

Delivering world class student experience and wellbeing

The role and impact of the estate, buildings and spaces

King's College London, Somerset House, Feb 2020.

Background



On 19th February, HEDQF organised a round table discussion to explore how the Higher Education (HE) estate, buildings and space impacts student experience and wellbeing.

The event was facilitated by HEDQF member John O'Brien, Founder and MD of [LCMB](#). It was hosted by [King's College London](#) and kindly sponsored by [The Management Recruitment Group](#).

The event

Ian Caldwell of King's College London and HEDQF started by presenting the latest HE research on student experience and wellbeing. John O'Brien of LCMB then presented the most recent workplace employee experience research and evidence. This was followed by a roundtable discussion involving all participants.

Participants

We are grateful for all attendees for contributing to the discussion and this briefing note:
Ian Caldwell Strategic Facilities Adviser and Non-Executive Director at King's College London

Rudi du Plessis Director of Operations, LCMB

Ben Duffill Deputy MD, MRG

Chris Forster Director of Estates and Facilities at The University of Greenwich

Simon Gwynne Director of Estates and Facilities at Canterbury Christ Church

Jerry Headley Interim Director of Estate Management at The University of Cambridge

Michael Hewlett Director, MRG

Robert Hutton Director of Estates, Facilities and Commercial Services at The University of Sussex

John O'Brien MD, LCMB

Julian Robinson Director of Estates at The London School of Economics

Stephen Wells Director of Estates, Facilities and Commercial Services, The University of Surrey

1. Context

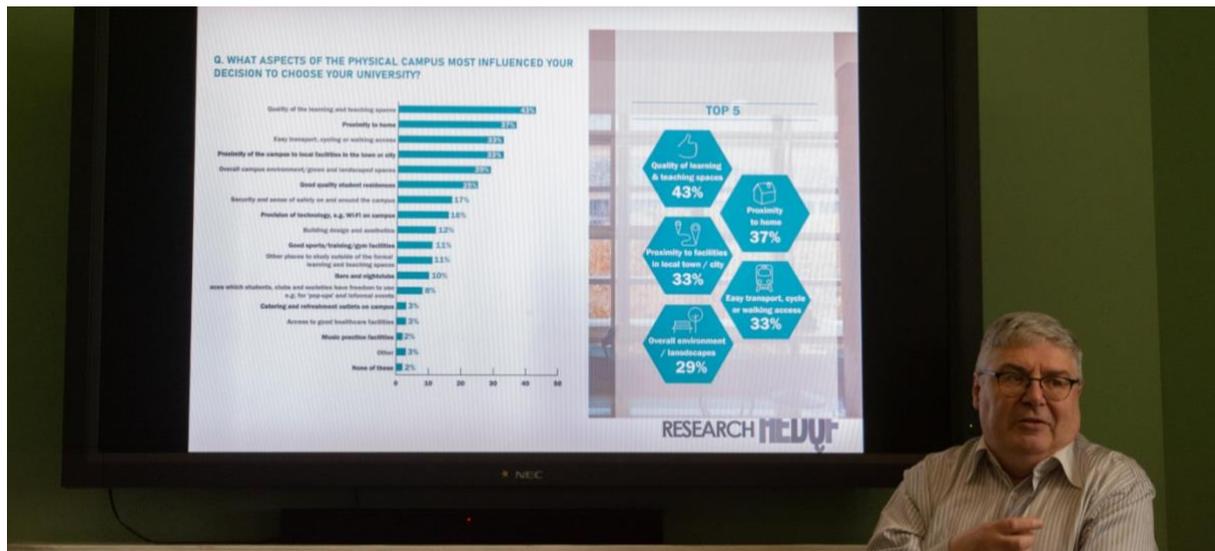
At the beginning of the roundtable discussion the attendees identified key estate challenges for Higher Education Institutions (HEIs):

- How to balance student experience, wellbeing, cost and estate efficiency (both in terms of space and resource use)?
- How to make space use more efficient and what relevant data is there to benchmark current performance?
- How to effectively manage the link between the estate and student/staff experience?
- How can Directors of Estates and their teams address perception vs. the estate's actual performance during the student journey through HE?

2. Student experience research overview – Ian Caldwell

Ian presented “[Delivering world class student experience and wellbeing –the role and impact of the estate, buildings and spaces: What do we really know?](#)”

Ian’s presentation highlighted the following observations:



Managing space

- Modern ways of working, such as open plan, hot desking etc. which support more efficient use of space, can be culturally challenging for academic communities to adopt and adapt to
- It is harder to create a community for staff using a cellular office approach and this is often an issue which is not knowingly recognised by staff
- HEDQF research shows that the best HE buildings utilise space in the most flexible way for users, responding flexibly to their needs

Supporting students

- Historical and totemic buildings appear to have a disproportional positive impact on ‘recruitment’ of students

- Most students spend the majority of their time in their residences. This raises the important question: how do you support them?
- Libraries are very important as a study space
- The low uptake of studying in breakout spaces suggests that there are not enough of them across the HE estate

Teaching

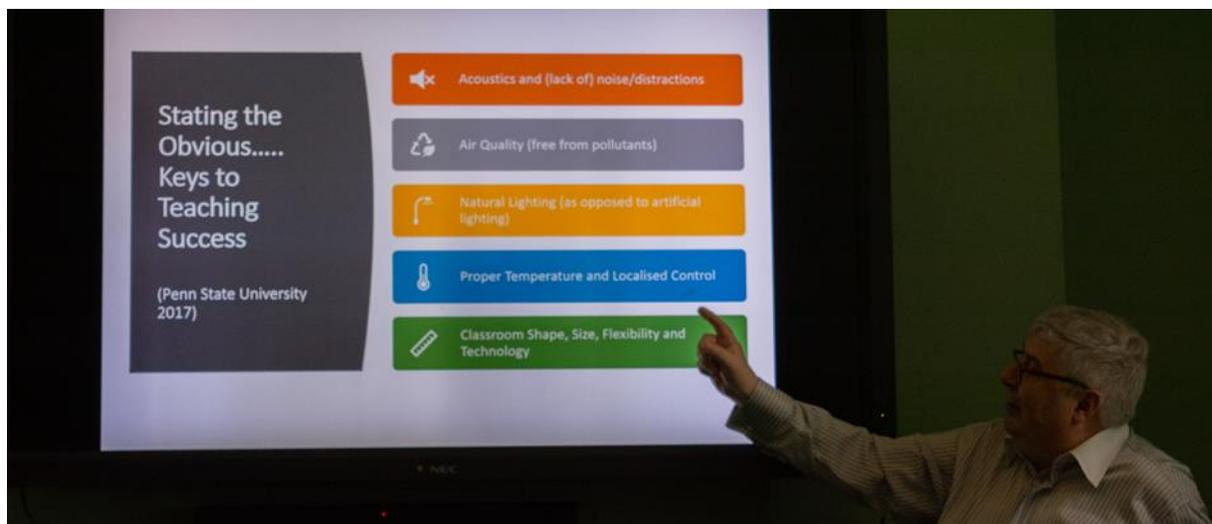
- Teaching spaces themselves prove to be difficult and the use of multiple channels to teach has been shown to improve the attendance at lessons (excellent teachers are less effective in poor environments and poor environments make good teachers less effective)
- Using or repurposing teaching spaces as study space can offer a good alternative use of the space and improve space efficiency

Wellbeing

- Design for wellbeing should be carefully considered in new build and refurbishment projects
- Don't forget that outside spaces are just as important as inside spaces for students
- Students have a need for social interaction which is also reflected in how they use space

Approach

- [HEDEFQ research](#) gives us an insight into how HE space is really used
- Estates and facilities management should be a partnership between Students, Staff and Estates



3. Workplace employee experience research and evidence overview – John O'Brien

John presented “[Lessons from the workplace](#)”

John highlighted the following observations through his presentation:



Research findings: the extent to which Indoor Environmental Quality (IEQ) affects human wellbeing and performance

- Recent research has increasingly highlighted the impact of our indoor environment on our wellbeing, performance and productivity
- Indoor Environment Quality IEQ (i.e. temperature, relative humidity, CO₂, Total volatile organic compounds, particulate matter, light, noise etc.) are shown to impact individual performance by between 2% and 20%
- British Council for Offices report that optimising IEQ can lead to a 2-3.5% increase in annual productivity for a whole organisation covering 30% the annual property operating costs of workplaces in London and 70% outside London
- [LCMB's research with Oxford Brookes University](#) on King's College London's workplaces shows a 10% improvement in workplace cognitive performance and 60% improved speed of processing in improved IEQ conditions

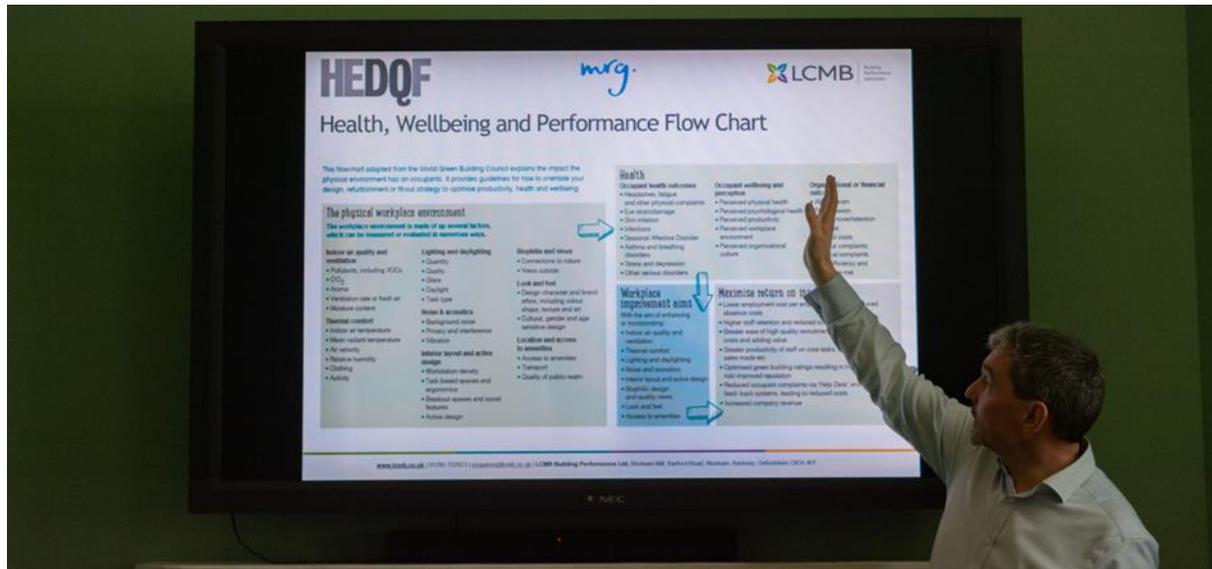
IEQ and students

- Similar research in primary schools has shown that student cognitive function and attainment is very sensitive to IEQ particularly CO₂

How to improve human performance and wellbeing

- Plan: when briefing and scoping new or refurbishment projects think about the direct impact on wellbeing and performance (protect occupant from adverse air quality, chemicals, light, noise) the sparkle impact (the site and surroundings) and the individual impact (the ability to control surroundings)
- Measure: Modern Internet of Things (IoT) technology can be used to evaluate and identify the performance of new and existing workplaces and buildings

- Collect feedback: Capture the perception of students and staff views of the performance of the HE estate with respect to their needs.
- Use the data: Qualitative data, together with the IEQ data from sensor, the quantitative data will allow Director of estates and their HEI's to make more informed decisions about the actual and potential impact of their estate, buildings and estates on their student and staff experience, wellbeing and performance



4. Round Table discussion and observations

There was a wide-ranging discussion amongst the group responding to the points raised by the presentations. Participants made the following observations and conclusions.

League positions and student selection

- Participants agreed that the quality of teaching and research were more likely to influence institutional standing than estates. There is a link between the quality of the estate (or more likely the perceived quality of the estate), and the league position of HEIs, the anecdotal evidence suggests this is not universally the case
- It is difficult for Universities to really know why a student might pick one over another, captured feedback can only get the view of those that do attend a particular university and not the view of those that choose to go elsewhere
- There was a general consensus that students are now much more informed and as a result more particular when choosing where they go

Staff vs. student experience

- There was a question about how important is staff vs student experience. The view is that it differs between different organisations depending on their primary focus and teaching/research mix

HEIs have a mix of estates and demographics

- Most HEI's recognise that because of the age and mix of their estate, quality is not at a uniform level
- Successful placemaking (i.e. give a building or estate a unique and attractive character) delivers really good social interaction between all stakeholders and actively encourages interaction between the staff/student bodies

- Within the staff body there was a recognition that different populations (in terms of demographics, gender, function etc.) have very different expectations from the work place for flexibility, prestige and breakout spaces

HEIs have differing and fluctuating needs which require insight, creativity and flexibility

- Conducting specific estate related surveys provided a very useful insight into the needs and wants of estate users from all parts of the University
- There is an obvious lag between the fluctuating needs of the University estate and the ability to address these. Panel concluded that this is best addressed through flexible approaches and taking back office functions off site. There is a case for both “local off-siting” (taking a function one stop on the train line) and “distant off-siting” (taking a function far away)
- Communication is very important – the messages coming from the estates department is just as important as the tangible outputs
- Not all organisations operate a defined space standard. The panel felt that this was helpful but needed to retain some flexibility to reflect different functional needs

The value and impact of culture

- The impact of culture on the estate function
 - o Culture pervades everything
 - o It is really important that a University defines what good looks like, in terms of the impact of estate on student experience, and measures regularly against that standard
 - o It is challenging to manage the differing expectation of different users (i.e. student, teaching staff, research etc.)
- Estate functions can benefit hugely from collaborating across organisations, and the sector to share experience, lessons learnt and key performance indicators
- The issue of the balance of different spaces across the estate and the efficient and flexible use of the estate across the academic year remains a challenging cultural and operational issue



5. Conclusions for HEDQF research

In conclusion, the attendees felt more research and insight into the following areas would allow Director of Estates and Facilities and their team makes a bigger impact on student experience, wellbeing and performance

- How do HEI's balance the wellbeing of people, the performance of the estate, cost and the need to save energy/carbon?
- How do HEI's deal with the particular (and often unique) challenges of legacy or historic buildings?
- What datasets and norms will allow HEI's to benchmark their space use and quality against each other to raise performance?

6. Key references

[HEDQF \(2019\), The Future of Learning Environments,](#)

[HEDQF \(2019\), The Future of Learning Environments, Learning Space Compass Framework](#)

[World Green Building Council \(2014\), Health, Wellbeing and Productivity in Offices: The Next Chapter for Green Building](#)

[Allen, Joseph G., Piers MacNaughton, Usha Satish, Suresh Santanam, Jose Vallarino, and John D. Spengler \(2015\), "Associations of Cognitive Function Scores with Carbon Dioxide, Ventilation, and Volatile Organic Compound Exposures in Office Workers: A Controlled Exposure Study of Green and Conventional Office Environments." Environmental Health Perspectives 124 \(6\): 805-812. doi:10.1289/ehp.1510037 and high level summary](#)

[British Council for Offices \(BCO\) \(2017\), Defining and Measuring Productivity in Offices](#)

[BCO\(2018\), Wellness Matters](#)

[Rajat Gupta, John O'Brien, Alastair Howard and Tom Cudmore \(2018\). Improving productivity in the workplace: lessons learnt and insights from the Whole Life Performance Plus project, Oxford Brookes University and LCMB Building Performance Ltd, Oxford.](#)

7. Queries on this briefing paper

Any questions or queries with respect to the presentations or this briefing paper can be directed to John or Ian who can be contacted via the contact details below

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