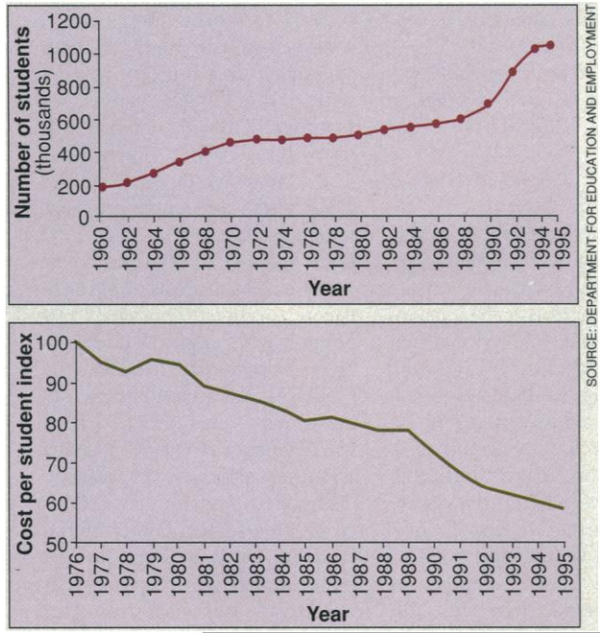
U.K. Universities: The End of Equality

A major report on British higher education has urged the end of free tuition, more concentration of research funds in elite universities, and a shift in "dual track" science funding

The United Kingdom's universities have just endured a decade of rapid change: The number of universities has doubled while funding has shrunk, the government has begun to concentrate research infrastructure funding in the top-rated institutions, and the grant-awarding research councils have gone through a fundamental reorganization. But the publication last week of the first major report on Britain's higher education system in more than 30 years suggests that the roller coaster of reform is only just getting started. The report, written by a panel chaired by educational troubleshooter Sir Ron Dearing, says participation in higher education should continue to expand, from its current level of 32% of all school leavers to 45%. It also calls for the slaughter of one British education's sacred cows—free higher education—by suggesting that students pay for part of their tuition. This proposal would go at least part of the way toward raising the estimated $3.2 billion needed to expand the system.

And it is not just university teaching that would be overhauled. University researchers, who carry out the vast majority of Britain's basic science, are also bracing for change. Although the report does not explicitly recommend that the government concentrate research funding in a select number of research-intensive universities, the Dearing panel suggests several changes that will inevitably lead in that direction. Its proposals would blur distinctions between project grants and infrastructure funding in the current dual-track funding system, and it suggests that a loan fund be established for equipment grants. "The U.K.'s researchers are working in an increasingly competitive global environment. These factors mean that the U.K. cannot expect to be preeminent in all research fields, and that higher education institutions can no longer expect to have a research capability in all areas," the report says. These recommendations, says environmental researcher Kerry Turner at the University of East Anglia in Norwich, would "stack the odds against single researchers, who may find they are in the wrong place to get funding."

Dearing's inquiry began last year in response to a cash crisis in higher education, a consequence of rapid expansion with limited funds. The expansion began in 1992, when the former Conservative government promoted "polytechnic" colleges to university status, effectively doubling the number of universities overnight. The university sector now has a turnover of $18 billion a year and, according to the Organization for Economic Cooperation and Development, is the most cost-effective in Europe. At current prices, average tuition costs per student have dropped from $10,300 in 1990 to $7600 in 1996–97. And this financial squeeze has not dented the appeal of a British university education: Overseas students now make up 12% of the total—trebling over the past decade.



Cost curve. Student numbers in U.K. higher education have climbed relentlessly for decades, while public funding per student has nose-dived.

Pressures from this relentless cost-cutting became critical in the fall of 1995, when the government announced plans for a 30% cut in capital projects in universities. University heads were outraged. Their association, the Committee of Vice Chancellors and Principals, estimated that the university system already had a deficit of $2 billion for essential maintenance and $800 million for priority research equipment.

Thinking the unthinkable

Faced with this crisis, the Dearing committee was told to "think the unthinkable" in terms of options for funding higher education without increasing demands on the taxpayer. The outcome, a massive report of 1700 pages, pulls no punches. "This review does not derive from any crisis of confidence in higher education. Its origins are rather the need for stock taking after a period of rapid expansion," says Dearing. "We see a tougher world for higher education. There are no soft options. What we say on standards, on more effective use of resources, on the need for greater professionalism in learning and teaching, and on interacting effectively with industry and commerce, are all tough requirements," he says.

The report acknowledges the strengths of the United Kingdom's university-based research. "It has sustained an excellent international reputation in research and has increased output markedly, with effectively no extra cash. It earns about $1.6 billion a year in foreign exchange, a mark of its international reputation," Dearing says. But British researchers cannot continue to compete internationally if funding remains stagnant, the report says: "Expenditure on research in the U.K. compares unfavourably with competitor countries. The lack of increased investment by Government in research is surprising over a decade when the opportunity for discovery and technological progress have continued to expand rapidly and global competition has increased."

The panel maintains that "the basis for funding research should be to fund excellence wherever it is located—in a department, a team, or even the lone outstanding scholar." However, Britain began departing from this ideal a decade ago. "From the mid-1980s it became apparent that the research funding aspirations of all higher education institutions could not be satisfied—this became even more true when the number of universities doubled in 1992. ... We see no alternative to continuing to target funds towards the best research, which means that some parts of higher education will receive only limited amounts of research funding, or none at all," the report says.

Traditionally, university research has been funded in a "dual support" system. Infrastructure funds are distributed to the universities by

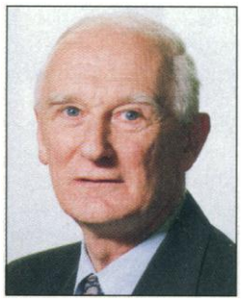
Dearing Puts a Price on Education

The Dearing report is full of praise for the changes that have taken place in British universities over the past few years. "Higher education achieved the Government target of doubling participation by the year 2000, 4 years early. It has absorbed a reduction in the cost of teaching an average student of 40% over the last 20 years. This is a dramatic increase in cost-effectiveness," the report says. But it wants to transform Britain's education landscape again. "We see the future of the United Kingdom, and the competitiveness of the U.K. economy, as necessitating the creation of a learning society—committed to learning throughout working life—of which higher education is a major part," says the report. Among its proposals:

- Increase the participation in higher education to 45% of all school leavers. Says the government's Education Secretary David Blunkett: "Our competitors in North America and the Far East have more young people in higher education. In the U.S., participation is about 40%; in Canada 44%. ... We intend to build on the committee's preferred option."
- Require students to pay 25% of the average cost of tuition, roughly $1600 per year. The student lobby group Campaign for Free Education (CFE) immediately denounced this idea: It would "continue the drive toward a business-driven, pay-as-you-learn education system; that is, training not education," says a CFE spokesperson.
- Require training in managing learning and teaching for all new full-time staff. To complete their probation, they must qualify for associate membership of a new Institute for Learning and Teaching in Higher Education. Performance in teaching must be a requirement for promotion.

The proposals have generally been well received by university administrators, if not by students. "We are pleased with the Secretary of State's bold decision to accept that full-time undergraduate students must pay a contribution to the cost of their teaching. This is a necessary step to maintain the quality of their teaching and learning experience, and provide a basis for further expansion." says Diana Warwick, chief executive of the Committee of Vice Chancellors and Principals. But she warns: "We have a big question whether these proposals will meet the funding gap that the government itself acknowledges." The tuition fees would raise about $1.6 billion, approximately half the extra income required in 20 years' time. –N.W.

the funding councils for England, Wales, Scotland, and Northern Ireland, while the subject-based research councils provide grants for specific research projects. The trend toward concentrating funds formally began in 1986 when the funding councils adopted a 4-yearly research assessment exercise that sought to measure the research quality of university departments and fund them accordingly (*Science*, 3 January, p. 18). This process has already led to the funding councils withdrawing funds from the weakest departments, and the Dearing committee recommends that further concentration should occur in future rounds of the research-assessment exercise. "Dearing's recommendations will reinforce the trend that a smaller and smaller group of universities will be carrying out research," says Turner. Bob Pryce, a deputy vice chancellor at one of the new universities, Coventry, says research has to be a part of every university: "Dearing pays only lip service to this, and progression of research in the new universities may be extremely difficult."



"No soft options." Sir Ron Dearing.

But in the long term, Dearing has more radical proposals for the dual-support system. "The dual-funding system is creaking. We think it is a logical position that research councils fund all costs," says the report. Accordingly, it calls on the government to allocate an extra $180 million to the research councils to begin funding more of the costs associated with research projects. "We propose that the present rate met by research councils of 45% of staff costs should be increased to 60%, or such higher rate up to 100% as the institutions can justify."

The report also suggests that funds could be transferred from the funding councils to the research councils to pay overhead costs. Such a move would be opposed strongly by university heads. "Loss of infrastructural funds will reduce our ability to support new researchers and help those who are between research council grants," says Sir David Harrison, a deputy vice chancellor at Cambridge University. Mark Ferguson, head of biology at the University of Manchester, agrees: "Transfer of funds would be crazy. Many organizations fund research in universities other than the research councils, such as the medical charities, and where would we get the infrastructural funds to support that work?"

As for research equipment, the report notes that years of static government funding have taken their toll. "Multinational companies are dissatisfied with the state of research facilities and equipment in higher education institutions," the report says. "Some are relocating their collaborative projects with universities outside the U.K. as a direct result of decay in the research infrastructure." Dearing's response is to suggest that the government provide as much as $800 million for a loan fund for equipment purchases. "The fund would support departments or institutions with a track record of conducting top-quality research," it says. Repayments of the loans could be made from the additional $180 million for infrastructural support, the report suggests.

This proposal has not been favorably received. John Mulvey, spokesperson for the lobby group Save British Science, describes the idea as a "cumbersome, slow, uncertain, and inefficient way to invest in scientific facilities, and we believe the government should stump up the funds." And the first indications are that industry is not keen on the plan, either. A statement by the Association of the British Pharmaceutical industry says: "We consider it most unlikely that we would want to contribute to this scheme. We do consider it to be the government's role, not industry's, to maintain the infrastructure of academia."

The report also flags a perceived weakness in top-level scientific advice for government. "We recommend to the government that it should establish, as soon as possible, a high-level independent body to advise the Government on the direction of national policies for the public funding of research in higher education, on the distribution and level of such funding, and on the performance of the public bodies responsible for distributing it." But the report, to many researchers' dismay, recommends that its advice be given in secret. "We believe advice can be more influential if given privately. Advisors can resign en masse for effective publicity if their advice is being neglected," says Dearing.

The government has already accepted some of the recommendations, including the proposal to end free tuition. It plans to ponder the report—and the responses to it—over the summer, and introduce legislation in the fall. Higher education's next roller coaster ride will then begin.

–Nigel Williams