

What are universities for?

Date and Location: 14th November, 2018 at The Royal Society

Chair: The Earl of Selborne GBE FRS
Chair, The Foundation for Science and Technology

Speakers: David Sweeney
Executive Chair, Research England, UKRI
Professor Dame Nancy Rothwell DBE DL FRS FMedSci FBPhS
President and Vice-Chancellor, The University of Manchester
The Rt Hon. The Lord Willetts FRS
House of Lords

Panellists: Professor Jonathan Grant
Vice-President/Vice-Principal (Service), King's College London

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Hash tag: #fstuni

DAVID SWEENEY said that he had just returned from a global tour that took him to 16 countries, promoting links with UK universities across the world. He found universal respect and admiration for our universities. They were seen as global leaders: a huge national asset. Sustaining that position would be tough.

On a narrow view the answer to the question posed by the debate could be that the role of universities was simply to provide teaching. But it was the aspiration to take a broad based view of their role that was the strength of our universities. He saw the current challenges facing universities as issues of balance – in terms of their engagement with stakeholders and what might be termed the current ‘trust deficit’.

On the one hand the universities were, arguably, being asked to dance to too many tunes, by stakeholders with sectional interests who did not feel they were getting their share of the cake. These could be individuals or bodies pressing legitimate causes such as student entrepreneurship or local civic objectives. But

these were not rights. Universities did not exist to provide a service to lobby groups as if they were the lesser partner. They were, as he said, one of our leading national assets in their own right. Relationships between universities and their stakeholders should be based on a discussion of mutual interests and benefits: true partnerships.

However universities could only expect balanced, respectful partnerships with the stakeholders if they were to rebuild trust where that had been lost; and they would have to take the initiative in doing so.

Issues of trust had arisen in a number of areas, for example in what might be seen as a truculent approach to accountability. Some of the negative approaches to the Teaching and Excellent Framework (TEF) had come across as mercenary. Equally complaining about accountability ‘overload’ was simply not good enough. It was reasonable to raise legitimate questions about methodology for the TEF, but not to shy away from the principle or from engagement with the issue.

Similarly a new approach to leadership was

required. There were some outstanding leaders; but issues such as those surrounding remuneration had clouded that perception, compounded by what could come across as a defensive, even evasive response. The way Bath had set about rebuilding trust after the focus on that university was a good example to others. On the other hand the levels of abuse to which Vice Chancellors had been subject from some of their own staff arising from the pensions dispute was unfair and damaging. The minority of staff at universities that had crossed this line should face up to the consequences of their actions in terms of undermining public trust in the universities.

He also argued that too much of the discourse conducted by universities was expressed in terms of their own self interest, for example in the debate over Brexit or in relation to their role in civic society and the local business environment. But it also too often coloured approaches to other issues: public funding – which should be seen as a contract not an entitlement; the relationship with the regulator where a more generous approach was needed, a preparedness to rise above short term difficulties and recognise the legitimate function of the regulator; and the degree to which universities were immune from some of the pressures on local communities and the hard decisions with which they were confronted.

All this called for a sustained effort to rebuild trust. It would require strong leadership from Vice Chancellors and their governing bodies; and it would require universities to work together, setting aside for these purposes that they were in competition with each other. An immediate, current issue that would benefit from such an approach was, for example, the damage being caused by the debate over unconditional offers, which could certainly be resolved through collective university leadership.

This was the balance that had to be struck: universities rebuilding trust where it had been lost, through a collective response and a more sensitive ear for the perspective of others; and their stakeholders responding by treating universities as respected and valued partners. Universities would then be in an even stronger position both to play the role of thought leadership, based on trust, that was necessary to enable the country to flourish economically and to sustain their role as global players in their own right.

PROFESSOR DAME NANCY ROTHWELL acknowledged that Vice Chancellors were not feeling self confident at the moment and would recognise many of

the challenges David Sweeney had raised. Nevertheless she and her Russell Group colleagues were clear about what universities were for. They were for the public good: as places of learning, enquiry and scholarship; places of discovery and new knowledge; places where academic freedom and challenge flourished, independent of political, cultural and religious differences.

She agreed that universities need to think in terms of stakeholders. The benefits to students and to the public good were clear. People with a university or college degree were more likely to vote, have much better health and higher levels of trust and tolerance, were less likely to commit crime, drink less alcohol, smoked less and were likely to be in better shape and to live longer. These advantages were not simply constructs of social background. There was clear evidence that universities were agents of social change in these areas.

The drivers for change confronting universities themselves were varied and challenging: globalisation, competition, student consumerism, funding, technology, open data, open learning and a global economy. It was easy to feel battered in the face of these demands; but she agreed that there was a need to rebuild confidence and trust. The universities benefitted hugely from the sense of public ownership that they enjoyed; but there was a corresponding breath in terms of the number of stakeholders, their expectations and the accountability that brought. This required a sensitive approach to what could often be nuanced issues. For example in the current debate over fees and funding it was important to remember that, contrary to some expectations, not only had student numbers risen since the introduction of student fees, they had risen correspondingly more for students entering universities through widening participation schemes.

The students of the future would be looking for a different kind of university experience. They would be looking for life long learning, wider skills and open access. They would have different career expectations – the capability to switch careers and a greater emphasis on entrepreneurship. That was why her university had developed the University College for Interdisciplinary Learning with its emphasis on encouraging curiosity and pursuit of knowledge outside subject specialisation, cross disciplinary knowledge and research, ‘grand challenges’ on key ethical and other issues, and enhancing employability and the potential to contribute more widely to society.

Universities had a significant role in relation to research and innovation. She was a firm believer in the synergistic interaction between researcher and teacher

and between both and the student; and there had to be balance - between the search for fundamental knowledge and applied research, between collaboration with competition with other universities and in terms of the need for depth in particular disciplines as well as encouraging cross disciplinary learning.

Universities were not themselves businesses; but they needed to become more 'business like' as they collaborated more and more with industry and other partners and as they embraced entrepreneurship as an increasingly important theme – enabling them to run commercially valuable services, grow their income, compete successfully in markets and manage intellectual property strategically. But all this came, for her, with a wise warning she had been given by an R & D Director of a major pharmaceutical company: "Don't turn great universities into second rate companies".

Universities should be making a difference to society and be aware of the impact they were making – in terms of commercial partnerships, the economy, wider communities, social responsibility more generally and cultural impact. It was more important than ever to be prepared to demonstrate these areas of impact through public engagement and to build trust as a result.

Universities were above all places for out of the box thinking, constructive challenges, unlikely connections and transformative experience. They had to be above the political landscape of the day: an academic community transcending national boundaries, operating in a global community and acting as the 'conscience of society'. The future for universities was one of diversification, where they would have to be adaptive and flexible. But they should be rigorously defensive of these core missions and values – and in doing so continue to be there for the public good.

LORD WILLETTS said that universities might be able to mount an argument that they did not need to be judged by utilitarian methods on the basis that they were of inherent value. But that was not, of course, the kind of argument they would be prepared to accept from anyone else!

He put forward five key roles for universities. First – and this was easily overlooked – they had a historic but still vital role in the conservation of knowledge and information. The library had traditionally been one of the most prestigious buildings in a university – and rightly so. Their role as custodians, trustees and stewards of these huge historic datasets could if anything become even more important in the future, as developments in digital technology enabled these to

be scanned and analysed even more comprehensively and quickly.

Manifestly they also had roles in relation to teaching and research. Ironically for many years people did not think that knowledge advanced. Scholarship at universities was a matter of mining the wisdom of the ancients; and even in more recent times the role of a university had been seen as to educate the liberal mind, with no utilitarian intent: "a place where nothing useful should be taught". In contrast 'menial' knowledge was seen as a function of vocational training.

Research did not become a recognised function in universities in the UK until after the 1914-18 war, when it became clear that our universities would need to compete with German universities in the provision of post-graduate degrees. (Interestingly, the then Vice Chancellor of Birmingham University, perhaps the most progressive university of the time in developing a research and development function, had successfully used this new initiative of government of the day to press for public investment in the infrastructure of universities, on the basis that interaction at post-graduates would be shocked by the poor quality of facilities in our universities.)

Universities were now rightly seen as places where the frontier of knowledge was expanded through research, both blue skies and applied, and as comprehensive providers of teaching and learning. Paradoxically, given that the UK had been slow to the party, it now had by international standards an unusual concentration of its overall research and development spend in universities - where our investment was comparable to the best even though overall levels of investment in research and development were lower.

He argued that universities had, since the 1960s, in effect taken on a fourth role of managing the transition to adulthood of young people. This co-incided with the expansion of the number of universities, which took on the role from the military (in the years of conscription) and before that of apprenticeship (of which, it should be remembered, a historical feature was that apprentices lived away from home).

A fifth role, increasingly important in a global economy in which few institutions were anchor institutions rooted in place: a focus for a community and a source of civic pride, not unlike the medieval cathedral.

Universities delivered clear benefits to the individual and society; and for both they could deliver economic and non-economic benefits. These were, he agreed, causal benefits, not simply effects of selection. Nevertheless the university of the future would have

to rise to new challenges: the global digital revolution which would change fundamentally the way teaching was delivered and research carried out; and excessive over specialisation which was endemic to our system.

Opening the debate, **PROFESSOR JONATHAN GRANT** said that he was in strong agreement with much of what the speakers had said. This was a moment of deep uncertainty both for the nation and for the university sector. Rather than being overwhelmed by the challenges, universities should make a positive response: embracing the national need for a humanitarian, less ideological response.

The theme for the debate carried echoes of the classic “What have the Romans ever done for us” question in the Life of Brian. The previous speakers had exemplified what universities “had done for us”. For example, their recent contribution to social mobility, not least, in the form of 60,000 students now attending universities who would not have done so a previous generations, spoke for itself.

Nevertheless, he would himself like to challenge universities to give an even greater emphasis to their mission in relation to social responsibility: accepting a mandate to drive change in their local environment, for example through the use of sustainable energy sources and a commitment to the Living Wage. This could help to rebuild trust and a sense of public purpose.

It was noteworthy that the latest generation of 16 and 17 year olds were significantly more likely to have been engaged in volunteering or to stop in social enterprises than their millennial predecessors. The next customer base for the universities would expect and force them to become more socially aware institutions.

DISCUSSION

A number of contributions to the debate returned to the theme of the impact on social mobility of the system of student fees and loans. It was suggested that there was clear evidence that the introduction of fees and loans had driven wider participation. The participation of the most disadvantaged quintile in universities had, for example, risen from 10% to 20%. That still compared to 60% participation from the most affluent sector of society. But the evidence also showed that the universities were the one part of the education sector where people from disadvantaged backgrounds ‘outperformed’ other groups in relative terms – although they were still less successful in accessing the labour market.

There was clearly pressure to lower student fees; and

there had been suggestions that fee income might be replaced by teaching grants. But if the fees were, for example, reduced to £6,500, the Treasury would have to find £2.5 bn to compensate for the full funding loss. In current circumstances that seemed unlikely. Capping student numbers as a response to any reduction in fee levels would be massively regressive. The emphasis in the debate on the future of the funding system should, of course, be on the consequences for students and wider participation, rather than the impact on universities themselves. But it was also true that any overall loss of income would impact on research.

There was clear evidence that students themselves understood the implications of some of these options – and did not believe that what would be seen as a minimal reduction in the level of the fee would outweigh the risks. Presentationally tuition fees would have been better described as ‘university’ fees, to underscore that universities provided a wider range of secondary benefits for students – for example in relation to participation in sport and the arts.

The current financing system had, however, impacted on part-time study. The universities and their funders had to find a different response to this, both in terms of the flexibility of provision and the funding approach. This was also an area in which employees ought to be taking more responsibility.

It was also agreed that, notwithstanding the encouraging progress that had been in widening participation, there was more to be done, more effectively by more universities in reaching out to schools, pupils and parents to encourage wider participation. More programmes to support students from disadvantaged backgrounds who did not have the same parental social networks as many of their peers to access employment after university were also needed.

There was some debate over whether there were too many universities and whether their functions were sufficiently compatible to discuss them in the same terms. Could and should universities be allowed to fail, given their role as ‘anchor institutions’ in communities? Were, on the other hand, the research rich universities such as those in the Russell Group too elitist – and over represented on occasions such as this? Most contributors to this point welcomed the number of and diversity of the universities in the UK. The growth in the number of universities had supported the growth in student numbers without creating massive institutions on the lines of universities in Europe. They were able to offer distinctive contributions in teaching, research

and in terms of engagement with local communities. For example some of the universities with less depth in knowledge based research were stronger on development: making a direct contribution to their local communities and industries to industry by focussing on practical research questions relating to construction or other areas of applied science. The Russell Group had undoubtedly formed itself into a formidable example of producer power; but it would claim that it fully recognised the case for and strength of diversity in the university sector.

Notwithstanding the evidence that some universities did engage effectively in the ‘development’ sector of the research and development agenda, the caution that universities should not turn themselves into second rate businesses was supported by a number of contributors. On the other hand the universities would be key contributors to the Government’s commitment to raise national levels of spending on research to 2.4% of GDP. That would require stronger partnerships with industry, with funding sources in the private sector and more inward investment from outside the UK. Companies should be incentivised to locate employees involved in research and development closer to universities; and there would have to be an even stronger pipeline of post graduate courses in stem subjects. The combination of NHS datasets and potential in the NHS for the provision of new technologies, linked to some of the best universities in the world with a strong science base and the associated industries, was a real strength for life sciences in the UK which could be exploited more effectively.

Other themes of the debate were the issue of early overspecialisation in the UK education system and the potential impact of the digital revolution on universities and the way students were taught.

It was argued on the one hand that many Europeans, starting out with a broader based education envied the extent to which UK degrees supported a much wider range of employment opportunities than was the case on the continent. But a number of contributors did believe that our schools and universities should combine to offer a more broadly based education. The three A level model in particular was criticised. Social policy studies and research now demanded skills in data analysis, for example. But many students in that area did no maths beyond GSE level. Too many of our students had no second language. And a more multi-disciplinary approach could also support wider participation.

It could be argued that the problem lay with schools;

but they were in turn driven by the selection demands of universities, which even went to the point of selective scoring of IB results. Equally the current financing system in England disincentivised four year degrees which had supported more broadly based university courses. More universities needed to follow the Manchester example, as described by Dame Nancy. Employers should also embrace degrees which put an emphasis on a liberal arts agenda. Perhaps there would be a demand for longer degrees, despite the assumptions about the impact of loans and fees. It might be what young people actually wanted. Interestingly the number of people doing Masters degrees was rising fast.

It was acknowledged that universities would have to progressively build skills and capabilities to respond to the digital revolution. Residential students expected access to digital learning both as a supplement to and blended with other methods of learning and teaching. Remote and digital learning would certainly increase; but it was supplementary and complementary to face to face learning, unlikely to replace it.

The scope for personalising learning through digital analysis of personal preferences and knowledge was already becoming evident; and universities would have to engage with these developments. It was easy to become distracted by some of the hype around artificial intelligence and related developments, but these were already being used to resolve issues that had bogged systems down in the past. The ownership of data and its implications for the dissemination and credentiality of learning was also an issue that had to be faced or universities risked being intermediated by, for example, the technology companies. The fact that universities were high trust institutions would have to be brought into play here, as would a commitment to adding social value through education.

A range of other topics was raised. There was support for universities to do more active listening exercises to find out more about public expectations of their role – and to use their students as a huge potential resource in engaging with the public and local communities. The suggestion that universities had a role as ‘the conscience of society’ was welcomed – and led to a discussion of whether, for example, that could extend to working with local prisons, although it was suggested that the further education system might be better adapted to the ‘drop in/drop out’ learning that might demand. The issue of ‘safe spaces’ was discussed – with a recognition that this could involve universities in complex issues of resourcing where particularly

controversial topics or speakers were involved. The role of the Office for Students was also raised, on which it was suggested the jury was still out.

Finally, a number of participants, including those on the panel, affirmed the role of universities in changing individuals: stimulating and stretching their minds and encouraging curiosity. This was in a sense a given. But it was indeed at the heart of what universities were for. It was also interesting that there was evidence that non graduates were more likely to be successful in career terms where they clustered with graduates: suggesting that they too benefited, if indirectly, from universities.

The Chairman closed the debate by thanking again all the sponsors, the speakers and the participants. It had been a rich debate, emphasising the vital importance of universities to the knowledge economy. They were uniquely placed to promote its advancement, dissemination and conservation.

Sir Hugh Taylor KCB

Useful Reading:

The right education for everyone, Speech by the Prime Minister on 19th February 2018
www.gov.uk/government/speeches/pm-the-right-education-for-everyone

A University Education, David Willetts, Oxford University Press, 2017
www.resolutionfoundation.org/about-us/team/david-willetts/

Blog on the purposes of universities by Professor Jonathan Grant
www.wonkhe.com/blogs/a-positive-moment-of-uncertainty-for-universities

Universities UK on public perception of universities
www.universitiesuk.ac.uk/news/Pages/british-public-proud-of-uk-universities-new-poll.aspx

Demand for Higher Education to 2030, Bahram Bekhradnia and Diana Beech
HEPI Report 105
www.hepi.ac.uk/2018/03/15/demand-higher-education-2030/

Augar Review of post-18 education
<https://www.gov.uk/government/news/prime-minister-launches-major-review-of-post-18-education>

National Committee of Inquiry into Higher Education, Ron Dearing, 1997
www.leeds.ac.uk/educol/ncihe/

UK Research and Innovation (UKRI):

www.ukri.org

Arts and Humanities Research Council, UKRI
www.ahrc.ukri.org

Biotechnology and Biological Sciences Research Council, UKRI
www.bbsrc.ukri.org

Economic and Social Research Council, UKRI
www.esrc.ukri.org

Engineering and Physical Sciences Research Council, UKRI
www.epsrc.ukri.org

Innovate UK, UKRI
www.gov.uk/government/organisations/innovate-uk

Medical Research Council, UKRI
www.mrc.ukri.org

Natural Environment Research Council, UKRI
www.nerc.ukri.org

Research England, UKRI
www.re.ukri.org

Science and Technology Facilities Council, UKRI
www.stfc.ukri.org

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www.airto.co.uk

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Department for Business, Energy and Industrial Strategy
www.gov.uk/government/organisations/department-for-business-energy-and-industrial-strategy

Government Office for Science
www.gov.uk/government/organisations/government-office-for-science

HEPI
www.hepi.ac.uk

Higher Education Funding Council for Wales
www.hefcw.ac.uk/home/home.aspx

Higher Education Division, Department of the Economy, Northern Ireland
www.economy-ni.gov.uk/articles/higher-education-division

Home Office
www.gov.uk/government/organisations/home-office

Jisc
www.jisc.ac.uk

Knowledge Transfer Network
www.ktn-uk.co.uk

Learned Society of Wales
www.learnedsociety.wales

Lloyd's of London
www.lloyds.com

Lloyd's Register Foundation
www.lrfoundation.org.uk

London Stock Exchange Group
www.lseg.com

Nesta
www.nesta.org.uk

Office for National Statistics
www.ons.gov.uk

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www.officeforstudents.org.uk

Royal Academy of Engineering
www.raeng.org.uk

The Royal Society of Chemistry
www.rsc.org

The Royal Society
www.royalsociety.org

The Royal Society of Edinburgh
www.rse.org.uk

Russell Group
www.russellgroup.ac.uk

Scottish Funding Council
www.sfc.ac.uk

Sixth Form Colleges Association
www.sixthformcolleges.org

Student Finance Northern Ireland
www.studentfinanceneni.co.uk

Student Finance Wales
www.studentfinancewales.co.uk

The Alan Turing Institute
www.turing.ac.uk

UK Statistics Authority
www.statisticsauthority.gov.uk

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www.unialliance.ac.uk

University Subject Tables
www.thecompleteuniversityguide.co.uk/league-tables/rankings

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www.wellcome.ac.uk

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Published by The Foundation for Science and Technology
Registered Charity Number: 274727
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