



Signage in use at Wapato High School. **Large screen:** Da-Lite 70265 Tensioned Large Cosmopolitan, 208" diagonal. 110x176 16:10 format. **2x2 displays:** 4:55 screens function together. 110" total diagonal.

Engaged Communications and Improved Safety

Challenges

- New construction plans for digital signage
- IP based, open standards
- Emergency communications integration
- Simple to use for staff and students
- Multi input and multi zone capabilities
- Enterprise grade, bright, attractive displays

Solution

- Ednetics video wall and signage solution
- Enterprise server platform, open standards
- InformaCast emergency notification system
- Easy management from web interface
- Tightrope Carousel Digital Signage System
- NEC LCD display, Hitachi LCD projector

Results

- Vibrant HD video wall and signage
- IP-based, scalable, integration ready
- Integration with InformaCast
- Intuitive, permissions-based content design and delivery
- Diverse content delivered in unison to designated displays
- Communication resource and proud addition to IT infrastructure



Wapato Ave. in Wapato, Wash.
Photo courtesy Wikimedia
Commons user Orange Suede Sofa

District Installs Attention-Getting Digital Signage

Wapato School District is located 156 miles southeast of Seattle and has three elementary schools, one middle school, a high school, and an alternative high school. The district serves 3,360 students and employs more than 340 teachers and staff. Almost 90 percent of the students are eligible for free or reduced-price lunch. The district recently completed the expansion and renovation of the high school, replacing the original 1950s-era structure.

Challenge

During the planning phase of the expansion and renovation of Wapato High School, District Executive Director, Glenn Green recognized that a digital signage system would provide great benefits. Because digital signage is eye-catching and dynamic by nature it is ideal for capturing the attention of students used to absorbing information from screens. Stakeholders agree that there are many advantages to the addition of a video wall and signage system. There were several prerequisites for the proposed system. It needed to be IP based, linked with the emergency system, simple to use, and multi input and multi zone capable.

The district wanted to use IP network for the system in order to build on an existing network investment while providing the capability to integrate the signage with the district emergency notification system. Displaying emergency content to video displays throughout the district was a system requirement. Administrators wanted the ability to override everyday content with emergency information during lockdowns, other emergencies, and drills.

The system had to be user-friendly for students and administrators to create and publish content easily. According to District Executive Director, Glenn Green, "we wanted (the system) to be interactive, we wanted students to have access to it, and we wanted to be able to stream live video as well as weather, emergency information, and other content."

It needed to handle multiple data input sources including PC, USB, HDMI, and cable TV and display multiple content sources to screens in multiple zones. Commercial grade video screens were necessary to deliver high-resolution images under a variety of lighting conditions.

3,360

K12 Students

3

Elementary Schools

1

Middle School

1

High School

1

Alternative High School

340+

Teachers and Staff

Solution

Wapato School District selected Ednetics to create a network based digital signage solution. The solution would use Cisco Unified Communications architecture the foundation for the customer's existing Ednetics Voice service as a platform for the signage solution. This would allow the customer to have a powerful link to communications and notifications making the signage useful not only in every day conditions but also in the case of an emergency. Ednetics specializes in IT integration and systems design for education and government customers. Ednetics brings years of experience in designing AV systems and in-depth knowledge of industry best practices for deploying them. Ednetics combines highly trained and certified account management, engineering, project management, and contracting teams. All teams work in close coordination with one another and with the customer.

Ednetics handled all equipment installation, software and server configuration, and user training. Green praised the level of communication and support Ednetics provided during the design and installation process: "We had regular meetings and planning sessions, and Ednetics kept us fully informed of the project's status as we went along." Regular consultation across the engineering, contracting, and project management teams made the installation process smooth and trouble-free. This ensured that the system would be ready for use at the beginning of the school year. Green described the company's attention to every phase of this and other projects with the district as "stellar."

Tightrope Carousel was selected for the network based digital signage software platform. The enterprise-grade system has open standards for integration capabilities. This allows an integration of the digital signage system with InformaCast, the district's emergency notification system. This makes the digital signage network a powerful supplement to school safety by displaying important information during emergencies.

Carousel is very attractive from a usability standpoint. Simple scheduling, content management, user roles, and system monitoring are all handled through a web-based interface. Content creation with templates gives students the ability to create beautifully designed messaging while administrators retain approval to messages before they go live. The system can be configured to update dynamically using weather and twitter feeds, offering fresh dynamic content every day.

Ednetics installed 16 NEC LCD video display screens throughout the school. Eight of them are used for the video walls in the Commons room; the other eight are distributed campus wide. These commercial grade screens deliver high-resolution images and feature zero-bezel screens for nearly seamless display result.

The system incorporates a Hitachi LCD projector and a retractable screen behind the stage in the Commons. The projector and screen are completely hidden when not in use. Approved users can manage and display content on the projector and adjacent video displays from a touchscreen control panel on the stage or with an iPad from anywhere in the room.

Results

Students and staff are enthusiastic about the impressive and vibrant video system. “Our students love the walls and are looking forward to taking ownership of some of their content,” Green said.

The digital signage solution uses the same IP network as the district phone service, Ednetics Voice, so there was no need for a separate architecture. The signage is integrated with Ednetics Voice and InformaCast emergency notification. This gives both systems greater versatility by letting administrators send time-sensitive information—school closures, lockdowns, weather alerts—using digital signage. This ensures that critical messages reach as many people as possible.

Training students and staff to use the system was fast and easy – most users were ready to upload content in less than an hour. Designing channels and deploying them is “easy and a lot of fun,” said Green. Green and other administrators appreciate the system’s user accountability features. “Another nice thing about the system is that it supplies checks and balances for content. After students design the content, it goes to an advisor who reviews and then approves it. Only then does it go on the screen – it’s not a direct feed for users,” Green said.

The system delivers diverse content simultaneously to multiple screens across campus. Staff use the system to post daily announcements, inform students of important deadlines, scheduling changes, and weather information. Student groups are using the digital signs to publicize fundraisers and meetings.

The new system is an education resource as well as a communication tool. The video production class is using it for a project profiling local senior citizens for the NPR StoryCorps series. The class has also used it to broadcast a series of anti-bullying videos. The student body government uses the system for announcements, and the psychology class has created content promoting positive attitudes and behavior.

The signage plays a key role in promoting college access and awareness within the student community. Dedicated screens are used for Twitter feeds from Washington State University, Eastern Washington University, and other colleges in the state. By using these feeds the district fosters awareness of state-wide opportunities. Green noted that the district intends to broaden the number of Twitter streams from other schools in the near future.

The digital signage and video wall solution is an exciting addition to the district’s technology infrastructure. Green said that “(we) have had the pleasure of showing off the project to other districts and one of the Vice Presidents of the University of Washington. All have been impressed with the implementation.” The system is an effective communication resource in its own right and a tangible sign of the district’s commitment to using technology in novel ways to fulfill its mission of “Preparing Students for Success in the Global Economy.” ♦

Ednetics was founded in 1997 to bring IT services and solutions to education and public sector communities. Opportunities to improve education and government settings through the use of advanced technologies continue to be our focus. Network based services and solutions with our customer's needs informing our approach has led to an impressive portfolio. Understanding our customer's needs through the eyes of hundreds of tech directors and administrators has informed our products and services every step of the way. Our diverse team includes contractors, specialized engineers, dedicated support, project managers and specialists with an affinity for technology and a desire to be the best at what we do. We are inspired by how technology can help and we love making a difference.