

Educators for Reform response to HEFCE Research Excellence Framework consultation

The threat to Britain's research base

Executive summary

The Higher Education Funding Council for England (HEFCE) is currently consulting on its proposals for a new Research Excellence Framework (REF), which will determine the allocation of HEFCE's block grant research funding to universities. The consultation is due to end on 16 December.

Under the REF, 25 per cent of the assessment criteria will be based on the impact of research including "economic, social, public policy, cultural and quality of life" impacts. The consultation document makes clear that this is based upon ensuring that the Government gets "value for money" from research.

The proposed impact criteria risk turning our world class research universities into nothing more than functionalist extensions of corporate Research and Development departments. REF threatens to put an end to the type of "blue skies" thinking which has led to some of the most vital discoveries and innovations. It is based on a misunderstanding of the basic nature of knowledge advancement, which is founded on open-ended exploration.

REF would represent a further extension of government objectives into the independence of universities. It would crowd out "close to market" research that is already taking place in the private sector.

Instead research funding should be reformed to give more autonomy to universities. Research and innovation that has a clear and immediate economic impact should be left to take place in the private sector. Research with a clear social impact should be conducted by charities or, where appropriate, within government departments. Universities should be free to pursue pure academic research.

The allocation of government research funding

University research funding in England is allocated by two means. The seven Research Councils distribute £2.8 billion for specific research projects,¹ whilst the Higher Education Funding Council for England (HEFCE) is responsible for block grant funding of around £1.6 billion.² This HEFCE funding was in the past allocated on the basis of an institution's performance on the Research Assessment Exercise (RAE).

RAE is to be replaced with the Research Excellence Framework (REF) from September 2013. Around £10 billion will be allocated as a result of the REF over five years.³

¹ <http://www.rcuk.ac.uk>.

² <http://www.hefce.ac.uk/research/funding/resfund>.

³ Bekhradnia, B. (2009), *Proposals for the Research Excellence Framework – a critique*, Higher Education Policy Institute.

Past, present and future

	RAE	REF	EfR proposals
Researchers	<p>Able to focus on areas of interest</p> <p>Research is based on the need to produce publishable papers</p>	<p>Forced to focus on impactful areas</p> <p>Research is based on the need to produce functionalist outcomes</p>	<p>Able to focus on areas of interest</p> <p>Research is motivated by academic curiosity</p>
Criteria	<p>70% of funding based on research outputs; 20% on the general research environment; 10% on indicators of esteem</p> <p>Encourages abstract or foundational research</p> <p>Rewards developing the discipline and making major contributions to a discipline, e.g. in pure mathematics, the discovery of non-linear equations called solitons which eventually led to the development of fibre optic cables</p>	<p>25% of funding based on impact of research; 60% on research quality; 15% on research environment</p> <p>Encourages applied and translational research that is “close to market”</p> <p>Rewards marketable products, TV documentaries and research on areas of Government interest, e.g. climate change; David Starkey documentary on the Tudors is considered highly important</p>	<p>Assessment is solely on the basis of the quality of the output</p> <p>Encourages “blue skies” research</p> <p>Rewards making contributions to the discipline even when impact isn’t immediately recognisable, e.g. abstract mathematical research</p>
Impact on business	<p>Allowed business to focus on R&D building on universities’ “blue skies” thinking for instance Syngenta’s work on GM crops</p>	<p>Crowds out business; directly marketable products are produced from public funds, inhibiting private sector innovation</p>	<p>Allows businesses to build on foundational research and focus on “close to market” product development</p>
Red tape	<p>Burden for universities in terms of preparing outputs for exercise; RAE cost to HEFCE £10-12 million</p>	<p>Higher burden as universities are forced to demonstrate impact for every 10-15 members of staff; cost not yet assessed</p>	<p>Limited burden as process is simplified</p>

Research will be measured on “impact”, not intrinsic value

Under the REF, 25 per cent of the assessment criteria will be based on the impact of research including “economic, social, public policy, cultural and quality of life” impacts, which specifically excludes academic impact. The consultation document makes clear that this is based upon ensuring that the Government gets “value for money” from research:

“The Government has made plain its view that maintaining the capacity of the HE sector to produce world-leading research across a broad range of academic

disciplines is essential to underpin economic growth and national well-being; and that to this end the HE sector can and should do more to ensure that excellent research achieves its full potential impact.”⁴

The REF follows a trend in Government policy to encourage a more functionalist approach to academic study highlighted by Lord Drayson, Minister for Science and Innovation, who called on the UK to make choices “about a balance of investment in science and innovation to favour those areas in which the UK has a clear competitive advantage”.⁵ Policymakers have decided that research will only be supported if it can prove that it makes a direct impact outside of the academic field. Lord Mandelson has argued that the Government “will need to focus on resources where they can have the greatest return in excellence and social and economic benefit”.⁶

An end to “blue skies” research

The proposed REF rightly ensures that peer review remains at the heart of funding allocation, so subject academics decide the value of funding. However they must do this within the constraint of centrally-set targets and criteria. The proposed impact criteria risk turning our world class research universities into nothing more than functionalist extensions of corporate Research and Development departments.

As the Higher Education Policy Institute has noted, “the addition of impact as a requirement to achieve the top grades will mean that producing and disseminating excellent research will not be sufficient if it cannot be shown to have had impact beyond the academic community”. The consequences of such an approach could be that “a historian that does good but not extraordinary work on Henry VIII could be valued more highly, if he presents a television series on the subject than his colleague who spends years producing a book that changes the way that historians see their subject but which does not have a perceived wider impact beyond the academic community”.⁷

The proposals threaten to put an end to the type of blue skies thinking which has led to some of the most vital discoveries and innovations in our history. Breakthroughs such as the x-ray, optical fibres, the liquid crystal display and even Google’s searching algorithm were all products of basic or foundational research undertaken for curiosity’s sake rather than being motivated by potential social or economic impact. The proposals are based on a misunderstanding of the basic nature of knowledge advancement, which is founded on opened ended exploration and adventurous spirit. If the current proposals are accepted then the study of chemistry could be demoted below the study of forensic science, for instance.

Measuring “value for money” is the wrong approach

The University and College Union has already highlighted the dangers of using impact to determine research funding allocation:

“The REF proposals are founded on a lack of understanding of how knowledge advances. It is often difficult to predict which research will create the greatest practical impact. History shows us that in many instances it is curiosity driven

⁴ Ibid.

⁵ Fazackerley, A. et al. (2009), *Innovation and Industry: The role of universities*, Policy Exchange.

⁶ Department for Business, Innovation and Skills (2009), *Higher Ambitions: The future of universities in a knowledge economy*.

⁷ Bekhradnia, B. (2009), *Proposals for the Research Excellence Framework – a critique*, Higher Education Policy Institute.

research that has led to major scientific and cultural advances. If implemented these proposals risk undermining support for basic research across all disciplines.”⁸

The proposals would seem to go against the very purpose of HEFCE, which is precisely to allocate block grant funding for research of the sort that would not normally be eligible for research council funding. Given that we already have research councils to fund specific projects based partly upon their economic potential it seems undesirable to close one of the few funding areas that remains available for blue skies thinking in the broadest sense.

The unintended consequences of REF are unknown

The proposals themselves lack clarity as to what is actually meant by impact, which is obviously a concern for researchers and academics. There is no way of predicting exactly what effect the inclusion of impact will have upon the distribution of funds.

HEFCE is running five pilots in order to demonstrate how impact will be assessed. These pilots will not report back until after HEFCE has announced the results of the conclusion for the REF. Academics are being asked to assess proposals without any knowledge of how they will work in practice. Further, the areas that have been chosen for the pilot are unrepresentative of the breadth of academic study, with four of the five areas being highly applied areas of academic study where impact can likely easily be identified.⁹

Crowding out the private sector

A further problem with basing the allocation of research funding on the impact that universities create is that “close to market” private sector research could be crowded out. All large businesses have research and development departments and it is here that research with the most immediate impact is carried out. Building on basic foundational research, R&D departments make products explicitly for the market; by turning universities into research and development departments the space for private sector innovation will be reduced.

Back to blue skies

- Impact should not form part of the REF assessment criteria for research. Academia must remain independent and curiosity driven. Research funding should be allocated on quality and peer-assessed merit, not against government value-for-money or socio-economic impact targets.
- Research and innovation that has a clear and immediate economic impact should be left to take place in the private sector. Research with a clear social impact should be conducted by charities or, where appropriate, within government departments. Universities should be free to pursue pure academic research.
- Research funding allocation should be reformed to give more autonomy to universities. These must become stronger, more powerful institutions that help drive forward Britain’s intellectual development and civic society.

⁸ University and College Union (2009), ‘Stand up for research’ petition.

⁹ <http://www.hefce.ac.uk/research/ref/impact>.