

Round-Table Discussion

Can the contribution of the arts, humanities and science to society and the economy be measured?

Held at the British Academy on 14th June, 2010

Chair: **The Earl of Selborne KBE FRS**
Chairman, The Foundation for Science and Technology

Speakers: **Sir Adam Roberts KCMG PBA**
President, British Academy
The Lord Rees OM Kt PRS HonFREng
President, The Royal Society
Dr David Sweeney
Director, Research, Innovation and Skills, Higher Education Funding Council for England

SIR ADAM ROBERTS said that a system for assessing research had become essential once the number of Universities doing research had grown through polytechnics becoming universities. Inevitably mistakes were initially made but public accountability required development of methods of assessment. The question was whether we now had the most appropriate system; whether the emphasis on impact rather than a broader illustrative and qualitative assessment, including narrative would be preferable. The British Academy's response to the Higher Education Council for England (HEFCE) consultation had accepted the social value of research, but stressed the problems of time scale, excluding poor research, and the relationship of outputs to specific projects. Outstanding research, coupled with good research based teaching was important not only for attracting high quality foreign researchers, but also for building high levels of skill in society and in the economy. He accepted the importance for HEFCE in having agreement from all sectors of academia to ensure acceptable implementation of impact assessments.

LORD REES agreed with Sir Adam. While science was at the heart of economic performance, high quality research in the humanities and social sciences was crucial. Leading universities would suffer if they were not able to support teaching and research across a full spectrum of subjects. High quality research establishments should be seen as a national asset - as the USA viewed Harvard, MIT and Stanford - as repositories of excellence and the source of transfer of knowledge through their graduates and other mechanisms. But crucial to getting good faculty and students to come to the UK to do research was allowing them to do the research they wanted to do. Because we had provided the funding - and funding for research is small in total public expenditure terms - and researchers had had the freedom to pursue their interests - the UK had been successful in attracting, and keeping scientists of international calibre. But, in the last few years this attraction had diminished and was already affecting the UK academic world. The field a scientist chooses to work in is, for him or her, a fundamental choice; neither he or she nor anyone else can predict whether or when his research will show success. Research must not be micromanaged on the basis that outcomes can be forecast; we do not even know what the impact of past research has been or will be. It is impossible to predict the future impact. But any funding decisions must take into account the future strength of the university sector as a whole; the enormous value it gives; and its attractions to world class scholars in an increasingly competitive world.

MR SWEENEY said that the aim in funding research was to support research which made a difference. It was not restricted to particular disciplines or faculties or universities. HEFCE searched for excellence in all areas, and sought to take account of different features in them. It was not looking for crude outturns; "blue

skies" research where outturns were by definition unknown must form part of the overall research picture. He recognized that it was more difficult to recognize "making a difference" in some areas than others. However, it was essential to articulate why research was beneficial to the UK - and not just in economic terms. Funding decisions must look at research output more broadly, recognizing the value that research in any one area can give to other areas, as well as supporting individual talent. We should support those who do excellent research which benefits society - no matter from which faculty it comes. HEFCE did not propose to micromanage research projects but to look at departmental levels of excellence, in partnership with both academics and others. Assessment, and some form of grading, was inevitable, and had been accepted over the years, even although individual procedures had been criticized. Universities will have to adjust to new systems and take advantage of them. They should support the research which makes the broadest possible contribution to society.

The following points were made in discussion:

1. There is confusion between the contribution of research, its impact and its quality. We must define before we can measure. Grading is merely a form of marking. What is intended?
2. Someone in Government - most likely the Chief Secretary to the Treasury - will shortly take a view on what amount of the total of public resources is to be devoted to research. What basis is he being given to do this? The public will want to know what the funds spent on research have delivered. There is a strong suspicion amongst some observers that research money is given for the benefit or researchers, not for public good. Both the British Academy¹ and The Royal Society² reports demonstrate individual cases showing superb results, but the overall case - spend more on research, rather than health, or defence, or primary education, is still weak. It is said that a 10% reduction in funding will lead to a 50% reduction in high quality research; but can this be demonstrated - by the time of the budget next week? Admittedly the Comprehensive Spending Review is not to be published until the autumn, but the budget will set the overall parameters.
3. Government has also to decide how to allocate the total resource. You have to try and look at outputs, otherwise you use proxies, which are always wide open to gaming. But to assess the results of individual projects is impossible - as well as extremely expensive. Was there any need for further assessment beyond that considered when a grant application was made? In response,

¹ Past, Present and Future - the public value of the humanities and the social sciences, British Academy, June 2010, p1-55

² The Scientific Century - securing our future prosperity, The Royal Society, March 2010, p1-72

it was said that the costs of assessment of university departments was small - £60m. There was great difference between assessing the value of a grant application and evaluating the quality of research output. It was the completed research, and its contribution to society, which needed to be assessed, not the possibility of good research.

4. If the aim was to fund excellence and consider the outturns in the light of benefit to society, was there not some doubt about how some individual universities would be rated? Some might fail to get any significant funding, and this raised the question about whether there were too many universities and whether all of them needed to do research. In response, it was said that all universities had areas of excellence, but that it was important to focus on these and not treat the whole institution with a broad brush. But this did raise the question about whether there should be more cooperation between institutions, so that some could focus more on teaching and others on research. It might well be that there should be more movement of PhD students from one university to another, to pursue PhD training - perhaps we should seek to ensure that PhD training is given only in those universities which have excellence in a particular discipline. They need not even move from an institution which did science. We could look at regional grouping of universities to provide graduate education.

5. Cost benefit analysis would go a long way to making assessments if properly grounded. It must take into account time lags between research, publication and recognition of a contribution to society and/or the economy. Some research will take longer to produce results than others; it must also look at side effects - e.g. the value of research for teaching, the attraction it gives to certain institutions in attracting scholars and faculty. Above all, it needs to be based on a knowledge of how science works, what motivates scientists, and how research is translated into useful knowledge.

6. It is essential to put a proper value on Higher Education, and how to understand how the different elements in it can make the best contribution. The UK is unsophisticated compared with the US in its organization of Higher Education. It is not a question of how many universities we need, but whether they are so organized to deliver good results in the field in which they specialize. Research is different from teaching, and there is no basis for suggesting that teaching is better if based on research. There need be only a few universities doing excellent research and training PhDs, and they needed to be funded properly. At present much money is not spent to best advantage. We also need to consider how undergraduate degrees are structured, and whether the traditional three year course is right for many subjects, and, indeed, for those who wish to study part time later in life. We also must look at the effect of widening participation - this is valuable in itself, but means that institutions are taking risks in admitting less qualified students. This means high drop out rates; it is absurd to criticize institutions which are seeking to widen intake if they have higher drop out rates.

7. The public do not understand that some research will deliver results only in the long term and in quite unexpected ways. Two examples were cited - the use of the study of an almost extinct language which displayed a different approach to explaining directions, had suddenly become of value in cognitive research; and the use of palaeographic knowledge in deciphering Enigma encoded signals. Such recondite areas of study must be preserved if we were to take advantage of new opportunities. Did the public want the value of research to be measured, or demonstrated? The former was almost impossible; the latter required much greater effort in showing, as in the examples quoted, how benefits could arise.

8. We should not overlook the benefits of the dual funding systems in the UK. The system should enable universities to bring together large projects on an interdisciplinary basis. It is crucial that science, the social sciences and the humanities should not be seen as separate entities - they all support each other when it

comes to looking at overall public benefit. It may be that interdisciplinarity has not been sufficiently emphasised in the HEFCE consultation. Regard needs to be paid to the longer time scales in which humanities or social science research takes to show results compared with the sciences

9. In the past, Government had respected the independence of universities, and allowed them to define for themselves what their purpose was. But increasing government intervention and direction had destroyed this autonomy. It was not clear what the purpose of universities now was, and it was essential to decide this before trying to evaluate or assess what they did. But, it was said in response, we are having to deal with an immediate problem of allocating funds, and cannot redesign the whole system. There was no question of the government trying to direct universities to pursue particular projects or issues; funds given to a university were given without strings - it was for the university to decide how to spend them.

Summing up, MR. SWEENEY emphasised the need for academia to make the case for research on its own, although it might have other advantages; that impact assessment should assist interdisciplinarity and that it is for individual institutions to decide how to spend funding. LORD REES re-emphasised the need to maintain the strength of the University sector through research, in the face of increased funding being given to research by our competitors - the US, France, Canada, the Far East. The issue was of concern to everyone, not just the elite. SIR ADAM ROBERTS said we must not run away from the impact agenda; we must agree on the need to demonstrate public value of research, and universities must accept scrutiny of public value. Impact should be assessed and described, but not measured.

Three key messages could be drawn from the discussion. First, that the response of all academic sectors to the consultation should present a united front; second, that it should be positive and emphasize our strengths; and third, demonstrate the vital contribution of high quality research to society and the economy. The discussion also showed how very difficult it was to answer the question posed - "how can the contribution be measured?"

Sir Geoffrey Chipperfield KCB

Useful web links:

1994 Group
www.1994group.ac.uk

Academy of Medical Sciences
www.acmedsci.ac.uk

British Academy
www.britac.ac.uk

Department for Business, Innovation and Skills
www.bis.gov.uk/science

The Foundation for Science and Technology
www.foundation.org.uk

Higher Education Council for England
www.hefce.ac.uk

Research Councils UK
www.rcuk.ac.uk

The Royal Academy of Engineering
www.raeng.org.uk

The Royal Society
www.royalsociety.org

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