



Roosevelt School District Web IEP student tracking application.

Roosevelt School District is a K-8 school district located in South Phoenix Arizona. Established in 1912, Roosevelt is now home to 21 schools and has approximately 12,000 students enrolled in the district. Additionally, Roosevelt services between 1200 and 1400 students with special educational needs. The district has long been known for excellence in its K-8 instructional programs, bilingual curriculum, and parental participation and community partnerships.

In 2001 Roosevelt invested in the development of a Web Based application known as Web-IEP. Web-IEP was developed using an IBM Websphere Studio Application Developer (Java) development environment. The application server used was a WebSphere Application Server utilizing network deployment. The Web-IEP application, application server and DB2 database were deployed on a Windows NT server.

The purpose of the application was to track and report on students with Individual Education Plans (IEPs) per Arizona state and federal requirements. Compliance with these requirements will be audited in 2011. When it was developed, Web-IEP was ahead of its time.

Since its initial deployment, there has only been minimal hardware maintenance performed on the server and there had been no updates applied to WebSphere, DB2, the Web-IEP application or the operating system. The application was also missing reporting features that are required for compliance.

The hardware and software maintenance costs and difficulties to support the web application had reached a point where the districts return on investment (ROI) had dropped significantly. While the original application provided custom functionality and compliance with state and federal mandates when it was first deployed, its functionality now lagged behind the rest of the industry.

With a very limited budget, Roosevelt needed to find someone to:

1. Bring the web application back on line and keep the application server running
2. Take over weekly data import activities and resolve any data errors
3. Provide software development services to correct open issues and to add new functionality

Finding the IT help they needed

The Roosevelt School District worked with a consultant when they first started experiencing server and application issues. The consultant promised to do work but was never able to deliver any results. Roosevelt felt they were running out of time and needed to look elsewhere for a reliable consulting company. According to Jeanne N. Koba Ed.D., "We were experiencing system issues impacting school-wide services and needed immediate and continued technical support."

The school district had worked with Mr. Robert Cody on a previous project when he worked for another company and was very pleased with his work. When they discovered he had started Lighthouse



Consulting Services they contacted him in August of 2008 to see if he could help them with their server and application problems.

Experience made the difference

“Lighthouse responded by keeping a mission critical Web Application up and running and taking support calls 7 days a week.” stated Jeanne N. Koba Ed.D. Lighthouse provided Roosevelt School District with comprehensive Technology Consulting and Customer Support services that included:

1. Taking over operational support for the Web IEP Production Server

Since the school district used the Web IEP application on a daily basis, the first priority was to address the frequent server outages. Two scenarios were identified:

- ✓ The physical server was being rebooted throughout the week without warning. Configuration issues with the Websphere Application Server were preventing the production server from automatically restarting upon system reboot. Compounding the problem, automatic notification of server down condition was being emailed to an incorrect address. Consequently the IT group was unaware of the server outage.
- ✓ Unreported application errors were causing the application server to crash without warning. The automatic notification of server down condition was being emailed to an incorrect address. As a result, the IT group was unaware of the server outage.

2. Providing first line technical support, including phone and email support, for the Roosevelt Special Education Staff and Teachers.

Once the server and application were stable, reporting and correction of issues and defects was addressed. A remote support process was put in place so that Roosevelt staff could contact Lighthouse to report problems with the web application and server outages. All reported issues were tracked and responded to within 24 hours depending on the severity of the issue being reported.

Technical support was provided during normal business hours, nights and weekends. This included manual data imports of student information performed during the application maintenance windows.

3. Providing software maintenance and technology consulting to resolve Web IEP application errors and data import issues.

As issues and requirements were identified, they were analyzed and prioritized. Because of issues with access to the source code, the maintenance effort for the web application became centered on only those activities that were critical to keeping the application available.



A plan for the future

Lighthouse worked with Roosevelt School District IT staff to identify and correct hardware issues with the Web IEP Production server. Concurrently, the WebSphere configuration issues were addressed, reducing the number and duration of application server outages.

Lighthouse worked with the school district to identify their options.

1. Use the Web Development services provided by Lighthouse to update the web application and supporting software. This included purchasing new hardware and application server licenses as well as, taking over control of Web IEP source code maintenance and development.
2. Enlist the help of Lighthouse to review other available “off the shelf” solutions, provide a detailed analysis and comparison to Roosevelt Special Education management.

After reviewing the options, Lighthouse advised Roosevelt School District to purchase e-IEPPRO. Developed by MediaNet Solutions, Inc. in Phoenix, Arizona, e-IEPPRO is a customizable web-based software solution that simplifies the management of the special education process. Additionally, e-IEPPRO has the added benefit of being a hosted solution, eliminating the need for Roosevelt to purchase new server hardware.

Lighthouse then worked with the e-IEPPRO and Roosevelt Special Education staff to identify the set of data that needed to be migrated to the new solution. A Data Mapping activity led by Lighthouse that lasted approximately one week identified all Web IEP data tables and data types and mapped those items to the e-IEPPRO equivalent. The final export of data out of Web IEP and into e-IEPPRO was completed in May of 2009.

Result

Roosevelt School District has successfully migrated to the e-IEPPRO Web solution. A very large percentage of the Web IEP data was successfully mapped and imported into e-IEPPRO with little or no additional manipulation. Moving the Web IEP application to a “hosted, off the shelf” solution saved Roosevelt School District money on software and hardware maintenance in the long term. Functionality available in the e-IEPPRO application will allow the district to reach its goal of 100% compliance with state and federal regulations prior to their next scheduled audit in 2011. According to Jeanne N. Koba Ed.D, “We could not have serviced our students without the help we got from Lighthouse.”