Good morning.

It’s a pleasure to be here as part of this cosmopolitan gathering united by our shared commitment to the power of education to transform lives, to improve societies, and to push at the frontiers of knowledge.

Before I begin I would like to thank the organizers, the team at the Times Higher Ed, and our hosts, King’s College, London.

My plan this morning is to take a few moments to invite us to celebrate some of the remarkable achievements of global education, before depressing us by talking about some of the challenges we face, and then issuing a call to action by suggesting ways to address these challenges.

*International Educational Connections and Challenges*

Let’s start by reminding ourselves of the individual and societal benefits of education globally. UNESCO reports demonstrate that:

- Worldwide poverty would be reduced by half if 420 million extra people received a secondary education.¹
- When the enrolment rate for schooling is 10% higher than the global average, the chance of war reduces by 3%.²
- Each additional year of schooling raises average annual GDP by 0.37%.³
- An extra year of schooling increases someone’s income by up to 10%.⁴
- Children of educated mothers are more likely to be vaccinated and less likely to have growth stunted by malnutrition.⁵
- And that a child whose mother can read is 50% more likely to live past the age of 5.⁶

Today the conflict in Syria has left, according to the UN, 2.1 million children out of school in Syria itself and another 700,000 Syrian refugee children in surrounding countries. We are watching the emergence of a lost generation of displaced, uneducated, young Syrians. The problems extend well beyond Syria, of course. A UNICEF report shows that the number of child refugees has increased 75% in the past five years. With wars and climate change expected to accelerate the rate of migration over the coming decades, this problem is likely to worsen. The problem is not only one of

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¹ UNESCO Global Education Monitoring Report, 2017
² UNESCO Global Education Monitoring Report, 2011
³ UNESCO Global Monitoring Report, 2011
⁴ UNESCO Global Monitoring Report, 2011
⁵ UNESCO Global Monitoring Report, 2011
⁶ The Education Commission’s Report, The Learning Generation
refugees, *Save the Children* estimates that in 2015 alone the education of 80 million children was disrupted by humanitarian crises.

I do not wish to suggest for a moment that education, and university education in particular, is a panacea for all societal ills, but I do believe that investment in education is the best investment any society can make.

There have been recent efforts, especially but not exclusively, in this country, to link higher education and radicalization. I think these efforts, while generally well-motivated, are baseless. My own field is the study of terrorist movements and, with many of my colleagues in this field, we have demonstrated that terrorists can be well-educated. But to suggest that they are radicalized at university is to confuse causation with correlation. The number of terrorists who have attended university is more a matter of demographics and of frustrated ambition than of education. Indeed, I believe that the kind of broad-based education I trust we will celebrate at this conference, an education that inculcates empathy, that cultivates curiosity, that teaches students to think critically, to act ethically, and always to question, can indeed be an antidote to radicalization.

What are universities to do in the face of these very real problems facing others around the world? We can, of course, sit on our hands. But we can also follow the lead set for us by organizations like CARA the Council for Assisting Refugee Academics. They receive hundreds of requests from at-risk academics every year, and have a network of 110 universities that offer positions to allow these academics continue their work. CARA was started in 1933 when the Nazis expelled leading academics from German universities. Academics who resettled before and during the Second World War went on to win 16 Nobel Prizes, 18 were knighted and over 100 became fellows of the Royal Society and the British Academy, including Ernst Chain, Hans Krebs and Karl Popper. The case of Albert Einstein is best known, he was visiting the US when Hitler came to power in 1933 and being Jewish left his position at the Berlin Academy of Sciences to settle in the US. We need to ensure that we are being at least as hospitable to contemporary academic refugees. This is both an ethical and practical imperative. It was precisely the openness of US academia to European refugees in the 1930s and thereafter that shifted the centre of gravity in scholarship across the Atlantic.\(^7\)

An enterprising young Oxford student recently established *The Journal of Interrupted Studies* to publish work-in-progress by migrants and refugees whose work had been interrupted, most often by violence in Syria. The aim of the journal is to ensure that the work is not lost and to demonstrate what migrants bring to their new countries.

Our international obligations and activities, of course, extend way beyond refugees. Our universities do a great deal to help strengthen capacity in other countries. Just to give a few British examples:

- The University of Manchester’s School of Engineering partners with the University of Zambia’s School of Engineering to provide internationally recognized training to local undergraduates.
- De Montfort University works in Gujarat, India, partnering with local universities, connecting rural villages to sustainable energy resources, and providing healthcare.
- Oxford and the Chinese University of Hong Kong have a partnership to help Asia build resilience to cope with natural disasters. Meanwhile, our Centre for Tropical Medicine and Global Health works with about 2,000 local staff in Kenya, Thailand and Vietnam conducting research on infectious disease.

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\(^7\) Abraham Flexner, “The Usefulness of Useless Knowledge"
Our transnational links are extensive. The number of campuses abroad has increased from less than a hundred a decade ago to over 300 today. In the last few years we have seen an increase in the number of research centres bringing together universities from across the world. Again, just a couple of examples:

- The University of Michigan and Shanghai Jiao Tong University have collaborated since 2009 on research projects in energy, biomedicine, nano-technology and data science.
- The Cardiff China Medical Research Collaborative is a global study of cancer involving Cardiff and some of China’s leading universities.
- Scientists from the University of South Australia and Third Military Medical University in Chongquinn discovered the drug Edavarone can alleviate the progressive cognitive deficits of Alzheimer’s Disease.

Our universities are cosmopolitan institutions and proud of it. Many of us are older than most national borders. Oxford’s first known international student matriculated in 1190 and the first recorded Chinese person in Britain was Shen Fu Tsong, a Jesuit scholar who catalogued the Chinese collection in the Bodleian Library in the 17th century. So for centuries scholars have traversed the globe to find the company of other scholars to work with, and students have travelled the world to learn from them. We are full of citizens of the world, we delight in this fact, and we know very well what citizenship means.

While we in British universities – and especially those of us in leadership positions - may feel that we have been getting a rough ride lately, and certainly some mendacious media and tawdry politicians seem determined do their utmost to damage one of the most successful - and globally admired - sectors of the British economy, our difficulties pale in comparison to those of our peers elsewhere.

The two most egregious contemporary cases in Europe are Turkey and Hungary. The Erdogan government has closed university campuses, fired tens of thousands of teachers, and demanded the resignation of all university deans, because of his fear that education is part of a “parallel state” which supports the exiled Islamic preacher Fethullah Gulen. The latest is that in June President Erdogan announced that evolution would henceforth be removed from the curriculum; he says he want to raise a “pious generation”. Then in July, without a hint of irony, he complained of a brain drain of students to the west... 

In Hungary, unlike Turkey a member of the EU, Prime Minister Viktor Orban rushed through parliament legislation designed to force the closure of CEU, the Central European University, in part due to a personal vendetta against one of the university’s most generous donors, and partly because he perceived the university as a voice of liberalism in opposition to his increasingly illiberal agenda.

When these travesties occur I believe it is incumbent upon us to practice the principles we articulate, to voice our opposition, to do what we can to reverse these actions, and to do everything we can to assist the academics affected. I believe we need to have a stronger sense of ourselves as a global community of academics, who speak to one another even when our governments don’t, especially when our governments don’t. The kind of community that is fostered by gatherings such as this. We will see over the next two days, as we examine particular issues from various institutional and national perspectives, that our interests are aligned and our aspirations shared. We also face many of the same challenges.

8 Hurriyet Daily News 26/07/2017
Challenges

As I turn now to some of these challenges my frame of reference will necessarily be that of Europe and North America, the two parts of the world in which I have worked and which I know best. Many of our problems, I know, don’t compare to those faced by universities in parts of the world beset with political instability, weak infrastructure, and struggling economies.

We face many challenges, it is precisely the range of them that makes jobs like mine interesting, but I would like to address just three this morning:

The decline of state funding.
The challenges posed by new technologies, and
The challenges of operating in an age of populism.

Decline in State Funding

There are variations among countries, as one would expect, but broadly we are seeing a decline in public funding of education. In the UK HEFCE grant allocations have fallen from £7.1 billion to £3.5 billion in the last 10 years. BREXIT will remove another significant source of funding. In 2014/15 UK HEIs received £725 million in research grant income from the EU which was 25% of the research grants provided by UK government bodies.

In the US state funding for Higher Education has decreased 9% over 8 years which has been compensated for by a 33% rise in tuition fees. At the federal level, President Trump’s 2018 budget proposal would slash the National Institutes for Health Budget by 18%, the EPA by 30%, the National Science Foundation would lose $776 million, the National Cancer Institute $1 billion and so on. This decline is not a recent phenomenon, the federal R&D budget has fallen form 2.1% of GDP in 1964 to less than 0.8% today.

In Europe since 2008 government funding for universities has fallen in Spain by 14%, Italy by 17%, and Greece by 63%. In Germany it has increased by 31%, France 4.3%, the Netherlands 4.8%. According to the Education Statistical Yearbook in China public spending on education rose from 2.4% of GDP in 1998 to 4.3% in 2012.

The loss of funding has, as we know, been made up by transferring the burden to students themselves though tuition fees. This is leaving students with significant debt which will inevitably affect their career choice, but it also popularizes the notion that students are consumers with all the implications that has for their relationship with their university. In the absolutely extraordinary words of the new chairman of the Education Select Committee: “The whole purpose of going to university - and making the sacrifice of taking out a significant student loan - is because of the prospect of a highly skilled, well-paid job at the end of it.” It seems to me that Mr Halfon has completely missed the point of going to university, but unfortunately he is not alone.

New Technologies

Technology is developing at an accelerating pace and causing us to think again about how we educate. A few years ago we were all pre-occupied by the opportunities afforded by MOOCS. Initially they looked enormously exciting, it looked as though we would be able to offer the best education available for next-to-nothing to anyone anywhere with access to the internet. It hasn’t
quite worked out that way due to the inability to pass on costs, the low completion rates, and the demographic of those who participate, so while MOOCs have not signalled - as many anticipated - the end of university education as we know it, they have pointed to a different future and to the imperative that we think through the implications of new technologies for how we teach, how we organize ourselves, and what we offer over and above what’s available on the internet.

There is an enormous amount of work to be done in harnessing these emerging technologies to enhance the education we provide, and to help us achieve our educational objectives. We also need to think through how we educate a population who are born digital; how we educate a population to enter a world of artificial intelligence and machine learning; how we educate ethical and responsible citizens in a world of social media and information overload; how we educate students to take jobs that we cannot even imagine today.

_The Age of Populism_

The third challenge, and the one that concerns me most at the moment is how universities operate in an age of populism. One of the most troubling aspects of the recent votes for BREXIT and President Trump was the gap they revealed between universities and the rest of the country. It turns out that educational attainment was the best predictor of voting intention. More important than income, than class, than race, than age, educational attainment was the best predictor in both cases. 75% of those with post-secondary degrees voted Remain, 73% of those without degrees voted for BREXIT. In the US Trump won the vote of non-college educated whites by a margin of 39%. Education level was also the critical factor in explaining shifts in voting patterns between 2012 and 2016. Clinton improved on Obama’s performance in counties with high levels of education by 9% and dropped by 11% in counties with low levels of education. This is potentially a real problem for universities who rely on public support for our ability to operate.

Both political campaigns provided ample evidence of a decline in respect for evidence and for experts. Michael Gove’s infamous quote about the public having had enough of experts encapsulates this attitude, but it was pervasive throughout the referendum campaign. A 2016 YouGov poll showed two thirds of “Leave” supporters, as compared to a quarter of Remainers, thought it wrong to rely too much on so-called experts. As one caller to a BBC radio programme put it: “Experts built the Titanic.”

To take the example of Climate Change, for which I would have thought the evidence by now was incontrovertible, Pew surveys found that in the US 87% of US Scientists say climate change is caused by humans compared to 50% of adults generally. In the Middle East, 38%, and in the Asia/Pacific region, 45%, believe that climate change is a very serious problem. In China the figure was a frightening 18%.

“Post-Truth” was named the Oxford Dictionaries Word of the Year for 2016 reflecting its use in the referendum and presidential campaigns, it refers to objective facts being less influential in shaping public opinion than appeals to emotion and personal belief. Perhaps “alternative facts” will be next year’s word. In Italy the populist Five Star Movement proposed a law against vaccines in


Pew Surveys “Public views on climate and climate scientists”, 10/04/2016
PewGlobal “Concern about Climate Change and its Consequences”, 11/05/2015
2015 which an Italian Health Official blamed for the trebling of incidences of measles. In Australia the government has recently launched a $5.5 million educational campaign to counter a populist campaign against the MMR vaccine.\textsuperscript{13}

Technology is exacerbating the attraction of “alternative truths”. There are currently 2.5 billion social media users including 50% of 18-29 year olds in the US. Misinformation can therefore spread with astonishing alacrity. Researchers at the Oxford Internet Institute warn that bots are having a dangerous impact on how information and misinformation spreads on the internet as they can mimic humans and influence public discourse.

As Tacitus said over 2000 years ago, “Truth is confirmed by inspection and delay; falsehood by haste and uncertainty.” With the 24 hour news cycle, and instantaneous social media coverage, no time is accorded to inspection and delay. Just recently, in the aftermath of the death of a young woman peacefully protesting a Neo-Nazi rally in Charlottesville, an image of a protester beating a police officer circulated on social media. It was later revealed to have been a doctored photo from a 2009 protest in Greece.

It has never been more important for universities to represent and to inculcate a respect for inspection and delay, for evidence, to educate the next generation to distinguish between the evidenced-based and the fabricated. Above all, to see truth as an aspiration not a possession.

One way to do this is to practice unequivocally the principle of freedom of speech that we espouse. Universities must not be seen as bastions of a particular political perspective. We must be open to the expression of all legal views, and be prepared to subject these views to reasoned argument. As teachers we must model to our students how to respond to views they find objectionable, not to avoid them. We must be robust in defending free speech against those who wish to constrain it, whether they be a government in a well-intentioned effort to prevent radicalization, or students claiming a right not to be offended. There should be no such right in universities.

If we are inconsistent in our application of these principles we will lose public respect, and if we don’t defend these principles we can’t expect anyone else to.

\textit{What is to be done?}

Faced with these challenges, and the shortness of time to address them, what is to be done? On the decline in public funding there is no substitute for diversifying our sources of support including philanthropy, partnerships with business, and commercialization of research. We must embrace new technologies and figure out how to harness their extraordinary power to help us achieve our mission of education and research. And, in an age of populism: we must engage. We must engage with schools, communities, politicians, business, and the media. We must not hesitate to use our expertise to inform public debate, and we should use our global reach to identify and disseminate solutions to public policy problems.

While many of us compete globally, we also operate locally, and we need to work to ensure that our local communities take pride in having a university in their midst, and feel some ownership of our successes. We bring enormous cultural and economic and benefits to our communities. My university adds £2.3 billion a year to the Oxfordshire economy and supports 33,700 jobs. I doubt local people know this. We need to be more systematic in opening our gates to our communities. In

\textsuperscript{13} Department of Health website, Australian Government, 24/04/2017
September, for European Researchers Night, we are holding a Curiosity Carnival in which we plan to bring 10,000 people into Oxford for the evening to engage with researchers and experience their passion for their work. People will be able to “order” a researcher from a “menu” and get to know them over a drink! I’m sure many of you have equally creative ideas.

We must guard our autonomy and we must exercise it. We have to be vigilant in protecting our research from influence by government, commercial funders, and donors, and we should never hesitate to speak truth to power. Those of us who are university leaders must create an environment in which our academics are free to say whatever they please on any subject they please subject only to the law of the land.

If we are to maintain public support we must be - and be seen to be - fair in our admissions procedures, transparent in our governance, consistent in our defence of the principles we espouse. And we must vehemently resist “alternative facts” and the acceptance of a “post-truth world.” I will end with brief suggestions from three of my colleagues:

- Stephen Roberts, Professor of Machine Learning argues that universities should create the knowledge equivalent of the Millennium Seed Bank which aims to preserve plant life at risk from extinction. This “seed bank for truth” would be a place where claims to truth can be independently verified, the results made publicly available. He says: “As we de-speciate the world we are trying to preserve these species’ DNA. As truth becomes endangered we have the same obligation to record facts.”
- Bodley’s Librarian, Richard Ovenden, argues that: “Universities . . . are repositories of authoritative knowledge. The academic standards which we uphold ensure that the research we foster and disseminate is a counterblast to the ‘fake news’ that comes from less authoritative sources.”
- Professor Philip Howard of the Oxford Internet Institute argues that universities must become activists for knowledge and evidence-based policy making and fight the spread of fake news on social media. He says: If the role of universities has been as guardians of knowledge, at this point they must become advocates for knowledge.”

If the public were to see us as advocates for knowledge, rather than advocates for ourselves, I think we would go a long way in regaining public confidence and eroding the troubling gap in political preferences between those with and without university degrees.

Thank you.