



Benefits of classroom and campus audio integration

Overview

The FrontRow Conductor campus communication system is an Audio over IP platform integrating the use of Paging/Intercom, Bells and Alerts into one solution leveraging the school Local Area Network (LAN) as well as the FrontRow Classroom Audio Solutions. When installed on a school site with prior use of analog paging most of the existing speaker infrastructure for common areas can be re-purposed to interface with the Conductor platform minimizing the investment redundancy.

A Unified School Communication System has many advantages over discrete / standalone paging systems and classroom audio systems.

Intelligibility

What good is a paging system if the class can't hear it? In many schools, PA announcements are played through a single speaker while media playback in the classroom continues. In the few seconds it takes for the teacher to stop media playback, the class has already missed the first part of the announcement. Other sites are adopting a bad practice of using the classroom speaker phone as the announcement hub thus using a personal device for group communication.

1. In the FrontRow system, the sound clarity invested in for the learning environments will be re-leveraged for delivery of important school site announcements. Moreover the local classroom signal (voice amplification and/or any media playback is muted during announcement, so every word is heard. In addition, the quality of the audio announcement is much greater than in typical analog paging systems since it utilizes the 2 or 4 classroom speakers.

2. In addition to the ceiling or wall intercom microphone, the teacher microphone also supports intercom communication allowing even soft voices to come across clearly to the administrators. Moreover, the mute button on the microphone can be programmed as a trigger point of communication either in the form of initiating an intercom call or calling for help.
3. Unlike analog systems, IP based systems do not degrade with distance from the office or suffer from other electronic interference. The signal is digital data and is as reliable as any school network connection. In the event of an external network break-down (no internet), communication via the LAN is not interrupted. In the event of a power outage, Power-over-Ethernet (PoE) will ensure that the Conductor platform remains in operation, securing 1-way and 2-way communication.

Cost of Ownership / Maintenance

Conventional school paging/intercom systems are built on an analog basis of design, typically 'closed' meaning that any change or troubleshooting measure requires the presence of manufacturers authorized technician paid for by expensive and reoccurring maintenance plans.

Because the FrontRow Conductor platform is IP based, the skill set required for most adjustments is available to the school/district via its existing IT staff who is already trained in understanding how operate and configure network based devices. Beyond a \$5000 investment for a 3 days training session with an application engineer from FrontRow, there will be no additional expenses to operate the FrontRow Conductor Platform, which is why the district CFO loves our systems too.

A system failure in an analog system means significant downtime and reconfiguring new hardware. With the FrontRow Conductor system, all settings are backed up daily, so even in the unlikely event of a server failure every bell schedule, zone, and announcement can be recovered in just a few minutes.

Being a software-based system, changing bell schedules, classroom zones, or announcements in Conductor can be performed by anyone (with the appropriate log-on permissions of course). Just try this with an analog system! Sorry, you'll need to schedule a visit from the manufacturer for that. Hope you have room left in your maintenance budget.

Control

In the FrontRow integrated solution, sharing audio resources in the classroom is just one side of the story. The other is control. Any FrontRow classroom AV control function can be initiated from the Conductor system, allowing for all kinds of scenarios.

Projectors can be scheduled to turn off at a specific time each day. Classroom HD displays can be switched to a specific input for school-wide streaming video presentations. Even the FrontRow lesson capture software will PAUSE during announcements so that the page isn't captured as part of the lesson. This deep integration is only found in FrontRow technology.

Intuitive User Experience

Ask any of our existing customers how they love the ease of use of the Conductor software. As powerful as it is, training only takes a few minutes, and even advanced functions like adding the bell schedule for the entire school year only takes a few clicks.

In the classroom, the integrated audio system provides visual notification of a page or intercom call with an LED beacon, just another part of the FrontRow philosophy of combining visual cues with audio for "effortless communication."

Open architecture Integration

Not only does Conductor integrate with FrontRow classroom audio systems, it can also talk to other school systems such as security cameras, access control, lighting, personnel security, or other systems. It speaks Serial, IR, GPI, and Network, so that all your systems work in coordination as needed. For example, you can override digital signage in an emergency, mute audio when a fire alarm is pulled, send network messages to IP camera systems, or use relays to trigger other low voltage systems.

Cost of Installation

Installing a separate analog paging system in addition to a classroom audio system means redundant speakers and cabling installation. Analog PA speakers range from \$100-150 with installation. Running additional plenum speaker wire for each analog paging speaker can cost up to \$500 per classroom.

With the Unified School Communications System from FrontRow, these costs are eliminated entirely. The only additional cost is that of a midspan injector to provide Power over Ethernet (PoE) to the classroom systems in order to allow for announcements during a power outage.