# NETWORKED LIGHTING CONTROLS SERIES

BETTERBRICKS
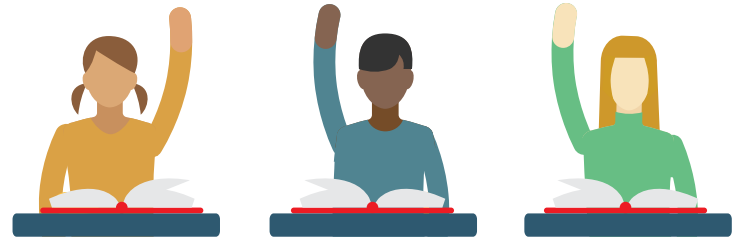Powerful Energy Ideas. Delivered by NEEA.

lighting design lab

## NETWORKED LIGHTING CONTROLS IN K-12 SCHOOLS

This guide outlines key concepts and design considerations best addressed with networked lighting control systems.

*For most K-12 school projects, updating the lighting systems is a once in a decade decision. With an understanding that lighting systems are integral to building systems and that lighting itself is integral to the occupant experience, school districts should think twice before investing in the lowest cost option for their next lighting project.*

## CLASSROOM FLEXIBILITY

Dimming and color changes can serve as effective cues for students to transition their activities while positively affecting circadian stimulus. NLC systems deliver maximum system capabilities with ease of control.

## They Can Do That?

Many modern NLC systems are setup and controlled via tablet-based application (App) tools. The Apps make it incredibly easy for facility professionals to:
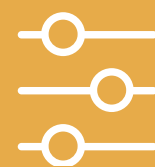
| Group or Regroup a Set of Fixtures | Control Light Levels | Adjust Sensor Settings | Track System Performance |

## Already invested in a Building Management System?

Modern NLC systems are increasingly capable of working with your existing systems.

## A BETTER WAY TO SIMPLIFY

### THE CHALLENGE

Hallways, classrooms, libraries, gyms, and auditoriums (to name a few K-12 spaces) may require different sensor hardware and placement strategies.

Each of these areas will also have different daylight calculations, wiring for zones, and commissioning in order to meet code.



**LLLC CONFIGURATION**

### A BETTER SOLUTION

LLLC technology – a subset of NLC – integrates occupancy, daylight, and full dimming on the fixtures themselves! No need to worry about hardware, placement, wiring, and daylight commissioning.

LLLC also offers school districts maximum control granularity and an easily reconfigurable backbone for future expandability.

## WORTH ITS WEIGHT

School districts often have key criteria which drives their procurement process. In addition to lowest cost, capital project managers need to understand what level of support they are purchasing.

Close attention should be paid to ensure there is a system implementation plan and clarity of roles.

| WHO | ROLE | WHEN |
|---|---|---|
| Manufacturer | Support mock-ups & system integration. | Through procurement & warranty |
| Local Rep Agency | Supports system intstallation, setup, & systems roll-out | Through installation & warranty |
| School Staff | Responsible for operating | For the life of the system |

*Want occupant satisfaction? Consider these topics at the beginning of your next project.*

- *Audit:* talk to stakeholders to understand past issues

- *Mock-up:* a limited deployment can help reduce risk associated with new technologies

- *Communicate:* The design intent with stakeholders

- *Educate:* Follow up with building occupants and facility operators to educate them on the new system

## MULTI SCENE WALL STATIONS

Multi-scene wall stations offer faculty easy access to an array of pre-programmed scenes.