

# RE-LIT - WELLBEING IN EDUCATIONAL SPACES

## A Study To Rehabilitate and Enhance The Design Education And Its Spaces

Designing environments for efficient usage for productivity is becoming more crucial for workspaces, thus being a vital component for design education. Design students as well as their faculty spend a lot of their time working in these environments; most of the time without realizing how much exposure they have to daylight to be more productive and healthier.

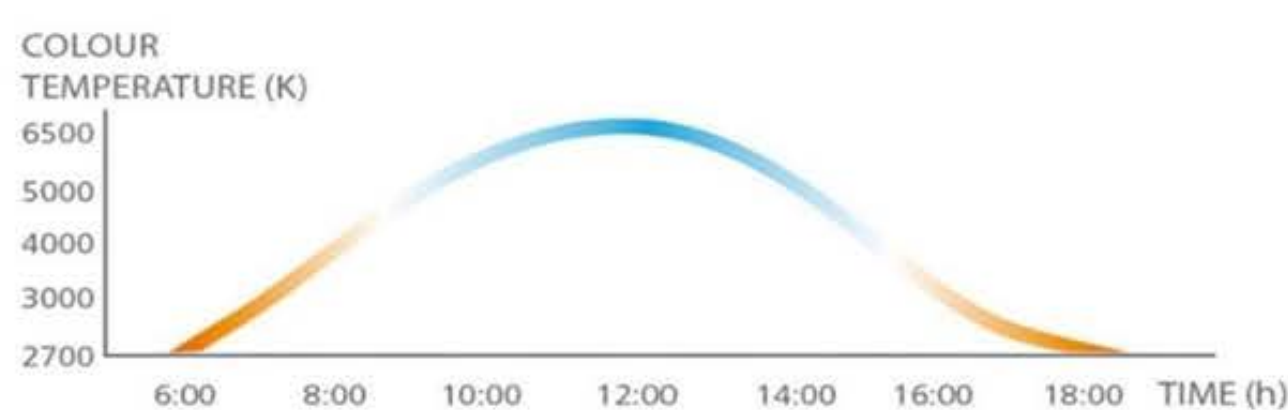
This makes up most of the important portion of well-being in workspaces. Most of these spaces were designed for efficiency spatially but are they really designed for the well-being of the individuals who are utilizing these spaces from a lighting standpoint?

It is becoming a more accepted notion that use of natural light is one of the most important aspects of creating healthier spaces not only for energy-efficiency but also to have a better impact on people using those spaces more comfortably. Creativity is also boosted by these types of notions hence making this a priority in redesigning the design spaces in academia due to the fact that students and faculty heavily rely on natural daylight to stay healthy, connected, both physically and mentally with the importance of the direct effects of daylighting on positive mood, productivity, and overall pleasure.



### RESEARCH QUESTIONS

- 1 **What is the importance of natural light for humans?**
- 2 **What are the psychological benefits of daylighting in well-being?**
- 3 **How are productivity and motivation for individuals affected by natural light?**
- 4 **Could biodynamic lighting be used as a well-being factor?**
- 5 **How could we work with reflectance and glare factors?**



### APPLICABLE METHODS FOR DESIGN EDUCATION

#### SUGGESTED METHODOLOGY

- **DAYLIGHT ANALYSIS**
  - Daylight analysis should be prepared for the existing and projected work and design spaces.
  - The window details and interior features of the space should be considered for this analysis.
  - Then the daylight analyzes of these areas should be examined in terms of the necessary parameters for the determined days and hours.
- **GLARE**
  - If glare is to be detected, it should be prevented with shading elements and other necessary applications suitable for design spaces.
  - Shading elements could be selected manually or automatically.
  - In prevention of glare, it is also important that users should not be obstructed from seeing outside.
- **LIGHTING CONTROL**
  - Lighting dimming could be addressed in zones where natural lighting is sufficient.
  - Required illuminance level (According to EN 12464-1/2011 Standard) on the working plane for educational buildings is need to be 500 lux.
  - In areas where natural lighting is not sufficient, the required level of illumination can be provided with artificial lighting and utilizing other components with lighting control systems.



### MAJOR TAKE-AWAYS FOR DEVELOPING A SOLID STRATEGY

The science of daylighting design involves not only figuring out how to give an occupied room enough light but also knowing how to do so while minimizing the negative side effects

Controlling glare is one crucial issue. Direct sunlight entering frequently creates an uncomfortable glare on work surfaces, making it challenging to work or see a computer screen.

Solar control is also needed to prevent glare caused by direct sunlight and undesirable heat coming through the windows during overheated periods. The direct entry of the sunlight should be obstructed in order to provide both visual and climatic comfort condition.

Natural Lighting and related supportive systems have great influences on users for their visual performance and psychological requirements. To create functional and ergonomic places with pleasing and efficient experiences, it is important to balance the daylighting and artificial lighting.

#### CONCLUSION

Lighting environment has significant impacts on humans physiologically and psychologically.

In design school environments, the design students and faculty exhibit behaviors mostly affected by the utilization of natural light in the studio and working spaces.

Light as a structuring element in a room not only influence our perception of that space but also affects our well-being, motivation and performance.

Re-thinking & re-shaping more adaptable working environments while revisiting some behavioral models/habits of students and faculty could be beneficial in order to identify certain potentials in the educational spaces of design schools.