

WESCO



INSIGHT

STATE, LOCAL, AND EDUCATION MAGAZINE

VOLUME 1, ISSUE 1

Higher Demand, Higher Expectations

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Reducing Electrical Fire Risk

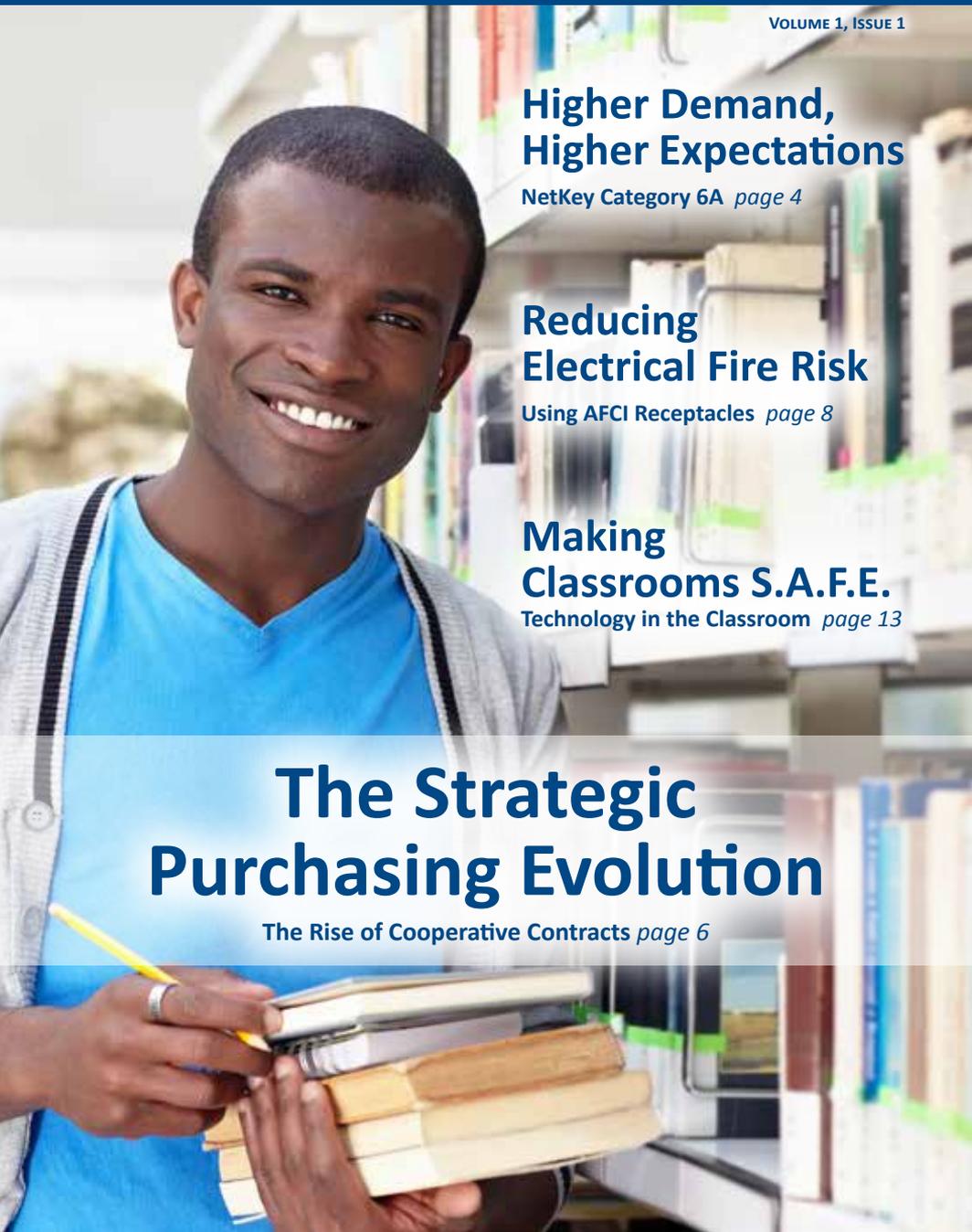
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From the Manager

Rob Bezjak, General Manager, SLED Market, WESCO

2014 was a moderate growth year for spending in the State and Local Governments, and the Education Market (SLED), with most investments focused on energy-saving initiatives. The rest of spend was used cautiously because of the mid-term election year.

At nearly halfway through 2015, we are seeing more aggressive project time lines – education being the most active market – and an increased interest in leveraging what is being purchased and how it is being purchased. As we listen to our customers and deliver solutions, consider two key thoughts that drive our collaboration:

1. Increase in Technology Deployment

As a leading distributor of data and broadband communications, electrical, safety and MRO products, WESCO's experts are familiar with the newest innovations and tried-and-true technologies available to meet customers' growing needs and unforeseen challenges.

2. Increase in Cooperative Contract Purchasing

WESCO is one of only a few companies in the industry that has a dedicated SLED team focused on the needs of the State and Local Governments and the Education Market and also has an in-depth knowledge of government purchasing from more than two decades of experience.

In this issue of WESCO's *Insight* magazine, the articles focus on technology and purchasing within the SLED market. As we move from a more cautious 2014 to the expected market growth in 2015, remember:



2015
2014

Whether you are a government agency, a government contractor, or an educational institution, WESCO is ready to help you take advantage of each opportunity available—whether technology deployments, cooperative contract purchasing, or beyond.

WESCO®

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INSIGHT

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Higher Demand, Higher Expectations

Panduit answers the need to deliver data faster and more effectively

Today's Demands

Citizens today want faster, more secure and convenient access to a greater number of government services. In particular, the Departments of Revenue, Labor, Finance, Education, as well as Public Health and Environmental agencies continue to see increased demand from the public. Local and state government decision makers also require prompt and reliable access to volumes of data and statistics from various departments and agencies. However, fragmented networks and outdated legacy systems make information sharing between departments burdensome and in some cases, impossible. Adding to the complexity, local and state governments are not only being challenged to enhance service, but to ensure that information assurance measures and legislative mandates around personal data privacy and security are met or exceeded – many times under challenging budget constraints.

Panduit's Solution

Panduit has developed a standards-compliant, cost-effective NetKey® Category

6A solution to deliver the performance to meet the ever increasing network demands of local and state governments:

- **Mitigate Risk** – The NetKey Category 6A solution is an end-to-end solution that enables a one-stop-shop experience, saving time and increasing accuracy in the purchasing process. At the same time, NetKey seamlessly integrates to reduce risks that can occur throughout core systems.
- **Lower Project Cost** – NetKey Category 6A components and cable provide easy installation with high quality, reliable terminations and eliminates costs associated with re-work.
- **Increase Agility** – NetKey Category 6A features the industry standard “keystone” form factor, which is compatible with a wide assortment of modular patch panels, faceplates, and surface mount boxes for both green and brownfield installations.
- **Future Assurance** – The NetKey Category 6A solution comes with an industry-leading 20-year warranty to guarantee the performance and integrity of the network infrastructure.

Higher Performance/Higher Bandwidth
NetKey Category 6A structured cabling performs at a higher frequency (500MHz) than Category 5e (100MHz) and Category 6 (250MHz) systems, resulting in higher bandwidth delivery for faster data throughput. With this higher signal transfer rate, it results in an additional electromagnetic interference that carries across components of the system called alien crosstalk (AXT). AXT diminishes transmission quality, significantly reducing signal-to-noise ratio (SNR) that is the crucial part in guaranteeing the integrity of data transferred. The components in a Category 6A system must be designed to suppress and compensate for AXT to successfully provide

10 gigabit/second transmission. If your application demands higher performance and bandwidth, The NetKey Category 6A solution has the proven innovation and quality you expect from Panduit!

PANDUIT®



To receive more information on Panduit's NetKey Category 6A solution, or other solutions available from WESCO, visit www.wesco.com/insight.

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Strategic Purchasing Evolution

Local governments and schools are in the midst of a strategic purchasing evolution. As the use of strategic purchasing within this segment continues to rise, cooperative contracts continue to gain importance. Though complex procurements still use multiple bids and proposals during the RFX process, the cooperative contract usage for purchasing simpler necessities has increased dramatically over the past decade.

Evolution Confirmation

In 2014, ONVIA, a government data analytics firm, saw an “evolution” in the number of Request for Proposals (RFPs) and competitively bid opportunities. Those opportunities for product categories typically purchased under cooperative contracts were on the decline, indicating an increase in the use of cooperative contracts.

Similarly, WESCO, who holds three cooperative contracts – E&I Cooperative Services (E&I), National Purchasing Partners (NPPGov), and The Cooperative Purchasing Network (TCPN) – has seen a sizeable increase in sales through these contracts year over year. In the recent past, these three organizations have also seen significant membership increases. Membership nearly doubled in E&I, tripled in NPPGov, and quadrupled in TCPN.

Evolution Forces

A 2014 survey by the NIGP said 94% of state and local government agencies use cooperative purchasing agreements. With the same pressures as every other industry, the public sector is told to save both time and money.

“The increasing use of cooperative contracts was a popular theme at our recent annual conference in Atlanta,” said Doreen Murner, CEO of the National Association of Educational Procurement (NAEP). “Leveraging the work of institutions and public agencies, is a must-have tool for strategic purchasing professionals across the country,” she added.

As these pressures get stronger with citizens demanding more transparency and lower taxes, government purchasing is shifting to utilize cooperative contracts to deliver these savings. According to this same NIGP survey, cooperative purchasing was documented as delivering time savings for 92% of respondents and cost savings for 77%. These savings were most likely found by:

- Standardizing products and services and combining requirements of agencies to produce lower prices through the contract
- Reallocation of internal resources by “sharing” procurement professionals

- Eliminating preliminary work and the actual bidding process, translating to a reduction in administrative work and cost
- Eliminating the need to seek quotes, bids, or proposals which creates convenience for buyers and saves time and effort

Evolution Elements

The shift isn't the same for all product categories or types. The NIGP survey indicated the majority of purchased items are information technology and electronics equipment, office supplies, vehicle and transportation equipment, and furniture categories. Furniture purchases through cooperative contracts increased by 8% from the 2011 survey results to the 2014 survey results.

Resources:

"3 Trends Shaping State & Local Contracting Growth in 2015", ONVIA, 2014

"Strength in Numbers: An Introduction to Cooperative Procurement", NASPO Issue Brief, Lee Ann Pope

"8 Steps to Evaluating Cooperative Purchasing Agreements", Jim Bard and Bill Shawver

According to an NIGP survey, cooperative purchasing was documented as delivering time savings for 92% of respondents and cost savings for 77%.

As the state and local government purchasing landscape continues to evolve, we expect increasing use of cooperative contracts and electronic purchasing to drive reduced procurement cycles, and a reduced cost per transaction—both of which will benefit state and local governments, educational institutions, and the taxpayers they serve.

For more information, complete the form at www.wesco.com/insight.

E&I, June 2011 and March 2015 e-newsletters

Point Nationwide/TCPN Presentation, 2012

"Delivering the Goods", Matthew W. Quinn, Government Procurement



The Cooperative Purchasing Network (TCPN)

is a national cooperative purchasing organization using an ISO-certified bidding process through their lead public agency, the Region 4 Education Service Center in Houston. The contract can be utilized by public members including cities, counties, public education, and political subdivisions nationwide.

www.tcpn.org





Reducing Electrical Fire Risk in a College Dormitory

AFCI Receptacles Increase Safety with Added Convenience

When students at a university in Ohio returned to school for the 2013 fall semester, they were welcomed by fresh updates at the residential center. As the largest building on campus, the six-story residential center is home to office space, classrooms, campus police, a chapel, and more than 500 students.

Over the summer months, four levels of the building holding nearly 160 dormitories underwent renovations for enhanced cosmetics and updates to the electrical system for increased safety and convenience to residents.

Due to upcoming changes to the National Electrical Code® (NEC) and concerns about student safety, the school wanted to find a solution to prevent electrical fires resulting from arc-faults caused by damage in branch circuit wiring and extensions to branches, such as appliances and cord sets.

Arc Fault Circuit Interrupters, or AFCIs, are now required by the NEC in many

areas throughout residences; and in 2014 the NEC began requiring AFCI protection be added when replacing receptacles in locations where AFCI protection is needed, such as living rooms, bedrooms, and dormitories.

Selection Considerations

In selecting a product solution, it was important to consider the lifestyles of the students. The occupants of college dorms, like any other residences, are constantly plugging in computers, tablets and other devices and using cord connected equipment. Minor damage to cords or cord ends may cause arcing which could result in an electrical fire.

As part of the electrical updates, the electrical contractor intended to replace all of the existing standard receptacles in the dorm rooms while also installing new AFCI breakers on the circuit panels. A product for replacing both the receptacles and breaker style AFCIs with a single solution was desired.



Facility management also had concerns regarding the AFCI breakers and their locations in a central panel. In the past, students experiencing loss of power due to an AFCI breaker interruption relied on Residence Life staff or maintenance personnel to reset trips of the electrical circuit. Students and staff were inconvenienced when this occurred after business hours, having to wait for access to the electrical breaker.

With this in mind, Leviton's SmartlockPro® Outlet Branch Circuit (OBC) AFCI receptacle was selected, providing AFCI protection at the device level while allowing students to reset the AFCI directly from the receptacle.

With facility management considering NEC requirements and the alternative option of installing AFCI breakers, it was determined that the site conditions allowed for device-based protection per the NEC.

The university was already planning to replace all of the devices in each of the dorm rooms with new receptacles, but Leviton OBC AFCI receptacles provided additional benefits beyond the localized reset capability. The AFCI receptacles saved time and money. Rather than purchasing new receptacles and breakers for each of the 18 existing panel boards on the residence room circuits, only one product was needed.

Leviton's OBC AFCI receptacles are designed to detect a wide range of arcing

The AFCI receptacles saved time and money.

Rather than purchasing new receptacles and breakers for each of the 18 existing panel boards on the residence room circuits, only one product was needed.

electrical faults, reducing the likelihood of the electrical system being an ignition source of a fire by de-energizing the circuit downstream of the device when an arc-fault is detected. The OBC AFCI is able to provide protection for downstream circuit wiring and outlets as well as electrical devices and cords that are plugged into those downstream outlets.

In the months following the installation of the AFCI receptacles, the school received positive feedback. Leviton is staying connected, making recommendations that continue to enhance the safety, efficiency, and reliability of the electrical systems at the school.

For more information, complete the form at www.wesco.com/insight.





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Supply Chain Solutions Deliver Results

WESCO believes that distribution partners need to provide customers with more than just products; WESCO delivers supply chain solutions that help improve efficiencies, productivity, and safety in our customers' organizations, facilities, and project sites.

Through the WESCO Value Creation Program, our team of experts will work with you to define your business requirements, identify all of the opportunities for continuous improvement, and customize a solution plan to help address your unique needs. When the solutions are implemented, you will realize true value and a positive bottom-line impact. WESCO has been delivering value-added solutions to customers for over a decade.

We are your trusted partner and will work with you to help you achieve your operational, safety, and productivity goals.

Whether you are trying to reduce downtime, improve operating costs, or save time, we can help!

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1. Identify Requirements

WESCO and the customer meet to build a clear definition of Customer Requirements:

- Cost Reduction
- Quality Improvement
- Productivity Enhancement
- Safety Improvement
- Waste Minimization

2. Align Solutions

WESCO's Team of experts reviews all of the Customer's requirements, then aligns them with the WESCO Value Creation Solutions. WESCO and the Customer work together to prioritize the solution options and create details for a Search for Savings event.

3. Search for Savings

WESCO and subject matter experts engage the Customer team in a Search for Savings event to identify opportunities for continuous improvement.

4. Customize & Implement

The WESCO team designs customized solutions to maximize productivity and value. Upon implementation, customers realize true value and positive bottom-line impact.

For more information, complete the form at www.wesco.com/insight 11

Drivers, Start Your Engines!

3



WESCO is proud to continue its partnership with Richard Childress Racing (RCR) and the #3 Chevrolet Camaro, driven by Ty Dillon, in the 2015 NASCAR XFINITY Series.

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NASCAR XFINITY Series 2015 Schedule

<u>Date</u>	<u>Track</u>	<u>State</u>
February 28	Atlanta Motor Speedway	Georgia
March 21	Auto Club Speedway	California
May 30	Dover International Speedway	Delaware
June 20	Chicagoland Speedway	Illinois
August 29	Road America	Wisconsin
September 26	Kentucky Speedway	Kentucky
October 9	Charlotte Motor Speedway	North Carolina
November 14	Phoenix International Raceway	Arizona

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Visit www.wesco.com/insight to learn more about how you can participate in the 2015 WESCO Racing Program.





Making Classrooms S.A.F.E. with the Right Technology

With nearly 40 cases of campus shootings in 2014, it's evident the state of safety measures in educational institutions needs to be re-evaluated. Once considered a safe haven for students, increasing cases of mass violence and suicides on campus are shattering the perception of safety within school walls. We have learned in recent years that no school or community is immune to this violence.

Technology is a tool school administrators use every day to help overcome challenges such as medical incidents, fights, bullying, and vandalism, but could the right technology also play an integral role in winning the battle against mass violence and making our schools safe again?

To a certain extent, schools and colleges are already using technology to address safety issues. In fact, many of these institutions have the latest security cameras, access controls, and monitoring systems onsite. In the 2014 National Center for Education Statistics' Schools and Staffing Survey, three of the top four most frequently used safety and security measures in schools involved these types of technology. However, these measures would have little to no impact in the face of a crisis. They are preventative

in nature, but are difficult to control and time-consuming to master. In an emergency situation, action needs to be instantaneous; these systems fail because they take too much time. But there is additional technology available that not only increases the preventative measures but, in the middle of an emergency situation, is instantaneous.

An example of this technology is the **S.A.F.E. (Security Alert for Education) System** which combines many different technologies to provide assistance.

It starts with a **teacher alert system**; this could be either a switch on the wall or desk or a button on a lanyard attached to the teacher's pendant microphone. By pressing this alert button, the teacher immediately notifies someone in the administration office that there is an incident. This can automatically activate a camera with a fish eye lens in the room that gives a 360° view of the room and starts to record. This would allow the administrator to dispatch security, medical, or both teams to respond.

Being able to alert the administration to an incident is only one part of the solution provided by technology. Another is the ability to alert the students

Continued on page 14



Continued from previous page

and staff of an issue. An **IP speaker system** can do just that. It allows the administration to broadcast alerts or directions over the entire campus or to a single classroom instantly. This could be something as serious as Shelter In Place or as simple as daily announcements. These speakers often allow for bi-directional communication, so a teacher or student can let the administration know what kind of incident is occurring.

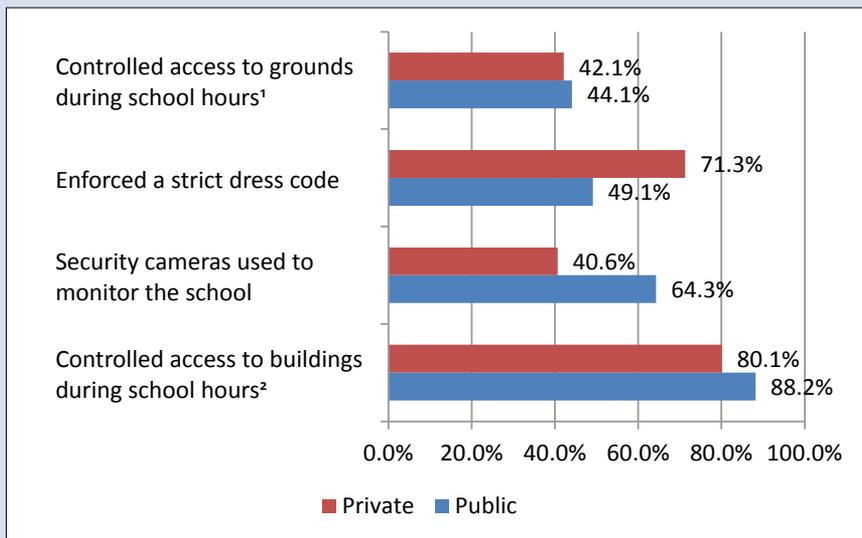
Surveillance cameras and DVRs (Digital Video Recorders) are another very important part of campus security. It is important to a school's safety to be able to see what is happening in real time as well as have an archive of an incident to look back on and study. Timely action is crucial in resolving small matters

before they escalate into life-threatening incidents. To eliminate the danger that can be caused by a lapse from the start of an emergency to the dispatch of emergency protocol or personnel, technology could be the solution. The time saved by the right technology solutions could be life saving, and well worth the investment from K-12 all the way through higher education institutions.

Making sure the right technology is deployed can be the difference between life and death. With a strong presence in the education market, WESCO is aware and developing solutions that provide the right technology to keep universities, campuses, classrooms and—most importantly—the students and staff safe while learning and teaching every day.

For more information, complete the form at www.wesco.com/insight.

School Safety and Security Measures



¹ For example, locked or monitored gates ² For example, locked or monitored doors
Note: Responses were provided by the principal. Source: US Department of Education, National Center for Education Statistics, Schools and Staffing Survey (SASS), "Public School Principal Data Files" and Private School Principal Data File," 2011-12

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Beyond Switches & Receptacles

Today's schools and universities must consider several factors during construction and renovation. Energy savings, ease of installation, and safety all play a critical role in choosing the right products for the job. Regardless of the reason, Hubbell has effective solutions to provide power, data, and communications.

The Hubbell offering goes well beyond switches and receptacles and covers the full range of applications found in educational institutions, including:

- Classrooms and learning spaces
- Administrative offices
- Residence halls
- Food and general services
- Auditorium and performing arts
- Science and research laboratories
- Data centers
- Athletic facilities and outdoor recreation
- Medical centers and health services
- Mechanical and maintenance facilities



Product breadth spans application categories such as:

- **Energy Efficiency:** Modern education facilities have open space environments designed to increase daylight, and data centers designed with improved airflow to minimize the need for cooling. Examples of Hubbell devices that support these initiatives include occupancy sensors, daylight harvesting sensors, and data center airflow management solutions.
- **Installation Efficiency:** Renovations often have very tight timelines as well as restrictions on available space above ceilings or behind walls due to masonry construction. Hubbell solves this challenge with wireless sensors, prewired raceway, plug-n-play AV assemblies, and prefabricated/pre-terminated wiring solutions.
- **Safety and Durability:** Educational institutions are demanding environments where safety for both students and staff is critical. Both new work and renovation require a range of products that meet rigorous, but important, safety qualifications while providing reliable, long-lasting performance. Products that fit this description



include impact and tamper-resistant devices, weatherproof and watertight products, ground fault devices, USB receptacles, isolated ground receptacles, and surge protection.

- **Data and Audio/Video:** In modern education facilities, this category supports enhanced communication and includes on-line learning and real-time delivery of the latest research information. To support this effort, Hubbell not only provides a range of products designed for the data center, it can also supply multimedia connectors, copper and fiber network cable, and cable management solutions.

With an offering that includes USB devices, raceway, poke-throughs, duct, cable protection, table-top boxes, cable management, basket tray, surge protection, sensors, floor boxes, AV and data-communication products, and high impact and harsh environment devices, Hubbell has the breadth and depth of product offering to provide the necessary solutions for your institutional construction and renovation needs.

For more information, complete the form at www.wesco.com/insight.

Hubbell Wiring Device offers an unparalleled breadth of products to serve the education market

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ACCORDING TO THE EPA, state and local government agencies spend more than \$10 billion per year on energy to provide public services and meet constituent needs. Up to one-third of this energy could be saved by implementing small changes that add up to significant savings. A lighting renovation, for example, is one of the quickest and easiest ways to reduce operational costs.



Present Lamp Wattage	50 W
Replacement Lamp Wattage -	7 W
Watts Saved	43 W
Replacement Lamp Life	x 25,000 h
	1,075,000 Wh
	÷ 1,000
kWh Saved	1,075 kWh
kWh Rate	x \$0.10 /kWh
Amount Saved per Lamp	\$107.50
# of Bulbs in Facility	x 100
TOTAL SAVED	\$10,750.00

Example:
 A facility with 100 lamps replaces the existing 50W MR16 lamps with 7W LED MR16 lamps. If the rate for energy is \$0.10 per kWh, the facility could save \$10,750 over the average life of the lamps.

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DORMITORY ROOM

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