Case Study: Broward County Public Schools

Critical Issue

When the Broward County Public Schools data warehouse was first started in 1996, the vision was that data could make a significant difference in student achievement. This vision became a reality as Broward County began to empower thousands of non-technical users with information from its data warehouse. It also became clear that timeliness was a vital factor, and that Broward County parents, students, teachers and administrators needed real-time, on-demand data sharing.

Organizational Challenge

While it's no surprise to hear that people are sharing information in a school district, and that intelligence can be key to success, Broward County Public Schools in Florida is using technology to take these subjects to new heights. Broward has developed an award-winning Bl implementation comparable to the business analytics systems that support Fortune 500 companies. Broward creates and captures immense volumes of information every day, including attendance records, grades, test scores, medical histories and contact information for parents and guardians. The school district is pioneering innovative new approaches for capturing, storing and rapidly retrieving student information. The backbone of all of these data and reporting activities is the Broward data warehouse.

Over 200,000 students, partners, teachers, and school administrators have login information to access the data warehouse. When these users want information in real-time, they want it "then and there," according to Phyllis Chasser, Ph.D., Senior Data Warehouse Analyst, Broward County Public Schools.

Using Precisely's data integration offering Connect, Broward transformed itself from a school system that was data starved to one that was data-driven, the school district's diverse hardware and software environment was a hurdle. To enable faster, better business intelligence analysis, Broward needed to break through database and platform barriers.

Company Name:

Broward County Public Schools

Headquarters: Fort Lauderdale, Florida USA

Industry: Education

Employees:

Approximately 41,900

Business Environment:

- Broward County Public Schools is the sixth largest school district in the U.S. and the largest fully accredited district
- Serves approximately 265,000 students in more than 260 schools and education centers
- Educates students from 235 different countries of origin speaking 159 different primary languages
- Earned high honors from some of the technology industry's top publications for best practices in business intelligence and data warehousing

Precisely Product: Connect (CDC)

Solution

At Broward County Public Schools, Connect helps make information available to the people who need it, when they need it. Connect provides real-time changed data capture and on-demand, enterprise-wide data sharing between any applications, regardless of database format or operating system.

"About 85 percent of our users are on Macs, and the other 15 percent on PCs. All of the student transactional applications as well as our data warehousing activities run on IBM i Systems. With Connect, we can bring data over rapidly from a wide range of data sources, including SQL tables, Db2 tables, flat files, SAP, Oracle, and others—often with just a point, click and drag," said Chasser.

Chasser emphasized that teachers and administrators can make more collaborative, data-informed decisions, and this has a very real impact on student achievement.

"A good example is the fact that our district demographics change on a regular basis—we have a lot of students moving from school to school during the year. We used to update all of our records overnight, but now, some of the most essential data, such as student registration and attendance, is real-time. So, by the time the student reports to the new school, everything is already there, and if they move during the middle of today, the records are there immediately," said Chasser. "Students can be placed right away in the specific classes as needed. If they have problems with English or they need to be on the lunch program, there's no delay."

The availability of real-time data has community value beyond the school district itself. Broward County Public Schools shares information with an organization called the Broward County Information Network via an Oracle database hosted by the county. This network includes many Broward County public entities including hospitals. "Data sharing definitely makes things easier for agencies across the county. For example, if a child is hurt outside of school, authorities can link into this independent database and get contact information or information for emergency treatment such as allergies that we have in our data warehouse," said Chasser.

"The data warehouse has created a data culture within the school district, and it's wonderful. The easy availability of data makes it an integral part of the organization, and Connect has been instrumental in creating that environment of easy availability," said Chasser.

Results

- Enables faster, better data analytics
- Supports more informed decision making
- Enables on-demand, organizationwidedata sharing across a multihardware and multi-software environment for over 200,000 users (with about 85 percent of the school district using Macintosh and 15 percent using PCs)
- Simplifies sharing of data from a wide range of sources including SQL tables, Db2 tables, flat files, SAP, and Oracle database
- Speeds the creation of ad-hoc queries for events and emergencies (i.e. hurricane-related school closings)
- Improves data accuracy through accountability as errors in the transactional system are more likely to be caught in real-time

Technologies

- Connect
- IBM i System Server (Model 870)
- Hyperion Performance Suite
- Access
- MacMidrange Client
- Adobe Acrobat

"Connect helps keep our students and their families informed in real-time and enables our teachers and administrators to perform faster, better data analysis. Real-time access to select information provides us with analytic capabilities comparable to those at Fortune 500 companies."

 Phyllis Chasser, Ph.D., Senior Data Warehouse Analyst, Broward County Public Schools