

DINNER/DISCUSSION SUMMARY

What are universities for?

Held at The Royal Society on 25th October, 2006

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- Chair:** **The Earl of Selborne KBE FRS**
 Chairman, The Foundation for Science and Technology
- Speakers:** **The Lord Rees of Ludlow Kt PRS**
 President, The Royal Society
- Professor David Eastwood**
 Chief Executive, Higher Education Funding Council for England
- Nick Butler**
 GVP, BP and Chair, Advisory Board, Centre for European Reform
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LORD REES briefly traced the evolution of English Universities, from their vocational function in the middle ages, through the influence of Newman and German practice, to the research based institutions of today. He outlined the focus of the study the Royal Society was undertaking, which, fundamentally, was to examine whether UK Universities would, in 2015, be "fit for purpose". The study would need to fill in the gaps in our knowledge of where we were now, and look at likely changes in the student populations, its needs and wishes, the changing economy, and funding constraints. But we start from a good position; our international standing in research is high, demonstrating the value of the dual-funding system and the RAE. But there were concerns; the RAE itself caused distortions; broad scholarship was downplayed; and there were significant gaps between academic research, application of research to technical development and industry, and public understanding. But any changes must ensure a continued and wide spread volume of high quality research, and encourage enthusiasm and entrepreneurship. The core function of a University was to produce outstanding students and preserve the Robbins aim of "reflective inquiry". That meant retaining top researchers and teachers in academia by giving them reasonable wages and a degree of personal freedom to follow their bent.

PROFESSOR EASTWOOD pointed out how late the modern university had developed in England. It had not contributed to the industrial revolution; research did not become significant until 1900 and expansion of the sector until the 1960s. Since then there had been the very rapid change from an elite to a mass educational system, nationally funded but with autonomous institutions. He echoed Lord Rees view of its success, marked by a high quality of research and teaching, increased efficiency (25% reduction in unit costs), student satisfaction, widening participation, low non-completion rates, an influx of foreign students, and increasing knowledge transfer. The HE sector was worth £45bn to the economy, at a cost of £15bn. This success had been achieved by intelligent evolution to meet

the changing needs and wishes of the country, which had themselves been shaped by the intellectual output of the sector. This should continue, through ongoing blue skies research, transfer of knowledge and engagement with SMEs, and the beneficial social and culture value of a large university trained population

MR. BUTLER remarked on the different roles universities played in different countries, such as China (80 universities in the last 18 months), Russia and Azerbaijan (where they formed the focus of resistance to Stalinism) and Iraq. They reflect the state of countries, timing and opportunities. But in the UK he saw four roles for universities, first, to extend knowledge both in the humanities and sciences. This meant concentrating resources both on topics and places. He supported the Research Assessment Exercise, which rewarded the best, but gave incentives to others to climb the ladder, and supported interdisciplinary work. But funding must be adequate if good staff is to be kept in academia. There is an international market for high quality people. Second, research must be linked to business through technological and knowledge transfer. Business must play a part, not only articulating its needs, but not being too restrictive on IP. Universities must recognize they are part of national, regional and local economies. Thirdly, they must encourage and support social mobility and meritocracy. They should provide a ladder of opportunity. Students should pay for study which gives them a life long economic advantage - and resources should go to secondary education to prepare them adequately for university. Fourth, they should play an international role in advancing knowledge. The major problems of our time - terrorism, climate change - need international knowledge and action. He was optimistic about the UK HE sector. It was more confident and better resourced than in the past and less subject to political interference than elsewhere.

A major theme in the following debate was whether the existing diversity in institutions had been recognized. "University" was a catch-all term which encompassed a wide

range of institutions, ranging from, at one end of the scale, the research intensive, highly selective Oxbridge type, giving high quality teaching in good surroundings leading to high status degrees, to, at the other, local institutions, with research targeted on development work for local industries, undemanding entry requirements, unattractive surroundings and staff anxious to move elsewhere. But the majority lay in between these extremes - with one or more 5* departments, highly regarded teaching, strong entrepreneurial culture and strong links with the local community. The whole range of these institutions had a part to play in HE education; but they had different roles, and it was wrong to rate an institution that was trying to fulfill one role as inferior to one trying to do another. But all need to be adequately funded, and it was an error to neglect one type of institution which was not performing the function of another. The Liberal Arts Colleges in the US were cited as an example of highly regarded teaching colleges which did little research; their students went on to graduate courses elsewhere. We should consider this model. There was also already a wide variety of courses, - 1, 2 or 3 year, part time as well as full time. But they were not perhaps adequately publicized, and they were not helping sufficiently to upgrade the skills of the existing workforce. Continuing professional development was a matter for both HE and FE, who must attend closely to the needs of business.

A further theme was the possible mismatches between what students wanted to study, the preparation they had been given in school to work at university level, the needs of the economy, and the willingness of students to pay fees and incur debt. The decline in applications for hard science had been noted (although there may have been some recent improvement), but overall statistics might be misleading. But there was a significant increase in "softer" subjects such as psychology and sports sciences. The issue was not - as some claimed - that these were not suitable University subjects - if there was student demand and they were properly taught, there was no reason for them not to be - but whether students would get jobs, either within their specialism or elsewhere, on graduation. One might argue about how many physiologists or sports scientists the nation needed, but if employers found that graduates trained in those disciplines were people they wanted to employ, the national need was met. These subjects, particularly when taken with other courses, covered a wide range of disciplines and offered scope for careers in various social and other services. But, most importantly, they were the choice of students, and to make it more difficult for students to do what they wanted would both blunt commitment and hinder widening participation. It was accepted that business must give training to graduates it employed, but there was concern that universities were not giving their students an adequate basis, in terms of achieving objectives, working with others, and self motivation, on which business could work. There were divergent views on whether students would be willing to pay increasing fees and incur debt. There was a long way to go before a market in HE was established which allowed students to measure courses and degrees and institutions which would be likely to give them financial benefit. Eventually it would have the beneficial effect of requiring universities to give high quality and focused teaching, and increasing the pressure on schools to give good preparation. Whether such a market would significantly affect wider participation, depended on whether you thought those coming from families with an aversion to debt, could change their views. Views had changed in the past; there had been a willingness to take up mortgages, and there was now a willingness to incur domestic debt. But the market would be

painful - not only would there have to be drastic changes in courses and lengths of study, but many institutions would have to merge or be taken over.

Speakers warned that, even with the increased resources going into HE, there were dangers in relying on the high numbers of overseas students paying large sums coming into HE, and paying large sums. This would continue only if the sector continued to lead in world class research, and ensured that students benefited from it. There was a danger of complacency, and one speaker termed the current satisfactory state of HE as fragile. It depended on enormous commitment of individuals, who must feel themselves well regarded and adequately remunerated. To attempt to tie rewards too closely to outputs, to allow the market to determine too rigidly the nature and content of courses, and no to give adequate space for independent work, would drive outstanding people away from UK universities, either to the City, or abroad. There was also some doubt about the ability of the UK economy to absorb the knowledge that universities were producing; much more effort was needed to have well trained people in business who could commission and use the research universities provided. Scepticism was poured on the idea of the European Institute of Technology. Autonomous and competing institutions would do better.

Several speakers refined, or elaborated, Lord Rees's definition of the core function of a university. Producing outstanding students must include training all students to use their minds to the best of their ability. Robbin's "reflective inquiry" extended not only to researchers, and post graduates, but to all who went to a University. A too close attention to market demand and career prospects must not inhibit the pursuit of this aim. It was only by achieving it that society, as a whole, would benefit from the social and cultural benefits that wide spread university education could produce.

Sir Geoffrey Chipperfield KCB

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