



## CASE STUDY



### Early Childhood Centers Do More than Educate Kids

As the largest private early childhood education provider in the U.S., Knowledge Universe—United States provides a network of more than 1,700 locations across the country, employing more than 30,000 educators and reaching nearly 200,000 students daily. *KinderCare*<sup>®</sup>

is just one of the brands under which Knowledge Universe operates with the goal of preparing young children for school and instilling a lifelong love of learning. But these early education centers are doing more than teaching—they're also going green with Hubbell H-MOSS Occupancy Sensors.

In the U.S., lighting consumes 8% of all energy and 22% of electricity, representing \$40 billion a year in energy costs. With such a large number of facilities operating amidst increasing utility costs, Knowledge Universe realized the need to reduce energy consumption. "The high cost of utilities and the shift towards an overall green initiative were the driving force behind deploying energy savings in our facilities," says Jacklin Kingen, LEED AP BD+C, Energy and Natural Resource Analyst II for Knowledge Universe. "We initiated the project by selecting locations across the country with the highest electricity consumption per square foot. "



To help cut energy costs and consumption in the highest energy consuming locations, Knowledge Universe implemented Hubbell H-MOSS Occupancy Sensors in more than 1,000 education centers throughout the country. Occupancy Sensors automatically turn lights on when a room is occupied and off when a room is vacant. Deploying sensors in areas of intermittent use where lights are often inadvertently left on can significantly reduce energy bills. Additionally, local incentives and rebate programs are available to help accelerate the return on investment for installing occupancy sensors. Without incentives, the payback period for a traditional sensor installation is normally in the one to two year time frame. Incentives turn this into months.



When it came to selecting occupancy sensors for bathrooms, offices, classrooms and closets throughout the early childhood education centers, Knowledge Universe selected Hubbell over other manufacturers. “Hubbell H-MOSS Occupancy Sensors had the features we were looking for along with competitive pricing,” says Kingen. “We chose wall-mounted H-MOSS sensors for every location where possible. The sensors have the ability to properly detect movement based on the needs of different locations, such as frequency of use and required viewing range.”



In addition to the occupancy sensors, Knowledge Universe is working to deploy lighting retrofits, programmable thermostats, thermal envelope retrofits, and water

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**Knowledge Universe estimates that they have achieved an annual savings of over \$250,000 with Hubbell H-MOSS Occupancy Sensors.**  
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saving initiatives to help reduce energy savings. An average of 20 H-MOSS Occupancy Sensors were deployed in each location, and Knowledge Universe was able to capture specific energy savings data based on centers where the sensors were deployed as the sole energy savings technology.

In just 654 Knowledge Universe centers, an average savings of nearly \$95,000 and 1,235,783 kilowatt hours was achieved in only six months—an amount equivalent to the total energy used by 67 homes. When considering the more than 1,150 centers where the sensors were deployed, that savings is sure to increase in the future as they install sensors in more locations.

“We are currently working to implement occupancy sensors in the majority of our remaining facilities, and it will become a standard moving forward as we continue to strengthen our facilities and focus on building quality education environments,” says Kingen.

*For more information about the comprehensive line of H-MOSS Occupancy Sensors, contact Hubbell at 1-800-288-6000 or visit [www.hubbell-wiring.com/energy.aspx](http://www.hubbell-wiring.com/energy.aspx)*

