



ARIZONA EDUCATION DATA WAREHOUSE

Project Start Date: 8/1/2007

Project End Date: 7/31/2010

Amount Awarded: \$5,954,518

The gathering and reporting of education data in Arizona has historically been driven by disparate needs, conducted in an ad hoc manner, and performed by separate operating units using a variety of hardware and software. There had been no standard data definition or organization. For these reasons, it has not been possible to track the effect various factors have upon education, over time.

In 2005 Arizona Department of Education (ADE) leadership took steps to correct this situation. We successfully implemented a limited-scope proof of concept data warehouse project in early 2006. After that success, ADE has achieved several more milestones: obtained firm commitment from government leaders and the state legislature to progress to a full data warehouse; received the necessary funding appropriation (the state legislature committed \$2.5 million in state funds); achieved a positive change in ADE's culture; and established a multi-disciplined steering committee. In November 2006 we embarked on building the full data warehouse, beginning a two-year project. The immediate course of action is to cleanse and bring together Student data from one system with Achievement data that resides in an entirely separate system.

When this initial Arizona Education Data Warehouse (AEDW) is launched late this year, it will include appropriate data marts and tools for analysis and visualization, and will be the bare beginning of a Statewide Longitudinal Data System for education in Arizona. Though uniting student and achievement information will be a worthy accomplishment never previously accomplished here, it is not sufficient to support the most important education decisions. For these, a wide variety of data elements that are not now collected must be gathered, cleansed, correlated, and stored—elements associated with teacher, class, curriculum, and special needs. The collection of this broader array of needed information, and its incorporation into the AEDW, would enable educators, administrators, legislators, and other decision makers to observe how areas such as curriculum affect achievement, to identify highly qualified teachers and highly effective methodologies, and to understand which policies improve education (and which should be rescinded because they do not). The AEDW will support highly informed decisions, by delivering to the decision makers a clear vision of how Arizona's children are being educated.

Arizona lacks the resources necessary to move from the initial AEDW to the full Statewide Longitudinal Data System just described. To supplement existing funding, the

state proposes a grant of \$5.9 million in Statewide Longitudinal Data System funding over three years, to be used toward: broadening data collection to include teacher, classroom and curriculum; creating a unified data dictionary; establishing a unified enterprise-wide data architecture; enhancing security infrastructure and data securitization; developing a consolidated calendar and automatic reporting; aligning the AEDW with NCLB and EDEN reporting requirements; creating online data collection capabilities for rural districts and extremely small schools; standardizing methodologies for data exchange with outside entities; training and supporting the broad spectrum of users; establishing formative and summative evaluation procedures; and forging a structure to enable ongoing SLDS support. Arizona intends to collaborate with Maine and Connecticut in building data dictionaries, SIF for reporting, FERPA issues in data sharing, and creating common EDEN reporting data models.