



higher education
policy institute



BBC NEWS

Call for broader degree courses

University degree courses should be more broadly-based, a leading engineer and former vice-chancellor has said.

Lord Broers said those intending to specialise in law, medicine or other professions should then do so in two years of postgraduate study.

Delivering the 2005 Higher Education Policy Institute lecture, he called for IQ tests for university applicants.

And he said universities should be free to "test the market" in terms of fees, with bursaries for the less well off.

'Old model'

Lord (Alec) Broers was vice-chancellor of Cambridge University until 2003 and is chairman of the House of Lords committee on science and technology and president of the Royal Academy of Engineering.

He told his audience at the Royal Institution in London that universities in Britain largely retained "the old model" of distinct faculties, homogenous courses and length of residence.

"Many new subjects have been introduced but the way they are arranged into silos and taught has remained largely unchanged for at least two centuries."

He questioned whether this was still appropriate.

There were two extreme views of what universities were for, he said.

- the idealistic view of the self-motivated, self-regulated community of disinterested scholars, teaching and researching without external direction or control
- the Gradgrindian, utilitarian view of justification by measurable results, or "output" in terms of trained and compliant employees

His inclination was towards the former.

"I believe that what we need from our universities first and foremost is the provision for young people of an adequately broad knowledge base, together with modern analytical and communication skills", he said.



Lord Broers said he doubted his ideas were politically acceptable

An undergraduate degree should cover the fundamentals of a coherent range of subjects.

"Too often, especially in science and engineering, students are fed indigestible quantities of pure mathematical background without its relevance being adequately explained.

"This merely leaves them in a state of confusion and disillusionment from which many never recover."

Schooling 'too narrow'

He said university teaching was underfunded and the £3,000 fees in England from next year would not fill the gap.

"Universities should be freed from the constraints of government and allowed to test the market on the basis that those who can afford to pay should ... but that bursaries should be provided for those who cannot."

But schooling also needed to change.

"At present those going to our top universities are essentially required to decide whether they are going to pursue arts and humanities, or science and technologies, half way through their secondary schooling," he said.

"The government's rejection of the Tomlinson proposals, which would have gone a long way to rectify this situation, was in my mind disastrous."

The problem stemmed largely from A-levels - "largely a 'memory' test", not sufficient in selecting students, which favoured the privileged because they depended heavily on the standard of teaching.

He argued that an IQ test - which has been introduced by some institutions for some courses - was also needed.

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