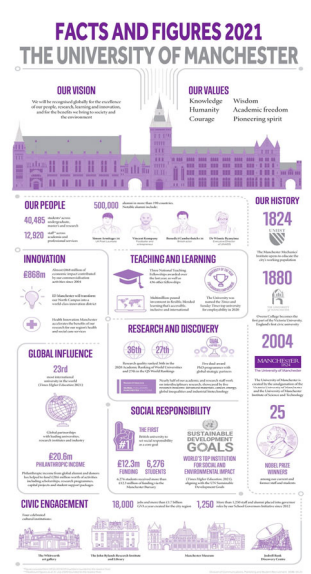


## Foresight on the Role of Universities after the Pandemic

XI International Academic Conference 'Foresight and Science, Technology and Innovation Policy' October 2021

**Luke Georghiou and Matt Atkin**  
University of Manchester

## Context



- Pandemic saw universities worldwide pivot rapidly to online teaching and restricted research activities when in lockdown
- UK universities work in market model in which majority of government funding of research is at a maximum of 80% of full economic cost and domestic undergraduate students also capped and funded at break-even or less
- In consequence, international student fees, which are not regulated, effectively subsidise research
- Restrictions on international travel with potential loss of revenues posed an existential threat which was partly mitigated by government loan facilities

## Using Foresight to stress-test strategic plan

- In addition to immediate crisis management, the University of Manchester decided to undertake a foresight exercise to look beyond the pandemic at medium-term strategy and to consider the implications for its pre-pandemic strategic plan, called '[Our Future](#)'
- Today's presentation will draw upon some of the materials from this case-study foresight to consider more general implications for the role of universities after the pandemic



## Basic Parameters of the Foresight Exercise

### Timeframe

- Options for medium-term horizon (5 to 10 years) post-Covid

### Participation

- Group of 10 area leaders/experts with 132 other staff in workshops, 2,077 in What Works? Survey and 108 students in survey & workshop activities plus wider student survey
- Open to all for comment before presentation to Senate and Board

### Scenarios

- 10-year reference assumptions underpinned central BAU scenario and groups asked also to formulate adverse and financially unconstrained alternatives



### Seven themes:

1. The future of the research system
2. The future of teaching, learning & student experience
3. Redefining the international university
4. Regional innovation and levelling up
5. Reimagining the way we work
6. Future campus footprint/role
7. University size and shape/business model

## Some key findings: Teaching and Research

- Flexibility at core for **teaching**, increasingly ‘blended’ combining best aspects of online & on-campus
- ‘Digital first’ to support
  - increased choice of pace, place, time and mode of study
  - kind of qualifications offered e.g. accommodating modular degrees or apprenticeships
- **Research** increasingly challenge-based demanding multidisciplinary cross-faculty approaches
- UK funding model for research not sustainable, meaning need to prioritise which areas for investment



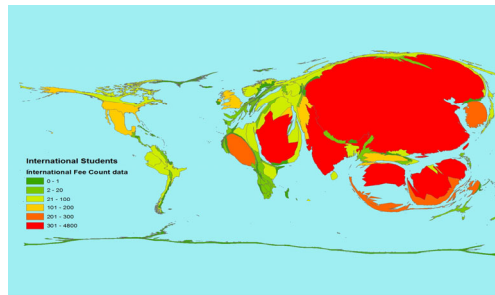
## Some key findings: Work & Campus

- **Work** will be more blended and flexible than pre-pandemic but no one-size-fits-all solution
  - where roles and circumstances allow, mixture of on-campus work for interaction and access to facilities & home-working to reduce commuting & allow focus
- Imperative for **net zero carbon** by 2038 challenging for both investment and behaviour
- Changing patterns of teaching, research & work demanding **more agile and flexible spaces**. Cultural as well as technical change needed
  - premium on collaboration space & hot-desking replacing cellular offices
  - repurposing existing spaces or re-providing where affordable
  - flexibility in use of working week to ensure efficient occupancy.



## Some key findings: At Home and Abroad

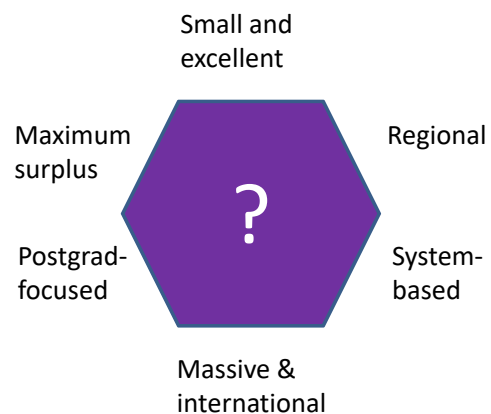
- International strategy stressing diversification of student population & low-travel learning experience
- Need to create a global multicultural experience on campus & to deliver courses online and via international centres and partnerships
- National political drivers emphasising regional role in innovation, 'levelling-up' and beyond



Cartogram of UoM international students country of origin

## Alternative Models of Size & Shape of University

- Future size and shape of University defined by student numbers, financial turnover and mix of activities
- Of the World's top-25 ranked (ARWU 2019) universities, 15 receive more than 50% of their income from gifts, investments, or attached businesses eg healthcare, publishing and 19>30%
- Major challenge to finance a transition and reach a financially sustainable model



## Some implications

- Most foreseen changes already exist at fringes of system but now becoming mainstream
- Blend of on and off campus experience is now a reality for both students and colleagues with almost all universities having this capability
  - Currently a reaction in progress as all enjoy the benefits of social and intellectual face-to face interaction on campus
  - Likely stabilization around a blended model with far higher digital content but clearly defined role for on-campus experience
- Substantial implications for campus estate strengthened by parallel pressure for de-carbonisation
  - More demand for interaction space and less for large lecture theatres
  - Limitations of retrofit for both carbon reduction and move to interactive space, especially in traditional/heritage buildings
  - Flexible working for staff likely to persist, again with implications for estate with more hot-desking etc
- Future of internationalisation will increasingly be challenged by carbon agenda as pandemic subsides, with lower travel alternatives
  - May drive increase of partnerships to allow partial study in home country or mix of online and shorter international stays
- It is very difficult for a university to shift its underlying business model as most are adapted to circumstances but most will change their operating models

## Conclusion

- Key words across all functions of university are agility and flexibility in a sector not renowned for either
- High levels of uncertainty & risk in political & economic environment make it unwise to overcommit to a single solution
- Organisational foresight cannot reduce uncertainty but it can increase readiness for change
- An adaptive, evolutionary model that values resilience provides a stronger foundation for change to maintain and improve a university's position