

University challenge for Britain

Sustaining a strong and competitive ability in research, as in sport, requires sustained commitment to investment in infrastructure. The British government risks compromising the prospects for long-term scientific achievement.

BRITAIN'S dismal performance in the Olympic Games — its performance in athletics, for example, was the worst since the 1952 games in Helsinki — has come as a brutal reminder of the harshness of international competition in the modern world. Several lessons can be drawn. One is that era of the gifted amateur, celebrated nostalgically in the film 'Chariots of Fire', has truly ended. A second is that modern athletes can no longer hope to succeed without the backing of a solid infrastructure that allows them to develop their talents to the full. Finally, most of the countries that have returned from Atlanta with the largest collection of medals are the ones that have accepted the need for substantial and sustained public investment in such infrastructure, and the limits to private finance in achieving this goal.

Each of these lessons could be applied instructively to the plight of British universities, and in particular to that of research within these institutions. There was a time when Britain rode high in the league of Nobel prizewinners, on the basis partly of the undoubted strengths of an élitist educational system. But those days are past. In the future, economic success — and the scientific success on which this will increasingly depend — will require substantial investment not only in individuals but also in the physical resources which high-quality teaching and research require. For this, adequate public funding, seen as a capital investment rather than a recurrent expense, is essential.

At present, the British government appears reluctant to accept this reality. To some extent, its reaction is understandable; faced with economic and political pressures to keep a tight cap on public spending, and aware that there are many fewer votes to be lost by squeezing universities than by raising taxes, it has inevitably been tempted to pursue its fiscal objectives partly by reducing its financial commitment to higher education. This has led to some dramatic moves. In last November's budget for the fiscal year 1996–97, for example, which began in April, the government announced a 31 per cent cut in capital funding for higher education — a sum of about £300 million — compared to the previous year. In doing so, it made clear that, where possible, investment capital should be raised through private-sector schemes in line with the government-backed Private Finance Initiative (PFI).

But, as the government appears to be recognizing belatedly in its attitude to the funding of sport, this approach is misguided. There are undoubtedly some forms of investment by universities and other higher education institutions — for example, in student accommodation or in teaching blocks — where the possibility of using these to generate additional income makes private financing a viable option. But much of this was happening anyway. And as even the report of a working group set up jointly by the Department for Education and Employment and the higher education sector (DfEE/HE), published last week, makes clear, there are other areas, particularly in the provision of specialized research and teaching equipment, where a PFI approach is "difficult to apply and time-consuming to pursue".

The needs for such investment are clear. They were, for example, dramatically highlighted in a report commissioned earlier this year by the Committee of Vice-Chancellors and Principals (CVCP), the body that represents higher education institutions in their negotiations with government, from the Policy Research in

Engineering, Science and Technology institute and the Centre for Applied Social Research at the University of Manchester. This found that four-fifths of university departments covered in a survey reported important research areas where a lack of funding for equipment was holding back progress. Nearly a fifth of research equipment was found to be of poor technical capability, and the report pointed out that some large companies are already seeking collaborators in academic institutions abroad because of the decay in the UK academic infrastructure.

There are, of course, dangers in overstating the plight of British universities. Although the CVCP, for example, has been able to point to a long list of university construction projects delayed partly because of a lack of adequate public finance, building work at other institutions is continuing apace. Furthermore, university science faculties have, through force of necessity, become increasingly skilled at using their entrepreneurial talents to raise funds for equipment and new buildings in a way that the government enthusiastically endorses. Indeed, the Manchester report found that more than half of university science departments in Britain felt that their equipment is as good as, or better than, the international average.

But there are many worrying aspects to current trends. Much of the new money that has gone into major construction projects in the biomedical sciences over the past decade, for example, has come from the Wellcome Trust, the richest research foundation in the world following the recent sale of its shares in the Wellcome pharmaceutical company (merged last year with Glaxo). Yet, as the trust itself properly insists, it is keen that this money should be used to complement public funding, not to replace it. This strategy is all the more important at a time when public investment in science is increasingly geared towards strategic economic goals, with the danger of broader considerations being forgotten.

Furthermore, there are areas in which relying on the type of PFI schemes suggested by the government can have its own drawbacks. Take information technology (IT), for example. This is one area that the DfEE/HE working party endorsed as having significant potential for growth, pointing out that in some universities, spending on IT can consume 70 per cent or more of equipment grants. Government officials emphasize the potential value of entering long-term commitments with major suppliers of such equipment, based on borrowed capital. But many universities are wary of this approach, pointing to the dangers of locking into a single supplier, as many schools have found, in a field where the leading-edge technology is changing rapidly.

As in sport, private sponsorship has an important role to play; but it is not the answer to sustained, long-term achievement. The government needs to recognize this fact, and to draw up a new strategy for supporting the research base in universities based on the concept of public, not private, investment. This will undoubtedly require some creative thinking, much of it hopefully focused within the working party now studying the future shape of UK higher education, chaired by Sir Ron Dearing. It will also, as in sport, pose some difficult dilemmas, such as the need to focus resources selectively on high performers without falling prey to élitism. But without a fundamental change in thinking, British science, like British sport, risks sinking gently into oblivion. □