

# EDUCATION

## Creating Smarter Schools: Benefits and Applications of IoT in Education

Nexos by Igor is an IoT platform that uses Power over Ethernet (PoE) to turn regular education facilities into agile, smart buildings.

With the Nexos' open API, educational facilities can integrate countless technologies to make schools smarter, safer and more productive

## Enable Better Learning



### Productivity

Studies have shown that the fluorescent lighting typically found in schools can have a negative impact on student performance. Installing programmable IoT-connected LED lighting is just one way to improve the student experience in an educational setting.



### Efficiency

IoT connected lighting and other devices can be programmed and automated. For example, lights can be set to a schedule, or they can be connected to occupancy sensors and programmed to shut off when a classroom is empty. IoT connectivity improves building efficiency and reduces energy waste, resulting in operational savings



### Safety

IoT networks allow for customizable security plans that utilize connected devices such as colored lights, digital signage, door locks, and sensors. Some schools use an IoT network to create different programs for severe weather threats, intruders, and other security risks. IoT technology also enables solutions such as interconnected emergency alert buttons in classrooms. IoT security applications empower teachers to take action and keep their students safe.

Learn more or request a demo at:

[igor-tech.com/Nexos](http://igor-tech.com/Nexos) • [info@igor-tech.com](mailto:info@igor-tech.com) • 877-588-2650



## Application in K-12 Education

**1 Custom Temperature Controls**  
 IoT temperature controls allow for customization from room to room, and temperature settings can be scheduled for certain times of day. Preset scenes allow these environment adjustments to occur with just the click of a button.

**2 Monitoring Device Usage**  
 IoT networks create easy opportunities to monitor device usage in a school environment. IoT devices can be programmed to automatically send usage and performance reports directly to teachers or facility managers.

**3 Attendance & Automating**  
 IoT smart sensors can detect empty desks and record student attendance. Applications like this may seem small and inconsequential, but they start to add up. More automated tasks means teachers can dedicate more of their time to student learning and other essential job functions.

**4 Programmable Security Protocols**  
 Interconnected IoT devices can be controlled by Nexos. A school administrator can create a simple security protocol and initiate actions using a phone or tablet. A single scenario can include several different actions and programs triggered on various IoT devices to provide protection in the event of a fire, tornado, intruder, or other threats in a school.

**5 Accommodations for Special Needs**  
 IoT solutions can create a safe, supportive school and calming atmosphere for all students. IoT temperature and lighting controls are especially helpful tools for supporting students who may be sensitive to the physical classroom environment.

**6 PoE A/V Capabilities & 3rd Party Apps**  
 PoE-enabled A/V equipment easily connects to Nexos and can be integrated into automatic lighting settings and other action sets for easier control and usage. By integrating 3rd party learning solutions with Nexos, teachers are able to inspire students' creativity and further increasing their participation and retention

**7 Asset Tracking**  
 IoT solutions can create a safe, supportive school and calming atmosphere for all students. IoT temperature and lighting controls are especially helpful tools for supporting students who may be sensitive to the physical classroom environment.

**“I used to think its [Nexos] a little frivolous. But now if you try to take it out my classroom, I'd be furious!”**

Mary Claire Wright - Computer Science Teacher,  
 Davidson High-school, Mobile, AL