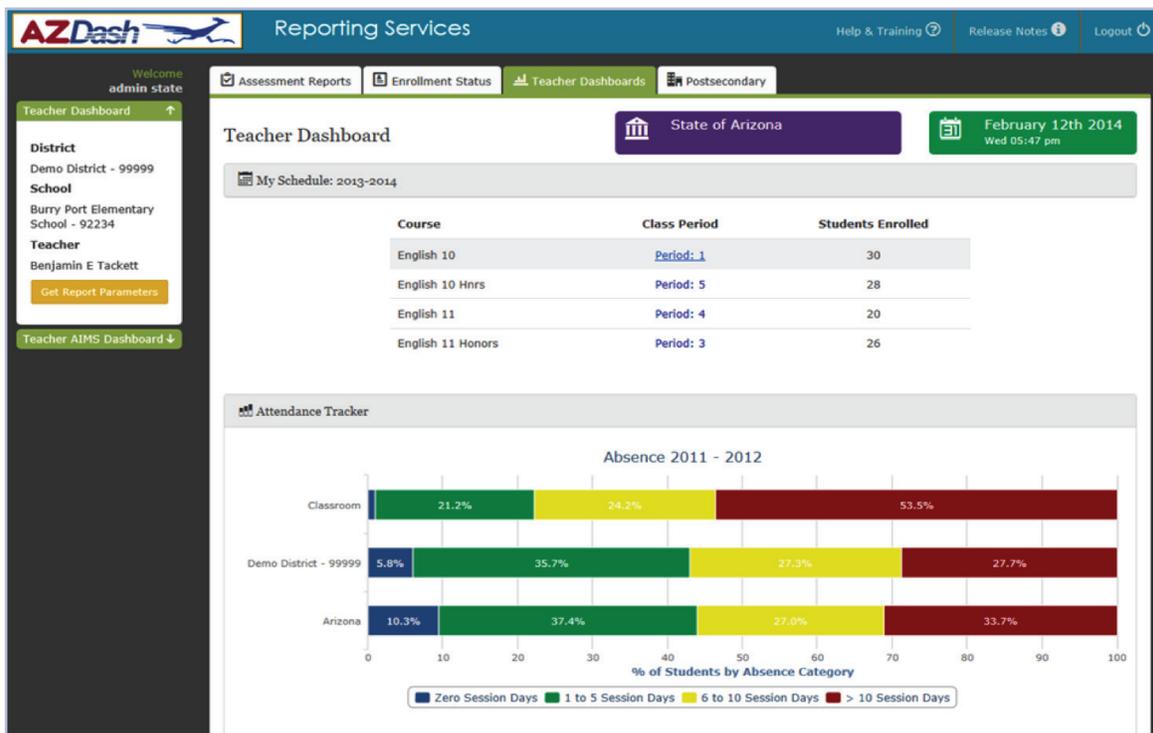


Figure 3. The “Teacher Dashboard” includes teacher-specific scheduling, assessment, and attendance information.

Funding

Work on AZDash was initially funded through Arizona’s 2012 SLDS grant, but more funds were needed to expand beyond the initial pilot. After the first year of development, the director of Governor Janice K. Brewer’s Office of Education Innovation was given a demo of AZDash. When she inquired as to why the dashboards were not being rolled out to all LEAs, ADE explained its financial limitations. She returned to the governor’s office and worked to secure funding so that AZDash could be expanded to all LEAs. Additional funding was also secured for the Arizona Education Data Standards (AzEDS). AzEDS uses the Common Education Data Standards (CEDS) being adopted by education systems across the nation to simplify the exchange of data between LEAs and their state agencies. Using this common framework for all applications and systems deployed and developed by ADE benefits LEAs by ensuring that data come in the right format.

Postsecondary Data

Through a partnership with the Arizona Board of Regents, AZDash also has incorporated data from three public universities. The newly created reports previously were delivered via a large PDF document; the AZDash team created a series of interactive dashboards showing high school administrators how their students performed in Arizona’s three public universities. These data may be helpful to high school administrators, for example, in order to determine if corrective action is needed.

Postsecondary information in AZDash includes

- percentage admitted without academic deficiencies;
- first-term GPA;
- percentage of continuous enrollment;
- student demographics; and
- level of first English and math course and average course grade.

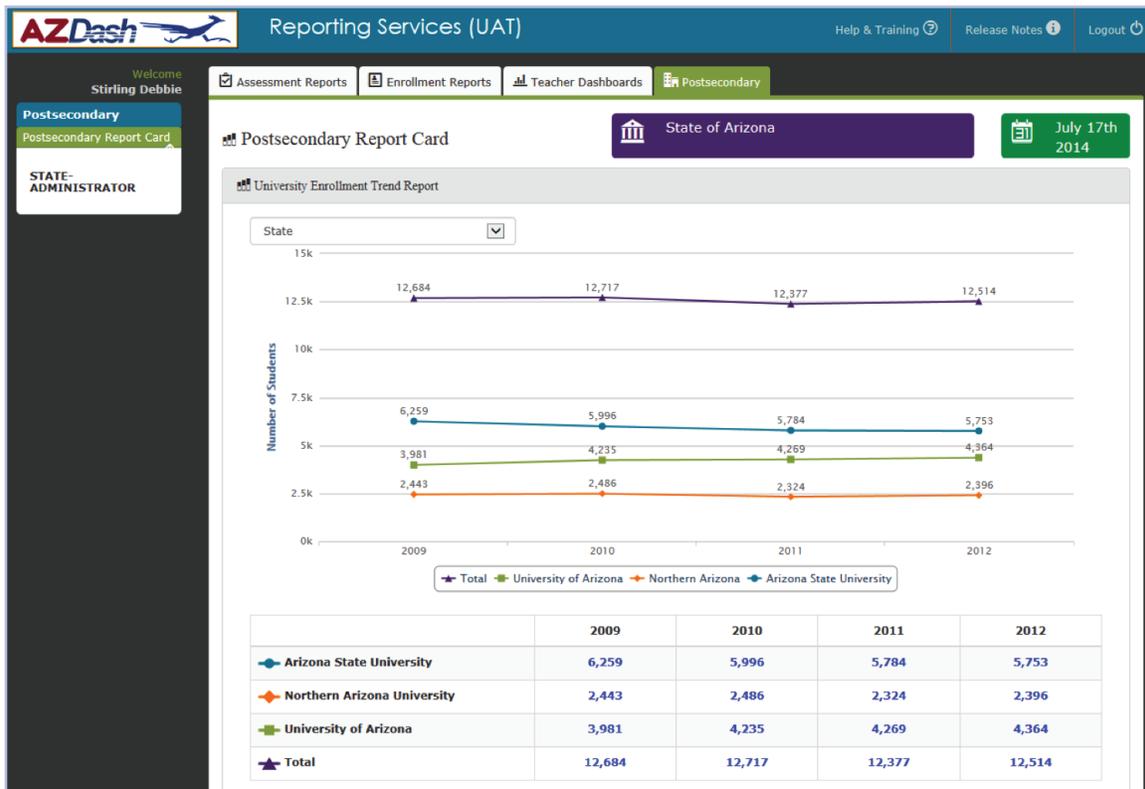
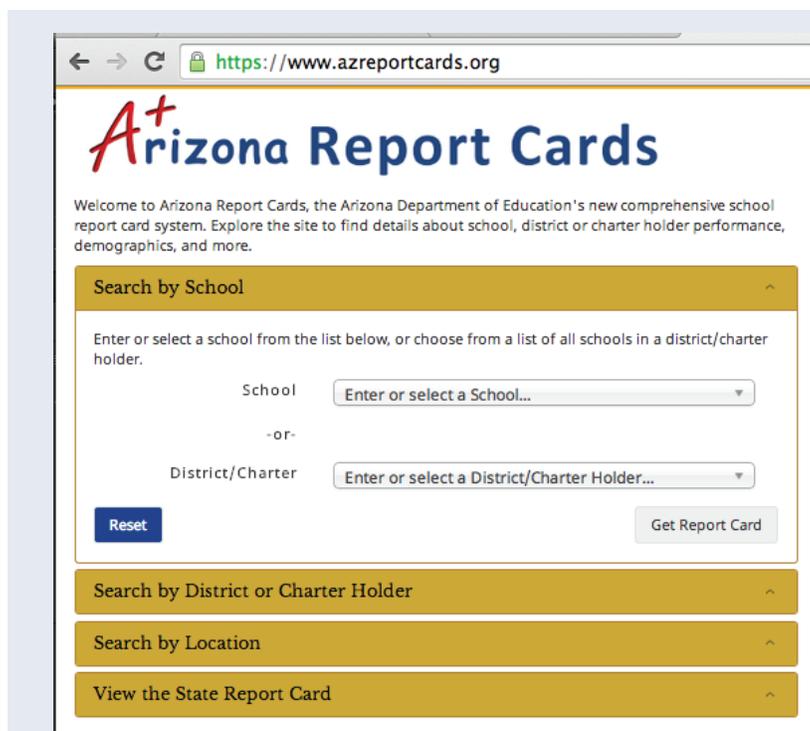


Figure 4. The Arizona Board of Regents provides postsecondary data from three state universities.

The Road Ahead

The AZDash project began with 10 LEAs and a few dashboards; now, AZDash is available to nearly 300 LEAs, with plans to expand to an additional 400 LEAs. New dashboards are released every six weeks, with plans for 40 more dashboards. Professional development is a priority. In addition to targeted training for administrators, teachers, and coaches/trainers, there are plans to incorporate AZDash training into the curriculum for postsecondary students studying education. ADE also holds a successful statewide data governance conference each year.



Arizona Report Cards

AZDash is available to parents and legislators in the form of Arizona Report Cards. The website is searchable by school, district or charter holder, and location. It provides an overview of each school, as well as assessment information for Arizona's Instrument to Measure Standards (AIMS) and National Assessment of Educational Progress (NAEP), with Stanford Achievement Test information coming soon. Academic indicators such as Title I Status, graduation rates, and college and career readiness also will be available soon.

Additional Resources

Arizona Department of Education

<http://www.azed.gov>

Arizona Education Learning & Accountability System

<http://www.azed.gov/aelas>

Arizona Report Cards

www.azreportcards.com

AZDash

<http://www.azed.gov/aelas/az-dash>

Showcase of Arizona Dashboards (webinar)

<http://nces.ed.gov/programs/slds/webinars.asp>