



The Curious Case of the Contractor Who Knew Too Little

How ElectroMedia Stepped in To Turn Ignorance into Bliss

Executive Summary:

Portland Public Schools had a vision to create a top-tier phone and communication infrastructure for their campuses. But there were a few wrinkles that still needed to be ironed out. First, they needed to say goodbye to sharing the same phone system as the City of Portland. The time had come to simplify their setup. Second, ElectroMedia needed to fix the paging system, since the previous contractors couldn't do so. Third, integrate the phone system, access controls, A/V, and advanced paging and notifications. It was a tall order, but there's no one better than ElectroMedia to fulfill the need.

Introduction to Portland Public Schools

There's something to be said for building a relationship that lasts. If you want to succeed in business and life, you have to be dependable and be there when you're needed most. The strong relationship between ElectroMedia and Portland Public Schools has a foundation of trust built over almost ten years, and this most recent interaction just solidified that trust even more.

As with any government or public bidding process, Portland Public Schools had worked with another provider who could not get their paging system to work correctly. With a previously established relationship, ElectroMedia was contacted to work on the paging system and integrate the phone system, card access, A/V, and networking infrastructure. This wasn't just a one-off either; Portland Public Schools needed all five schools in the district to have similar work completed. With ElectroMedia's extensive technological experience in the education sector, Portland Public Schools was in good hands.

But First, Let's Understand the Challenges

Portland was having continued issues with its paging system. It needed to function properly, because it's the main communication avenue during emergencies. Not only that, but the access controls go hand-in-hand with the paging system, so if paging is messed up, it automatically cascades through the rest of the system. After that, the phone system had to integrate with the advanced alerting and notification workflow to kick off a rapid response across the school and district.

Moreover, there's a unique scenario where the City of Portland's phones are being run and managed through the public school phone system. This may have worked smoothly when it was initially installed. Still, with the added security features being implemented and for the management and stability of the system, the city's phones would need their own system.

Additionally, Portland Public Schools prefers to keep as many connected services as possible with one company or contact. For a customer, the day-to-day management of systems is typically more straightforward than dealing with ten different contacts for eight systems. When other contractors failed to live up to their side of the contract, they desperately needed to consolidate their contractors. The goal was to receive better overall service with a system operating at its full potential.



Paging system malfunction



Security challenges



Fragmented contractor management

A Phased Approach to Solve the Challenges

Instead of suggesting a complete overhaul, ElectroMedia sat down with Portland Public Schools, discussed their ultimate goals, did multiple site visits, and then got to work optimizing the systems and completing the integration. Having years of experience helps when trying to untangle a web of technology haphazardly woven together.

Phone System



Separating the City of Portland's phone system from the school district system was necessary to streamline communication and management. The unnecessary cross-agency dependencies were a disaster waiting to happen, and separating them improved the efficiency and simplicity of both systems. This change allowed the school district to focus on its specific needs without the complications of managing external entities. Next up was integrating the phone system with emergency alert features that notify staff and authorities during emergency situations.

Paging and A/V



Calling 911 or specific incident codes from any phone in the building would kick off alerts and notifications. For example, suppose 911 was called due to smoke filling the halls. In that case, the notification is sent to the principal and superintendent with the pertinent information of which phone the call originated from, room number, building, etc. Then, if the scenario calls for it, a prerecorded message and visual alert – colored lights that match the incident – could be triggered to play across the campus. The seamless coordination between phone, paging systems, and visual alerting mechanisms ensures effective communication during emergencies.



Access Controls and Lockdown



The speed at which a call triggers a safety activation is of utmost importance. The same can be said for quick lockdown when necessary. The implementation of card access systems enhances security by controlling entry points and allowing for lockdown capabilities when required. The comprehensive lockdown system allows principals and the superintendent to initiate lockdowns from their respective offices.

The system integrates with card access controls, automatically locking all doors and providing real-time alerts through a paging system and visual indicators throughout the school. Special access features include a control panel for managing access to specific areas, such as the weight room, ensuring tailored security protocols for different parts of the school.

Moving Forward with Ongoing Projects

With all the work already complete, ElectroMedia isn't done. Our ongoing project is replacing network switches and routers in Portland schools. The project is being executed in phases, focusing on one school at a time to minimize disruption during the school year. The upgrades include replacing outdated network infrastructure with modern switches and routers to enhance connectivity and performance. The initiative aims to future-proof the network by ensuring that cabling and equipment can support evolving technology needs over the next decade.



If partnering with ElectroMedia sounds like something you need, contact us; we love a challenge.

