

CASE STUDY

eScholar

“DATA FLOW IS EXTREMELY FLEXIBLE AND HAS ENABLED US TO DELIVER A PACKAGED SOLUTION THAT IS EASILY CONFIGURABLE FOR VARIOUS END USER BUSINESS NEEDS.”

Stuart Colvin, eScholar Fellow



Challenge

eScholar required a robust and flexible data integration tool that could be embedded within its data warehousing systems

Solution

eScholar integrates Data Flow, a powerful ETL tool from Pitney Bowes Business Insight, within its packaged solution to access, merge and validate data from multiple sources before it enters the data warehouse

SUMMARY

The federal No Child Left Behind Act (NCLB) of 2001 has initiated widespread reform of education policy and in recent years, there has been an growing increase in reporting requirements, accountability measures and requests for information. These requests require the full context of data in order to be actionable. NCLB requires states to prepare and to make available state report cards containing the most recent information available on assessment, accountability and teacher quality at the state level. Wherever possible, this information is to be disaggregated in terms of gender, major racial and ethnic groups, students with disabilities, students with limited English proficiency, students considered economically disadvantaged and migrant students.

Building a Data Warehouse to Meet the Reporting Needs of Schools

Founded in 1997, eScholar provides solutions for collecting, cleansing, identifying, analyzing and reporting on the data that educators need for tracking and improving student performance. eScholar's technology has become the recognized standard in data warehousing systems, providing the most sophisticated form of data warehousing for the education industry. It is indispensable in integrating and cleansing the vast quantity of information collected daily on behalf of children across the United States. eScholar is dedicated to improving student education by providing educators with the most effective data management tools possible.

The eScholar Complete Data Warehouse® is a solution for compiling, analyzing and reporting on more than 2,500 data elements. It facilitates

longitudinal analysis that provides insight into student, teacher, school, district and state performance, enabling educators to improve student outcomes. All of the data elements in the eScholar Complete Data Warehouse® solution are maintained at the finest, or lowest, level of detail and can be stored for an unlimited period. The data warehouse integrates all of the data elements, regardless of the source. Therefore, every fact collected by a school district that relates to an individual student's performance remains tied to that individual and creates a comprehensive record that can be tracked throughout their academic career.

Prior to implementing Data Flow™, a data processing engine for data integration and analysis, eScholar had used other tools with their data warehousing systems but found them to be deficient. eScholar sought an alternate solution that would provide database independence and ease of maintainability. “We build a package solution, but it needs to be easy to configure and maintain,” explains Stuart Colvin, eScholar Fellow. “Data Flow from Pitney Bowes Business Insight is extremely flexible and has enabled us to deliver a packaged solution that is easily configurable for various end user business needs.”

RESULT

Comprehensive Data Processing Solution Tracks Student Performance to Support National Education Goals

By integrating Data Flow from Pitney Bowes Business Insight into each implementation of the eScholar Complete Data Warehouse®

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solution, eScholar can better configure its data warehousing systems to meet the individual needs of each school agency or district. For example, in a state agency implementation, eScholar data warehouse collects school and student data from operational systems in each school district. Data Flow then transforms and validates this data before it is stored to the data warehouse. Data Flow can connect to any source of structured data, merge from multiple sources and is highly scalable. This makes it easy for eScholar to configure data warehousing systems for school districts with less than 1,000 students to state agencies serving more than 4 million students. “Implementation of Data Flow from Pitney Bowes Business Insight has significantly decreased our system maintenance costs, which allows us to pass these savings onto our customers,” said Stuart Colvin, eScholar Fellow. “We are now able to simplify the complex IT environments, so we can devote more time to product enhancements and new development.”

School and student data loaded into the eScholar Complete Data Warehouse® solution can be classified in 38 separate categories. Examples include student demographics and attributes, attendance, standardized test results, course grades, discipline infractions, staff demographics and attributes, professional development, finance, special education and surveys. Some data elements, such as those included in student demographics, span several domains. While those data elements are stored only once, the eScholar Complete Data Warehouse® solution can analyze data across multiple domains, which replaces

the labor intensive process of examining hundreds or thousands of student reports manually. Snapshots of student demographics can be taken at crucial points to capture the composition of the student body. This data can be easily stored on an annual basis for reporting to state and federal agencies. The capability of storing factual as well as demographic data enables a more comprehensive analysis of student and faculty information. Using Data Flow, reports are easily generated in a matter of minutes.

Data Flow’s robust and easy-to-use features have also helped eScholar efficiently expand to service post-secondary school systems. Its intuitive interface allows developers to become familiar and productive with the technology quickly. “Our customers want to do longitudinal data analysis,” explains Colvin. “They want to see the education trends in different programs, evaluate its impact on students and analyze how successful the school system is at educating students to be college-bound.”

Data Flow enables eScholar to address the increasing need for easily accessible, user-friendly data, which facilitates reporting and analysis to support the national education goals of the No Child Left Behind Act. Tracking and improving the performance of the complex enterprise of educating children is eScholar’s core mission. “Pitney Bowes Business Insight has continued to evolve, working with us to determine future needs so that we can continue to provide the best-of-breed data warehousing system for the education industry,” said Colvin.

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About Us (PBBIAdvantage)

Operating as one division, Pitney Bowes Group 1 Software and Pitney Bowes MapInfo are now called Pitney Bowes Business Insight. Pitney Bowes Business Insight offers a unique combination of location and communication intelligence software, data and services that can be used throughout an organization. We combine our deep industry knowledge with our strategic analysis offerings and apply our expertise to help you take action that leads to better, more insightful decisions. You will get a more accurate view of your customers, and integrate that intelligence into your daily business operations to increase revenue, improve profitability and enhance operational efficiency.

About Us (eScholar)

eScholar provides software, services, and consulting in the area of education data management. We’re the leader in education data warehousing, used in seven state education agencies and more than 2,500 school districts nationwide. We’re the leader in student identifier solutions, used by 10 education agencies, the U.S. Department of Education’s Office of Migrant Education, and the Department of Defense Education Activity. Across our product suite we support more than 12 million students in over 3,600 districts nationwide.