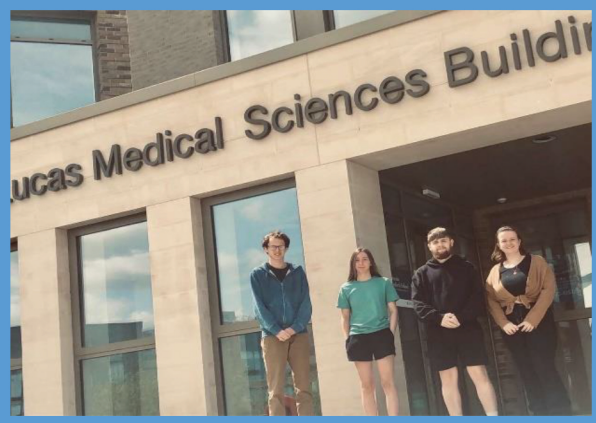


Post-pandemic Learning Spaces – POE of a BREEAM Excellent Building

Introduction:

We conducted a Post Occupancy Evaluation (POE) of the University of Lincoln Medical School building, a BREEAM excellent building. Following the COVID-19 Pandemic, there has been abrupt changes to occupancy patterns & environmental control in education buildings. This is important to monitor as this is influenced by the performance gap which indicates when buildings do not perform as well as they are expected to.



Methodology:

We created a questionnaire to give out to users of the Medical School as well as recorded regular observation data across a week using information from the thermostats (pictured below). From this we could evaluate environmental and social comfort as well as occupancy behaviour.

Results:

People:

Zone 1 was on average the busiest zone, due to its large capacity. 9-10am was the quietest hour of the day, after which population would increase and peak at around 2pm. Friday was the quietest day we recorded, possibly due to end of the week fatigue or commuting students who travel on Fridays.

Temperature:

The graphs show the trend between the highest temperature each day and the amount of people. It shows that the two hottest days have the most amount of people in each zone. This also aligns with the highest external temperature recorded for each day. Zone 2 is not shown due to the absence of a thermostat in the zone.

Lighting:

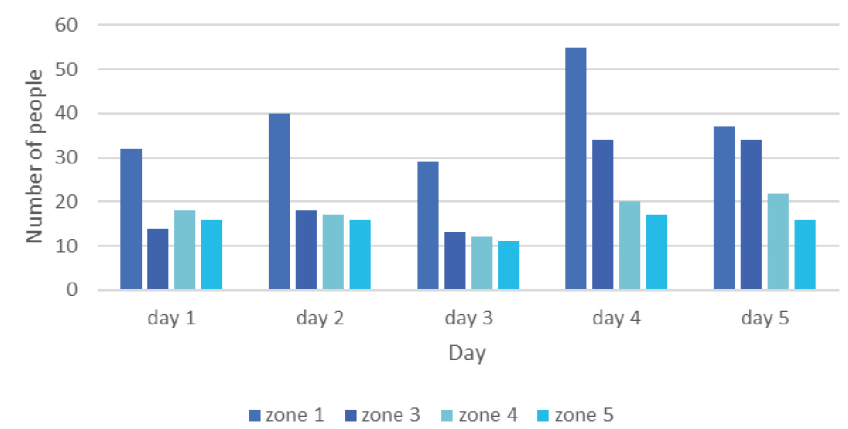
Overall, natural lighting was rated higher than artificial, due to the large windows, however towards the +3 side of the scale natural rated higher. This may be due to poor weather as the days varied.

CO2:

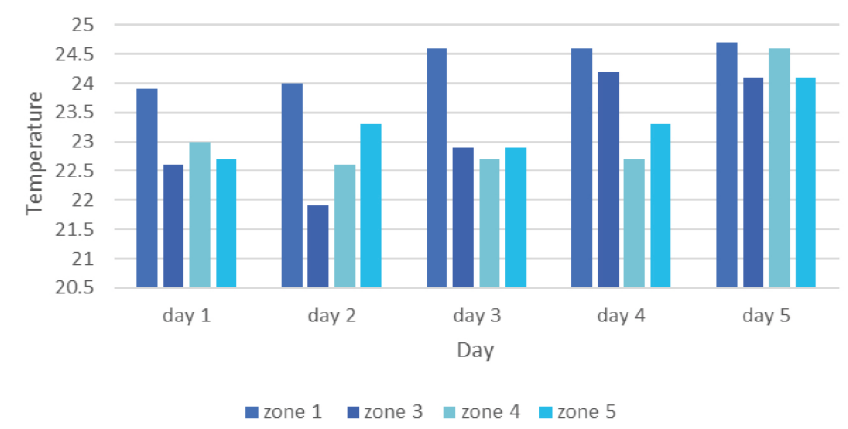
CO2 levels, measured in ppm where all within a good range, (400-1000ppm). Higher levels can cause drowsiness. The levels showed a slight increase as population rose which is expected but may be only a small increase due to more windows and doors being opened.



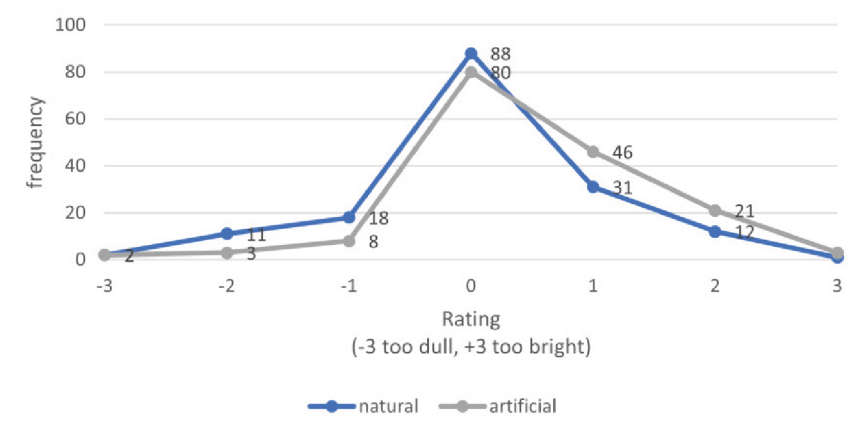
Most amount of people each day per zone



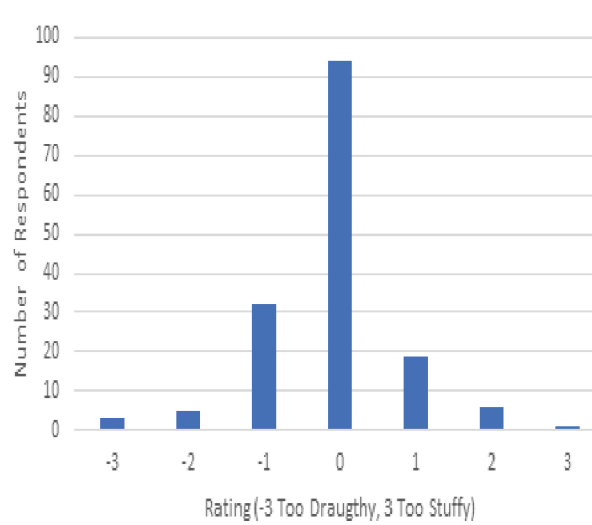
Highest temperature each day per zone



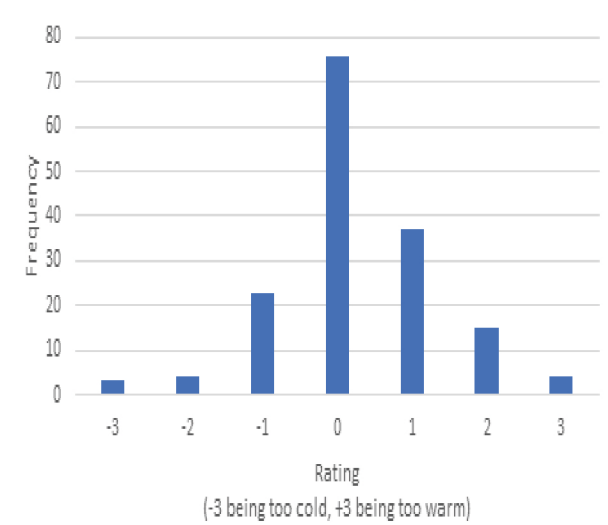
How do you find the natural and artificial light?



How do you find the Ventilation



How do you find the overall temperature?



Conclusion:

We found most of the trends support the medical school being a comfortable place to study, with optimum conditions. The student feedback seems to be mostly positive. The library and study areas also seem to be well used by students after the pandemic, taking advantage of the spaces provided. Our experience as student researchers pushed us out of our comfort zones with surveys and learning excel to analyze, but also taught us new skills that will help for the future. It has helped us to work on our confidence skills, teamwork, planning and data analysis.

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