The overarching goal is improved student performance. Teachers, administrators, and parents are united in their desire to improve student achievement by maximizing access to education content and curriculum... not just inside the classroom, but anywhere students could be learning. The challenge is to make the most of every minute of every school day, including those minutes not actually spent in the classroom.

**MORE LEARNING TIME**

School bus WLAN access to full classroom resources and information helps improve student performance by increasing work and study time. It makes commuting time more productive, helping students better plan, review and create assignments. It also makes bus rides for field trips and other student events such as scholastic and sports competitions more productive.

What kinds of materials and solutions are available for students on connected school buses? Basically, students have access to everything that’s available in the classroom or media lab. A few of the available solutions include:

- Self-paced tutoring videos on specific science and math topics that help students drill deeper down into a concept, or review examples of material they found particularly challenging in class.
- E-learning and student collaboration platforms on which students can work together virtually on projects and participate in blended learning environments.
- Online interactive material that supplements in-classroom curriculum and is tied to state learning standards.
NETWORK SECURITY
Schools are always concerned about student network access and the content they are accessing. Motorola's solution extends the school's own network to the access point on the bus using a secure VPN tunnel over a 3G/4G cellular network. Student access is authenticated the same as in the classroom, and all traffic is encrypted and routed back to the school's network, utilizing the school's firewall security and content filtering as if the students were on school premises. Although the access point on the bus could be anywhere in the world with a 3G/4G connection, it still maintains the same security and functionality as if it were on a ceiling in a classroom, keeping the students protected and on task.

INCREASED STUDENT SAFETY
Network connected buses also help provide increased safety. Motorola's WLAN connectivity helps create the "next-generation school bus" by providing for real-time GPS-based route tracking of buses, more streamlined fleet management, video surveillance and RFID-based student accountability, as well as enhanced voice communications with the driver in the event of an emergency situation.

Student behavior on school buses is another important safety issue, and is particularly of concern on long and frequent bus trips. High-speed connectivity on buses helps students build more positive habits. When students are engaged in course work while riding the bus, behavioral issues, restlessness and potentially hazardous activities are significantly reduced.

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