

webMethods & Fairfax County Public Schools

Fairfax County Public Schools: Using webMethods Business Process Management to Ensure the Safety of Students



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~Ted Davis, Director of Enterprise Information Services, Fairfax County Public Schools.

Fairfax County Public Schools (FCPS), located in Fairfax County, Virginia, is the 13th largest school district in the United States, with over 164,000 students attending class in 238 schools and a \$2.1 billion annual operating budget. It is a diverse and dynamic school system, and parents have come to expect and demand a lot from FCPS. More than half of the county's adult residents have four-year college degrees or better, and the median household income of Fairfax County is one of the highest in the nation.

The Challenge – ACCESSING ACCURATE EMERGENCY INFORMATION ON DEMAND

In Fairfax County Public Schools (FCPS) today, as in many school systems across the country, emergency information on students is collected on paper forms. Schools usually collect these forms from parents at the beginning of the school year, then again for every athletic activity in which the students participate, and then again every time students go on field trips. With over 164,000 students, this adds up to time-consuming paperwork for parents who must repeatedly fill out numerous forms. Schools must then maintain this information in rows of binders or manually enter the information into student information databases. It can take a school four weeks or more to manually enter this information based on paper forms.

Maintaining emergency information in this manner is daunting, but accessing this information in time of an emergency is truly difficult. For example, if a student

is injured in the gymnasium, the physical education teacher runs down to the clinic to get the nurse, who then returns to the gymnasium to assess the student. In these situations it is best not to move the student, so the nurse sends someone back to the clinic or office to locate the student's emergency care information; the individual then returns to the gym again with this information so that the nurse may contact the parents and provide the information to the Emergency Medical Services. Too often, the emergency contact information is out of date because the parents did not notify the school of changes to phone numbers, e-mail addresses, doctors, and other vital information.

Challenges like these are compounded further when the incident takes place outside of the school or after normal school hours, as in the cases of field trips and sporting activities, when emergency information on file is not accessible.

“Schools clearly have a problem in collecting emergency information on students, maintaining and ensuring its accuracy, and accessing this information where and when it is most needed,” says Ted Davis, Director of Enterprise Information Services, Fairfax County Public Schools. “We knew that meeting those challenges would result in timely care of students in emergency situations and timely communication with parents. Ultimately, these factors lead to safer and more secure schools.”

THE SOLUTION – WEBMETHODS BUSINESS PROCESS MANAGEMENT

To address these challenges, FCPS started developing a service called weCare@school. The service enables parents to securely access emergency care information on their students via a Web-based application and to identify updates—reducing the need for the emergency care form and ensuring accurate information. To help integrate the service’s many processes and disparate users and devices, FCPS chose webMethods for its ease of integration through Web services, rapid delivery of applications, support for multiple devices, ability to manage applications distribution by role; secure, reliable communication; and support of online and offline communications.

Using webMethods Business Process Management (BPM) capabilities, built on its leading Integration Platform, webMethods Fabric™, FCPS now captures electronic signatures, thus eliminating the need for parents to sign any paper forms. Through an automated workflow, the parents’ updates are routed to school administration to verify the data and load it into the student information system—without manual entry. The application routes these changes to a school employee for review and approval. Upon approval, the application commits the changes to the student information database.

weCare@school also enables first responders in schools (police officers, nurses, principals, assistant principals, etc.) to securely access emergency care and location information on students via wireless, handheld devices and cell phones, including Blackberries.

“With process modeling included as a core component of the webMethods integration platform, we could quickly and easily enact specific business processes exactly as we envisioned them,” said Ted Davis. “One of the real benefits of this integrated approach is the higher levels of assurance that it delivers. If we included a specific component within the process, we knew that it’s there and functioning. Based on our unique mission, having this level of confidence in the system’s performance is critical.”

RESULTS – INCREASED EFFICIENCY, ACCURACY, AND SAFETY

Initial indications are that the benefits of the project will be significant. Where parents spent hours providing emergency care information, they can now update their information in minutes. Where schools spent four weeks or more manually entering student information from forms, they can now validate the electronic submissions as they arrive without manual entry; and where first responders spent up to half an hour searching for emergency information, they can now have it on demand. Furthermore, since parents have the ability to see emergency information as it exists in the student system, they now have the opportunity to correct any errors.

“Although weCare@school improves the efficiency with which FCPS processes emergency care information, the ultimate beneficiaries are students.” concludes Davis.

weCare@school is an innovative project that fits into an overall strategy at FCPS to improve

collaboration with parents and the community. FCPS has also implemented many other innovations with webMethods as well, such as the ability to perform the census of school-aged children, enabling 60,000 residents to complete the census online, the ability to register for adult education classes online and pay via credit cards, and the ability to complete Individualized Education Program plans online for 23,000 special education students.

FCPS SUCCESS HIGHLIGHTS

- Improved efficiency of collecting and maintaining emergency care information on 164,000 students.
- Improved accuracy of emergency care information.
- Improved accessibility and timeliness of emergency care information for first responders in schools.
- Rapid deployment of new capabilities.
- Interaction with external partners.
- Access to vital information where and when it is needed most.

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