UNLOCKING THE POWER OF UNIFIED COMMUNICATIONS IN SCHOOLS

MOTOROLA SOLUTIONS 2017 K-12 EDUCATION INDUSTRY SURVEY REPORT
We look to our nation’s schools as an oasis of learning, safety, and stability. The Motorola Solutions 2017 School Communications Survey illuminates the fact that in some important ways, schools embody larger communication trends found in other areas of our lives, such as multiplying devices on the job and an increasing need for powerful data applications.

When school employees use advanced applications and features such as text messaging and GPS tracking at home, they want to be able to use those same features in the workplace in order to keep students safe and staff productive. They want to communicate instantly over any device while at work with the type of applications and intelligence they’re accustomed to using outside of school.

Today, forward-looking schools are taking notice.

The Motorola Solutions 2017 School Communications Survey included over 720 educators, representing school districts ranging from under 500 students to over 10,000 students, across 48 states. Survey respondents included administrators, office staff, telecommunications and IT employees, facilities and operations staff, transportation directors, teachers, maintenance workers, and athletics personnel.
720+ SCHOOL PERSONNEL. ACROSS 48 STATES. REPRESENTING JOB TITLES FROM ADMINISTRATORS, TO TRANSPORTATION. IN SCHOOL DISTRICTS RANGING FROM UNDER 500 TO OVER 10,000 STUDENTS.
While analog radios offer a high degree of reliability and have been used in schools for decades, today’s digital radios combine the reliability of analog with the best aspects of smartphones, so school employees have access to advanced safety features, a continuously expanding library of applications, and tools like text messaging, Bluetooth® connectivity, GPS tracking, and Wi-Fi®.

In 2017, school personnel are overwhelmingly using multiple devices on the job, but the mix of devices and means of communication they’re actually using may surprise you. Internet and email were listed as the primary form of communication by 31% of respondents. Two-way radios were the next most popular device at 30%, followed by cell phones and land line phones. In fact, the use of two-way radios in schools continues to rise, growing from 10% of respondents using them as a primary means of communication in the Motorola Solutions 2015 Education Survey to 30% today.

Two-way radios are currently being used by a wide range of school personnel. Principals, office staff, and maintenance personnel are the most likely to employ them in order to accomplish their day-to-day responsibilities. District administrators, teachers, security, transportation employees, athletics personnel, operations staff, and safety teams also use radios in their everyday jobs.

And for good reason. Two-way radios are purpose-built for highly reliable, instant communication between groups. Plus, two-way radios utilize secure, private networks that provide optimal coverage for the school and remain operational even during a crisis, allowing educators to communicate even when mobile phone towers are swamped by high traffic.

TODAY’S SCHOOLS AT A GLANCE

DEVICES AND MEANS OF COMMUNICATION

Primary form of communication used in school districts

- Two-Way Radios: 30%
- Cell Phones: 18%
- Landline Phones: 14%
- Overhead Paging System: 4%
- Internet/Email: 3%
- Other: 2%

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Two-way radio usage has tripled in the last 2 years.
For the women and men who dedicate their careers to educating our children, there is no greater imperative than keeping their students safe. In order to do so, communication is key. This includes having always available communication for emergencies. Communicating directly with colleagues and first responders from any device, anywhere. Hearing clearly among chaos. But alarmingly, and through no fault of their own, most respondents’ safety and communication priorities simply don’t align with their schools’ reported capabilities.

### THE DISCONNECT: SCHOOL PRIORITIES VS SCHOOL CAPABILITIES

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**Safety and Communication Priority** vs **Reported Capability**

<table>
<thead>
<tr>
<th>Safety and Communication Priority</th>
<th>Reported Capability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creating Safe, Secure Environment</td>
<td>25%</td>
</tr>
<tr>
<td>Always Available Communications</td>
<td>19%</td>
</tr>
<tr>
<td>Hearing Clearly Anywhere</td>
<td>11%</td>
</tr>
<tr>
<td>Direct Communication with First Responders</td>
<td>17%</td>
</tr>
<tr>
<td>Communicating with School Personnel, On Any Device, Anywhere</td>
<td>15%</td>
</tr>
</tbody>
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**Survey Report | 2017 School Communications**
How can we close the gap between school priorities and capabilities? With innovative solutions for faster, more efficient communications, so that school personnel can upgrade their school safety planning and seamlessly connect to first responders and other educators before, during, and after an emergency.

The presence of school safety plans was nearly ubiquitous among those surveyed. However, while 80% of respondents said their plans included basic planning with school personnel for disasters and events, only between 50% and 60% said their plans include components such as emergency communications during and after disasters, advanced planning with first responders, or mid-level planning with school personnel and first responders.

While 80% of respondents said their school’s safety plan includes basic training for disasters and events with school personnel, only 50% conduct advanced planning with school personnel, first responders and other community partners.

### Levels of Safety Planning in Schools Today

- **Basic Planning for Disaster**: 80%
- **Mid-Level Planning**: 63%
- **Advanced Planning**: 50%
- **Emergency Communications**: 60%
- **1% Don’t Have a School Safety Plan**
- **3% Other**
A WHOLE NEW WORLD OF PRODUCTIVITY AND EFFICIENCY

Instant communications, without boundaries, with added intelligence. With Motorola Solutions Team Communications, this is now possible. Powered by MOTOTRBO™ digital radios and the WAVE Push-To-Talk (PTT) application on non-radio devices, Team Communications is at the heart of Unified Communications in schools and connects everyone - principals, teachers, bus drivers, and others - with the power of push-to-talk. WAVE extends PTT to smartphones, laptops, tablets and PCs, so all school staff can instantly communicate, collaborate, and share critical information from applications and from offsite locations.

For instance, bus drivers can now talk to each other, their supervisors and schools instantly with the press of a button. They no longer have to pull off the road, interrupt routes and disrupt their schedules. This is much safer than cell phones, as two-way radios are not restricted by the U.S. Department of Transportation for commercial motor vehicles.

"WAVE really expands the reach of our portable and mobile radios. Where we had lack of coverage, it has opened up a new door because it connects different devices to our MOTOTRBO radios throughout the county. The app is very easy to use and the communication is very clear." – Superintendent, Elmore County Public Schools, Alabama

OF RESPONDENTS REPORTED USING MULTIPLE DEVICES TO COMMUNICATE WITH EACH OTHER

92%

PREFERRED DEVICES FOR INSTANT COMMUNICATION AMONG SCHOOL PERSONNEL

<table>
<thead>
<tr>
<th>Device</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>CELLPHONES</td>
<td>88%</td>
</tr>
<tr>
<td>TWO-WAY RADIOS/WALKIE TALKIES</td>
<td>68%</td>
</tr>
<tr>
<td>POLICE, FIRE AND EMS RADIOS</td>
<td>46%</td>
</tr>
<tr>
<td>LANDLINE PHONES</td>
<td>44%</td>
</tr>
<tr>
<td>LAPTOPS</td>
<td>43%</td>
</tr>
<tr>
<td>INTERCOMS</td>
<td>38%</td>
</tr>
<tr>
<td>DESKTOP PCs</td>
<td>36%</td>
</tr>
<tr>
<td>TABLETS</td>
<td>34%</td>
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ACTUALIZING THE POTENTIAL OF DIGITAL RADIOS

To fully realize the power of Team Communications and gain next generation capabilities such as PTT across all devices and powerful applications, our findings indicate many schools will need to transition to digital radios. Most school personnel are either using solely digital radios, or a mix of digital and analog technology in their district.

ALMOST 30% ARE SOLELY USING ANALOG RADIOS, AND ARE THEREFORE NOT REALIZING THE FULL VALUE OF DIGITAL TECHNOLOGY

Schools have relied on two-way radios for decades. But today, digital technology, like Motorola Solutions’ MOTOTRBO two-way radios, are at the cutting-edge of instant communications, combining the best features of smartphones with the reliability and power of push-to-talk (PTT). Now, principals, teachers, IT staff, bus drivers, and operations personnel have access to features like text messaging, Bluetooth® connectivity, GPS awareness, and Wi-Fi® connectivity. Plus, MOTOTRBO includes important safety features such as Transmit Interrupt, which prioritizes critical communications, interrupting other calls to be certain that the most important information is heard by all users in an emergency.

The location-tracking feature monitors buses, assets and staff in real time so you know exactly where they are at virtually any moment. Additionally, only Motorola Solutions digital radios have access to the Motorola Solutions Application Developer Program, the largest portfolio of applications for two-way radios in the industry, with new apps added and updated regularly.
A UNIVERSE OF SCHOOL-OPTIMIZED APPS AT YOUR FINGERTIPS

MOTOTRBO two-way radios are compatible with a universe of apps for safety, productivity, and efficiency. With MOTOTRBO, powerful apps can monitor buses, check fuel usage, track the whereabouts of personnel, monitor device and vehicle upkeep, and even inform school personnel if bus doors or school doors are left open.

Fremont School District 79, located just outside Chicago, introduced an application to allow radio users to make and receive phone calls directly on their MOTOTRBO digital radios, with supplementary access to familiar phone-like features. The app is connected as an exchange into the district’s PBX phone system, so any school employee can make an emergency call from a MOTOTRBO radio directly to 9-1-1.

Educators indicated they wanted a range of new capabilities as part of their school’s communication system.

### TOP SIX APPLICATIONS FOR K-12 SCHOOLS

<table>
<thead>
<tr>
<th>Application</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Text Messaging</td>
<td>83%</td>
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<tr>
<td>GPS Location Tracking</td>
<td>58%</td>
</tr>
<tr>
<td>The Ability to Interrupt Conversations to Prioritize Critical Messages</td>
<td>53%</td>
</tr>
<tr>
<td>Remote Facility Management</td>
<td>40%</td>
</tr>
<tr>
<td>Radio Frequency Identification (RFID) to Identify and Track Students</td>
<td>36%</td>
</tr>
<tr>
<td>Work Order Ticket Management</td>
<td>23%</td>
</tr>
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TAKING SCHOOL SAFETY TO THE NEXT LEVEL

If your school is looking to go beyond the basic emergency preparedness playbook, Motorola Solutions and SchoolSAFE have partnered to offer a groundbreaking solution that combines hardware, an intuitive software application, and training for schools and first responders. SchoolSAFE makes it possible for school-based radio systems to connect directly with the radios used by first responders from the beginning of an incident, while first responders are en route to the scene, and once they arrive on-site. Now, your school can join over 230 SchoolSAFE installations across the country and receive the training and technology to instantly, reliably, and securely connect to community police, fire, EMS and 9-1-1 call centers during a crisis.

"If we wanted to communicate among schools or across the district, we had to use landline or cell phones and they were not reliable. If an emergency occurred, time was lost as we tried to make connections."  
Superintendent, Chardon Local Schools, Ohio

"MOTOTRBO and SchoolSAFE greatly improve response because information comes in directly from the schools through this interoperability."  
Bureau Chief, Pueblo County Sheriff’s Office, Colorado

"We realized that to improve school safety, we had to be part of a bigger process with local agencies."  
Director of Student Services, Pueblo County School D-70, Colorado

EXPLORE SCHOOLSAFE
SECURING FUNDING FOR CRITICAL SAFETY INITIATIVES

OUR CHILDREN AND EDUCATORS DESERVE THE HIGHEST LEVEL OF SAFETY POSSIBLE

Funding should not hold your school back from upgrading its communications. For this reason, Motorola Solutions has partnered with EducationGrantsHelp to develop an informative guide full of tips and advice on applying for and securing school safety communications grants, such as:

- How to prepare for 2017 school safety and communications grants
- How what’s happening on the Hill affects grant funding
- What you must do before starting your school safety grant application
- How to ensure your grant application is top-notch
- How to find school safety grant funding prospects for communications equipment

In addition, Motorola Solutions partners with EducationGrantsHelp to provide free grant assistance for your school communications needs. If you’re looking for funding for your communications project, sign up for our free grant program.
Today’s schools use technology in almost every facet of education. But when it comes to communication, too often they must make do with aging or inefficient equipment. Our children and educators deserve better. By unlocking the power of Team Communications, school staff can quickly communicate with each other and first responders, using any device, with a catalog of robust apps to choose from.

Instantly connect staff and public safety personnel in an emergency. Keep track of children, colleagues, and assets from any location. Monitor buses and routes in real time. Link districts and staff efficiently over any device. With Team Communications from Motorola Solutions, schools are safer and staff members are more productive.

Visit [www.MotorolaSolutions.com/Education](http://www.MotorolaSolutions.com/Education) and learn what the power of Team Communications for Schools can do for your students and school personnel.