



www.bardicsystems.com

CASE STUDY

Enhancement of Information System Architecture Powers Product Growth Strategy at Large Edtech Services Company

THE CHALLENGE

A leading education technology company, provider of learning software popular in the K-12 education market, contacted Bardic Systems with an initial request for data definition services.

Specifically, our customer wanted to collect and analyze student data not only by grade level and school district, but at a more useful, granular level: by student subgroup, such as students with disabilities and students who are English language learners.

This would enable our customer's product reports to help teachers further accelerate growth, personalize learning, and close achievement gaps in their student body.

Our customer wanted to work with Bardic Systems to address the following key issues:

- Identify new data fields needed for data capture
- Transform data collected manually and from over 30 Student Information Systems (SIS) and map to customer's internal data model
- Use standards, such as the Common Educational Data Standard (CEDS) to streamline future enhancements and faster integration with external systems

THE SOLUTION

The successful completion of Phase I of the project was defined as follows: to update the internal data architecture, data model, and business rules to enable their data warehouse to store new data attributes for students and for their accomplishments.

Phases II and III of the project will complete the interfaces to SIS external systems and the design of new reports and research capabilities based on analytics enhanced by the additional data collected.

During the 6-week project, Bardic Systems defined a working team, a review team, and a set of deliverables and due dates to keep the project on track.

Business requirements. Bardic Systems collected and reviewed feature requests from our customer's school clients and from internal stakeholders, such as the psychometrics research department.

Data sources and standards. Since the customer's data architecture is an open system that must accept data from multiple systems used by their clients, Bardic Systems proposed use of the Common Education Data Standards (CEDS). The CEDS project is a national collaborative effort to develop voluntary, common data standards for a key set of education

data elements to streamline the exchange, comparison, and understanding of data within and across P-20W institutions and sectors.

Data definitions. Once the data requirements were agreed upon, Bardic Systems worked with the customer's data architecture manager to rigorously design data structures, code sets, and taxonomies to support future business needs.

RESULTS

In addition to the stated goals for the project, Bardic Systems helped the customer identify key areas for improvement in their product development and management process.

Our solution delivered the first phase of a project to enhance our customer's product line. New school district dashboards and reports can now be developed to support targeted learning solutions and actions to take with regard to student subgroups.

Other benefits include:

- Outdated data fields have been identified and replaced
- Critical standards compliance is in place
- The path is set for new, market-leading analytics capabilities and our customer is designing additional value-added business initiatives

For more information on Bardic System's information architecture and data services, contact Bardic Systems at 401.384.0566, or sales@bardicsystems.com