

Cincinnati Public Schools (CPS) An Award Winning District Employing the On Demand 'Data Center of the Year'

With 71 schools (including 19 high schools and 58 elementary schools) covering a 90 square-mile area, Cincinnati Public Schools (CPS) is Ohio's third-largest public school district. Dating back to the early 1800s (William McGuffey, author of the famous readers, was once on the teaching staff and President William Howard Taft an alumnus), the district now enrolls nearly 36,000 K-12th grade students, in a mainly urban setting.

In the third year of its Building Excellence Plan to align curriculum and teaching with state academic standards, monitor student progress and provide intervention for struggling students, CPS has a well-oiled strategy to rebuild and renovate its schools into "modern 21st century learning environments," while progressively raising scholastic achievement.

"Last year we went up three notches on our report card" says District Treasurer Michael Geoghegan, referring to the Ohio Department of Education State Report Card. CPS, which boasts of continued advancement in recent years in overall district performance, reading and math scores, student attention and graduation, is one of only a few urban districts in the state to improve its rating.

Geoghegan and newly-selected superintendent, Rosa Blackwell, were co-recipients of 2005 Ohio Innovation in Finance Award "for their leadership in crafting the major restructuring necessary to bring CPS' budget back to the level of fiscal year 2002 and to lower the number of staff to fit with the district's enrollment."

"We went through some major internal right-sizing," he continues. "There had been a school enrollment reduction of 17 percent in recent years and we hadn't adjusted to it. When Rosa Blackwell arrived we developed an employee severance plan to reduce staffing by 673 positions. It was a major initiative, done without major layoffs." The district consolidated six small schools, imposed hiring and travel freezes, among other measures, and managed to reduce the budget by \$41 million.

"We were then able to concentrate on other operational enhancements," says Geoghegan, whose district also received a Certificate of Achievement for Excellence in Financial Reporting. Among these enhancements has been the employment of an Oracle E-Business Suite and Database Management System (DBMS) accessed "On Demand" via the company's data center, which was recently recognized as Data Center of the Year by AFCOM (an association for data center professionals) and Network World.

Based in Austin, Texas, the 130,000 square foot facility, with its state-of-the-art grid architecture, was acknowledged for its high standards, superior design and efficient operations, as "evidenced by the success of its Oracle On Demand customers and by its own business."

Over a three year period, Oracle had merged 40 computer data centers into one ultra-advanced hub as part of a global IT consolidation. Its "On Demand" (software as a service) initiative was one of the results. The data center has a storage capacity of three petabytes, with 12,000 servers and the largest single Dell/Linux and Network Appliance installations anywhere. With a commitment to efficient energy use, it has not had an electrical or mechanical outage since it opened in 2002.

Multiple grids, and 2,000 servers, are used to host the On Demand applications, providing unparalleled scalability and manageability. The facility is also protected by an incredible array of security devices, including internal penetration tests, retina scan-

ning, hand geometry, vehicle proof perimeter fences, blast proof glass and X-ray scanning.

"On Demand has been a night and day transformation," says Avis Sharpe, CPS Assistant Treasurer and Controller. "It's a significant enhancement for us, like a virtual operation, we can't say enough operationally, not to mention financially. We're saving \$1 million a year."

According to Sharpe the district had made the most of an in-house system. "It was an old legacy system that was expensive to maintain. The hardware costs were outrageous. Like many school districts, our budget was limited and we found it very hard to be competitive in hiring technical people. We really needed a second database administrator. The system was down all the time, we didn't have a disaster recovery plan and we were greatly exposed."

After looking at upgrade and outsourcing options (payroll was outsourced at the time) CPS learned of On Demand and decided to implement the DBMS along with the Human Resource Management (HRM) and Financials (FIN) applications. "We've just upgraded to the most recent version, Financials 11.5.10," adds Sharpe.

"Now we don't need that extra database administrator. We no longer need to outsource payroll (an HRMS function) and there are monthly and quarterly upgrades to the system; all traditional flow adjustments are made for us. There are no big time maintenance fees, no obsolete hardware (hardware upgrades are part of the contract), no troubleshooting, no need for backups because full backup is covered. We have 24/7 service and support and have not had down time since we implemented On Demand. We were once down for nine days with our old system. I really have to question people's decision to maintain their own hardware now."

"We do still have our challenges," says Michael Geoghegan. "We're competing with a number of charter schools that are not held to the same accountability and are drawing funds from the public schools, and of course there are the NCLB requirements." But the On Demand alternative has presented CPS with a number of options for new applications which, when the resources are available, will even further enhance its operations.

• • •

AT A GLANCE	
DISTRICT:	<i>Cincinnati Public Schools (CPS)</i>
LOCATION:	Cincinnati, Ohio
SIZE:	Nearly 36,000 K-12 students enrolled in 71 schools
CHALLENGES:	The district, which couldn't afford additional in-house technical staff, had an old legacy system that was prohibitively expensive to maintain. What's more, CPS was greatly exposed with regular system crashes and no disaster recovery plan.
SOLUTIONS:	The district utilizes E-Business Suite through the Oracle On Demand Center in Austin, TX.
RESULTS:	CPS has seen a substantial improvement in operational efficiency, reliability and savings (\$1 million p.a.) with the On Demand system, with virtually no down time.

**For more information on Oracle's Solutions
for K-12 Primary and Secondary Education
please call 800.633.0677 or visit
<http://www.oracle.com/industries/education/k12.html>**

ORACLE®

How Four School Districts are Achieving Excellence Through Information-Driven Education *Brought to you by Oracle*

"We would become an exemplary district... be more cost effective and streamlined in our business practices... have the ability to recognize and analyze each individual student's progress over time... have all of our students achieve academically excellent results...no longer lose revenue due to system inefficiency... become a leader in educational technology...completely close the achievement gap..."

Ask any number of educators what their vision of excellence entails and you're sure to get any number of answers. But regardless of how they define it, today's schools, school districts and federal, state, and local departments of education achieve school excellence with the aid of technology and with a strategic approach to choosing solutions that support their vision of excellence in K-12 education.

A growing number of visionary schools and districts utilize web based enterprise systems to improve their performance measurements, while enhancing services, increasing efficiencies, and improving accountability and communication. They are able to make these advances because they have integrated access to information and solutions that improve the way information is managed.

Some use enterprise software architecture and database management systems to recruit and continually train and develop highly skilled and qualified teachers who, in-turn, use their improved skills to increase the quality of learning their students achieve. Others use them to efficiently manage resources such as faculty, staff, physical assets, and suppliers—saving money that can be put toward learning-related needs. Still others leverage these web-based tools to better communicate and collaborate with students, parents, faculty and the community at large—all pathways that lead to more effective learning.

These are the accounts of three school districts (ranging from 34,000 to 136,000 students) and a state department of education (representing 1.2 million students) that employ an array of web-based enterprise software solutions to realize the same outcome, no matter how they define it – educational excellence.

Richardson Independent School District (RISD) Installing a World Class Infrastructure

Situated in suburban Dallas County, Texas, Richardson Independent School District (RISD), encompasses portions of the cities of Dallas and Garland, along with most of the city of Richardson. "Our community tradition of providing quality education is consistent with our goal to become an exemplary district," notes Jim Nelson, RISD superintendent, who has served as Texas Commissioner of Education, Executive Secretary of the State Board of Education and Chairman of the State Board of Educator Certification.

"This would mean that 90 percent or better of our students are passing TAKS (The Texas Assessment of Knowledge and Skills, first implemented in 2003), which is not a minimum skills test. We intend to completely close the achievement gap and ultimately expect all of our students to achieve academically excellent results."

The district's 38 square miles represent a highly diverse population and, according to Nelson, "meeting the academic needs of every student, while providing opportunities for students to grow socially and emotionally, poses a number of significant challenges. To achieve these goals we need to continue to recruit, develop and maintain a

highly qualified staff and we need to demonstrate fiscal responsibility, efficiency and effectiveness in all operations."

RISD comprises 55 school campuses, including elementary schools, junior high schools, high schools and an alternative learning center, all serving more than 35,000 students, with a total teaching staff of approximately 2,400 and more than 1,900 support staff.

"Curriculum alignment is a never-ending ordeal of trying to meet the needs and improve the performance of all students — those who need intervention as well as those who need more of a challenge," says Nelson. "It has also been a challenge to attract and maintain an excellent teaching staff. A number of our teachers are reaching retirement and, salaries notwithstanding, there are not enough students going into the field of education to staff the classrooms in our area or state."

RISD's response to these challenges reaches back to the late 1990s when, according to Neil Delerson of RISD Information Systems, there was sufficient bond money available to address what was then an antiquated infrastructure. The district made a significant commitment to provide its schools with computers and to implement a web-based solution.

"The decision was made to replace our archaic, mainframe-based technology with a modernized platform that featured real-time access to data and more extensive reporting capabilities," says Delerson. "Our user community went through an evaluation process and ultimately determined that an Oracle Database Management System (DBMS) would meet our needs."

To address the growing needs in the area of staffing and recruitment, RISD chose to employ the Human Resources Management (HRM) family of applications, part of Oracle's E-Business Suite, which automates the entire recruit-to-retain process while providing an exacting overview of HR-related activities, including payroll, performance management, compensation and recruitment.

"Our employment applications and employee evaluations are now all on-line," says Jim Nelson. "All HR information is available in easy-to-access reports, with the computerized maintenance of employee service and certification records and the ability to electronically produce yearly salary verification letters."

The district also chose other E-Business Suite applications including Financials (RISD recently earned a certificate of achievement for "Excellence in Financial Reporting") and the self-service requisitioning app, *iProcurement*, part of the Advanced Procurement Suite. The aggregate result is that the district is now able to run its core accounting, budgeting, procurement and inventory management functions on a single platform. While it provides more effective control and accountability, along with greater cost savings through more refined budgeting and financial management, the same E-Business platform also provides a critical venue for funding, by integrating grant accounting with the general ledger, allowing the district to better manage its government grant initiatives.

To assist the district in meeting its regulatory compliance requirements at both state and federal levels, RISD has created a data warehouse. "A great deal of data analysis and reporting is required," says Delerson, "including NCLB accountability and the accompanying metrics and benchmarking."

"It's now easier for us to use our data to drive our day-to-day operation in all areas," adds Jim Nelson. This, in turn, allows RISD to concentrate on its goal of becoming an exemplary district. "We've doubled the number of recognized and exemplary schools in our district which means improvement in student achievement. Recommended Honors Program seals were earned by 82 percent of our 2005 graduates and we had 24 National Merit Finalists last year."

As seen in EDUCATION WEEK's Quality Counts 2006

In its quest to further close the achievement gap, and with the help of Oracle Consulting Services, RISD has begun to leverage the power of its technology stack to create a district-wide portal. This will ultimately allow everyone, from superintendent to parents, access to critical information they need to help their students succeed.

Initially focused on student assessment, the district is integrating the information into its data warehouse, for access through the district-wide portal. A standard set of applications, reference materials and resources will be available to each user, who will have access to the portal using single sign-on capability

“Although it’s still in the early stages, it’s already showing its promise” concludes Delerson.

• • •

AT A GLANCE

DISTRICT: *Richardson Independent School District*

LOCATION: Dallas County, Texas

SIZE: More than 35,000 students, 2,419 teaching staff, 4,329 district employees

CHALLENGES: Meeting the academic needs of an extremely diverse population while providing opportunities for students to grow socially and emotionally in the face of never-ending curriculum alignment, staffing and financial challenges, and NCLB accountability.

SOLUTIONS: The district has incorporated the Human Resource Management, Financials and iProcurement applications of Oracle’s E-Business Suite and is leveraging its technology stack to create a district-wide portal and decision-support system, along with an NCLB-friendly data warehouse.

RESULTS: Increasingly able to drive its day-to-day operations with its web-driven system, RISD is meeting its NCLB accountability requirements and, most significantly, is steadily closing the achievement gap in its quest to become an exemplary district.

Virginia Department of Education (Commonwealth of Virginia) A Statewide Initiative

In 2003 Virginia Governor Mark Warner, in conjunction with the Commonwealth’s General Assembly, announced his “Education for a Lifetime” initiative to “improve educational achievement within the state from “pre-school through grad school and beyond.”

With a K-12 student enrollment of nearly 1.2 million students enrolled in 1,839 public schools and with over 89,000 public school teachers, Virginia has become a national leader in education technology under the initiative, which has resulted in the continued implementation of Virginia DOE’s Standards of Learning (SOL) web-based technology initiative and its state-level Educational Information Management System (EIMS).

“The project was very generously funded by our governor and there were no regulatory issues,” says Lan Neugent, Associate Superintendent for Technology for Virginia’s Department of Education, who was recently honored by the National Coalition for Technology in Education and Training (NCTET) for his “leadership in the use of technology to improve teaching and learning.”

Until recently, Virginia’s school kids had each participated in the more than 2 million Standards of Learning assessments each year, with schools and districts devoting hundreds of thousands of hours to meet the many disparate data collection and reporting requirements associated with both the Virginia Board of Education’s Regulations for Accrediting Public Schools and with the Federal NCLB guidelines.

The DOE’s solution was the implementation of EIMS, a web-based system, which includes decision support applications that can provide Virginia’s teachers and administrators with timely, accurate student achievement data, along with extensive DOE reporting tools, secure data transfer capabilities and, significantly, a powerful longitudinal student information system for electronic high-stakes testing.

Run on a powerful, state-wide data warehouse, and accessed through an Oracle portal, the system was integrated by Pearson Education Measurement (PEM), part of a collaborative partnership with the Virginia DOE’s Technology Division and the state’s 135 school divisions. The EIMS is slated to free up countless hours for Virginia educators (more than 400,000 assessments have already been delivered online). The Virginia Department of Education also projects a savings for the Commonwealth of more than \$64 million over the next decade.

“We have been able to load five years of state assessment information into the data warehouse and have provided an array of reports that our school districts can use to analyze the data,” says Neugent whose mission is to have every school division utilizing the system with full instructional and testing capabilities including online delivery of results for state and local evaluation by 2009.

By its nature, the web-based EIMS also provides links to a wide array of other educational resources and is accessible to authorized users anywhere. Role-based security determines the user’s level of access. Initially (during the program’s pilot) PEM has been responsible for role level security, however, once the system is fully loaded and functioning, Virginia’s school divisions will be responsible for security

According to Neugent, the longitudinal student information system is the most essential component of the program. It provides the ability to recognize and analyze each individual student’s progress over time (while maintaining the student’s privacy and security). Each district is thereby enabled to keep track of each of its students and each school, in turn, is provided with the information needed to improve student instruction and broaden each student’s learning opportunities.

To accomplish this students are assigned with a unique, permanent testing identifier. “We have now assigned testing identifiers to each student in Virginia and have developed a process for assigning identifiers to new and transferring students.” says Neugent, who adds that giving the school districts the support they need to provide this data has, in fact, been the biggest challenge thus far.

The overarching SOL initiative, which now serves as a model for other states ensures that, in a time when Internet savvy students have raised skills and expectations, there’s Internet ready, LAN capability in every Virginia school, coupled with enough high-speed band-width to ensure that all educational needs are met for some time to come.

• • •

AT A GLANCE

DISTRICT: *Virginia Department of Education*

LOCATION: Commonwealth of Virginia

SIZE: Nearly 1.2 million students enrolled in 1,839 public schools, with more than 89,000 public school teachers

CHALLENGES: To become a leader in educational technology in accordance with the governor’s “Education for a Lifetime” initiative, to streamline the burdensome but necessary Standards of Learning assessments and to find a way to track the progress of each and every student in the state.

SOLUTIONS: Virginia utilizes a state-wide data warehouse and electronic high-stakes testing (a powerful system that allows Virginia to keep track of all the students in the school system to assist schools in improving instruction and learning opportunities for all students) in its

RESULTS: Educational Management System (EIMS). EIMS is slated to free up countless hours for Virginia educators, every Virginia school will be provided with the information needed to broaden each student’s learning opportunities. EIMS is also projected to save the Commonwealth more than \$64 million over the next decade.

San Diego Unified School District (SDCS) A Collaborative Upgrade

The second largest urban school district in California (and eighth largest in the nation), San Diego City Schools (SDCS) dates back to 1855. SDCS incorporates over 200 educational facilities (including 113 elementary schools, 23 middle schools, 27 high schools, 25 charter schools, 10 alternative schools and four “atypical” schools) serving approximately 140,000 students. There are 14,500 full time equivalent staff positions, representing nearly 16,000 employees.

With a cumbersome, scattered series of outmoded business systems, SDCS had struggled for quite some time to meet its federal and state reporting obligations. Due to an inability to collect all the requisite data, particularly in light of NCLB’s requirements, the district was actually losing revenue.

“The challenge was to update our architecture from several home-grown, mainframe systems to one modern, web-based business system, in order to be more cost effective and streamlined in our business practices,” says Mike Casey, Executive Director and CTO of San Diego Unified School Districts (SDCS). “In 2002, we made the decision to go with PeopleSoft software and use Empower Solutions as an implementation partner.”

A management and technology consulting organization that specializes in technology solutions for state and local government, Empower’s role was to ensure a smooth transition for the district, to an Oracle Portal (web content management system) that employs PeopleSoft Enterprise Suite applications, along with a C Innovations SIS (Student Information System).

“If you look at where ERP (enterprise resource planning) companies ‘grew up’ it was a logical choice to select PeopleSoft,” says Casey. “Oracle grew as a database company and later added on the financials software as their flag-ship application, while PeopleSoft cut its teeth in the HR Payroll area.”

The portal provides the integrated framework needed to deliver the software applications and manage the many requisite reports with a single interface, while the enterprise suite applications provide the performance management solutions. In the case of SCDS these include Financial Management Solutions (FMS), Human Capital Management (HCM) and Enterprise Performance Management (EPM), an application that helps district managers to formulate strategies and align them with operational plans, while monitoring day-to-day operations.

“Considering all of the business processes involved in ERP we recognized that our biggest challenge was payroll,” says Casey. “K-12 payrolls are very complex when you have to consider the number of labor unions, memorandum of understandings, hundreds of calendars, multiple retirement systems and the multiple funding streams and multi-funded positions throughout the district.”

Although a majority of the district’s HR functions are now managed through HCM, the Payroll application (which calculates earnings, taxes and deductions, while maintaining balances and payroll data) has been especially significant as a result of this challenge. Other essential applications include Benefits Administration,

with automated enrollment and billing and Recruitment through the Candidate Gateway (formerly known as eRecruit), which enables applicants and employees to collaborate in real time.

The HCM application (SDCS uses the HCM 8.8 version) also offers SCDS employees a time-saving series of real time, self-service functions, including ePay, enabling employees to view basic payroll information and print a copy of their latest earnings statement online, eBenefits, for open enrollment, plan changes, dependent and personal data maintenance and eProfile, which allows employees to perform their own profile maintenance, while slashing administrative effort and increasing data integrity.

Predictably, the implementation of such self-service functions (and the dispensing of traditional paper-driven reporting) has immeasurably increased district employee production. With nominal training it has also raised employee satisfaction. As with all Enterprise Suite applications, each app is intuitively accessed through the universal (and familiar) PeopleSoft portal.

“All of the purchase orders for the district are created and sourced through eProcurement,” says Casey, referring to yet another self-service application, which allows employees to manage their own requisitions while enforcing policies, identifying exceptions and controlling employee buying. “We also use nearly the entire FMS suite.”

The FMS suite (SDCS uses the Financials 8.4 SP2 version), which integrates with other applications across departmental lines, features Cash Management (“incorporating our Accounts Receivable and Accounts Payable functions” says Casey), General Ledger (“allowing us to efficiently record our financial transactions”), Inventory (“which tracks our inventory and allows for the well-organized operation of our district warehouse”) and Asset Management (“allowing our district to easily track its major assets”).

The portal also supports the district’s web-based Student Information System (SIS), which is used to manage such student-related administration duties as enrollment, attendance, scheduling, discipline, transcripts and grade reporting. The SIS is also used to gather and report the data needed to remain in compliance with state and federal regulations, including the No Child Left Behind initiative.

“Students today are different than they were even 10 or 20 years ago,” says Casey. “They’re growing up in a world where the Internet has always existed. But our mission hasn’t changed. I know that as change continues, and issues arise, we’ll solve them in a collaborative, responsive way.”

• • •

AT A GLANCE

DISTRICT: *San Diego Unified School District (SDCS)*

LOCATION: San Diego, California

SIZE: 136,000 students, more than 200 educational facilities with 14,500 full-time equivalent staff positions representing nearly 16,000 employees.

CHALLENGES: To update the district’s business system from several slow, inefficient home grown mainframe systems to one modern, integrated system in order to be more cost effective and streamlined in its business practices.

SOLUTIONS: Using an Oracle Portal Web Content Management System, the district chose to employ a PeopleSoft Enterprise Product Suite, along with a Student Information System (SIS).

RESULTS: The district no longer loses revenue due to inefficiency, is able to readily gather and report its requisite NCLB data and is able to overcome the considerable business complexities of running the eighth largest school district in the nation.