

EDUCATION



LIGHTEN's Human-Centric Lighting (HCL) solution provides personalized lighting for students and teachers at schools and institutions. By providing access to biological healthy lighting and intelligent human oriented lighting control our system provide obvious advances and benefits.

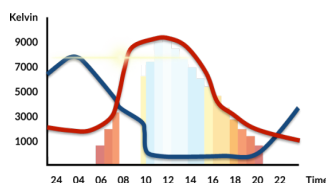
SOLUTION FEATURERS

Personalized: Individual light based on - age, gender, chronotype, health, etc.

Automatic: The user can automatically get light needed a round the clock

Individual setting: Individual light to individual needs and preferences

Adaptive: Via recording of user behavior in the cloud and eventually self-learning



The personalized light is regulated via a user friendly App and managed by advanced algorithms.

BENEFITS FOR THE INDIVIDUALS

- Improved level of energy
- Improved well-being
- Better learning
- Better results
- Reduced sickness absence
- Individual light for special projects
- Individual light for special needs (e.g. ADHD)

BENEFITS FOR THE MANAGEMENT

- Better attention
- Improved well-being
- Reduced sickness absence
- Individual light for special needs (e.g. ADHD)

BENEFITS FOR THE EDUCATIONAL INST.

- Better learning and results
- Reduced sick level – lower cost
- Lower energy consumption

IMPROVED LEARNING

Studying and learning can be fun and a life long process for most people. At times it can also be an exhausting experience involving loss of concentration, eyestrain and headaches. These symptoms are often linked with indoor climate of high temperatures, humidity and poor lighting conditions.

Students are different and have different challenges. Most young people are “night owls” meaning they are tired in the morning and less motivated for learning. Some students have visual problems and others problems with hyperactivity. So systems helping support a healthy study environment must take individual needs and preferences into account to be effective.

DID YOU KNOW?

- Reading speed can be increased by up to 36% with the right lighting conditions in classrooms
- Studies show that the level of concentration improves dramatically and the frequency of errors is dropping by almost 45%
- Up to 20% of students entering school encounter visual problems
- Hyperactivity can be reduced by up to 76%, when pupils were given a mathematical problem to solve under a soothing (calm) lighting scene
- Energy savings of up to 80% is feasible by using LED lighting solutions

Sources:

- Illuminating the Effects of Dynamic Lighting on Student Learning, Michael S. Mott, The University of Mississippi, Advanced Education Center, 2012
- Philips Study at Alten Forst, Hamburg Grundschule

EU MARKET FACTS:

- In the EU there are approx 108 million students
- Expenditures per student is more than 20% in average for western EU countries (GDP per capita)
- The cost of a Danish primary student is approx 10,000 USD per year

LIGHTEN's patent pending lighting control system provides individual and personalized lighting for specific customer groups.

LIGHTEN delivers control systems and advanced algorithms for personalizing existing or new installations of lighting systems.