

The Wisdom Agenda Research-intensive universities in the 21st century

Leading universities have the potential to transform themselves into wisdom universities and thus – in partnership with government, commerce and society – offer robust solutions to aspects of the world's major problems.

Universities at their best are rare environments. They nurture and reward exploration, enquiry, discovery and debate. Uniquely, they provide space where the pursuit of knowledge is valued for its own sake. University researchers are driven by a desire to probe the boundaries of knowledge, and to challenge conventional assumptions. They build upon – and question – many centuries of scholarship, and prepare the next generation to do likewise.

Discoveries made by research-intensive universities expand humanity's capacity to understand, imagine and shape the world.

Curiosity underpins all that universities do. However, it is certainly not universally agreed that curiosity alone is worthy of investment. Universities are in receipt of public funds, and are expected to provide more than a cloistered sanctuary for the curious. Increasingly, governments demand some direct benefit to the public, most commonly to the economy.

In the UK, for example, a key new component by which past performance is assessed – and, therefore, much future research activity funded – is the requirement to demonstrate its 'impact'. And many grant applicants are now required to forecast the 'impact' of the research proposed.

Much academic blood has been shed in the debate over whether measures such as these actually lead to scarce resources being applied to the most promising areas of research. However, the anguish of form-filling, game-playing and jostling to be the most 'impactful' distracts us from the true impact of which some universities are capable: the delivery of wise solutions to aspects of the world's great problems.

I invite you to consider anew the role that universities — uniquely among public, private or voluntary institutions — can play in partnership with government, commerce and society.

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The challenges humanity faces

The world's major problems – for example in the economic, environmental, health and social spheres – are complex, systemic, interconnected and urgent to an unprecedented degree.

Billions of people suffer from illness and disease, despite the existence of proven cures. Life in our cities is under threat from social tension, climate change and resource depletion. The prospect of global peace and cooperation recedes in the face of conflict between our nations, ideologies, faiths and cultures. For the vast majority, our quality of life diminishes despite technological advances.

Business-as-usual offers humanity only further degradation, and will deny our children and grandchildren the ability to strive to fulfil their potential. And it is becoming clear that we have only a decade or two in which to engineer the radical changes that will provide a sustainable, equitable and prosperous world to our descendants.

Wisdom – here defined as the judicious application of knowledge for the good of humanity – is the key to providing solutions to aspects of these problems.

From knowledge to wisdom

Universities are collections of individual experts focused on advancing knowledge within their particular subject areas, 'disciplines'. Both problem-oriented and curiosity-driven research by individuals and small groups can result in significant discoveries and applications.

This is the foundation of the advancement of knowledge, and the core research activity of all leading universities. In its highest forms, specialist research has transformed human experience and improved innumerable lives. However, the full potential of such scholarship – the benefit to humanity – is more likely to be realised when it is fully developed in the context of a university engaged in discovery across the full breadth of disciplines.

This is because solutions to major problems – complex, systemic and interconnected challenges – evade the grasp of any single discipline. While subject expertise is essential, more significant outcomes can follow when experts from different disciplines act together.

Greater understanding and novel insights arise when subject boundaries are transcended, and the breadth of specialist knowledge is considered collectively. Wise solutions emerge through synthesising and contrasting the knowledge, perspectives and methodologies of different disciplines.

Comprehensive research-intensive universities, with their critical mass of expertise across the disciplines, therefore can – and must – be greater than the sum of their parts. Once great minds from different disciplines bring together different perspectives, understandings and procedures to engage in cross-disciplinary debate, then our collective expertise is best-placed to yield wise solutions.

While some cross-disciplinary collaboration takes place spontaneously, there is also a crucial role for university leaders to encourage, facilitate and support such interaction.

Developing a culture of wisdom

Only universities with excellence across the disciplines, a critical mass of expertise and a commitment to impact in its

broadest sense can cultivate and deliver wisdom on the scale and with the speed required by the world's current crises.

The delivery of a culture of wisdom is possible only when the following factors become central to a university's vision and operation.

Research leadership founded in excellence: outstanding research conducted by individuals and small groups is the bedrock upon which a culture of wisdom is built.

Enduring excellence, derived from talented individuals' curiosity about and commitment to their chosen subject area, is the basis of research leadership. Individuals with the ability to determine their own research direction can develop the novel lines of enquiry that will form the basis of breakthroughs in knowledge.

The wisdom university must recruit and retain the best research leaders, those with the imagination and insight to discover answers to questions that have frustrated all others and, indeed, to formulate questions that have not occurred to others

Excellence across a broad research spectrum: a leading researcher working in an environment where a wide range of advances are being made, and which can act as a source of inspiration, has greater potential than one based at an institution with narrow interests or disciplinary silos. The adoption of methods or analogies from other disciplines is often a feature of the most creative and innovative research.

The wisdom university must consist of a community engaged in discovery across the spectrum of disciplines – simultaneously at the forefront of knowledge in, for example, architecture, anatomy, anthropology, anaesthesia, art, archaeology, ageing and astrophysics – providing a richer environment for productive interaction.

Facilitation of cross-disciplinary interaction: excellence in depth and breadth will not, in itself, provoke collaboration. Indeed, academics can be deterred from working across disciplinary boundaries by traditional academic structures and models of career progression, along with measures of prestige based overly on specialisation. Effective communication and engagement can be impeded by the differences between disciplines' methodologies, intellectual frameworks and terminologies. Yet it is these very differences that can make for dynamic cross-disciplinary interaction generating novel outcomes.

While some cross-disciplinary interaction occurs spontaneously, in order to foster it at scale the wisdom university must:

- respect specialist knowledge while dismantling and structural or organisational barriers to its cross-fertilisation
- support the synthesis of new knowledge both within and across fields and disciplines
- shape an environment in which a significant aspect of leadership is openness to cross-disciplinarity
- provide thematic contexts for cross-disciplinary interaction and facilitate networks to draw together experts from disparate subject areas.

The wisdom university must encourage, support and empower

members of its diverse community to find common ground and formulate cross-disciplinary responses to major societal challenges.

Commitment to academic collaboration and strategic partnership: a natural extension of cross-disciplinary interaction is an engagement with expertise beyond the university.

The wisdom university must develop mutually beneficial academic collaborations, for example with groupings of partner hospitals, with leading specialist research institutes or with 'islands of excellence' (those groups demonstrating subject-specific expertise within universities which are not comprehensively excellent), including collaborations aimed at capacity-building in the developing world.

Most relationships with external organisations are forged initially by individual researchers, locally, regionally and internationally, and with local communities, government bodies, business, policymakers and practitioners. Where appropriate, the wisdom university should develop these relationships – particularly those that have a bearing on social, environmental, legal and health issues globally – into strategic partnerships, which can bring together complementary strengths and deepen the impact of cross-disciplinary research.

Engagement and responsiveness: a university's cultural, business, political and intellectual partners can offer insights into the constraints and opportunities they face, helping academics to anticipate and respond to the rapidly and continually changing external environment and informing the development of evidence-based solutions.

The wisdom university must make every effort to engage in dialogue with partners in order to address their key concerns and maximise the social, economic, cultural and environmental benefits of its research. Sustained partnerships both enable the university to respond rapidly and imaginatively to emerging priorities and initiatives, and make it more likely that its proposals will be adopted.

A global perspective: the wisdom university must recognise the interconnectedness and interdependence of people around the world, and provide an environment in which researchers are encouraged to think about how their work can intersect with and impact upon global issues.

Delivering impact

Excellent cross-disciplinary research will generate robust solutions to aspects of the world's major problems. However, the full potential impact of research will not necessarily be realised simply by dissemination through standard routes. The wisdom university must be committed to exploiting fully the channels, including the following, through which it can maximise its impact.

Scholarly publication and other academic outputs: the most conventional channel to share discovery. The wisdom university will disseminate its research findings as widely as possible – including through open access, institutional repositories and media promotion – in order to broaden its social benefit.

Education: in order to shape tomorrow's leaders. The wisdom university will expose its students to cutting-edge research and research-led teaching, provoke curiosity in areas beyond their primary subject, provide opportunities for them to engage in cross-disciplinary activity and inculcate in them a desire to understand the value of multiple perspectives.

Public engagement: the wisdom university will make its discoveries accessible and comprehensible to the public, and engage in responsible and mutually beneficial debate. It will develop effective public engagement programmes, both in order to understand the public's varied concerns, beliefs, attitudes and behaviour, and to respond with relevant proposals. It will inform public opinion and address the barriers to adapting individual, organisational and mass behaviour.

Translational research: the wisdom university will go well beyond the dominant model of developing high-tech solutions for end-stage disease. It will bring the breadth of its expertise – including, for example, sociological and behavioural sciences – to bear on improving health systems. To optimise this translation, it will forge new forms of engagement with corporate and public stakeholders within health systems.

Enterprise: in recognition that corporate polices and practices have a significant impact on global issues, the wisdom university will proactively share its research findings with business leaders. It will facilitate the engagement of its research leaders with enterprise, and in particular link together numerous piecemeal interactions into more valuable and more rapidly responsive sustained relationships. The wisdom university will respond to the priorities of business and industry and deliver impact through: education and training in entrepreneurship; social enterprise; corporate partnerships; industry-related and translational research; commercial research contracts; consultancy; continuing professional development; student businesses; commercialisation of intellectual property through spin-out companies; and licensing and product development.

Public policy: the wisdom university will develop its reputation as a source of excellent research which can inform policymaking, and as a source of evidence-based policy solutions. It will fully exploit the opportunities offered by membership of and engagement with public bodies and seek to increase its influence. It will work with governments at all levels, as well as with non-governmental organisations, think-tanks and others, to identify and respond to public policy needs. It will build upon existing connections between academics and policymakers, enabling external agencies to identify sources of relevant wisdom and the university to anticipate better and respond swiftly to emerging policy issues.

Conclusion

Only by developing a culture of wisdom can the modern global university deliver solutions to the major 21st-century challenges that must be overcome if the people of the 22nd century are to have the opportunity to thrive.