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Higher Education in the learning society

Summary Report

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The National Committee of Inquiry into **Higher Education**

Summary Report

Chairman's foreword

- We were appointed with bipartisan support by the Secretaries of State for Education and Employment, Wales, Scotland, and Northern Ireland on 10 May 1996 to make recommendations on how the purposes, shape, structure, size and funding of higher education, including support for students, should develop to meet the needs of the United Kingdom over the next 20 years, recognising that higher education embraces teaching, learning, scholarship and research. We were asked to report by the summer of 1997. Our full terms of reference are set out on pages 5 and 6.
- We now submit our report. In doing so, we thank those who were members of the working groups we created to study and advise on particular issues, and in particular the members of our Scottish Committee, whose advice to us is published as part of our report. We are indebted to all those who gave evidence, both oral and written. We are grateful to those in higher education in this country and in the countries we visited for being so open with us as we sought to inform ourselves and develop policies for the future. Most of all we are indebted to our secretariat and in particular to our secretary, Shirley Trundle, who served us with distinction and far beyond the call of duty. We were indeed fortunate in having such a team.
- I am personally much indebted to all my colleagues on the Committee, of whom I asked far more than they can have envisaged when they agreed to join it. This report is very much the work of all of us.

An introductory comment

- We were appointed to advise on the long term development of higher education. But we express here our concern that the long term wellbeing of higher education should not be damaged by the needs of the short term.
- We are particularly concerned about planned further reductions in the unit of funding for higher education. If these are carried forward, it will have been halved in 25 years. We believe that this would damage both the quality and effectiveness of higher education. We are also concerned about some other immediate needs, especially in relation to research.
- We recognise the need for new sources of finance for higher education to respond to these problems and to provide for growth. We therefore recommend that students enter into an obligation to make contributions to the cost of their higher education once they are in work. Inescapably these contributions lie in the future. But there are pressing needs which we identify in the Report in the years 1998/99 and 1999/2000. We urge the Government to respond to these in its decisions on funding, by giving credit for the value, embedded in the commitments given by students to provide for their education. The present public expenditure and accounting practice does not provide for this: it therefore fails to recognise value that is properly recognised in normal commercial accounts, and leads to costly arrangements for securing that value by sale of the loan book, which can be ill afforded.

Much of our report is concerned with material things and with the central role of higher education in the economy. It would be surprising were it not so. But throughout we have kept in mind the values that characterise higher education and which are fundamental to any understanding of it. They were well expressed by John Masefield in an address at the University of Sheffield in 1946. Speaking of a university, he said, as we would now say of higher education as a whole:

'It is a place where those who hate ignorance may strive to know, where those who perceive truth may strive to make others see; where seekers and learners alike, handed together in the search for knowledge, will honour thought in all its finer ways, will welcome thinkers in distress or in exile, will uphold ever the dignity of thought and learning and will exact standards in these things.'

8 It must continue to be so.

Ron Dearing

The National Committee of Inquiry into Higher Education

Terms of reference

To make recommendations on how the purposes, shape, structure, size and funding of higher education, including support for students, should develop to meet the needs of the United Kingdom over the next 20 years, recognising that higher education embraces teaching, learning, scholarship and research.

The Committee should report by the summer of 1997.

The Committee should take account of the context in Annex A.

The Committee should have regard, within the constraints of the Government's other spending priorities and affordability, to the following principles:

- there should be maximum participation in initial higher education by young and mature students and in lifetime learning by adults, having regard to the needs of individuals, the nation and the future labour market;
- students should be able to choose between a diverse range of courses, institutions, modes and locations of study;
- standards of degrees and other higher education qualifications should be at least maintained, and assured;
- the effectiveness of teaching and learning should be enhanced;
- learning should be increasingly responsive to employment needs and include the development of general skills, widely valued in employment;
- higher education's contribution to basic, strategic and applied research should be maintained and enhanced, particularly in subjects where UK research has attained international standards of excellence or in Technology Foresight priority areas;
- arrangements for student support should be fair and transparent, and support the principles above;
- higher education should be able to recruit, retain and motivate staff of the appropriate calibre;
- value for money and cost-effectiveness should be obtained in the use of resources.

Annex A to the terms of reference

The Committee should take account of the following context:

- demand for higher education from suitably qualified applicants of all ages is growing as more people achieve qualifications at level 3 and more of those who already have higher level qualifications look to upgrade or update them;
- there is a growing diversity of students in higher education with a growing number of mature entrants, part-timers, and women students;
- higher education continues to have a key role in developing the powers of the mind, and in advancing understanding and learning through scholarship and research;

- the UK must now compete in increasingly competitive international markets where the proliferation of knowledge, technological advances and the information revolution mean that labour market demand for those with higher level education and training is growing, particularly in business, and that there is a greater premium on the products of the country's research base;
- many of our international competitors are aiming to improve the contribution their higher education systems make to their economic performance;
- higher education has a key role in delivering national policies and meeting industry's needs for science, engineering and technology in research and postgraduate training;
- a flourishing higher education system is important for all sectors of the economy and essential to the NHS and the education service, supplying qualified manpower, research and innovation, and continuing professional development;
- through scholarship and research, higher education provides a national resource of knowledge and expertise for the benefit of out international competitiveness and quality of life, and provides a basis for responding to social and economic change through innovation and lifelong learning;
- higher education continues to have a role in the nation's social, moral and spiritual life; in transmitting citizenship and culture in all its variety; and in enabling personal development for the benefit of individuals and society as a whole;
- higher education is a major contributor to local, regional and national economic growth and regeneration;
- there are distinctive features of higher education in different parts of the UK;
- links between higher education and other parts of the education and training system, particularly further education, are increasing in importance;
- links between higher education in the UK and elsewhere in the world are growing, as the international mobility of students and staff increases;
- in higher education is an important educational export in its own right;
- new technology is opening up the possibility of new forms of teaching and learning, and higher education is increasingly delivered in the work-place and in the home through distance-learning;
- the Government has legislated to enable private financial institutions to offer loans to students on similar terms to those offered by the Student Loans Company;
- there have already been reviews of a number of areas likely to be of interest to the Committee, for example of the national framework of qualifications and of credit accumulation and transfer, of postgraduate education, and of the dual support arrangements for research funding.

Members of the National Committee

Professor John Arbuthnott Principal and Vice-Chancellor of the

University of Strathelyde

Baroness Dean of Thornton-le-Fylde (formerly Brenda Dean)

Sir Ron Dearing (Chairman)

Ms Judith Evans Departmental Director of Personnel

Policy, Sainsbury's

Sir Ron Garrick Managing Director and Chief Executive

of Weir Group

Sir Geoffrey Holland Vice-Chancellor of the University of Exeter

Professor Diana Laurillard Pro Vice-Chancellor (Technology

Development) of the Open University

Mrs Pamela Morris Headteacher, The Blue School, Wells

Sir Ronald Oxburgh Rector of Imperial College of Science,

Technology and Medicine

Dr David Potter Chairman of Psion ple

Sir George Quigley Chairman of Ulster Bank

Sir William Stubbs Rector of the London Institute

Sir Richard Sykes Chairman and Chief Executive of

Glaxo Wellcome ple

Professor David Watson Director of the University of Brighton

Professor Sir David Weatherall Regius Professor of Medicine at the

University of Oxford

Professor Adrian Webb · Vice-Chancellor of the University of

Glamorgan

Mr Simon Wright Academic Affairs Officer, Students Union,

the University of Wales College of Cardiff

Secretary to the National Committee

Mrs Shirley Trundle Department for Education and

Employment

Introduction

1. This summary of our main report includes some of our key recommendations. You are strongly recommended to read as well the full list of our recommendations at the back of the summary.

A vision for 20 years: the learning society

- 2. Our title, 'Higher Education in the learning society', reflects the vision that informs this report. Over the next 20 years, the United Kingdom must create a society committed to learning throughout life. That commitment will be required from individuals, the state, employers and providers of education and training. Education is life enriching and desirable in its own right. It is fundamental to the achievement of an improved quality of life in the UK.
- 3. It should, therefore, be a national policy objective to be world class both in learning at all levels and in a range of research of different kinds. In higher education, this aspiration should be realised through a new compact involving institutions and their staff, students, government, employers and society in general. We see the historic boundaries between vocational and academic education breaking down, with increasingly active partnerships between higher education institutions and the worlds of industry, commerce and public service. In such a compact, each party should recognise its obligation to the others.
- 4. Over the next 20 years, we see higher education gaining in strength through the pursuit of quality and a commitment to high standards. Higher education will make a distinctive contribution to the development of a learning society through teaching, scholarship and research. National need and demand for higher education will drive a resumed expansion of student numbers young and mature, full-time and part-time. But over the next two decades, higher education will face challenges as well as opportunities. The effectiveness of its response will determine its future.
- 5. That future will require higher education in the UK to:
 - encourage and enable all students whether they demonstrate the highest intellectual potential or whether they have struggled to reach the threshold of higher education – to achieve beyond their expectations;
 - safeguard the rigour of its awards, ensuring that UK qualifications meet the needs of UK students and have standing throughout the world;
 - he at the leading edge of world practice in effective learning and teaching;
 - undertake research that matches the best in the world, and make its benefits available to the nation;
 - ensure that its support for regional and local communities is at least comparable to that provided by higher education in competitor nations;
 - sustain a culture which demands disciplined thinking, encourages curiosity, challenges existing ideas and generates new ones;
 - be part of the conscience of a democratic society, founded on respect for the rights of the individual and the responsibilities of the individual to society as a whole;

- be explicit and clear in how it goes about its business, be accountable to students and to society, and seek continuously to improve its own performance.
- 6. To achieve this, higher education will depend on:
 - professional, committed members of staff who are appropriately trained, respected and rewarded;
 - a diverse range of autonomous, well-managed institutions with a commitment to excellence in the achievement of their distinctive missions.
- 7. The higher education sector will comprise a community of free-standing institutions dedicated to the creation of a learning society and the pursuit of excellence in their diverse missions. It will include institutions of world renown and it must be a conscious objective of national policy that the UK should continue to have such institutions. Other institutions will see their role as supporting regional or local needs. Some will see themselves as essentially research oriented; others will be predominantly engaged in teaching. But all will be committed to scholarship and to excellence in the management of learning and teaching.
- 8. Higher education is fundamental to the social, economic and cultural health of the nation. It will contribute not only through the intellectual development of students and by equipping them for work, but also by adding to the world's store of knowledge and understanding, fostering culture for its own sake, and promoting the values that characterise higher education: respect for evidence; respect for individuals and their views; and the search for truth. Equally, part of its task will be to accept a duty of care for the wellbeing of our democratic civilisation, based on respect for the individual and respect by the individual for the conventions and laws which provide the basis of a civilised society.
- 9. There is growing interdependence between students, institutions, the economy, employers and the state. We believe that this bond needs to be more clearly recognised by each party, as a compact which makes clear what each contributes and what each gains. Our view of the compact is summarised in Table 1.

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H. Charles and Cha	- Contribution-	Benefits
Society and taxpayers, as represented by the Government	 A fair proportion of public spending and national income devoted to higher education. Greater stability in the public funding and framework for higher education. 	 A nignty skilled, adaptable workforce. Research findings to underbin a knowledge-based economy. Informed, flexible, effective citizens. A greater share of nigher education costs met by individual beneficiaries.
Students and graduates	A greater financial contribution than now to the costs of tuition and living costs especially for those from richer backgrounds). Time and effort applied to learning.	 Wore chances to participate in a larger system. Better information and guidance to inform choices. A nigh quality learning experience. A clear statement of learning outcomes. Rigorously assured awards which have standing across the UK and overseas. Fairer income contingent arrangements for making a financial contribution when in work. Better support for part-time study. Larger Access Funds.
Institutions	 Collective commitment to rigorous assurance of quality and standards. New approaches to learning and teaching. Continual search for more cost-effective approaches to the delivery of higher education. Commitment to developing and supporting staff 	 A new source of funding for teaching and the possibility of resumed expansion. New funding streams for research which recognise different purposes. Greater recognition from society of the value of higher education. Greater stability in funding.
Higher education staff	Commitment to excellence. Willingness to seek and adopt new ways of doing things.	 Greater recognition (financial and non-financial) of the value of all of their work, not just research. Proper recognition or their profession. Access to training and development opportunities. Fair pay.
Employers	 More investment in training of employees increased contribution to infrastructure of research. More work experience opportunities for students. Greater support for employees serving on institutions' governing podies. 	 More highly educated bepole in the workforce. Clearer understanding of what higher education is offering. More opportunities for collaborative working with higher education. Better accessionity to higher education resources for small and medium size enterprises. Outcomes of research.
The families of students	■ Possible contribution to costs.	Better higher education opportunities for their children. Better, more flexible, higher education opportunities for mature students.

The Committee's approach to its work

- 10. From our first meeting we recognised the scale of the task facing us. We persuaded a number of external members to join working groups to broaden the range of expertise available to us and to help us to advance our work quickly. We gathered as much evidence as possible and heard a wide range of views on the future of higher education. The reports published with our main report describe the outcomes of that work.
- 11. Throughout our work we received tremendous support and commitment to our task from those within and outside higher education. We cannot name all those who helped us, but we are greatly indebted to every one of them.

Higher education today

- 12. Higher education in the UK can take justifiable pride in what it has achieved over the last 30 years. It has expanded opportunities: 1.6 million people are students in higher education. Almost a third of young people now go into higher education from school and college, and there are even more mature students than younger ones. Higher education has adapted as the needs of students and other clients have changed. It has maintained its international standing in research, introduced new approaches to learning and teaching and to quality assurance, and has greatly improved its cost-effectiveness. It continues to produce first degree graduates quickly and with low dropout rates compared to other countries. All this has been achieved through the commitment of those who work in higher education.
- After a very rapid rise in the number of students between 1988 and 1993, the Government placed a cap on any further growth in publicly-funded full-time undergraduate student numbers, and subsequently withdrew almost all public funding for capital expenditure. Its funding plans for the next three years require further reductions in unit costs. These reductions take place against a background of a unit cost reduction of more than 40 per cent over the last 20 years. This has been achieved, in part, by under-investment in infrastructure. Substantial redundancies are now in prospect and many staff feel that their contribution to the achievements of higher education over the last decade is under-valued. The concern now is that short term pressures to reduce costs, in conditions of no growth, may damage the intrinsic quality of the learning experience which underpins the standing of UK awards.
- 14. In summary, over the last 20 years:
 - m the number of students has much more than doubled;
 - public funding for higher education has increased in real terms by 45 per cent;
 - the unit of funding per student has fallen by 40 per cent;
 - public spending on higher education, as a percentage of gross domestic product, has stayed the same.

Although there is widespread support for the expansion of higher education which has taken place, there are some concerns that current arrangements for quality assurance are not sufficient to ensure comparability of standards in an enlarged sector.

Alternative progression routes and qualification aims for a more diverse range of students are not yet fully established. There is also concern that competition between institutions may have hindered beneficial collaboration, and that funding arrangements which reward high quality research have diverted attention from the delivery of high quality teaching.

The wider context

- 16. External factors have affected the development of higher education since the Robbins report on higher education in the early 1960s. We judge that external changes will be even more influential over the next 20 years.
- 17. Powerful forces technological and political are driving the economics of the world towards greater integration. Competition is increasing from developing economics that have a strong commitment to education and training. The new economic order will place an increasing premium on knowledge which, in turn, makes national economics more dependent on higher education's development of people with high level skills, knowledge and understanding, and on its contribution to research. The UK will need to invest more in education and training to meet the international challenge.
- 18. However, no public service can automatically expect increasing public expenditure to support if. Higher education needs to demonstrate that it represents a good investment for individuals and society.
- 19. The world of work is in continual change: individuals will increasingly need to develop new capabilities and to manage their own development and learning throughout life.
- 20. New technology is changing the way information is stored and transmitted. This has implications both for the skills which higher education needs to develop in students, and for the way in which it is delivered. It opens up the possibility of higher education programmes being offered remotely by anyone anywhere in the world, in competition with existing UK institutions, but also offers a global market place in which UK higher education can compete.
- 21. As the world becomes ever more complex and fast-changing, the role of higher education as a guardian or transmitter of culture and citizenship needs to be protected. Higher education needs to help individuals and society to understand and adapt to the implications of change, while maintaining the values which make for a civilised society.

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22. Other countries have reached similar conclusions, and other higher education systems are responding. The UK cannot afford to be left behind.

Aims and purposes

- 23. In the light of these national needs, we believe that the aim of higher education should be to sustain a learning society. The four main purposes which make up this aim are:
 - to inspire and enable individuals to develop their capabilities to the highest potential levels throughout life, so that they grow intellectually, are well equipped for work, can contribute effectively to society and achieve personal fulfilment;
 - to increase knowledge and understanding for their own sake and to foster their application to the benefit of the economy and society;
 - to serve the needs of an adaptable, sustainable, knowledge-based economy at local, regional and national levels;
 - to play a major role in shaping a democratic, civilised, inclusive society.

Future demand for higher education

- 24. With increasing competition from developed and developing nations, and given the possibility of locating business operations anywhere in the world as a result of the development of communications and information technology, nations will need, through investment in people, to equip themselves to compete at the leading edge of economic activity. In the future, competitive advantage for advanced economies will lie in the quality, effectiveness and relevance of their provision for education and training, and the extent of their shared commitment to learning for life.
- Demand for higher education from people of all ages will continue to grow. Improvements in educational achievement at school and in further education will increase the number of people ready and willing to move on to higher education. Higher education has proved to be an excellent personal investment with a return averaging between 11 and 14 per cent and we expect it to continue to be a good investment, even after further expansion.
- While the growing demand for higher education is evident, meeting that demand involves high costs. The national need to expand the present provision must be critically examined. The UK is one of the leaders in the European Union in terms of the proportion of its people graduating. The target set by the last Government for a third of young people to participate in full-time higher education by the year 2000 has already been largely met.
- As the supply of graduates has expanded rapidly in recent years, the directly measurable national economic return from investment in higher education is expected to fall. Even so, it will still meet the Treasury's required rate of return of six per cent in real terms. We note that participation in higher education by young people in the USA and Japan is much higher than here, although a significant proportion is below first degree level. Some of the nations of the Far East have ambitious plans for expansion. Our visits to France, Germany, the Netherlands, Australia and New Zealand showed a general, long term expectation of expansion. The UK must plan to match the participation rates of other advanced nations: not to do so would weaken the basis of

national competitiveness. Our first conclusion is, therefore, that higher education should resume its growth.

We do not see value in any particular target figure for 20 years time. Informed student and employer demand should be the main determinant of the level of participation in the future. But bearing in mind that full-time participation by young people in Scotland and Northern Ireland has risen to around 45 per cent, a rise must be envisaged from the present 32 per cent to a national average of 45 per cent, or more. Within such a total, we believe that much of the expansion should be at sub-degree level, such as study for the Higher National Certificate (HNC) and the Higher National Diploma (HND). At the postgraduate level, especially in the context of lifelong learning, we see a need for continuing expansion in provision for taught higher degrees, at least in line with, and possibly above, the growth in first degree level qualifications.

Recommendation 1

We recommend to the Government that it should have a long term strategic aim of responding to increased demand for higher education, much of which we expect to be at sub-degree level; and that to this end, the cap on full-time undergraduate places should be lifted over the next two to three years and the cap on full-time sub-degree places should be lifted immediately.

Widening participation in higher education

29. Despite the welcome increase in overall participation, there remain groups in the population who are under-represented in higher education, notably those from socio-economic groups III to V, people with disabilities and specific ethnic minority groups. Many of the causes lie outside higher education itself, although we recognise that higher education can contribute to improving the situation. We believe that the best progress will be made if the funding of expansion is targeted on institutions which can demonstrate a commitment to widening participation in the recent past, and have a robust strategy for doing so in the future.

Recommendation 2

We recommend to the Government and the Funding Bodies that, when allocating funds for the expansion of higher education, they give priority to those institutions which can demonstrate a commitment to widening participation, and have in place a participation strategy, a mechanism for monitoring progress, and provision for review by the governing body of achievement.

30. We also make a number of recommendations designed to allocate funds to institutions and individuals to encourage wider participation.

Students and learning

31. If the future of the UK depends on the quality, effectiveness and relevance of its provision for education and training, it should be a national objective for its teaching and management of learning to be world class. Achievement of this objective does not

require large additional expenditure, and we see no reason why it should not be realised.

- 32. But its realisation does depend on a change in the values of higher education, where research is currently the main basis for professional reward and advancement. A survey of academic staff showed that only three per cent of them believed that the payment system rewards teaching, but 63 per cent felt that it should.
- 33. There must, therefore, be a radical change in attitudes to teaching.
- Recommendation 14 We recommend that the representative bodies, in consultation with the Funding Bodies, should immediately establish a professional Institute for Learning and Teaching in Higher Education.
 - 34. The purpose of this recommendation is to establish higher education teaching as a profession in its own right. The Institute's functions would include accrediting professional achievement in the management of learning and teaching, commissioning research and development work into learning and teaching practices, and stimulating innovation and co-ordinating the development of innovative learning materials. We envisage the Institute taking a leading role in assisting institutions to exploit the potential of communications and information technology for learning and teaching.
 - 35. Our vision puts students at the centre of the process of learning and teaching. They must have appropriate support and guidance in their academic work, on careers and in other areas if they are to make the most effective use of their investment in higher education. We make a number of detailed recommendations to enhance and support learning.

The nature of programmes

- 36. Education after the age of 16 in England, Wales and Northern Ireland is characterised by its close focus on a narrow range of subjects, particularly in the years immediately before entry to higher education. Over the last 30 years, this has been the subject of continuing debate, with proposals to widen the basis of study being frequently advocated. The most recent proposal, in a report by Sir Ron Dearing in 1996, was to offer pupils the option of an Advanced Diploma which combines studies in depth with complementary breadth. We commend this as a way forward.
- 37. But our concern in this report is with higher education. The evidence we have had from employers shows that, while the intellectual development that comes from the single honours degree is valued, they see advantage in graduates being able to study their specialism within a broad context. We favour students being able to choose between different types of higher education programme, including more offering a broader knowledge of a range of subjects.

- There is much evidence of support for the further development of a range of skills during higher education, including what we term the key skills of communication, both oral and written, mimeracy, the use of communications and information technology and learning how to learn. We see these as necessary outcomes of all higher education programmes.
- The strongest single message which we received from employers was the value of work experience. This is particularly emphasised by small and medium sized enterprises who need new employees to be able to operate effectively in the workplace from their first day. Further development of work experience opportunities requires action by both employers and institutions.
- 40. Young people entering higher education will increasingly come with a Progress File which records their achievements up to that point and which is intended for use throughout life. We favour the development of a national format for a transcript of achievement in higher education which students could add to their Progress Files.
- We have emphasised the need for students and employers to be well-informed about what higher education offers. They need clear statements about the intended outcomes of higher education programmes and the levels at which it is possible to leave with a recognised award.
- Recommendation 21

We recommend that institutions of higher education begin immediately to develop, for each programme they offer, a 'programme specification' which identifies potential stopping-off points and gives the intended outcomes of the programme in terms of:

- the knowledge and understanding that a student will be expected to have upon completion;
- Rey skills: communication, numeracy, the use of information technology and learning how to learn;
- cognitive skills, such as an understanding of methodologies or ability in critical analysis;
- subject specific skills, such as laboratory skills.

Qualifications and standards

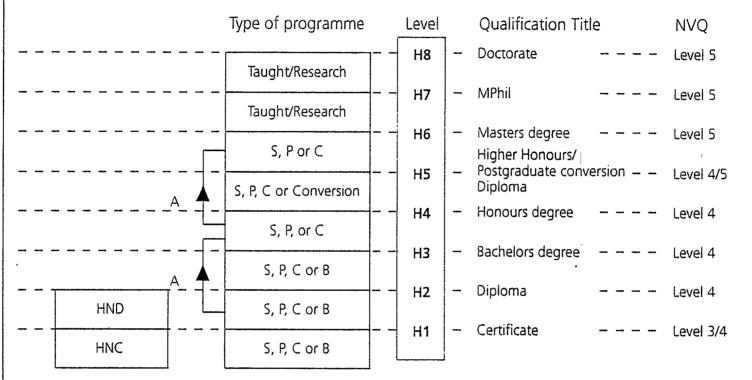
- Throughout the UK we see the need for a consistent range of awards that recognise achievement. We propose a framework of qualifications which provides for progression, is broad enough to cover the whole range of achievement, is consistent in its terminology, will be well understood within higher education and outside it, and incorporates provision for credit accumulation and, increasingly, scope for the transfer of credits earned in one institution to another.
- 43. It is fundamental to our approach that awards should be based on achievement, with less emphasis on the length of study required. The framework will cater for a range of aspirations and achievement and enable students to progress through higher levels as

well as to move between programmes. It encompasses vocational and academic qualifications. The framework must have recognised standards at each level, and achieve standing here and abroad. We envisage individuals building up a portfolio of achievements at a range of levels over a working lifetime. The framework of qualifications we propose is set out in Chart 1, with some examples of people moving through the framework in Chart 2.

- Within the framework, we propose adoption of the Scottish practice, in which the Higher National Certificate and the Higher National Diploma represent achievement at different levels (H1 and H2 in the framework). We see both qualifications as being able to include credit for work-based learning.
- 45. There is a need to clarify the current confusion over the designation of Masters degrees. We believe that the award of a Masters degree should be reserved for postgraduate research and for taught programmes whose requirements are appropriately more demanding than for a first degree in the subject. We propose the name 'Higher Honours' for advanced undergraduate programmes (such as the present MEng and MPharm).
- We are particularly concerned to ensure that, when a programme is franchised by one institution to another, the standard required, and the quality of provision offered to the student, is no lower than in the parent institution. As the practice of franchising has expanded rapidly, we are concerned that some further education institutions may have extended themselves too broadly and entered into too many relationships. There have also been a very small number of cases where control by UK higher education institutions of programmes franchised overseas has been inadequate. In the interests of extending opportunity and encouraging lifelong learning, franchising should continue, but only where quality assurance and the maintenance of standards are not prejudiced.

Recommendation 23 We recommend that:

- the Quality Assurance Agency should specify criteria for franchising arrangements;
- these criteria should rule out serial franchising, and include a normal presumption that the franchisee should have only one higher education partner;
- franchising partners should jointly review and, if necessary, amend existing arrangements to ensure that they meet the criteria, and should both certify to the Agency that arrangements conform with the criteria;
- there should be periodic checks by the Agency on the operation of franchise arrangements to verify compliance;
- after 2001, no franchising should take place either in the UK or abroad except where compliance with the criteria has been certified by the Quality Assurance Agency.



A level / GNVQ / Access

Note

- 1. Each level up to H4 would require at least 120 additional credit points.
- 2. Students pursuing broad programmes at levels H1, H2 and H3 and securing 360 credit points would be awarded a Bachelors degree.
- 3. To achieve an Honours degree would require at least 360 specialist credit points. The rate of progress would depend on the amount of previous specialisation.
- 4. It would be for each institution, consulting as appropriate with the professional bodies, to determine the pattern of credits (eg how much specialisation or how much breadth) required to qualify for an Honours degree.

Type of programme

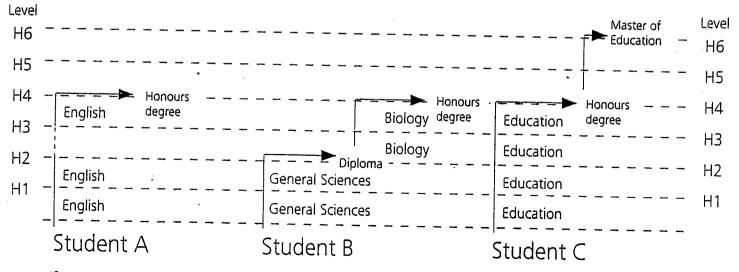
- A = Accelerated route if correct number of specialist credit points acquired
- S = Single subject
- C = Combined subjects
- B = Broad range of subjects
- P = Subject leading to professional status

Conversion = postgraduate conversion course

Student A had always been interested in English and wanted to study it in depth in higher education. Having acquired the relevant A levels, she entered higher education as a full-time student and followed the single subject route and left with an honours degree at level H4. She takes no breaks and completes her Honours degree in three years by the accelerated route.

Student B was interested in science, but less sure about the specific area she wanted to study. She entered higher education and studied a General Sciences programme up to level H2 on a full-time basis. She left full-time studies with a diploma having got a job as a technician in a laboratory. She continued her studies on a part-time basis sponsored by her employer focusing on biology and acquired an Honours degree at level H4.

Student C, following a Short Service Commission in the Army, wanted to retrain as a primary school teacher, specialising in education of young children. He enrolled on a BEd programme, which enabled him to study for a profession and acquire a range of subject knowledge. He left with an Honours degree at level H4. Later, in order to progress in his career and update his skills, he enrolled on a part-time MEd programme. This took him up to level H6.



- 47. Expansion in student numbers must not be at the cost of lowering the standards required for awards. Nor should it result in lowering the quality of provision or in increasing numbers of drop-outs or failures. Higher education in the UK has a long-established reputation for quality and standards. It is because of this reputation that the UK currently attracts so many students from overseas. We owe it to them, and to our own students, that the quality of their learning should be high and that the awards they gain carry respect. The three year honours degree is short by world standards, and its international acceptability depends on the quality of the learning experience and high standards for awards.
- 48. We welcome the establishment of the Quality Assurance Agency to oversee quality and standards in higher education, but believe that it should have a somewhat different agenda from that currently proposed.

Recommendation 24

We recommend that the representative bodies and Funding Bodies amend the remit of the Quality Assurance Agency to include:

- quality assurance and public information;
- standards verification;
- the maintenance of the qualifications framework;
- a requirement that the arrangements for these are encompassed in a code of practice which every institution should be required formally to adopt, by 2001/02, as a condition of public funding.
- 49. The external examiner system, through which institutions seek to ensure common standards for their awards, worked well in a small community of institutions. It is inadequate to meet the needs of the much expanded and more diverse system of higher education that we now have. We need to build from established practice to create a more effective mechanism through which, while awards remain the responsibility of the individual institution, there is acceptance that the general standard of awards is a shared responsibility of the whole academic community.

Recommendation 25

We recommend to the Quality Assurance Agency that its early work should include:

- to work with institutions to establish small, expert teams to provide benchmark information on standards, in particular threshold standards, operating within the framework of qualifications, and completing the task by 2000;
- to work with universities and other degree-awarding institutions to create, within three years, a UK-wide pool of academic staff recognised by the Quality Assurance Agency from which institutions must select external examiners;
- to develop a fair and robust system for complaints relating to educational provision;
- to review the arrangements in place for granting degree-awarding powers.
- 50. To the extent that higher education adopts these recommendations, the need for the apparatus of quality assessment and audit by the Quality Assurance Agency will be correspondingly reduced.

51. We welcome participation by professional bodies in establishing the standards appropriate to their discipline. We particularly urge them to be actively engaged in accrediting programmes and in working with the academic community to specify required outcomes. We share the concerns of some professions about the required entry standards for programmes. However assessments at the end of the first or second year should form the basis on which decisions on progress to a degree should be based. We refer in our main report to particular concerns about entry standards for degree programmes in engineering.

Supporting scholarship and research

- 52. We have identified four distinct purposes for research in higher education. These are:
 - to add to the sum of human knowledge and understanding;
 - to inform and enhance teaching;
 - to generate useful knowledge and inventions in support of wealth creation and an improved quality of life;
 - to create an environment in which researchers can be encouraged, and given a high level of training.
- 53. It has been notable that over the last decade there has been no increase in real terms in Government funding for research. Research expenditure in the UK compares unfavourably with that in many competitor countries. Yet the evidence available to us shows the UK is among the world leaders in both the quality and the quantity of research outputs and is cost-effective in the use of resources. The importance of the research base to the national economy, and its cost-effectiveness, provides a strong case for increasing the present level of funding.
- We have devised a series of principles for research funding allocation to support the purposes. The mechanisms for distributing funding should be clear and transparent. Excellence should be supported, and where research is funded, it should be funded adequately.
- There is an urgent need to put right past under-investment in the research infrastructure. The resources must be found to enable the UK to maintain its place as one of the world's major research centres. Without it, our universities will no longer be able to attract funding from industry or international institutions on the scale they have in the past. Nor will they continue to be valued partners with overseas institutions in research.
- We also consider it necessary that funding policies to support research should promote, as far as possible, high quality teaching. We endorse the policy of targeting funding on high quality departments, but there is also a need for funding to support the research and scholarship which underpin teaching in those departments which do not aspire to be at the leading edge in research.

Funding should also support applied and regional research work. We think that it is in the national interest to bring industry and higher education into stronger partnership in both research and its exploitation, for their mutual benefit. This should be encouraged by the Government.

Recommendation 34 We recommend:

- to the Government that, with immediate effect, projects and programmes funded by the Research Councils meet their full indirect costs and the costs of premises and central computing, preferably through the provision of additional resources;
- to the Funding Bodies that the next Research Assessment Exercise is amended to encourage institutions to make strategic decisions about whether to enter departments for the Exercise or whether to seek a lower level of non-competitive funding to support research and scholarship which underpins teaching;
- to the Government that an Industrial Partnership Development Fund is established immediately to attract matching funds from industry, and to contribute to regional and economic development;
- to the Government that it promotes and enables, as soon as possible, the establishment of a revolving loan fund of £400 to £500 million, financed jointly by public and private research sponsors, to support infrastructure in a limited number of top quality research departments which can demonstrate a real need.
- 58. To obtain the best use of resources, human and physical, stronger arrangements are required to promote joint and collaborative activities by institutions and interdisciplinary work.
- 59. There is a need for better support for research in the arts and humanities and propose the establishment of an Arts and Humanities Research Council
- 60. For research students, there is need for a code of practice to guide institutions and inform students on what they can reasonably expect. We endorse the proposals made to that end in the 'Review of postgraduate education' chaired by Professor Martin Harris.

The local and regional role of higher education

- 61. Higher education is now a significant force in regional economics, as a source of income and employment, in contributing to cultural life, and in supporting regional and local economic development. This is brought out strongly in the report of our Scottish Committee: it is no less recognised in Wales and Northern Ireland. In England, regional consciousness varies, but we recognise the significance of the contribution of higher education to the localities and wider areas in which they are situated.
- 62. The contribution of individual institutions to regions and localities is diverse. It includes support through research and consultancy, attracting investment and

providing new sources of employment, meeting labour market needs, supporting lifelong learning, and contributing to the quality of life as centres of culture.

As part of the compact we envisage between higher education and society, each institution should be clear about its mission in relation to local communities and regions. We note that the Government is likely to create regional chambers which will develop an economic strategy for regions and establish regional development agencies.

Recommendation 36

We recommend to the Government that institutions of higher education should be represented on the regional bodies which it establishes, and that the Further Education Funding Council regional committees should include a member from higher education.

We make proposals that higher education institutions should be able to hid for regional sources of funds, to enable them to be responsive to the needs of local industry and commerce, and should seek ways of giving firms, especially small and medium sized enterprises, easy and co-ordinated access to information about higher education services in their areas. We also make recommendations designed to help foster entrepreneurship among students and staff in higher education.

Communications and Information technology

- Throughout our report we identify scope for the innovative use of new Communications and Information Technologies (C&IT) to improve the quality and flexibility of higher education and its management. We believe these give scope for a reduction in costs. In the short term, implementation requires investment in terms of time, thought and resources, and we make recommendations about how this might be achieved.
- The full exploitation of C&IT by higher education institutions will require senior management to take an imaginative leap in devising a strategy for their institutions which can bring about this change. The Funding Bodies and the Government can help to encourage such a development.

Recommendation 41

We recommend that all higher education institutions in the UK should have in place overarching communications and information strategies by 1999/2000.

- The UK already enjoys a good information technology infrastructure, and we make recommendations about how this might be completed and maintained. The main challenge for the future is to harness that infrastructure, together with high quality materials and good management, to meet the needs of students and others.
- 68. The use of new technologies for learning and teaching is still at a developmental stage but we expect that students will soon need their own portable computers as a means of access to information and for learning via a network. We are also aware that students will need access to high quality networked desktop computers that permit the use of the latest multi-media teaching materials and other applications.

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Recommendation 46

We recommend that by 2000/01 higher education institutions should ensure that all students have open access to a Networked Desktop Computer, and expect that by 2005/06 all students will be required to have access to their own portable computer.

Staff in higher education

The health of higher education depends entirely on its staff, whether academic, professional or administrative. There is concern among staff that they have received neither the recognition, opportunities for personal development, nor the rewards which their contribution over the last decade merits. Over the next 20 years, the roles of staff are likely to change, as they undertake different combinations of functions at different stages of their careers. To support and prepare staff for these new working patterns, more focused and appropriate training and staff development activities will be needed.

Recommendation 47

We recommend that, over the next year, all institutions should:

- review and update their staff development policies to ensure they address the changing roles of staff;
- publish their policies and make them readily available for all staff;
- consider whether to seek the Investors in People award.
- 70. To achieve world class higher education teaching, it should become the norm for all permanent staff with teaching responsibilities to be trained on accredited programmes.

Recommendation 48

We recommend to institutions that, over the medium term, it should become the normal requirement that all new full-time academic staff with teaching responsibilities are required to achieve at least associate membership of the Institute for Learning and Teaching in Higher Education, for the successful completion of probation.

- 71. In this era of continuing change the rewards offered must be sufficient to recruit, retain and motivate staff of the required quality. Recent evidence suggests that the majority, but by no means all, of staff in higher education are paid substantially below comparable private and public sector rates. On the other hand, there is evidence of an increase in the ratio of senior lecturer to lecturer posts, which may have offset a relative decline in academic salary levels. There is, however, growing concern about the present arrangements for determining pay and conditions of service. Central pay bargaining is under strain, as many institutions feel the need to take decisions in relation to their own circumstances rather than collectively. Others argue for maintaining national bargaining, a statutory pay review body or a standing review body.
- 72. Whatever view may be taken of the various options, the issue of remuneration should not be looked at in isolation. Significant changes will be needed as higher education responds to changing needs and opportunities. To the extent that higher levels of remuneration may be justified, there is the question of how institutions can meet the

cost. The employment framework of all higher education staff, not just academies, needs to be addressed. These are material issues and we think the time has come for a review of the whole framework within which pay, conditions of service, work practices and the use of human resources can be settled. Our main report suggests terms of reference for such a review.

Recommendation 50

We recommend to the higher education employers that they appoint, after consultation with staff representatives, an independent review committee to report by April 1998 on the framework for determining pay and conditions of service. The Chairman should be appointed on the nomination of the Government.

Management and governance of higher education institutions

- 73. The effectiveness of any organisation depends upon the effectiveness of its management and governance arrangements. We have identified three principles to underpin management and governance in higher education institutions. These are that:
 - institutional autonomy should be respected;
 - academic freedom within the law should be protected;
 - governance arrangements should be open and responsive.
- 74. Although institutions have made impressive improvements in efficiency in the face of a dramatic fall in public funding per student over the last 20 years, the challenge to find new and better ways of doing things will continue and intensify. Some institutions currently fall far short of the performance of the best. Our main report considers how institutions might make better use of their staff, their estates, their equipment and other resources.
- 75. Over the next 20 years, communications and information technology will provide increasing opportunities to improve institutional effectiveness and efficiency. Λ continuing challenge to management will be to realise the full potential of such systems.
- We are conscious of the enormous contribution that members of governing bodies 76. make to institutions. They serve higher education well. But we are also aware that there is great diversity in governance arrangements, and sometimes a lack of clarity. Although we do not seek uniformity, we believe that institutions may often be able to achieve greater clarity and effectiveness in the way they govern themselves. We make recommendations to this effect. In particular, we propose a code of practice on governance, and, as part of that, we think that, as a general rule in the interests of effectiveness, membership of a governing body should not exceed 25. To gain maximum benefit from the work of governing bodies, we see a need for them to review their own performance, along with that of their institution.

Recommendation 57

We recommend that each governing body should systematically review, at least on every five years, with appropriate external assistance and benchmarks:

- its own effectiveness and, where there is in excess of 25 members, show good reason why a larger body is needed for its effectiveness;
- the arrangements for discharging its obligations to the institution's external constituencies;
- all major aspects of the institution's performance, including the participation strategy.

The outcomes of the review should be published in an institution's annual report. The Funding Bodies should make such a review a condition of public funding.

The pattern of institutions which provide higher education

- 77. The names and distribution of institutions are important matters that go to the heart of the capacity of the system to deliver higher education. For the future pattern of institutions to have public confidence, it should be guided by a number of principles: the need for diversity; institutional autonomy; responsiveness to national need; allowance for the development of individual institutions; the need for access across the country; and the need for proper economy and quality of provision.
- 78. We support the existing diversity between institutions, believing it to be a considerable strength in responding to the diverse needs of students as participation in higher education widens: We recommend that funding arrangements should reflect and support such diversity. Notwithstanding this, diversity must not be an excuse for lower standards or poor quality provision for students. We believe there should be greater control on the use of institutional titles, so that students, employers and others are clear about the status of institutions. We make recommendation on this issue and on the use of the title 'university'.
- 79. We considered the special role of further education colleges in providing sub-degree higher education, and believe that growth and transfer of this provision to these colleges should be encouraged.

Recommendation 67

We recommend to the Government and the Funding Bodies that, in the medium term, priority in growth in sub-degree provision should be accorded to further education colleges; and that, wherever possible:

- more sub-degree provision should take place in further education colleges;
- higher education provision in further education colleges should be funded directly;
- there should be no growth in degree level qualifications offered by further education colleges.
- 80. We have considered the case for establishment of additional universities, and concluded that there should be a systematic decision-making process for deciding whether individual cases are reasonable.

81. Many of those giving evidence advanced the case for greater collaboration between institutions to improve effectiveness and efficiency throughout the sector. We found no obvious external factors that were discouraging institutions from collaborating, and found many examples of such practice. However, given the importance of collaboration, it will be important that there are no unnecessary barriers to it.

Recommendation 68

We recommend to the Funding Bodies and the Research Councils that they review their mainstream teaching and research funding arrangements to ensure they do not discourage collaboration between institutions; and that, where appropriate, they encourage collaboration. We recommend to the Funding Bodies that they be prepared to use their funds on a revolving basis, bringing forward and offsetting annual allocations in support of collaboration which has a strong educational and financial rationale.

The funding requirement

- 82. We have looked critically at both the short and long term funding requirements of the higher education sector.
- 83. The present public spending plans for higher education assume a reduction in real terms of expenditure per student of 6.5 per cent over the two years 1998-99 and 1999-2000. This is in addition to the more than 40 per cent reduction achieved since 1976. Furthermore, the Government decided, from 1995-96, to reduce substantially capital funding for equipment and the refurbishment of institutions' estates. We have considered how far this is sustainable without significant damage to the quality of the student experience and to the research base. We have concluded that institutions should be able to manage a one per cent a year real reduction in funding per student over the next two years; a 6.5 per cent reduction would damage quality.
- 84. Overall, we have identified a range of short term funding needs for the sector:
 - an alleviation of the proposed cut in funding per student;
 - infrastructure requirements;
 - changes to existing student support levels:
 - the resumed growth in student numbers we have recommended.
- 85. In total, we estimate that an additional £350 million in 1998-1999 and £565 million -- in 1999-2000 is required.
- 86. For the long term, we have identified six elements requiring additional expenditure if the higher education system is to develop effectively over the next 20 years. These are:
 - an expansion of student numbers to allow around 45 per cent of young people to participate full-time and corresponding increases in the numbers of mature students, postgraduates and those who study part-time;
 - providing part-time students with better support and thereby encouraging growth in lifelong learning;
 - adequate infrastructure;

- proper funding to support all the purposes of research and for an Arts and Humanities Research Council;
- improving maintenance support for students, including larger Access Funds;
- increasing higher education pay in line with earnings elsewhere in the economy.
- 87. We think it right that levels of student support should be kept under review to avoid exacerbating the financial problems which some students already face.

Recommendation 70

We recommend to the Government that it reviews annually the total level of support for student living costs taking into account the movement of both prices and earnings.

88. The additional quantified funding requirements measured in 1995-96 prices are summarised in Table 2.

Table 2: Summary of additional annual funding requirement in 20 years time compared to current expenditure

	£ million (recurrent) 1995-96 prices
1 Increased student numbers offset by savings	800
2 Equity for part-time undergraduate students	50
Refurbishing the estate and replacing and improving equipment (including C&IT equipment)	250
1 Research	185
5 Access Funds and improvements to support for disabled students	40
6. Real growth salaries	600
lotal	1,925

The net addition of close to £2 billion takes into account an offsetting saving of £1,300 million. This is a demanding requirement. The long and short term funding requirements have to be regarded as a minimum, because they do not allow for any significant increases in the volume of publicly funded research despite the need for the UK economy to be knowledge-based or for research to underpin higher level teaching. Nor do they include quantified sums for any real increase in pay resulting from the immediate pay review we recommend or the cost of increasing student support by more than the Retail Prices Index.

Who should pay for higher education?

90. There is widespread recognition of the need for new sources of funding for higher education. The costs of higher education should be shared among those who benefit from it. We have concluded that those with higher education qualifications are the main beneficiaries, through improved employment prospects and pay. As a consequence, we suggest that graduates in work should make a greater contribution to

the costs of higher education in future. Employer contributions to higher education and training should mainly take the form of a contribution to the cost of continuing education and training for their employees.

- 91. The state should also remain a major source of funding for higher education in the future because:
 - it has a direct interest in ensuring that participation in the UK matches that of its competitors;
 - it needs to ensure that tomorrow's workforce is equipped with the widest range of skills and attributes;
 - it must ensure that access to opportunities for individuals to benefit from higher education is socially just;
 - it needs to secure the economic and cultural benefits which higher education can offer the whole nation.
- 92. We have noted the Government's desire, over the long term, to increase the proportion of national wealth devoted to education and training and believe that higher education should share in this.
- Recommendation 71 We recommend to the Government that, over the long term, public spending on higher education should increase with the growth in Gross Domestic Product.

Funding learning and teaching

- Public funding for tuition currently flows to institutions via block grants from the Funding Bodies and tuition fees for full-time undergraduate students which are paid through those students' mandatory awards. Over the long term a greater proportion of public funding should follow informed student choice so that institutions have greater rewards for responding to that demand.
- Recommendation 72 We recommend to the Government that it shifts the balance of funding, in a planned way, away from block grant towards a system in which funding follows the student, assessing the impact of each successive shift on institutional behaviour and the control of public expenditure, with a target of distributing at least 60 per cent of total public funding to institutions according to student choice by 2003.
 - 94. Institutions told us that the suddenness with which funding changes were introduced were sometimes almost as difficult to manage as the required reductions in public funding. We believe that greater stability would enable institutions to plan more effectively.
- Recommendation 73 We recommend to the Government that the public funding for higher education institutions should be determined on a rolling three year basis.

Student support and graduate contributions

- 95. A student support system for the future should, as far as possible:
 - be equitable, and encourage broadly based participation;
 - require those with the means to do so to make a fair contribution to the costs of their higher education;
 - support lifelong learning, so that choices between part-time and full-time study and for discontinuous study are financially neutral;
 - he easy to understand, administratively efficient and cost-effective.
- 96. Although levelling up of support for those groups of students, particularly part-time students, who are currently less well-supported is desirable, it would be very expensive and might risk substituting public support for the support currently provided by employers and others well-placed to do so. Reducing support for those who are currently better supported could involve hardship for individuals, especially if changes were introduced rapidly without time for them to prepare. We have taken a pragmatic approach to devising arrangements which support students and enable graduates in work to make a contribution.
- 97. Part-time undergraduates currently have to make a contribution to their tuition costs and they are not generally eligible for public support for their living costs. Although many are supported by their employers, there are disincentives to study for the unemployed and for those on low incomes.

Recommendation 76

We recommend to the Government that:

- from 1998/99 it should enable institutions to waive tuition fees for part-time students in receipt of Johseeker's Allowance or certain family benefits;
- as part of its forthcoming review of the social security system, it should review the interaction between entitlement to benefits and part-time study, with a view to ensuring that there are no financial disincentives to part-time study by the unemployed or those on low incomes;
- it should extend eligibility for Access Fund payments to part-time students from 1998/99, and additional funding should be made available for this purpose.
- 98. Although the average graduate receives a good financial return from higher education, some will experience periods of unemployment, some will need to take career breaks, and others will have low paid jobs. If graduates are to be asked to make an increased contribution they need the reassurance that they will not be faced with unreasonable payment burdens. This can be achieved by introducing payment mechanisms which relate the annual level of payment to a graduate's income: income contingent payments.

Recommendation 78

We recommend to the Government that it introduces, by 1998/99, income contingent terms for the payment of any contribution towards living costs or tuition costs sought from graduates in work.

- 99. There are a number of ways of operating an income contingent contribution scheme, including:
 - a graduate tax under which graduates are liable to pay an income tax supplement;
 - a deferred contribution scheme;
 - a loan scheme under which individuals could choose to pay the required contribution upfront or take out a loan which would be repayable after graduation.
- 100. A graduate tax is attractive because it has the potential to secure large additional resources for higher education, but it provides no means by which individuals can pay their contribution upfront, and thus does not deliver additional funding in the short term. For the graduate, it is open-ended, resulting in those who are particularly successful being expected to contribute large sums. For institutions, it would not guarantee that the income from the tax would benefit them because, to do so, would cut across the general principle that tax revenue is not earmarked for particular services.
- 101. A deferred contribution scheme would involve a student making a commitment, on enrolment, subsequently to contribute a certain percentage of his or her income with the total potential contribution being limited to the cost of the higher education programme taken or some defined percentage of that. The terms of the payments would be set, however, so that the average graduate would, in practice, pay only around 25 per cent of the cost. Only those who secured the highest incomes would pay back the full cost of their higher education programmes. Like a graduate tax this has the potential to deliver substantial extra resources, but the graduate contribution is not open-ended. Like the graduate tax it would not release resources in the short term. This disadvantage might be overcome by offering the option of paying at the time of study or of making a contribution later. These options are worth further exploration for the medium term, but we do not think that they could be introduced quickly.
- 102. We examined a range of options for supporting graduates to make contributions by providing loans during study to be repaid on an income contingent basis by the graduate once in work.
- 103. The widespread view in evidence was that an additional contribution from graduates should be sought by converting the existing support for student living costs from 50:50 grants and loans to 100 per cent loans. We looked carefully at this option. But we also examined three others which involve graduates making a contribution to their tuition costs because we felt that such contributions offer a number of advantages over the more widely canvassed alternative. We return to these advantages in paragraph 108. The four options are summarised in Table 3.

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Table 3: Graduate contribution options

	Living costs support	Tultion contribution
Existing system	50% means tested grant 50% loan	None
Option A: Maintenance contribution	100% income contingent	None
Option B. Tuition contribution	50% means tested grant 50% income contingent loan	25% contribution with income contingent loan
Option C. Means tested tuition contribution	100% income contingent	25% means tested contribution with no loan
Option D. Tuition contribution with restoration of maintenance grants	100% means tested grant	25% contribution with income contingent loan

- 104. We reviewed each option against the impact it would have on: individuals and their families at the time of study; graduates; different social groups; and the funds generated for higher education.
- 105. Table 4 summarises the range of parental contribution required for a student who studies away from home outside London for three years. For simplicity, rounded figures of £10,000 for the maximum support for living costs over three years and £1,000 a year for a tuition contribution, where appropriate, are used. The table shows clearly that the distinctive feature of Option A is that it removes any obligation from higher income families to contribute to the costs of higher education for their children.

Table 4: Assumed parental/family contributions for three years under different options

<u></u>	Existing system	Maintenance contribution	Tuition contribution	tested tuition	Tultion contribution with
		A	В	contribution C	restoration of maintenance grant D
Higher income families (£)	5,000	n	5,000	3,000	10,000
Middle income families (£)	2,000	0	2,000	1,200	4,000
Lower income families (f)	0	O	0	n	n

Table 5 shows, on the same basis, the maximum graduate commitment which would be incurred by a student who studied for three years. We do not believe any of these commitments would be unmanageable for graduates so long as income contingent payment mechanisms were in place.

Table 5: Graduate commitment for three years study (C)

_	Existing system	Maintenance contribution	Tuition	Means tested tuition contribution	Tuition contribution With restoration of maintenance grants
	5,000	10,000	8,000	10,000	3,000

107. Table 6 shows how the various options redistribute public subsidies among families of different incomes.

Table 6: Effect of options on distribution of public subsidies for three years study compared to present polices

	Students from high income	Students from low income families
A: Maintenance contribution	Increased public subsidy through availability of additional E5,000 living cost loans at a subsidised rate.	Decreased public subsidy as living costs grants of F5,000 replaced by loans at a subsidised rate.
B Tuition contribution	Decreased public subsidy, through f 3,000 tuition contribution, backed by a subsidised loan.	Decreased public subsidy, through (3,000 tuition contribution, backed by a subsidised loan
C Means tested tuition contribution	Depends precisely on the balance between the increased public subsidy on living cost loans and the level of the new tuition contribution	Decreased public subsidy as living cost grants of £5,000 replaced by loans at a subsidised rate
D: Tuition contribution with restoration of maintenance grant	Decreased public subsidy through loss of £5,000 subsidised loans for maintenance and new tuition contribution of £3,000, although the latter is mitigated by access to a subsidised loan.	Depends on the precise halance between increased public subsidy in 100 per cent grant for living costs and loss of public subsidy in having to contribute £3,000 to tuition backed by a subsidised loan Likely to be an increase in public subsidy.

- 108. We would be particularly reluctant to see any reduction in public subsidies being concentrated on students from the poorest families and even more reluctant to see the funding released by this, and more, being used to increase the subsidies for others.
- 109. Table 7 shows what net contribution each of the options makes to public finances on both the present cash accounting basis for public finances and the planned resource accounting basis. Negative numbers represent an additional outflow of public funds.

Table 7: Financial effects of options compared to existing arrangements.

Description		,	•		
A. Cash accounting					
Emillion Net contribution to pu	ublic finance	s by acade	mic year in	1995 96 prid	105
	Year 1	Year 2	Year 3	Year 8	Year 18
A Maintenance contribution	(200)	(300)	(400)	(50)	800
B: Tultion contribution	50	100	150	500	1,100
C: Means tested tuition contribution	0	. 0	50	400	1,450
D: Tuition contribution with restoration of maintenance grant	200	300	450	650	600
B. Resource accounting					
Emillion Net contribution to pu	ıblic finance	s by acader	nic year in	1995-96 pric	es
Maintenance contribution	350	500	700	450	100
3 Tuition contribution	350	550	750	700	900
C: Means tested tuition contribution	550	850	1,100	950	750
D: Tuition contribution with restoration of maintenance grant	100	150	150	300	800

Notes: Figures in brackets are net additional costs to the Exchequer

Cash accounting counts all loans advanced as public expenditure in the year they are made and all repayments as negative public expenditure in the year they are received. Resource accounting counts as public expenditure only the implied subsidies in the loans (including interest subsidies, provision for default and other kinds of non-payment).

- 110. The main conclusion from this table is that none of the options provides the additional resources needed in the long term by higher education. Option A is particularly limited in this respect. We have concluded that any option which delivered the resources needed would produce unacceptable burdens on graduates and on families of modest means, or would lead to unacceptably high levels of graduate debt.
- 111. There are arguments for all four options but we have concluded that, on balance, Option B offers the best balance between seeking a continuing contribution from higher income families and from graduates in work. As the figures show, seeking an increased contribution from graduates towards living costs as in Option A:
 - takes away subsidies from the poorest families and redirects them to others;
 - increase public expenditure in the short term;
 - releases modest resources for higher education in the long term.

We strongly favour options which involve a contribution to tuition costs for three further reasons:

- m students are likely to be more demanding of institutions if they are contributing;
- it would help to level the playing field between full- and part-time study and would? put full-time higher education students on a more similar basis to adult further education students:
- if graduates are contributing to the costs of their tuition there will be a clearer expectation that the funding released should be spent on higher education.

- 112. We suggest that the contribution should be a flat rate one and not varied by subject of study so that access to expensive or prestigious programmes is by academic merit not financial means. The contribution should, by analogy with the contribution expected from adult further education students, be of the order of 25 per cent of average tuition costs each year. Government bursary or scholarship arrangements may be needed for subjects such as medicine and teacher education where courses are longer than three years but generally the contribution required should be proportional to the number of years of study. In order to protect against precipitate increases in the level of expected contribution, there should be a thorough review before any such change could be made by the Government.
- Recommendation 79 On a balance of considerations, we recommend to the Government that it introduces arrangements for graduates in work to make a flat rate contribution of around 25 per cent of the average cost of higher education tuition, through an income contingent mechanism, and that it ensures that the proportion of tuition costs to be met by the contribution cannot be increased without an independent review and an affirmative resolution of both Houses of Parliament. The contributions made by graduates in work in this way should be reserved for meeting the needs of higher education.
 - 113. We suggest that the Government considers either offering a discount for upfront payment or introducing a modest real rate of interest on loans to encourage those who can afford it to make a contribution at the time of study
 - Because none of the options we explored delivers the additional resources needed in the short term and the Government has indicated that additional public funding will not be forthcoming, we looked at the possibility of seeking greater contributions from the only other immediately available source, students' parents. Our main report discusses two variants, of Options B and C, which have an increased means test. Both would release substantial extra sums. The decision on their social acceptability is essentially a political one.
 - 115. A fundamental problem with the Government providing loans for students is their treatment in the national accounts. Under conventional Government Accounting a loan is treated exactly like a grant in the year in which it is made. The planned introduction of a new form of accounting, resource accounting, will make clearer the fact that grants and loans are not equivalent. There will still, however, be a problem in that loans will continue to count against the Public Sector Borrowing Requirement in the year that are advanced. This is not the approach adopted in all other countries.
- Recommendation 80 We recommend to the Government that it looks urgently at alternative and internationally accepted approaches to national accounting which do not treat the repayable part of loans in the same way as grants to students.
 - 116. The previous Government explored various ways to secure private finance for student loans. We are not satisfied that any such approach offers value for money.

Enabling individuals to make their contributions

- Any future mechanism to support individuals in making their contribution should be easy to understand, simple to administer, efficient and cost-effective. As the Inland Revenue already has in place arrangements for assessing income and securing payments from almost all the working population we believe that it would be best-placed to collect income contingent payments on behalf of our proposed Student Support Agency (see below).
- Recommendation 82 We recommend to the Government that the Inland Revenue should be used as the principal route for the collection of income contingent contributions from graduates in work, on behalf of the Student Loans Company.
 - Currently there are a number of different organisations involved in student support, including 160 local education authorities, a central awards organisation in Scotland, Education and Library Boards in Northern Ireland, and the Student Loans Company. This is not clear or simple for students or for institutions. We believe that the there should be a single Student Support Agency which might be built up from the existing Student Loans Company.
- Recommendation 8.3 We recommend to the Government that it establishes, as soon as possible, a unified Student Support Agency with responsibility for:
 - assessing the eligibility of individuals for various kinds of public support;
 - administering graduate contributions on an income contingent basis;
 - means testing and paying grants for students' living costs;
 - making per capita tuition payments to institutions according to the number of students they enrol.
 - Such a unified Student Support Agency would cover many of the functions which are sometimes suggested for a system of individual learning accounts (ILAs) or a Learning Bank. However much more work is required to define the exact nature of such accounts. They could provide a mechanism for giving incentives to individuals and their families to save for higher education (although the case for going beyond current financial instruments is not a strong one); and to give incentives to employers to contribute to their employees' development through higher level study. We expect that, over time, individuals, with the development of lifelong learning, will expand their use of existing tax efficient savings mechanisms for education. ILAs as part of a wider strategy on education and training should provide added incentives for employers to contribute within the context of the expansion of continuing professional development.

Government and higher education institutions

We see great value in maintaining the long-standing practice of the Government remaining at arms' length from individual institutions and therefore in retaining intermediary Funding Bodies. This practice should be extended to Northern Ireland.

But we also see advantage in progressively channelling an increasing proportion of funding for tuition through students and, thereby, encouraging institutions to be more responsive to student requirements.

- 121. This will require students to be able to make an informed choice based on information about the offerings of higher education, its likely costs, and possible future employment opportunities. Students need better information and we recommend that their representatives with the representative bodies of schools, colleges and higher education institutions should together identify what information is needed and how it can be provided, making appropriate use of information technology.
- To develop a coherent approach to the development of the whole of post-18 education we recommend that the funding arrangements in Wales, in which funding councils for higher and further education are served by a common executive, are adopted in Scotland and Northern Ireland. In England the scale of activity is such that we see a continuing need for two separate funding councils with their own executives, but we welcome the moves already in hand to secure some greater co-ordination of action at a regional level
- 123. Higher education is now a such major element in the national economy that a UK-wide review is needed on a regular basis.

Recommendation 88

We recommend to the Government that, in five years' time and subsequently every ten years, it constitutes a UK-wide independent advisory committee with the task of assessing the state of higher education, advising the Government on its financing, and on ways in which, in future years, it can best respond to national needs; on any action that may be needed to safeguard the character and autonomy of institutions; and in particular any changes required in the level of student support and contributions from graduates in employment.

Higher education in Scotland, Wales and Northern Ireland

- 124. Although our terms of reference relate to the whole of the UK, we are conscious of the distinctive needs and traditions of higher education in the different parts of the country. Higher education in Northern Ireland and Wales is broadly similar to that in England. However, higher education provision in Scotland has a number of particularly distinct features. For this reason we established a Scottish Committee to advise us its report is published with our main report.
- One particular feature that we have noted about higher education in Scotland is the breadth of undergraduate degree programmes in comparison with the rest of the UK. Scotland has a high participation rate of nearly 45 per cent, with much of the difference between it and the rest of the UK attributable to sub-degree level work. We use the experience of Scotland in relation to both of these issues to inform our report more widely.

- 126. Higher education in Wales is similar to that in England, although a distinctive feature is the large amount of residential full-time provision because of the dependence of institutions on students coming to study from outside the vicinity of the institution. Having worked to enhance the quality of its research provision, we heard that Wales intends to increase the volume of research in order to attract inward investment and to support economic regeneration.
- 127. There are only two universities and two colleges of higher education in Northern Ireland. A serious issue for the Province is that 40 per cent of young people have to leave to take up higher education opportunities. A considerable number of these do not do so from choice, but because of the limitation on the number of places and the relatively high standard of entry to the local universities. This issue has prompted us to include an appendix addressing particular issues facing Northern Ireland, and proposing a number of options for increasing the provision of places in a cost effective way.

Next steps

- 128. Our report sets out a major programme of change for higher education over the next twenty years. Our vision for the future is clear. Although our outlook has been to the long term, our detailed recommendations necessarily focus on the first steps towards that vision. We hope that the legacy of our work will be a higher education system which is well-placed to develop and respond as new challenges and circumstances arise, including those which we cannot foresee from the perspective of 1997. Our recommendations add up to a coherent package for the future of higher education. We do not intend that those to whom they are addressed should choose to implement only some of them. The new compact requires commitment from all sides.
- 129. We have addressed our recommendations to those who should, in our view, he responsible for taking them forward. Where it is possible to set a specific timescale for the necessary action, we have done so. Some of our recommendations require organisations to undertake substantial developmental work before they can be implemented, and some are of less immediate urgency than others. We are conscious of the need not to overload organisations with too many tasks at once: it is often better to focus energy and attention on the most important and urgent work, but that does not mean that our recommendations for the medium and longer term can be ignored. Recommendations which we have described as for implementation 'over the medium term' are those which should generally be implemented within the next three to five years, although work in preparation for that may well need to start immediately. Those recommendations which we suggest should be implemented 'over the long term' are those which require even more substantial preparatory work or the prior implementation of other recommendations before they can be put into effect. Most of them are unlikely to be implemented in less than five years.
- 130. The recommendations are addressed to a wide range of hodies who have varying responsibilities in relation to higher education. Table 8 shows the allocation.

Table 8: Organisations to whom recommendations are addressed.

Organisation	Recommendation number
The Government	1, 2, 5, 6, 7, 11, 19, 22, 29, 34, 35, 36, 37, 39, 43, 44, 51, 54, 55, 56, 61, 62, 63, 64, 65, 66, 67, 70, 71, 72, 73, 74, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 90, 91, 92, 93
Higher Education Funding Bodies	2, 3, 4, 6, 7, 14, 24, 26, 27, 28, 32, 33, 34, 44, 57, 58, 59, 61, 66, 67, 68, 75
Further Education Funding Bodies	3, 7
The Institute for Learning and Teaching in Higher Education	6, 13, 15
The Higher Education Statistics Agency	7
Institutions and their governing bodies	8, 9, 11, 12, 13, 16, 17, 18, 20, 21, 31, 38, 39, 40, 41, 42, 45, 46, 47, 48, 49, 50, 51, 52, 57, 60
Representative bodies of Higher Education	10, 14, 22, 24, 26, 38, 51, 53, 54, 58
The Quality Assurance Agency	11. 22, 23, 25, 69
Students' unions	12
Employer representative bodies	19, 38
Awarding bodies and the organisations which oversee them	22
Franchising partners	23
Companies	30
Research Councils	32, 68

131. We give below some guidance on the immediate priorities for action.

Funding

- There is an immediate short term problem with the funding of higher education. If this is not addressed by the Government, there is a real danger that some institutions will be severely damaged and that others will take unilateral action, for example through the introduction of supplementary fees, which will make it impossible for our long-term vision to be realised.
- If the Government accepts our proposals on funding, it will need to introduce primary legislation because it does not currently have the power to make loans to support of students' tuition costs or to give effect to our proposals for income-contingent collection of loan repayments. This must be a priority if additional resources are to flow to higher education in 1998-99. We are encouraged that the Government has already indicated its intention of introducing early legislation.
- The same degree of urgency will need to be applied to the complex process of implementation. If implementation on this timescale cannot be achieved, alternative means of providing additional resources in the short term will have to be found, but the options are not attractive. We have already said that short-term moves to remove student loans from the public sector are unlikely to represent good value for money. The only other immediate source of resources, apart from the taxpayer, is parents of students.

- Our proposals on funding do not stand in isolation. They are part of a new compact 135. between all the stakeholders of higher education. The Government must therefore commit itself just as firmly and with the same urgency to the other elements of that compact, if all who are involved in higher education are to be encouraged play their part. This means that the early legislation we propose must provide for a procedure to govern any review of the contribution to be made by graduates. The Government must also ensure that new arrangements are well-publicised and explained clearly to prospective students and their families.
- Universities and colleges have pressed hard for a solution to the funding crisis which 136. they perceive. We have made proposals which should place them on a firmer financial footing. But institutions need to take urgent action too. They owe it to students and to the taxpayer to make sure that they make the best possible use of the available resources. They must secure appropriate management and cost information systems to support this as quickly as possible. They will need the help of the Funding Bodies and their representative bodies to ensure that all know what the best can do. Work on developing appropriate benchmarks is urgent. Institutions must ensure that their governance arrangements enable them to carry forward the development we propose.

Quality and standards

- In return for additional contributions from graduates, institutions must make much 137. clearer what they offering to students. They must work continually to improve the quality of teaching and they must approach the mutual assurance of standards with real commitment. Anything less would be to sell their students short. The immediate requirement from institutions is that, acting collectively, they give the Quality Assurance Agency all the support and facilities it needs to be fully effective and that they establish the Institute for Learning and Teaching in Higher Education, and give it the necessary support and facilities too.
- Our recommendations place great expectations on the new Quality Assurance Agency. 138. The bodies which established the Agency need urgently to review and amend its remit if it is to assume the role we propose for it. It needs the support of the whole sector in its tasks and it will need to embark very rapidly on a large programme of work. New systems for the assurance of quality and standards must be in place and seen to be effective within a short space of time. If they are not, the Government will be justified in intervening to protect the interests of students.

Research

The priorities in research are to begin to rectify the deficiencies of the infrastructure 139. and to establish new arrangements which encourage strategic decisions by institutions to concentrate on their strengths. The Government will need to take immediate steps to secure private sector contributions for the rolling loan fund for infrastructure: we have already identified some organisations who are willing in principle to contribute. The Funding Bodies need to set the rules for the next Research Assessment Exercise quickly so that institutions can begin now to plan their preparation for it.

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Staff in higher education

140. Staff in higher education have achieved much in recent years and our report expects that they will continue to be dedicated, professional and adaptable. They must be given appropriate support in this. Our recommendations for more systematic staff development and training, and especially for accreditation of teaching staff need to be pursued as a matter of urgency by individual institutions and by the sector collectively. The overall review of pay and conditions of service which we recommend should also be set up as soon as possible, in order to try to avoid a repetition of the unsatisfactory pay negotiations seen this year.

Higher education's local and regional role

We assume that the Government will be taking early steps to introduce new regional structures. As it does so, it needs to take account of our recommendation that higher education should be represented on the new hodies and it must ensure that higher education can play its full part in economic regeneration.

Conclusion

We know, from all the contacts we have had in our work, that the value and importance of higher education is widely recognised. We also know that those within higher education are committed to its wellbeing and are willing to embrace change. If all that good will, energy and professionalism can be focused on the developments proposed in this report, we are convinced that UK higher education will match the best in the world over the next 20 years.

List of Recommendations

Chapters 1-5 NONE

Chapter 6

We recommend to the Government that it should have a long term strategic aim of responding to increased demand for higher education, much of which we expect to be at sub-degree level; and that to this end, the cap on full-time undergraduate places should be lifted over the next two to three years and the cap on full-time sub-degree places should be lifted immediately.

- We recommend to the Government and the Funding Bodies that, when allocating funds for the expansion of higher education, they give priority to those institutions which can demonstrate a commitment to widening participation, and have in place a participation strategy, a mechanism for monitoring progress, and provision for review by the governing body of achievement.
- We recommend that, with immediate effect, the bodies responsible for funding further and higher education in each part of the UK collaborate and fund possibly jointly projects designed to address low expectations and achievement and to promote progression to higher education.
- We recommend that the Funding Bodies consider financing, over the next two to three years, pilot projects which allocate additional funds to institutions which enrol students from particularly disadvantaged localities.
- 5 We recommend to the Government that:
 - it considers the possibility of restoring to full-time students some entitlement to social security benefits, as part of its forthcoming review of the social security system. This review should include consideration of two particular groups in current difficulty, those who temporarily withdraw from higher education due to fillness and those with dependent children aged over 16;
 - the total available to institutions for Access Funds should be doubled with effect from 1998/99 and that the scope of the funds should be extended to facilitate participation by students who would otherwise be unable to enter higher education.
- 6 We recommend:
 - to the Funding Bodies that they provide funding for institutions to provide learning support for students with disabilities;
 - to the Institute for Learning and Teaching in Higher Education (see Recommendation 14) that it includes the learning needs of students with disabilities in its research, programme accreditation and advisory activities;

- to the Government that it extends the scope of the Disabled Students Allowance so that it is available without a parental means test and to part time students, postgraduate students and those who have become disabled who wish to obtain a second higher education qualification.
- We recommend that further work is done over the medium term, by the further and higher education Funding Bodies, the Higher Education Statistics Agency, and relevant government departments to address the creation of a framework for data about lifelong learning, using a unique student record number.

- We recommend that, with immediate effect, all institutions of higher education give high priority to developing and implementing learning and teaching strategies which focus on the promotion of students' learning.
- We recommend that all institutions should, over the medium term, review the changing role of staff as a result of Communications and Information Technology, and ensure that staff and students receive appropriate training and support to enable them to realise its full potential.
- We recommend that, over the medium term, the representative bodies, in consultation with other relevant agencies, should seek to establish a post-qualification admissions system.
- 11 We recommend that:
 - institutions of higher education, over the medium term, integrate their careers services more fully into academic affairs and that the provision of careers education and guidance is reviewed periodically by the Quality Assurance Agency;
 - the Government, in the medium to long term, should integrate careers advice for lifelong learning, to complement services based inside higher education institutions.
- We recommend to students' unions and institutions that they review, on a regular basis, the services offered to their students and adapt them as necessary, in particular to meet the needs of part-time students.
- We recommend that institutions of higher education begin immediately to develop or seek access to programmes for teacher training of their staff, if they do not have them, and that all institutions seek national accreditation of such programmes from the Institute for Learning and Teaching in Higher Education.
- We recommend that the representative bodies, in consultation with the Funding Bodies, should immediately establish a professional Institute for Learning and Teaching in Higher Education. The functions of the Institute would be to accredit programmes of training for higher education teachers; to commission research and development in learning and teaching practices; and to stimulate innovation.

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- We recommend that the Institute should:
 - develop, over the medium term, a system of kitemarking to identify good computer-based learning materials;
 - co-ordinate the national development, over the medium and long term, of computer based learning materials, and manage initiatives to develop such materials;
 - facilitate discussion between all relevant interest groups on promoting the development of computer-based materials to provide common units or modules,
 particularly for the early undergraduate years.

- 16 We recommend that all institutions of higher education should, over the medium term review the programmes they offer:
 - with a view to securing a better balance between breadth and depth across programmes than currently exists;
 - so that all undergraduate programmes include sufficient breadth to enable specialists to understand their specialism within its context.
- We recommend to institutions of higher education that, over the medium term, their admission procedures should develop to value good levels of competence in communication, numeracy and the practical use of information technology.
- We recommend that all institutions should, over the medium term, identify opportunities to increase the extent to which programmes help students to become familiar with work, and help them to reflect on such experience.
- We recommend that the Government, with immediate effect, works with representative employer and professional organisations to encourage employers to offer more work experience opportunities for students.
- We recommend that institutions of higher education, over the medium term, develop Progress File. The File should consist of two elements:
 - a transcript recording student achievement which should follow a common forma
 devised by institutions collectively through their representative bodies;
 - a means by which students can monitor, build and reflect upon their personal development.
- We recommend that institutions of higher education begin immediately to develop, for each programme they offer, a 'programme specification' which identifies potential astopping-off points and gives the intended outcomes of the programme in terms of:
 - the knowledge and understanding that a student will be expected to have upon completion;
 - key skills: communication, numeracy, the use of information technology and learning how to learn;
 - cognitive skills, such as an understanding of methodologies or ability in critical analysis;
 - subject specific skills, such as laboratory skills.

- 22 We recommend that the Government, the representative bodies, the Quality Assurance Agency, other awarding bodies and the organisations which oversee them, should endorse immediately the framework for higher education qualifications that we have proposed.
- 23 We recommend that:
 - the Quality Assurance Agency should specify criteria for franchising arrangements;
 - these criteria should rule out serial franchising, and include a normal presumption that the franchisee should have only one higher education partner;
 - franchising partners should jointly review and, if necessary, amend existing arrangements to ensure that they meet the criteria, and should both certify to the Agency that arrangements conform with the criteria:
 - there should be periodic checks by the Agency on the operation of franchise arrangements to verify compliance;
 - after 2001, no franchising should take place either in the UK or abroad except where compliance with the criteria has been certified by the Quality Assurance Agency.
- 24 We recommend that the representative bodies and Funding Bodies amend the remit of the Quality Assurance Agency to include:
 - quality assurance and public information;
 - standards verification:
 - the maintenance of the qualifications framework;
 - a requirement that the arrangements for these are encompassed in a code of practice which every institution should be required formally to adopt, by 2001/02, as a condition of public funding.
- 25 We recommend to the Quality Assurance Agency that its early work should include:
 - to work with institutions to establish small, expert teams to provide benchmark information on standards, in particular threshold standards, operating within the framework of qualifications, and completing the task by 2000;
 - to work with universities and other degree-awarding institutions to create, within three years, a UK-wide pool of academic staff recognised by the Quality Assurance Agency, from which institutions must select external examiners;
 - to develop a fair and robust system for complaints relating to educational provision;
 - to review the arrangements in place for granting degree-awarding powers.
- 26 We recommend to the representative bodies and the Funding Bodies that the Board of the Quality Assurance Agency should, as soon as possible, include a student and an international member.

Chapter 11

27 We recommend that the Funding Bodies, through the Joint Information Systems Committee (JISC), should continue to manage and fund, on a permanent basis, quality and cost-effective Communications and Information Technology (C&IT) services for researchers and should, in due course, introduce charges for services on a volume-ofusage basis.

- We recommend to the Funding Bodies that the Joint Information Systems Committee (JISC) should be invited to report, within a year, on options to provide sufficient protected international bandwidth to support UK research.
- We recommend to the Government that a new Arts and Humanities Research Council (AHRC) should be established as soon as possible.
- We recommend that companies should take a strategic view of their relationship with higher education and apply the same level of planning to it that they give to other aspects of their operations.
- We recommend to institutions of higher education that they should, over the next two years, review their postgraduate research training to ensure that they include, in addition to understanding of a range of research methods and training in appropriate technical skills, the development of professional skills, such as communication, self-management and planning.
- We recommend that the Funding Bodies and the Research Councils commission a study to evaluate the funding of interdisciplinary research, including the incentives and disincentives. The report should be ready to inform the next Research Assessment Exercise.
- We recommend to the Funding Bodies that, in the interests of transparency and applying international standards properly, the practice of including one or more international members in all Research Assessment Exercise (RAE) panels, wherever possible, should be introduced to the next RAE.

34 We recommend:

- to the Government that, with immediate effect, projects and programmes funded by the Research Councils meet their full indirect costs and the costs of premises and central computing, preferably through the provision of additional resources;
- to the Funding Bodies that the next Research Assessment Exercise is amended to encourage institutions to make strategic decisions about whether to enter departments for the Exercise or whether to seek a lower level of non-competitive funding to support research and scholarship which underpins teaching;
- to the Government that an Industrial Partnership Development Fund is established immediately to attract matching funds from industry, and to contribute to regional and economic development;
- to the Government that it promotes and enables, as soon as possible, the establishment of a revolving loan fund of £400 to £500 million, financed jointly by public and private research sponsors, to support infrastructure in a limited number of top quality research departments which can demonstrate a real need.
- 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.

- We recommend to the Government that institutions of higher education should be represented on the regional hodies which it establishes, and that the Further Education Funding Council regional committees should include a member from higher education.
- We recommend to the Government that funding should continue to be available after April 1998, when the present provision from the Higher Education Regional Development Fund is due to cease, to support human capital projects which enable higher education to be responsive to the needs of local industry and commerce.
- We recommend to higher education institutions and their representative bodies that they examine, with representatives of industry, ways of giving firms, especially small and medium sized enterprises, easy and co-ordinated access to information about higher education services in their area.

39 We recommend:

- to the Government that it considers establishing a modest fund to provide equity funding to institutions to support members of staff or students in taking forward business ideas developed in the institution, and to support the creation of incubator units;
- to higher education institutions that they establish more technology incubator units within or close to the institution, within which start-up companies can be fostered for a limited period until they are able to stand alone.
- We recommend to higher education institutions that they consider the scope for encouraging entrepreneurship through innovative approaches to programme design and through specialist postgraduate programmes.

- We recommend that all higher education institutions in the UK should have in place overarching communications and information strategies by 1999/2000.
- We recommend that all higher education institutions should develop managers who combine a deep understanding of Communications and Information Technology with senior management experience.
- We recommend to the Government that it should review existing copyright legislation and consider how it might be amended to facilitate greater ease of use of copyright materials in digital form by teachers and researchers.
- We recommend to the Government and the Funding Bodies that, to harness and maximise the benefits of Communications and Information Technology, they should secure appropriate network connectivity to all sites of higher education delivery and further education colleges by 1999/2000, and to other relevant bodies over the medium term.

- We recommend that institutions of higher education, collectively or individually as 45 appropriate, should negotiate reduced tariffs from telecommunications providers on behalf of students as soon as possible.
- We recommend that by 2000/01 higher education institutions should ensure that all 46 students have open access to a Networked Desktop Computer, and expect that by 2005/06 all students will be required to have access to their own portable computer.

- We recommend that, over the next year, all institutions should: 47
 - review and update their staff development policies to ensure they address the changing roles of staff;
 - publish their policies and make them readily available for all staff;
 - consider whether to seek the Investors in People award.
- We recommend to institutions that, over the medium term, it should become the 48 normal requirement that all new full-time academic staff with teaching responsibilities are required to achieve at least associate membership of the Institute for Learning and Teaching in Higher Education, for the successful completion of probation.
- We recommend that all institutions should, as part of their human resources policy, 49 maintain equal opportunities policies, and, over the medium term, should identify and remove barriers which inhibit recruitment and progression for particular groups and monitor and publish their progress towards greater equality of opportunity for all groups.
- We recommend to the higher education employers that they appoint, after consultation 50 with staff representatives, an independent review committee to report by April 1998 or the framework for determining pay and conditions of service. The Chairman should be appointed on the nomination of the Government.
- We recommend to the Government, institutions, and the representative bodies of 51 higher education, that, over the long term, the superannuation arrangements for academic staff should be harmonised by directing all new entrants to the Universities Superannuation Scheme.

- We recommend to institutions that, over the medium term, they develop and 52 implement arrangements which allow staff and external hodies to have access to and understand the true costs of research.
- We recommend that the Committee of Vice-Chancellors and Principals, in 53 collaboration with other institutional representative hodies, reviews the functions of the Universities and Colleges Information Systems Association to ensure that it can promote the implementation of Communications and Information Technology in management information systems.

- We recommend that the Government, together with representative bodies, should, within three years, establish whether the identity of the governing body in each institution is clear and undisputed. Where it is not, the Government should take action to clarify the position, ensuring that the Council is the ultimate decision-making body, and that the Court has a wider representative role, to inform decision-making but not to take decisions.
- We recommend to the Government that it takes action so that:
 - individuals may not serve as members of a governing body for more than two terms, unless they also hold office;
 - it is a requirement for the governing body at each institution to include student and staff membership and a majority of lay members;
 - an individual may not chair a governing body for more than two terms of office.
- We recommend that the Government takes the lead, with the Privy Council, in discussions with institutional representatives to introduce, within three years, revised procedures capable of responding more quickly to an institution requesting a change in the size of its governing body. The intention should be to ensure a response within one year.
- We recommend that each governing body should systematically review, at least once every five years, with appropriate external assistance and benchmarks:
 - its own effectiveness and, where there is in excess of 2.5 members, show good reason why a larger body is needed for its effectiveness;
 - the arrangements for discharging its obligations to the institution's external constituencies;
 - all major aspects of the institution's performance, including the participation strategy.

The outcomes of the review should be published in an institution's annual report. The Funding Bodies should make such a review a condition of public funding.

- We recommend that, over the medium term, to assist governing hodies in carrying out their systematic reviews Funding Bodies and representative hodies develop appropriate performance indicators and henchmarks for families of institutions with similar characteristics and aspirations.
- We recommend to the Funding Bodies that they require institutions, as a condition of public funding, to publish annual reports which describe the outcomes of the governing body's review and report on other aspects of compliance with the code of practice on governance.
- We recommend to institutions that, over the next two years, they review and, if necessary, amend their arrangements for handling complaints from students, to ensure that: they reflect the principles of natural justice; they are transparent and timely; they include procedures for reconciliation and arbitration; they include an independent, external element; and they are managed by a senior member of staff.

- We recommend to the Government and the Funding Bodies that diversity of institutional mission, consistent with high quality delivery and the responsible exercise of institutional autonomy, should continue to be an important element of the United Kingdom's higher education system; and that this should be reflected in the funding arrangements for institutions.
- We recommend to the Government that it takes action as soon as possible to end the scope for a confusion between the title and the name used by institutions, either through clarifying the legal position or by ensuring that conditions can be placed on the flow of public funds so that these go only to those institutions which agree to restrict their use of a name and title to that to which they are legally entitled.
- We recommend to the Government that, in the medium term, there is no change to the current criteria for university status; but that, for the future, there should be a period of relative stability in the number of universities with the weight accorded to the numerical criteria reduced and greater emphasis placed on a distinctive role and characteristics in awarding this status; and that the Government should give notice of this.
- We recommend to the Government that it takes action, either by amending the powers of the Privy Council or by ensuring that conditions can be placed on the flow of public funds, to enable the removal of degree-awarding powers where the Quality Assurance Agency demonstrates that the power to award degrees has been seriously abused.
- We recommend to the Government that it takes action, either by clarifying the legal position or by ensuring that conditions can be placed on the flow of public funds, to restrict the use of the title 'University College' to those institutions which are in every sense a college which is part of a university under the control of the university's governing body; and to those higher education institutions which have been granted taught degree awarding powers.
- We recommend to the Government and the Funding Bodies that there is greater clarity about where responsibility lies for decisions about the establishment of new universities; and that criteria are developed for deciding such cases and allocating public funding.
- We recommend to the Government and the Funding Bodies that, in the medium term, priority in growth in sub-degree provision should be accorded to further education colleges; and that, wherever possible:
 - more sub-degree provision should take place in further education colleges;
 - higher education provision in further education colleges should be funded directly;
 - there should be no growth in degree level qualifications offered by further education colleges.

- We recommend to the Funding Bodies and the Research Councils that they review their mainstream teaching and research funding arrangements to ensure they do not discourage collaboration between institutions; and that, where appropriate, they encourage collaboration. We recommend to the Funding Bodies that they be prepared to use their funds on a revolving basis, bringing forward and offsetting annual allocations in support of collaboration which has a strong educational and financial rationale.
- We recommend to the Quality Assurance Agency that, as it develops its arrangements, it ensures that these arrangements do not discourage collaboration between institutions.

We recommend to the Government that it reviews annually the total level of support for student living costs taking into account the movement of both prices and earnings.

Chapter 18

We recommend to the Government that, over the long term, public spending on higher education should increase with the growth in Gross Domestic Product.

- We recommend to the Government that it shifts the balance of funding, in a planned way, away from block grant towards a system in which funding follows the student, assessing the impact of each successive shift on institutional behaviour and the control of public expenditure, with a target of distributing at least 60 per cent of total public funding to institutions according to student choice by 2003.
- We recommend to the Government that the public funding for higher education institutions should be determined on a rolling three year basis.
- We recommend to the Government that variations in the level of public funding for teaching, outside modest margins, should occur only where:
 - there is an approved difference in the provision;
 - society, through the Secretary of State or his or her agent, concludes, after examining an exceptionally high level of funding, that in relation to other funding needs in higher education, it represents a good use of resources.
- We recommend to the Funding Bodies that they should explore the possibility of setting aside some of their total grant, as soon as possible, to establish revolving loan schemes to fund:
 - projects to refurbish buildings (to improve fitness for purpose) or to undertake large scale long term maintenance projects;
 - expensive equipment purchases (for teaching or research);
 - collaborative projects which will facilitate access for staff and students in a region to teaching or research facilities which could not otherwise be provided on a viable basis.

- We recommend to the Government that: 76
 - from 1998/99 it should enable institutions to waive tuition fees for part-time students in receipt of Jobseeker's Allowance or certain family benefits;
 - as part of its forthcoming review of the social security system, it should review the interaction between entitlement to benefits and part-time study, with a view to ensuring that there are no financial disincentives to part-time study by the unemployed or those on low incomes;
 - it should extend eligibility for Access Fund payments to part-time students from 1998/99, and additional funding should be made available for this purpose.
- We recommend to the Government that, once the interim bursary scheme expires, it 77 establishes permanent arrangements for the equitable support of students of dance, drama and stage management at institutions which are not in receipt of public funds.
- We recommend to the Government that it introduces, by 1998/99, income contingent 78 terms for the payment of any contribution towards living costs or tuition costs sought from graduates in work.
- On a balance of considerations, we recommend to the Government that it introduces 79 arrangements for graduates in work to make a flat rate contribution of around 25 per cent of the average cost of higher education tuition, through an income contingent mechanism, and that it ensures that the proportion of tuition costs to be met by the contribution cannot be increased without an independent review and an affirmative resolution of both Houses of Parliament. The contributions made by graduates in work in this way should be reserved for meeting the needs of higher education.
- We recommend to the Government that it looks urgently at alternative and 80 internationally accepted approaches to national accounting which do not treat the repayable part of loans in the same way as grants to students.
- We recommend to the Government that Scottish students who have had only one 81 year's education after statutory schooling, many of whom under current arrangements would choose to take a four year honours degree, should not make a tuition contribution for one of their years in higher education. Beyond that, this would be a matter for consideration by the Secretary of State for Scotland.

- We recommend to the Government that the Inland Revenue should be used as the 82 principal route for the collection of income contingent contributions from graduates in work, on behalf of the Student Loans Company.
- We recommend to the Government that it establishes, as soon as possible, a unified 83 Student Support Agency with responsibility for:
 - assessing the eligibility of individuals for various kinds of public support;
 - administering graduate contributions on an income contingent basis;
 - means testing and paying grants for students' living costs;

making per capita tuition payments to institutions according to the number of students they enrol.

Chapter 22

- We recommend to the Government that the tradition of institutional separation from national and sub-national levels of government is firmly maintained; and that this principle is extended to Northern Ireland.
- We recommend to the Government that, with immediate effect, it brings together the representative bodies of students, schools, colleges, higher education institutions and the organisations offering careers services to identify what better information is needed by students about higher education opportunities, their costs and benefits; and to work together to improve timely dissemination of the information.
- We recommend to the Government that the division of responsibility between the further and higher education Funding Bodies in England and Wales should be such that the higher education Funding Bodies are responsible for funding all provision defined as higher education.
- We recommend to the Government that the Teacher Training Agency continue its remit in respect of teacher training in England but that the respective responsibilities of the Higher Education Funding Council for England and the Teacher Training Agency are reviewed in drawing up proposals for the role of a General Teaching Council.
- We recommend to the Government that, in five years' time and subsequently every ten years, it constitutes a UK-wide independent advisory committee with the task of assessing the state of higher education; advising the Government on its financing and on ways in which, in future years, it can best respond to national needs; on any action that may be needed to safeguard the character and autonomy of institutions; and, in particular, on any changes required in the level of student support and contributions from graduates in employment.

Chapter 23

NONE

Chapter 24

NONE

Appendix 1

We recommend that higher education institutions in Northern Ireland, in close collaboration with all the relevant external players, steadily enhance their regional role, taking full advantage of the special potential for the development of strong regional networks.

- We recommend to the Government that options be examined for substantially increasing the number of higher education places in Northern Ireland in a cost-effective way which involves no compromise in quality and standards.
- We recommend to the Government and institutions that consideration be given to adopting the Dearing 16–19 year olds option as one of the bases for entrance to universities in Northern Ireland.
- We recommend to the Government that the scale and nature of funding for research in Northern Ireland universities should be assessed afresh in the context of the Province's strategy for economic development and of the recommendations in Chapter 11
- We recommend to the Government that there be constituted in Northern Ireland a Tertiary Education Forum, a Higher Education Funding Council and a Further Education Funding Council.

Componentes Principales de un Plan Estratégico

- A Planteamiento de la Misión
- B. Objetivos Estratégicos
- C. Planes Operacionales y Metas
- D. Plan Presupuestario

Componentes de un Plan Estratégico

A. Planteamiento de la Misión

Un intento por destilar la esencia de la forma en que una institución se ve a si misma o, idealmente, le gustaría ser vista.

Aparte del compromiso de aumentar el conocimiento a través de la enseñanza y la investigación, el planteamiento de una misión podría escoger el estilo especial y la firmeza de una institución.

Componentes de un Plan Estratégico

B. Objetivos Estratégicos

¿Hasta dónde quiere llegar la institución en el lapso de 5 años?

Tiene que ver con asuntos de política de más importancia, por ejemplo:

- (i) tamaño de la institución
- (ii) balance enseñanza/investigación
- (iii) división estudiantes de licenciatura/posgrado
- (iv) difusión de materias
- (v) vínculos con organismos externos
- (vi) desarrollo de edificios y propiedades
- (vii) generación de rentas

Componentes Principales de un Plan Estratégico

C. Planes Operacionales y Metas (2 - 3 años)

Hay planes y metas establecidos a fin de alcanzar los objetivos estratégicos. Estos incluyen asuntos tales como:

- (i) provisión de personal
- (ii) número de estudiantes
- (iii) asignación de espacio
- (iv) eliminación y/o introducción de cursos
- (v) programas de investigación
- (vi) ingresos profesionales
- (vii) estimación de la renta bruta y gastos
- (viii) facilidades de residencia y de apoyo general

Componentes Principales de un Plan Estratégico

D. Plan Presupuestario

Cambia el Plan de Operación a un plan fijo más detallado para el año siguiente. Incluye asuntos no-financieros tales como las metas del número de personas admitidas y la asignación de espacios.

UNIVERSITY OF WARWICK

MISSION STATEMENT FOR THE PERIOD UP TO 2000/2001

Warwick is one of Britain's leading universities. It is research-led and is utterly committed to the provision of teaching of the highest quality. It is distinctive amongst universities that have been rated in the top group in the HEFCE research assessment exercises in giving high priority to improving access, to continuing and post experience education and to close collaboration with its local and regional community. As a research university Warwick looks outward to the international research community. It will continue to add an international dimension to its work and in particular orient itself more closely to Europe in both teaching and research.

GENERAL STATEMENT OF AIMS

1. A Research University

The University has demonstrated its commitment to research in its ratings in the 1986, 1989, 1992 and 1996 national research assessment exercises. 98.7% of our academic staff were submitted in the 1996 Research Assessment Exercise and 90% of our academic staff are based in departments awarded a research rating of 4 and above.

Research excellence is enhanced through careful selection of academic staff, formal study leave arrangements and the University-wide Graduate School which gives focus and support to the postgraduate population which in 1996/97 stood at 5920.

Research plans are supported by continued investment in the University's capital building programme. New buildings for Mathematics, Biological Sciences, Statistics and Social Studies and a major extension to the International Manufacturing Centre were completed in 1996-97 together with Phase I of the Medical Research Institute.

2. Excellence in Teaching

The University regards research as an integral component in its teaching. We believe that the high quality research carried out by our academic staff has a direct impact on the quality of our academic teaching programmes and the opportunities they provide.

Teaching at Warwick also informs research. Well-qualified and able undergraduate students at Warwick (average 1996 entry 26.3 points at A-level) together with a large Graduate School community (comprising 40% of the student population) bring new perspectives to intellectual problems. The increasing number of mature entrants on undergraduate programmes enhances the quality of teaching and learning through the exchange of ideas, knowledge and experience. The quality of teaching offered by the University is supported by continued capital investment in the teaching environment, innovation in course delivery and design and access to a range of computing facilities.

The University's commitment to the quality of teaching offered to our students is demonstrated by our record of 'Excellent' or equivalent ratings for teaching Quality Assessment, eleven out of thirteen

to date, and the commendations contained in the HEQC's audit report on the University's collaborative provision.

3. The University's Regional Role

The University plays a major regional role through its policies to improve access and share its expertise with a range of organisations and individuals. More than 500,000 people currently work, study, visit or use the resources of the campus each year. The University is taking a central role in the Coventry and Warwickshire Partnership and is closely involved in the development of a regional economic plan with the Government Office of the West Midlands. The University continues to make a significant contribution to regional economic regeneration through the University of Warwick Science Park which has now established its first off site base in the Warwick Technology Park.

Industrial collaboration will continue as a key element in the University's academic strategy. Teacher education, social work education and medical research and training programmes make an important contribution to the social structure of the region. Through, in particular, the Warwick Manufacturing Group the University is assisting industry to adapt to change in the region.

The University's Arts Centre is the largest multi-arts facility in the country outside London. It attracts 250,000 people each year to a varied and high quality programme and is the major centre for the arts in the area.

4. Improving Access and Continuing Education

This University places high priority on improving access, developing continuing and post-experience education and close collaboration with its local and regional community. In 1996/97 numbers in its Open Studies programme stood at over 6,000 and in post-experience work at 9,500. The part-time degree programme is now firmly established with a current population of over 400 and 2+2 degree programmes, offered in collaboration with our local Associated Colleges, have a total student population of approaching 500 students. Our relationship with Associated Further Education Colleges has been extended through joint staff development programmes, by harnessing those opportunities offered by IT developments to promote collaborative projects and will be cemented further with the introduction in Autumn 1997 of Open Studies Certificates offered by the Colleges.

5. An International University

Overseas student numbers have grown by more than 50% in the last five years. The University is involved in a wide range of international research partnerships and has long-standing exchange agreements with universities across the world. It offers formal teaching programmes in Hong Kong, Malaysia, Thailand and South Africa.

As one of the leading British universities Warwick has an important role to play in Europe. It will continue to extend its active research links and to consolidate its collaborative agreements with other major universities and research partners through programmes sponsored by the EU, such as Framework V, LEONARDO and TEMPUS. It will strive to enhance its student and staff mobility programmes through SOCRATES, while seeking to promote itself as a centre for postgraduate and postdoctoral study for European students.

UNIVERSITY OF WARWICK

STRATEGIC PLAN FOR THE PERIOD UP TO 2000/01

- 1. Academic Aims and Objectives
- 2. Policies in Relation to Staff
- 3. Student Numbers
- 4. Estate Strategy
- 5. Information and Library Systems Strategy
- 6. Financial Strategy
- 7. Quality
- 8. The University and Regional Policy

1. Academic Aims and Objectives

Warwick's strategic and planning objectives for the period up to 2000/01 are as follows:

Maintaining Research Strengths

Maintaining Excellence in Teaching at Undergraduate, Postgraduate and Post-Experience Levels

Development of the Science and Technology Base of the University

Maintaining and Developing the Graduate School

Maintaining the Infrastructure to Support the University's Academic Aims

Maintaining and Developing Opportunities for Academic Collaboration, Access and

Widening Participation

Enhancing the University's Role in Europe

Continuing the University's Policy of Income Generation

Maintaining Research Strengths

Warwick intends to remain a leading research university which offers degrees and other qualifications across a broad portfolio of academic disciplines. Its policy is to ensure that the benefits of research are disseminated through strong academic publications, teaching of the highest quality and relevance and by the application of research results where these have importance for industry and society in regional, national and international communities.

The results of the 1996 RAE confirmed Warwick's position as one of the UK's leading research universities. The University's policy of submitting 98.7% of its staff underlined the importance that is attached both to research itself and to providing a teaching environment in which students are taught by research active staff at the forefront of their subjects. This objective has been confirmed by the results of teaching quality assessments in which Warwick departments claim the common aim of providing research-led teaching. Eleven out of the thirteen departments assessed to date have been rated "excellent" or have scored 21 points or more with two scoring the maximum of 24 points. A majority of these departments also received a rating of 5 or 5* in the RAE.

Many of the University's policies over the next period are designed to support its principal objective of maintaining and enhancing its existing strengths in teaching and research. While overall the results of the RAE were a further improvement on those in 1992 the University has initiated a series of reviews of some departments using external advisers as appropriate. The University has set aside £2m in an Academic Investment Fund to help finance this process. A review of the Department of Italian has already been completed and this will lead to a new professorial appointment in the subject area and a general strengthening of language provision. The money set aside by the University in the Academic Investment Fund will also provide selective support for the further development of other highly rated areas against research plans which all departments have prepared.

Warwick's resource allocation process specifically takes into account RAE ratings as a factor in the distribution of grant and posts to departments and a premium for 5* departments has been added to the model. While the University is concerned to ensure that under-performing areas are given the opportunity to improve, it also wishes to protect research performance of the highest quality by further investment and its resource model and planning decisions will reflect this. A forward plan for the development of Mathematics agreed in 1995/96 includes the appointment of new staff throughout the planning period with the aim of reinforcing the Department's 5* rating and to promote new areas of research. The expansion of the Department has also been facilitated by the recent completion of the capital development of the Gibbet Hill site which included a new building for Mathematics. New Professors in Computer Science and in History will strengthen further these 5* Departments over the next period.

Changes in academic focus will mainly build on existing strengths. Over the past four years the University has extended its commitment to medical education and now has 14 posts, six established at the professorial level, in medical specialities to add to the commitment to molecular biology in the Department of Biological Sciences. It has also raised the funds from private sources to build the first stage of a Medical Research Institute. So far these activities have been concentrated at the postgraduate and research levels, and, in anticipation of further growth in this area, a small Postgraduate Medical School has been established. The prospect of the report of the Working Party on Medical Manpower has encouraged the University to believe that its long-term ambition of developing an undergraduate programme could be realised. Bearing in mind the need to keep unit costs down we have explored a partnership with Leicester University to create a joint Leicester/Warwick Medical School. These discussions are not yet concluded but we are optimistic that they will provide a framework for a joint bid from the two Universities.

Interdisciplinary research is developing in all Faculties, including the application of mathematical modelling to medicine, computer simulation of financial markets and a centre in Eighteenth Century Studies. The ESRC Centre for the Study of Globalisation and Regionalisation will generate research opportunities for many staff in the Social Sciences as will the planned joint Warwick and Oxford ESRC Centre in Skills Knowledge and Organisational Performance. ESRC core funding for Ethnic Relations, Macroeconomic Modelling and Industrial Relations will come to an end towards the end of the planning period but the University intends to continue these research interests in new organisational forms.

Warwick is sensitive to user needs in the development of its research programme. External influences include feedback from a wide range of university/industry links and the articulation of priority areas by government and the research councils. We remain committed to Foresight Initiative and intend to remain quick to respond to initiatives and to be

competitive in schemes like the Joint Research Equipment Initiative and Research Council Programmes, as well as those run by the British Academy. Improving the University's record in expanding its income from research grants and contracts will also remain a high priority. A review was undertaken of the research challenges facing Warwick and the results of this are being implemented including new incentives (worth £250k per annum) that enable departments to share more fully in the financial benefits of research grant overheads. Related questions about staff development and career progression are also being addressed. The forward plan for external research funding sees this rising to £19m by the end of the period. The targets include growth in funding from Europe and the University is positioning itself, with European partners, to respond fully to the opportunities presented by Framework V.

The University will continue to strengthen arrangements for exploiting the results of research. Income is rising from this source and increasing targets have been set for income from licences and royalties over the five-year period.

1.2 Maintaining Excellence in Teaching at Undergraduate, Postgraduate and Post Experience Levels

The strong link between research and teaching at Warwick ensures that developments in research have a direct impact on the quality of our academic teaching programmes and the opportunities they provide. Eleven of the thirteen departments assessed for quality of teaching to date have been awarded excellent ratings or scores of 21 or more points. Investment from the additional resources generated by the University's considerable earned income activities have resulted in lower student:staff ratios than the national average which in turn protect small group teaching and regular contact between individual students and their tutors. The University will continue to invest in the teaching environment and the facilities it provides for independent learning. The use of a range of teaching methods is encouraged through the staff development programme and a central fund to back innovations in course delivery and design. We wish to build upon the success of the Law Technology Programme at Warwick and our expertise in distance-learning to develop novel methods of teaching and learning through exploiting the possibilities provided by the WWW and related technologies. An ambitious project to provide data networking to all campus residences in a rolling programme is now underway.

The University plans to expand its activities in a number of academic disciplines where there is high demand from students and a rich research environment. We were pleased to have been awarded additional funded places as a result of our bid under the 4-Year Science Initiative and would want to bid strongly again in any new competition for additional places which may form part of the new methodology for funding teaching. The average A level point score of new undergraduates has risen to the equivalent of ABB. We are seeing increased demand for Mathematics, Physics, Computing Science and Psychology and for most subjects in the Social Sciences. Demand for places in Arts subjects has also remained buoyant. A key objective for the University is to increase the size of its science and technology base. The admission of more undergraduate students into the physical sciences, Psychology and Computing would aid this expansion and we are keen in particular to develop new degree programmes which reflect the changing boundaries of scientific enquiry and the needs of employers.

Recently introduced joint degree programmes in Law and Business and in modern languages as signalled in last year's Strategic Plan have attracted strong candidates and will recruit well in October 1997. We would now like to build further on our strengths in the Warwick Business School and Economics to grow the undergraduate base of these two departments.

1.3 Development of the Science and Technology Base of the University

The University's science departments need to expand in order that they are best placed to compete internationally in research and the training of students. The policy of emphasising growth in these disciplines over the past five years has seen considerable expansion in some departments (notably Mathematics, Computing Science and Biological Sciences) but there are further opportunities that need to be exploited to take advantage of new research funding opportunities and to ensure that research groups are of critical mass. There are strong national and international imperatives for such growth which is also a priority for the industrial needs of the region. Funding has been secured from the Government Office of the West Midlands to extend the BEng partnership with Rover to other industrial companies and a significant ESF grant of nearly £250k will enable Masters programmes in Physics, Chemistry and Engineering to meet local needs for advanced scientific training in these disciplines. The Warwick Manufacturing Group continues to provide an impressive portfolio of training, research and consultancy that has a strong regional focus. It will shortly be occupying the second phase of the International Manufacturing Centre which has been constructed at a cost of £4.1m. The Group's international contacts and the extension of its programmes to bases across the Pacific Rim has brought international experience and expertise to bear upon its regional and national activities to the benefit of students, industrial partners and academic staff.

1.4 Maintaining and Developing the Graduate School

Postgraduates represent over 40% of the student body. The University's Graduate School remains the focus of developments in graduate education addressing issues relating to evaluation and quality, recruitment and training and the social and pastoral requirements of graduate students. The next period will see a significant increase in the number of residences set aside for postgraduates on the campus once the next residential complex is completed by 1999, 360 of which will be reserved for their use to add to the 1020 already available. The connection of existing postgraduate residences and the new rooms to the campus network will provide access to the full range of electronic research databases and other resources complementing the University's communal facilities.

Warwick's policy of integrating postgraduates as fully as possible into the life of the University and providing them with a high quality academic and social environment has ensured that we are able to keep our edge in an increasingly competitive market.

A key aim of the Graduate School during the next period is to increase further the number and proportion of research students. The 59% increase in such students since 1992/93 has not been evenly spread amongst all disciplines. The Graduate School is well-placed to coordinate strategies to remedy these disparities; a successfully launched postgraduate work agency that provides employment opportunities on the campus in preference to hiring temporary staff from commercial agencies; targeted promotion and marketing of research opportunities; and audits of departments to help identify areas of potential development. The Financial Plan assumes that growth in UK/EU research students will be 15%.

Forecast Postgraduate Student Population 1996/97 - 2000/01 (All Figures in Heads not FTEs)

Category	96/97	97/98	98/99	99/00	00/01
Taught Degrees		,			
UK/EU					
Full-Time	916	926	922	914	. 931
Part-time	2464	2435	2437	2424	2431
Overseas					
Full-Time	556	584	613	643	675
Part-Time	1180	1240	1300	1366	1434
SUB-TOTAL	5116	5185	5272	5347	5471
Research Degrees	•				
UK/EU					
Full-Time	661	689	714	741	773
Part-time	348	360	372	381	392
Overseas					
Full-Time	240	252	267	278	292
Part-Time	105	111	116	122	128
SUB-TOTAL	1354	1412	1469	1522	1585
TOTAL	6470	6597	6741	6869	7056

1.5 Maintaining the Infrastructure to Support the University's Academic Aims

The continuing growth anticipated by the University in its research and teaching activities requires a matching investment in infrastructure. We are determined not to allow the expansion of University activities and the decline in the value of funding to force a lowering of the quality of life on the campus, its appearance and the facilities it offers. Considerable care is taken of the campus environment. The maturing landscape with the protection of green spaces and natural features provides an attractive setting for the University's activities and helps promote Warwick to future students, staff and the many conference and short course visitors whom we host. While the sums for major capital expenditure that can be earmarked within the Financial Plan are insufficient to fund all our plans, a number of significant projects will go forward which include improvements to the Humanities Building and a new building for the Business School as well as the student residences described earlier.

The University has planned for further reductions in the sums it can make available for equipment following the significant cuts in capital grant for 1996/97 when this was separately identified in grant announcements. It will increasingly use these funds to encourage departments to seek matching funding from external bodies to meet research needs in

particular and will ensure that areas of high research potential are protected. There are, however, concerns about identifying funding at a sufficient level for a continuing programme of computer replacements to replace outmoded machinery as well as to support new initiatives.

Maintaining and Developing Opportunities for Academic Collaboration, Access and Widening Participation

The University promotes and manages extensive collaboration activities founded on research excellence and training. It seeks to maximise the value in publicly funded research (for the 1995/96 year in excess of £12m) in association with industry and commerce having regard to regional needs as well as national and international links; overall funding exceeded £5m in the current period. The strategic importance in development and provision of access to leading edge technology is recognised in corporate relationships and in SMEs where cost effective solutions directed at improvement in competitiveness complements initiatives in raising skills and graduate employment; initiatives such as the Teaching Company Scheme, LINK, the Manufacturing Excellence Initiative, Breakthrough Technologies, management placement through the HOST programme and the STEP project for graduate introduction to industry. Delivery within the region is achieved by various means; the Advanced Technology Centre and International Manufacturing Centre are the focus for work with international companies in the automotive, acrospace and computer sciences companies attracting funds in excess of £20m. As a leading regional institution with innovative and commercial management the University demonstrates and exemplifies the benefits of links with government and local agencies through the Chambers of Commerce, TECs and Business Links, development agencies in the West Midlands and City and County Councils together with other HEIs participating in regional networks, supported in some cases by funding through the EC with access to funds in excess of £25m. In concert with the University Science Park it has attracted active inward investment and encouraged diversity in the employment base with resulting contribution to economic redevelopment; the current number of companies stands at 70 with 1600 employees

Warwick aims to increase collaboration with the other HEIs in the West Midlands through membership of the West Midlands HE/TEC Network and as convenor of the UACE CVE Network for the West Midlands. The University is the lead institution for a regional project to promote CVE to be developed in 1997-98 which will link with a Coventry and Warwickshire proposal to run a DEE funded 'Learning Line'. The University is also developing a number of co-operative activities with other University Libraries in the region including Coventry, Leicester and Birmingham. Projects include staff exchanges, the potential for co-operative development of specific holdings and joint postgraduate access agreements. We anticipate membership of the consortium of University Research Libraries (CURL) will lead to further collaborative developments and access to specialist collections.

The University has developed a range of initiatives to support access for local, non-traditional students. The Open Studies programme, which is now largely credit bearing, consists of 350 courses and attracts 6,000 registrations a year. Within the programme over twenty Open Studies Certificates have been developed which can lead on to the University's established Part-time Degree scheme. Close collaboration with its nine local FE Colleges, which are designated Associate Colleges of the University, contributes significantly to widening access, the University plays a central role in, and provides accommodation for, the local Open College Network; it has jointly developed with its Associate Colleges an innovative 2+2 degree programme, and from autumn 1997 Colleges will offer Open Studies Certificates thus providing greater opportunities for access to the University across Warwickshire, Solihull and

Coventry. Also in Coventry the University's Hillfields Centre provides a focus for inner-city access work and is a base for a number of collaborative initiatives aimed at widening participation.

The University has recently concluded a major review of its continuing education activities and has re-affirmed its commitment to the provision of a wide range of life-long learning opportunities, not least through active regional partnerships with other institutions and private and public sector enterprises. In order to build on past achievements and to exploit new opportunities, the University has created a Chair of Life-long Learning; the first in the country. The holder will have a particularly important role to play in the further development of local and regional partnerships which have a focus on life-long learning and the world of work, and in developing flexible forms of learning which will build on the successes of the University's community-based work.

The University is committed to ensuring that every opportunity is provided to enable the widest possible participation by students with disabilities. Warvick has a tried and tested policy of identifying the best provision on an individual basis for each student with a disability who applies to study at the University. It has a fully developed support service for students with disabilities within the Senior Tutor's Office. The Office has a wide range of important regional links to support groups and organisations such as the Local Authorities, the regional offices of SKILL and the Community Volunteer Service.

The University has adopted a proactive policy of developing access, both physical and intellectual, to the facilities and educational opportunities it offers. It has also produced a wide ranging and detailed Disability Statement, in line with the Disability Discrimination Act 1995 and HEFCE requirements, which is available to all students with disabilities applying to study at the University.

The University has a long-standing commitment to continuing vocational education, both accredited (usually in the form of full-time, part-time or distance learning Masters programmes) and non-credit bearing (over 6,000 registrations a year). It is the University's strategy to include as many subject departments as possible in this work and to emphasise its importance for individuals' continuing professional development as well as for employing organisations with whom much of this work is developed and delivered on a partnership basis. These opportunities for life-long learning in the context of the world of work have both a regional emphasis especially where they involve small and medium sized enterprises, but also a national dimension when they involve collaboration with large, blue chip companies. Collaboration with major employers is key to the strategies of the Business School and the Warwick Manufacturing Group and is resulting in an increase in tailored degrees at both undergraduate and postgraduate level.

1.7 Enhancing the University's Role in Europe

In addition to the many individual and departmental links that exist with European universities, institutions and companies, the University has sought actively to play a part in the emerging networks of universities with common interests and ambitions. Warwick is a leading member of the European Consortium of Innovative Universities and hosted the second formal meeting of the Consortium in April of this year. The meeting has set goals for collaboration which include a joint Masters in Innovation Management, a European doctorate and joint research activity to exploit opportunities presented by Framework V and the EC CRAFT scheme. These projects will be taken forward during the next phase of the Consortium's development. The University's European Office plays a key role in promoting

such opportunities and in ensuring that we are able to benefit from research and training initiatives funded by the EU and other European bodies. Total funding from Europe is projected to tise from £4.25m to £5.5m in the planning period.

The University has participated actively under the ERASMUS programme and now holds a contract under SOCRATES and is developing collaborations through LEONARDO. This will complement the growing numbers of degree programmes which include European study components and active exchanges with a wide range of institutions. These are underpinned by the promotion of modern language courses as options or requirements in many degree programmes. The Language Centre is expanding further the number and capacity of its courses to meet the demand from undergraduates and postgraduates in addition to catering for over 2,000 registrations annually on its accredited Open Studies programme. Warwick remains active in working with institutions in Eastern and Central Europe, the Former Soviet Union Unsign TEMPUS and similar programmes. It continues to support the Warwick Eastern European Scholarship Programme. Conscious of the proposed expansion of the European Union in the early part of the next century Warwick will continue to develop relationships and opportunities in Eastern Europe during this planning period

1.8 Continuing the University's Programme of Income Generation

The University's Financial Plan continues to contain a major element of income earned by the University itself, which makes a vital contribution to the realisation of the objectives in the Strategic Plan. The proportion of income not coming from block grants and Home/EU student fees is forecast to be around 64% by the end of the period. The net contribution to the funds available for general University purposes is forecast to be in £m:

1996/97	1997/98	1998/99	1999/00	2000/01
£22.2	£23.2	£25.2	£26.4	£27.6

This programme is vital to the University's success and considerable attention will continue to be paid to its management and further growth and development.

2. Policies in Relation to Staff

Warwick places great emphasis on the recruitment and retention of academic staff of the highest research potential. It seeks to ensure that young probationary staff have lighter teaching loads in order to develop this potential and from April 1995 the standard probationary period was extended from three years to four to ensure that staff have every opportunity to achieve the required standard of performance. Probationers are contractually required to attend a structured staff development programme to ensure that they are equipped for the demands of their posts. The University is party to the national arrangements for the various groups of staff it employs, but within the limits imposed by these agreements it operates policies on pay and promotion that reflect personal performance and the demands of the labour market.

The University's policy of appointing younger members of staff has held the average age of academic staff at 44, the same as in 1994; the proportion of staff under age 35 has increased from 17.5% to 21%. Departments are encouraged to differentiate the allocation of teaching and administrative responsibilities so as to protect and enhance their capacity for research. The employment of graduate assistants to provide training opportunities in either teaching or research and the generous study leave arrangements (around 150 terms of study leave have

been granted for 1997/98) designed to promote the University's research capability have already been described. The University expects that the staff student ratio will decline by between 10 and 15% over the planning period on current assumptions. Flowever, the current Financial Plan provides additional resources for rapid promotion of academic staff where this is merited by exceptional achievement, and also for the absorption of the Warwick Research Fellows onto the University's permanent establishment.

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Early retirements will continue to play a significant role in facilitating restructuring. This is expected to result in a small decline in the number of academic staff over the period.

The need for human resource management along the general lines advocated in the Fender Report is recognised within the University. Staff at all levels are encouraged to improve their qualifications and time off for relevant courses is available to non-academic staff. Bursaries, funded by the University, are available to assist staff to enter the University's part-time degree programme. The financial stringencies that will worsen the academic staff student ratio will lead to a proportionate decline in the numbers of non-academic staff. We recognise that this emphasises the need to give attention to the training requirements and the aspirations of the staff in post; there has been a significant enhancement of the staff development.

The University has, through its consistently excellent teaching quality assessment scores, shown itself able to support high quality teaching alongside its research capability. This has been supported by a professional development programme for probationary and established staff led by the Academic Staff Development Officer. He also leads a programme which provides a certificate in University teaching. A Teaching Innovations Fund is available to encourage staff to develop new ways of approaching teaching, learning and assessment. At least a dozen projects are usually supported in any year and the outcomes are publicised widely within the University. An academic staff development publication, FORUM, published three times each year and circulated to all academic staff, assists in the sharing of best practice.

3. Student Numbers

The University's principal strategic objectives for student numbers have been referred to in the previous section. Policies relating to initial teacher education are dealt with in the next section. While we have been grateful for the additional funded places allocated as a result of initial teacher education restructuring and in response to our bid under the 4-year science initiative, we remain frustrated that the current policy of consolidation has constrained growth. Warwick is able to attract highly qualified candidates for all of its programmes of study (with the possible exception of Chemistry and Engineering which are reflecting national difficulties). The results of the TQA suggest that the quality of the academic training and overall experience at Warwick is very high. This is borne out by the high percentages of graduates who either find employment or go onto further study. Of the graduating cohort in 1996, only 2.8% were unemployed six months after leaving the University with 58.9% going into employment and 21.7% into further study or training.

In the absence of any firm information about future government policy for student numbers in the HE sector, our planning assumptions hold intake targets at current levels for the duration of the period except for the final year when a small increase of 1% is anticipated. These plans are not predicated on any assumptions about the possible success of the University in gaining additional places in the proposed new funding and student allocation methodology but, as indicated earlier, we expect to make strong bids for selective growth in key areas.

Pressure on places from traditionally-qualified students is also making it more difficult for departments to provide opportunities for students without A levels or for those who wish to return to study through access programmes or in later life. This makes it all the more important that we remain committed to supporting the 2+2 degrees with our associate colleges since these are central to the development of our plans for a community university and the involvement of local people in the academic programmes of the University. The intake target for these degrees will remain at around 100 throughout the period. They are complemented by the part-time degree programme and a growing Open Studies Certificate programme which has developed rapidly from the accredited CE provision that we offer and that is expected to attract around 6,000 registrations annually. The OS Certificates will become increasingly based in the Associate Colleges; they will continue to provide credits towards the part-time degree programme in particular.

Plans for postgraduate student numbers have been described earlier in the section on the Graduate School.

3.1 Reform of Initial Teacher Training

We remain concerned about the effects of reducing grant and undergraduate student numbers on the Institute of Education and the University more widely. Significant shifts in DEE training targets make forward planning more difficult than for other areas of the University's activities and the 17% decline in grant by 2000/01 because of the adoption of a price-based regime for funding has required a significant restructuring exercise in the Institute linked to central savings where costs, such as those incurred in the Library, computing and the administration, relate to initial teacher education activities. Restructuring has also been made necessary because of the University's policy of increasing numbers on the secondary phase PGCE, particularly in subjects of national shortage. This has required the acquisition of staff with the necessary skills at a time when numbers on the primary phase 4-year BA(QTS) continue to decline. The following table illustrates the shifts in recruitment against allocated targets since 1995/96 to the end of the current TTA rolling three-year planning horizon:

3.2 Recent and Planned Recruitment to ITT Programmes

Category	95/96	96/97	97/98	98/99	99/00	00/01
Primary						
BA(QTS) Intake	156	146	139	132	127	127
BA(QTS) Population	701	612	563	535	509	491
PGCE	57	54	51	49	.47	47
TOTAL PRIMARY	758	666	614	584	556	538
Secondary	•					
BA(QTS) Population	67	38	-	-	-	-
Mathematics	30	30	40	40	40	40
Science	49	82	72	72	72	72
IT	-	25	40	40	40	40
Modern Languages	29	41	50	50	50	50
English	29	27	45	45	45	45

1.1

(Figures based on actual recruitment for 95/96 and 96/97 and currently indicated targets from the TFA for 97/98 through to 99/00. The numbers for 00/01 assume no change from 99/00 pending allocations from the TFA. The University has yet to respond to the invitation to bid for the years 98/99 to 00/01 and these figures are therefore provisional.)

The figures show that the University has made a significant contribution to the recruitment and training of teachers in secondary shortage subjects. We intend to remain a committed provider of initial teacher training and will be seeking to expand our current numbers on the secondary PGCE during this planning period subject to being able to protect the quality of provision by forming sufficient partnerships of the requisite standard with schools. In the primary phase, the University is considering the possibility of offering a three-year BA(QTS) to replace its current four-year degree and may bring forward plans to this effect in the next year with a corresponding bid for compensation for the funded places that it would then voluntarily give up. This plan is part of a general shift in the Institute's activities which will also see a significant refocusing of its CPD activities around national priorities and a new credit-based framework. The University also wishes to ensure that its work in initial and continuing teacher education is underpinned by high quality research that informs the debate about policy at a national level as well as being relevant to the work of teachers in schools Recent appointments have contributed to this aim. The successful establishment of the Centre for the Research in Elementary and Primary Education under Professor Robin Alexander and the continuing work of existing research groups in the University provide both the means and focus for this aim to be realised in the coming period.

4. Estate Strategy

The University has under consideration a large number of capital projects which includes schemes for refurbishment of existing laboratories and buildings that are now nearly 30 years old. The estimated cost of these projects is £19m, but as a direct consequence of the reductions in the University's Recurrent Grant it will only be possible to fund schemes to a total of £2m p.a. in the University's Financial Plan for the period 1997/2001.

A summary of the University's major capital building programme is as follows:-

Project	<u>Value</u>	
Gibbet Hill Site		
Extension of Mathematics and Biological Sciences	£5.0m	Completed September 1996
Medical Research Institute - Phase 1	£1.3m	Completed July 1997

Central Campus		
Social Studies Phase 7	£3.0m	Completed September 1996
Library - book storage and IT space	£1.3m	Completed September 1996
International Manufacturing Centre (Engineering) - Phase 2	£2.7m	Completed April 1997
Students' Union Extension	£3.5m	Due to start in April 1997 for completion in September 1998
Residences		
Claycroft - 424 units	£6.5m	Stage 2 - Completed September 1996 Stage 3 - Due for completion in September 1997
Lakeside		-
Lakeside		
New student residences 600 units and 50 staff housing units	£12.0m	Due to start June 1997 for completion in September 1999

The second phase of the redevelopment of the University's Arts Centre, financed by external funds, was completed in January 1997. The third phase, which is being undertaken in stages, at a cost of £1.25m is due for completion in the spring of 1998. A feasibility study is also being undertaken for further improvements to the Arts Centre as part of the third phase. During 1997/98 the University will complete the Priority 2 works included in the KDK Survey on Building Condition and Statutory Compliance. In March 1997 the University purchased a fourth house in Kirby Corner Road in pursuance of its policy to acquire all eight houses adjacent to the Westwood campus.

5. Information and Library Systems Strategy

The definition of Information and Library Systems Strategy is the responsibility of the Information Services and Library Policy Committees. The development and implementation of academic and administrative IT is undertaken by the Director of Information Technology, while the development and implementation of Library strategy, which is strongly associated with the expansion of access to electronic information services and systems, is under the direction of the Librarian. The aim is to meet requirements with cost effective, long term solutions based, wherever possible, on UK academic and industry standards, open systems and multi-vendor products. Service departments provide resources and support where, for standardisation or economy, this is best addressed at a central level, while academic departments undertake more specialised, localised provision.

A major investment completed in 1993/94 brought cabling to a common standard (level 5 UTP) extending to all offices, teaching rooms and work spaces. A further grand trunk initiative in 1996/97 has improved the capability and resilience of the data network. It has also enabled the installation of a replacement, distributed telephone exchange together with the extension of energy management, control and security monitoring. Networking to the

desk will remain ethernet based, with the selective use of 100Mb where necessary. No further investment is anticipated in the FDDI technology of the fibre backbone, development plans being based upon an evolutionary migration to ATM.

The University is connected to the SuperJANET network and to a Coventry Metropolitan Area Network (MAN) established with JISC funding in 1996/97. Networking standards are to be maintained by full participation in the networking activities and projects of the academic community. The University provides Super-JANET connectivity to Coventry University and JANET services to seven sites, five being FE colleges. The University's strategy is to participate in the development of regional networking, leading to better communication with educational, commercial and industrial partners, and ultimately with staff and students in their homes.

The University's strategy is to enable research, teaching and administration by providing quality access to electronic communication and to information resources, meeting the growing demand for capacity, function and support. Data resources include MIDAS and the ESRC Survey Archive, commercial providers and the World Wide Web.

The implementation of a revised Library strategy is well under way. It includes the transfer of all housekeeping functions, except for inter-library loans, from a Data General/BLS system to a SUN UltraSPARC, UNIX, client-server system, supporting the BLMCP Talis software. The OPAC will be made available to users through the familiar Web interface permitting exciting developments including access to the CURL libraries catalogue (COPAC). The introduction of an advanced version of the OPAC, utilising the Z39.50 protocol, will give users a seamless interface to a vast array of bibliographic and other resources. The strategy includes expansion of CD-ROM holdings (>100 databases) and, when resources are available, pre-caching of many datasets. The multi-user inter-library loans system, based on the Lancaster package, will be upgraded. The Library will expand the range of CAS-IAS systems (cg BIDS/UnCover/Inside Information) and access to the growing number of electronic journals, including those available through SuperJournal and other eLib projects.

The implementation of a new strategy for administrative computing is in progress. This includes the transfer of all major applications from an HP 3000 platform to open systems, using commercial packages based on resilient, open data structures. The first stage of this process has been the implementation of an integrated Payroll/Personnel package on a UNIX platform. The main modules of this system have now been operational for over a year. A new student records package, also UNIX based, has been acquired and will be phased into service from October 1997. The final stage of the migration will be the selection and implementation of a new finance and research system and work has started on the requirements specification.

The University aims to provide facilities enabling teaching quality to benefit from Information Technology. The first phase of a programme to install integrated audio visual facilities in large lecture theatres is nearing completion. There are now 9 lecture theatres, totalling over 1800 seats, with projection from a networked computer. A further three lecture theatres, with over 550 seats, will be brought to a similar level in 1997/98. The strategy is to maintain the large theatres at, or near, state of the art technology, while cascading displaced equipment into smaller teaching spaces.

Computer access for teaching and learning is based upon three elements; campus work areas, the cabling of residences enabling the connection of student owned or rented PCs and provision for students accommodated off-campus. A new facility with 200 PCs was opened

at the start of academic year 1996/97. The objective for work areas is to provide flexible accommodation, suitable for computer assisted teaching, tutorial and examination, which can be used on an open access basis at all other times. A further review of open access work area requirements will be made in 1997/98.

Cabling of on-campus residences, providing UTP Ethernet and telephone connections, started in 1996/97, with over 250 rooms being cabled. This number will increase to over 700 for academic year 1997/98, and it is planned that over 5,000 on-campus residents should gain access to the local area network within three to four years.

6. Financial Strategy

The University has included in its financial plan the information provided by the Funding Council and the Teacher Training Agency on grants for 1997/98 and the prospects for later years. In both cases this has presented the university with a financial challenge. In the case of the Funding Council the large efficiency gain in the year 1999/2000 has required some expenditure to be reduced. In the case of the Teacher Training Agency it has been necessary to cope with a forecast of sharply reduced funding per student continuing across the plan period. The effect of these trends is to continue to put considerable pressure on the University's finances.

On the positive side the financial plan has been helped by the savings programmes which were agreed in 1996, which include 50 early retirements, major reductions in expenditure on equipment, and an ongoing general savings programme. The effect of these has been to remove approximately £3m per year from the university's costs in the later years of the plan.

The reduction in the employers contribution to USS has been of importance.

The University has again re-examined its forecasts of earned income and the plan includes significantly higher income from overseas students among other changes. This is due to sustained increases in overseas student numbers which we anticipate will continue. The University is now also planning to raise fees to overseas students faster than the rate of inflation across the planning period. In addition an examination of earned income performance has revealed that the results can be forecast with reasonable accuracy, so the safety factor (the central contingency) applied to reduce the activities' forecast has been reduced this year so as to release more of the spending into the university's plan. The effect of this change is to remove approximately £500k of contingency from the University's plans in all years.

In response to changes in the year, the plan includes certain new strategic measures of which the most important are:

An academic investment fund which is £1m non recurrently in the years 1997/98 and 1998/99, to provide for the University to respond to the results of the 1996 research assessment exercise.

New incentives to departments for securing new Research Grants and Contracts have been introduced at a cost of £250,000 a year from 1997/98.

The level of capital expenditure planned by the university has been raised, partly by a decision to embark on a major new scheme of student residences costing £12m, and

partly by the inclusion of £6.25m of general provision for other capital schemes which are non self financing.

The provision for scholarships has also been increased so that it continues at a constant level across the plans.

The plan shows the University staying in surplus for all years, but the surplus declines in the final year to a very low figure of around £0.5m. As noted above the plan also contains less contingency provision than in previous years so there is a greater degree of risk than in the past. It is the view of the University that the plan is acceptable as a transitional plan, while higher education awaits the results of the Dearing Enquiry. The University does not regard the plan as satisfactory in the medium term since the level of surplus is significantly smaller than the 3% margin recommended by the Funding Council and which the University considers a reasonable target to allow investment in new developments in the medium term. In this connection the University considered, during the preparation of the plan, the introduction of a new charge for non-academic activities which would be imposed on students and staff, but it decided to make no such provision in the plan for the time being. However it may be that the University will return to such a matter next year if the current financial situation and the large efficiency gain sought in 1999/2000 are not abated after the results of the Dearing Enquiry are known.

7. Quality

Warwick is committed to ensuring that its research and teaching programmes are of the highest quality, that they are internationally competitive, and meet the standards set by leading universities around the world. It remains in the very top group of universities as measured by both the national research assessment exercises and its eleven ratings of 'excellent' or scores of 21 or more points out of the thirteen subject areas assessed for teaching quality to date.

University long-term strategy and the co-ordination of academic financial and physical development is managed by the Joint Council and Senate Strategy Committee. The Committee has worked with each department to produce a research plan with the aim of supporting and enhancing research excellence across the University. Detailed academic resource allocation is undertaken by a committee of the Senate, the Estimates and Grants Committee, which approves student targets and allocates resources for posts and departmental expenses direct to departments within the approved strategic plan. Its procedures, which include consideration of departmental research plans and interviewing departmental chairmen to determine needs and objectives, are crucial elements in ensuring that resources are targeted effectively. The University's governmental and administrative procedures continue to sustain a highly collaborative organisational culture benefiting from academic diversity underpinned by a common institutional purpose.

The University's decision-making processes are directly informed by the Academic Database, a complex set of academic statistical and performance indicators which provides national and inter-departmental comparisons. It was especially commended by the HEQC and is complemented by an evolving matrix of research profiles which is proving of benefit to the Research Committee.

The Senate's Academic Policy Committee has responsibility for quality assurance and assessment policies in the University and manages the reviews of teaching programmes and research centres. The University's quality assurance procedures comprise a rigorous system

of programme approval, complemented by periodic and annual review of all courses. Students are encouraged to provide feedback on the quality of the teaching and education they receive through departmental staff-student liaison committees and a range of other measures including course questionnaires. This feedback informs the design, approval and review of programmes and courses. The Committee monitors and evaluates the workings of staff-student liaison committees across the University.

The Graduate School, through its governing body, the Board of Graduate Studies, plays a key role in the University's quality assurance arrangements for postgraduate education, scrutinising new graduate programmes, reviewing existing graduate courses, and monitoring submission and completion rates. The Graduate School also disseminates good practice on issues such as supervision and training.

The University has engaged with the national discussions on graduate standards, participating in a HEQC pilot study on graduateness in three disciplines. It is using the findings of this study, together with ongoing work on transferable skills, to develop profiles of the skills, knowledge and experience expected of graduates in different subjects, which will be of practical use to students and employers. The harmonisation of examination conventions within each faculty and the care and attention paid to the appointment and role of external examiners are important in maintaining and monitoring standards.

Warwick's approach to quality assurance of programmes delivered on campus, together with those taught with partner institutions at home and abroad were well regarded by the HEQC in its last two academic audit visits. The University is currently preparing for a continuation audit visit by the new Quality Assurance Agency in autumn 1998.

Academic success cannot be achieved without financial resources. The Earned Income Group will remain a key mechanism to generate, forecast and manage additional income together with the Joint Strategy Committee and Finance Committee's willingness to invest in projects which offer the potential for development. The formal monitoring of financial performance throughout the year at regular meetings of budget holders represents a further element in the maintenance of an environment which can respond quickly to external changes.

Warvick takes pride in managing itself effectively. In spite of its growing size it enjoys a highly collaborative atmosphere. Its culture is built on strong central management coupled with strong departmental management and an organisational arrangement that stresses both the benefit of academic diversity and of institutional common purpose. Financial management is strong at all levels and runs throughout the institution. The University operates with short lines of communication and where necessary has the machinery to take important decisions quickly. We believe we are well placed to prosper throughout the late 1990s and into the next century.

8. The University and Regional Policy

The West Midlands and the County sub-region remain in many ways areas subject to social deprivation:

(a) Perinatal death rates per 1,000 births, often taken to be a key public health indicator, stand at 10.6 in the West Midlands (12.3 in Coventry), as against 8.8 nationally.

- (b) Only 38% of pupils in Coventry obtain passes in five or more GCSEs compared to 44.5% nationally.
- (c) Age participation rates in higher education in the West Midlands are 29% compared to a national figure of 32.4%.
- (d) Improved performances in the last six months still show only 17% of small companies in the region introducing new products, a key factor in their survival.

The University was brought into existence by the efforts of the Coventry City Council and the Warwickshire County Council and over many years has tried to play a leading role in the region's economy and to remedy some of its difficulties. We have since the University's foundation been keen to be involved in medical education and our postgraduate Medical School already has Professorships in Community Paediatrics and Primary Care as well as in other fields. We have a major commitment to teacher education and in 1995/96.165 of our graduates took teaching positions in the area. We have made a significant commitment to access to higher education through part-time degrees and the 212 degree scheme and through our large continuing education and post-experience programme which has involved 13,400 people in 1995/96. The University of Warwick Science Park, which has recently just opened its first satellite Innovation Centre in Warwick, has made a significant contribution to the local economy. The initial 44 acres is now full, 60% of the tenants having grown out of the first incubator building. The SME Centre in the Business School and the Warwick Manufacturing Group's work with Coventry City Council 'World Class Manufacturing' initiative make very important contributions to the small business scene. At the level of larger companies the University's commitment to post-experience training in business and in engineering represent a major regional advantage. At the same time the University Arts Centre attracts 250,000 visits to music, theatre, film and painting and sculpture to the campus and competes vigorously with the concert and other facilities in Birmingham. Relations with the two local authorities remain very good. The University is closely involved in the development of a regional economic plan with the Government Office of the West Midlands and the Vice-Chancellor is an active member of the Coventry and Warwickshire Partnership, the agency for economic development in the sub-region. The University is one of the six largest employers in the sub-region and is the only one whose growth has continued throughout the last decade. The West Midlands economy is primarily technology-led and the University's science and engineering departments are deeply involved with it in undergraduate degrees ie, partnership degree with Rover, which we hope to spread to other major companies, joint masters and doctoral programmes and industrially-led research.

UNIVERSITY OF WARWICK

Processing Academic Business

Governance of the University

The University is governed through five major bodies: Court, Council, Senate, Assembly and the Faculty Boards

(a) Court

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This is chaited by the Chancellor. It meets once a year to receive the Vice-Chancellor's Annual Report and appoints the Chancellor on the recommendation of the Council and the Senate. While Court has a large membership, with many representatives from the local community, it is not involved in the day to day running of the institution, rather it is a ceremonial body which promotes the work of the University.

(b) The Council and the Senate

The Council has a full membership of 44 with a majority (25) of lay members. It is chaired by the Pro Chancellor. He and the other lay officers - the Chancellor (who while formally a member, never in practice attends meetings), and the Treasurer - are ex-officio members as are the Vice-Chancellor and the three Pro-Vice-Chancellors. The rest of the membership comprises 22 lay members drawn from the professions, business and industry and the local authorities. 13 academic members drawn from the Senate and two students elected by the Union of Students. 13 of the lay members are co-opted on the recommendation of the University's Nominations Committee which is charged with keeping under review the extent to which membership of the Council is broadly representative of the public and appropriate to the interests of the University.

The Council is the executive governing body of the University and derives from the Charter specific managerial responsibilities for finance and the University estate, and also a more general remit to oversee the conduct of University business in concert with the Senate. This articulation between the Senate and the Council is a key factor in the University's system of governance and management. Whilst the Council is ultimately accountable for the efficient management and good conduct of all aspects of the University's operation, within that the Senate has responsibility for the academic activities of the University. These have always been interpreted broadly to include all aspects of the operations of the University that have a bearing on teaching, research and the welfare, supervision and discipline of students. The Statutes state:

The Senate shall be the supreme academic authority of the University and shall, subject to the powers reserved to the Council by these Statutes, take such measures and act in such a manner as shall appear to it best calculated to promote the academic work of the University.

In order that the Senate may fulfil its remit there are certain statutory provisions which ensure that Council must take into account the views of the Senate on resource matters whether physical or financial insofar as they affect educational and social policy. In particular, the senate has the power:

'to advise the Council on the allocation of resources for teaching and research'.

'to advise Council on priorities for new buildings and on the long-term development plan of the University'. In addition, the Senate may:

'make recommendations to the Council on any matter of interest to the University.

In order to carry out its responsibilities, and ensure the necessary dialogue with the Senate, the Council has specialist standing committees, principal amongst which are the Finance and General Purposes Committee and the Building Committee. The Senate and the Council have established a Joint Strategy Committee to advise on strategic issues and matters of forward planning. The Joint Committee has a specific concern to ensure that interrelated questions of academic, financial and physical planning are considered in conjunction.

The detailed work of the Council is mostly carried out through the Council standing committees and the Joint Strategy Committee. Each of the standing committees has a membership drawn from amongst the members of Council with the chairman being a lay member. The Joint Strategy Committee on the other hand is chaired by the Vice-Chancellor but includes the Chairman of Council, the Treasurer, who is ex-officio the Chairman of the Finance and General Purposes Committee, and the Chairman of the Building Committee as well as the three Pro-Vice-Chancellors, the three Chairman of the Faculty Boards and the President of the Students' Union.

In addition to the key standing committees mentioned above, there is a range of other Council sub-committees, usually with a mixture of lay and academic membership, which have an important role in overseeing the conduct of specific areas of business. These include:

Arts Centre Committee (Chaired by the Vice-Chancellor)
Audit Committee (Chaired by a lay member of Council)
Honorary Degrees Committee (Chaired by the Pro-Chancellor)
Careers Advisory Board (Chaired by the Vice-Chancellor)
Earned Income Group (Chaired by the Registrar)

The Senate is chaired by the Vice-Chancellor and has a full membership of 37 elected from the Faculty Boards and the Assembly. Membership also includes two representatives from the Union of Students. The Senate meets up to eight times per year and the greater part of its business arises from reports from the range of Senate committees responsible for specific academic matters eg. Academic Policy Committee, Board of Graduate Studies. The Estimates and Grants Committee is a Senate committee which also reports to the Finance and General Purposes Committee and is charged with making recommendations in regard to the distribution of resources made available for academic purposes, including allocation of departmental budgets and establishment and filling of vacancies for new posts in academic departments and academic service areas. The Senate also oversees the three Faculty Boards as well as the Research Centres and Institutes.

The Senate Steering Committee, comprising the Vice-Chancellor, the three Pro Vice-Chancellors, the Chairmen of the Faculty Boards, Chairman of the Graduate School and the President of the Union of Students meet on a weekly basis during term time. The Committee's main responsibilities are to make recommendations to the Senate on items of business arising from more junior bodies and to act on behalf of the Senate on academic matters which arise between meetings of the Senate.

(c) The Faculty Boards

The Boards of the Faculties of Arts, Science and Social Studies are headed by elected Chairmen, appointed on an annual basis but with the expectation that a Chairman will serve for a minimum of three years. Membership of the Faculty Boards are drawn from representatives of departments and research centres within each Faculty. The Faculty Boards are responsible to the Senate for academic matters within the Faculty, ie teaching, research, curricula and examinations.

(d) Assembly

The membership of the University Assembly includes all academic and administrative staff. The Assembly meets once per year and is chaired by the Vice-Chancellor and has the power to make recommendations to the Senate and the Council on any matter relating to the University and receives reports on the physical and academic development of the University.

The Vice-Chancellor is Chairman of the Senate and ex officio a member of all University committees. The Registrar is formally Secretary of the Statutory bodies and their committees.

Processing Academic Business

Academic business (eg. new academic courses, degree programmes, reviews of degrees, examination regulations, academic policy etc.) is processed through the various Senate Committees (see Appendix 1)—For example:

(a) New Degree Programmes and Courses within Degrees

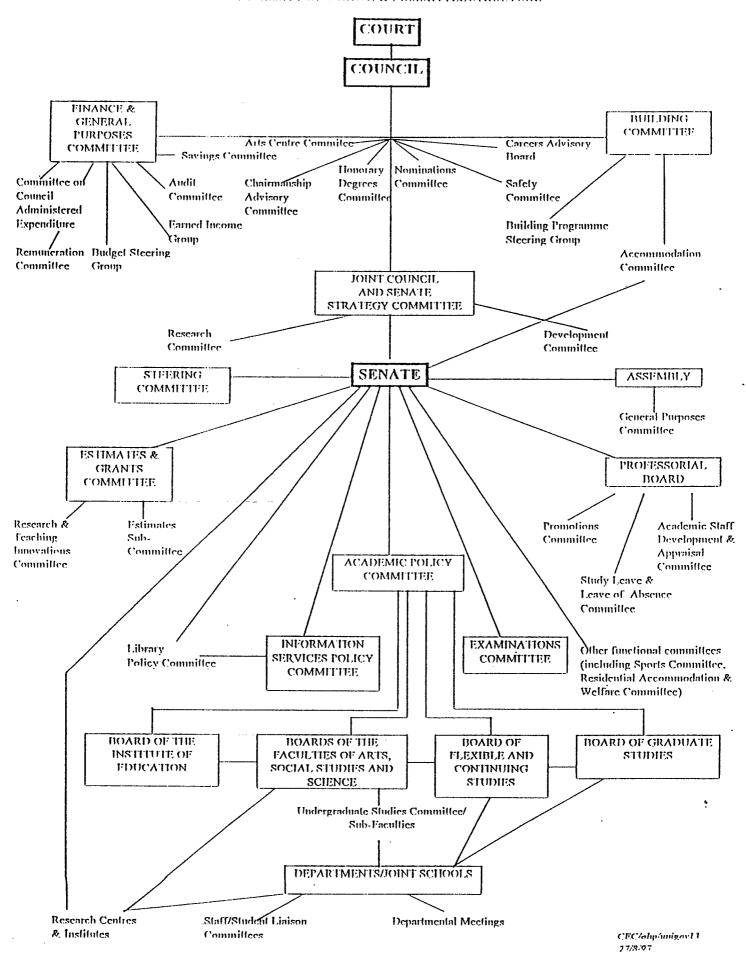
New degree programmes are proposed by departments or joint schools. Undergraduate programmes are then considered by the relevant Sub-Faculty and Faculty Board, postgraduate programmes by the Board of Graduate Studies. They are then submitted to the Academic Policy Committee which sentinises all such proposals on behalf of the Senate. Finally, the Senate's approval is given on a recommendation from the Academic Policy Committee. New courses within degree programmes are proposed by departments or joint schools and approved by the appropriate Sub-Faculty and Faculty Board.

The Senate has determined the information which it would wish to see included in new degree proposals and these requirements are embodied in the standard forms which are available from the Academic Office. The information must include the academic rationale for the new degree and the estimated student demand.

(b) Periodic Review of Degrees

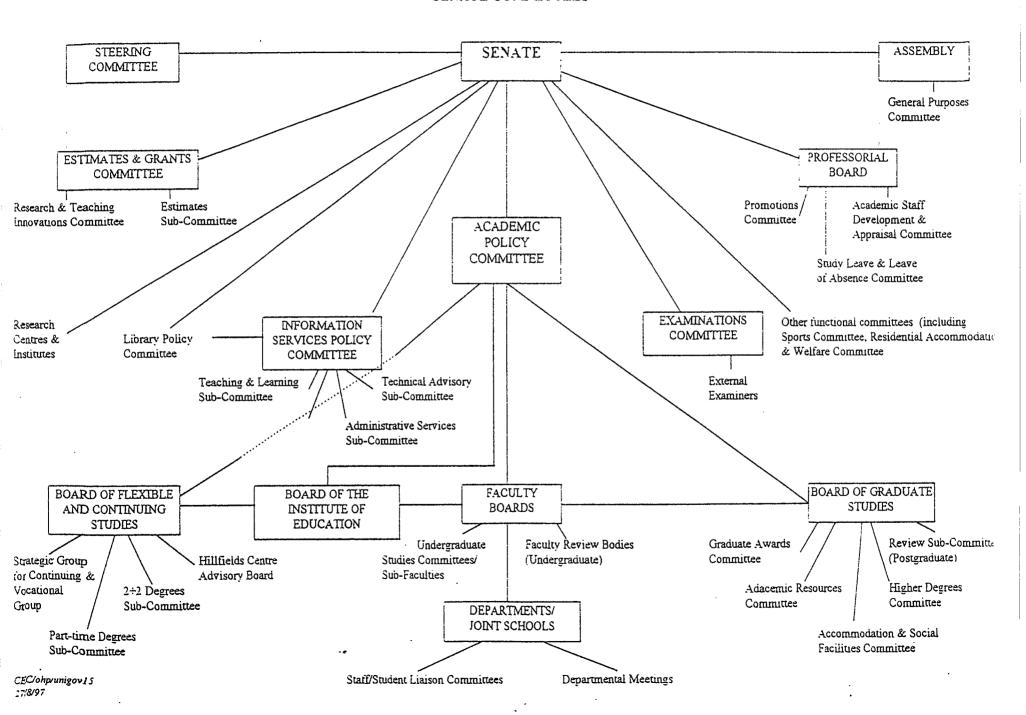
The responsibility for the periodic review of degrees lies with the Academic Policy Committee. The reviews of undergraduate programmes are conducted by Faculty Review Bodies, and those of postgraduate programmes by the Board of Graduate Studies. Reports resulting from the reviews are forwarded for the consideration of the Academic Policy Committee.

The timetable for meetings of the Sub-Faculties, Faculty Boards, Board of Graduate Studies etc. is published each year in the University Committee timetable and made widely available to all members of staff.



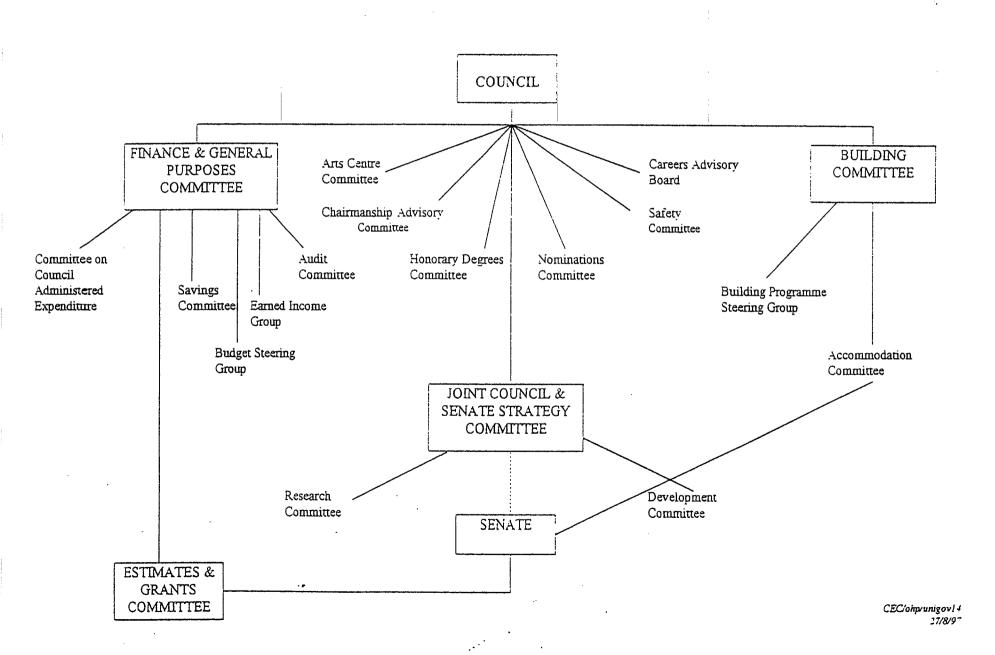
UNIVERSITY OF WARWICK COMMITTEE STRUCTURE

SENATE COMMITTEES



UNIVERSITY OF WARWICK COMMITTEE STRUCTURE

COUNCIL COMMITTEES



- The Legal Framework of UK University Governance
- Constitution and Responsibilities of Governing Bodies
- The Proper Conduct of Public Business
- The Relationship between Governance and Management

THE LEGAL FRAMEWORK OF UK UNIVERSITY GOVERNANCE

1. THE ROYAL CHARTER

granting legal independence

2. GOVERNANCE

 Charter, Statutes, Ordinances, Regulations

3. GOVERNING STRUCTURES

 Court, Council, Senate, Faculties, Academic Departments

4. THE DECISION MAKERS

 lay members, academic staff, the bureaucracy

IMPACT OF MASS HIGHER EDUCATION

- COST
- PRIVATE FUNDING
- SIZE OF INSTITUTION -MANAGEABILITY
- PUBLIC ACCOUNTABILITY
- DIVERSITY REGIONAL DIMENSION
- COMPETITION FOR RESEARCH STANDING

RESPONSIBILITIES OF GOVERNING BODIES

Financial Management

According to the HEFCE's Financial Memorandum, the governing body of the institution shall be responsible for:

"ensuring that funds from the Council are used only in accordance with the Act [Further and Higher Education Act 1992] this Memorandum and any other conditions that the Council may from time to time prescribe."

"Ensuring that in conducting its affairs it exercises its discretion [over its use of public funds] reasonably and takes into account any relevant guidance on accountability or propriety issues from time to time by the Council, the National Audit Office, sector representative bodies or any other relevant authority."

ensuring "that the institution has a sound system of internal financial management and control."

Appointing an audit committee and arranging "to provide for internal and external audit, in accordance with the Audit Code of Practice and any other guidelines drawn up by the Council in consultation with institutions."

"Delivering value for money from public funds."

RESPONSIBILITIES OF GOVERNING BODIES

Health and Safety

The governing body shall:

"make and give effect to such arrangements as are appropriate, having regard to the nature of [the University's] activities and the size of [its] undertaking, for the effective planning, organisation, control, monitoring and review of the preventive and protective measures."

"appoint one or more competent persons to assist [it] in undertaking the measures [it] needs to take to comply with the requirements and prohibitions imposed upon [it] by or under the relevant statutory provisions."

provide its employees with "comprehensible and relevant information on -

- the risks to their health and safety identified by the [institution's health and safety] assessment.
- preventative and protective measures.
- the [safety] procedures [of the University]."

1992 Health and Safety Act

RESPONSIBILITIES OF GOVERNING BODIES

Information

The governing body shall:

"give a council [in our case the Higher Education Funding Council for England, established under the provisions of the 1992 Act] such information as they require for the purposes of the exercise of any of their functions under the Education Acts"

1992 Further and Higher Education Act

RESPONSIBILITIES OF GOVERNING BODIES

Efficiency

The HEFCE is empowered by the Act to "arrange for the promotion or carrying out by any person of studies designed to improve economy, efficiency and effectiveness in the management or operations of an institution within the ... higher education sector."

The person carrying out such an efficiency study may

"require the governing body of the institution concerned -

- (a) to furnish [him] with such information, and
- (b) to make available to him ... for inspection their accounts and such other documents,

as [he] may reasonably require."

1992 Further and Higher Education Act

RESPONSIBILITIES OF GOVERNING BODIES

Students' Union

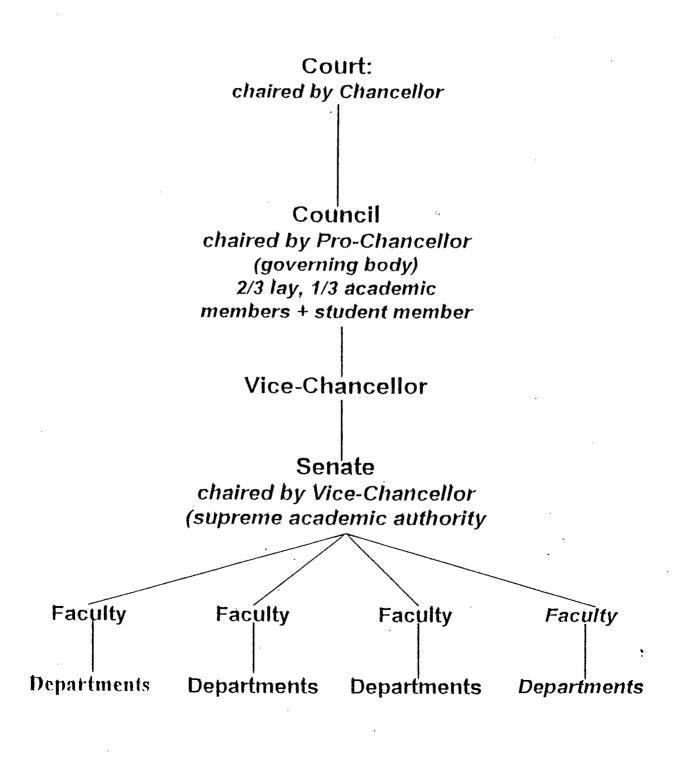
The governing body is required to take steps "as are reasonably practicable" to ensure that:

"any Students' Union . . . at the establishment operates in a fair and democratic manner and is accountable for its finances."

The governing body must prepare and issue a code of practice setting out how the above measures are to be put into effect.

1994 Education Act

PRE-1992 UNIVERSITIES



POST-1992 UNIVERSITIES

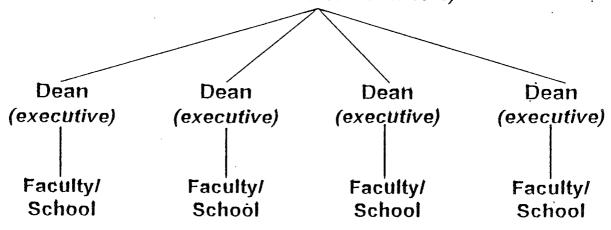
Board of Governors:

chaired by lay Chairperson, only 2 staff members and 1 student member, not more than 25 members in all

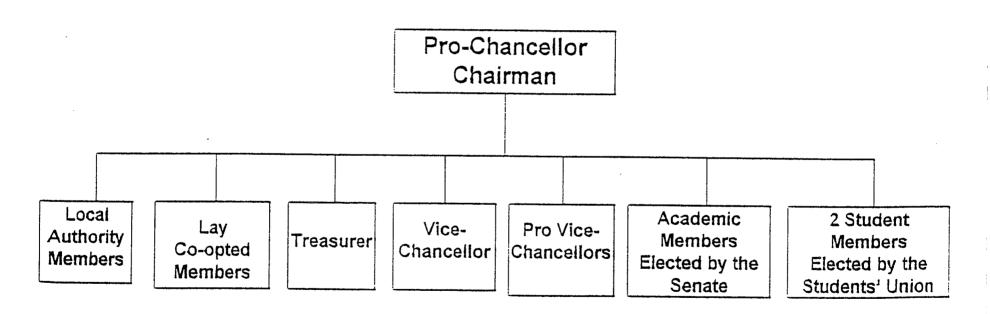
Vice-Chancellor (chief executive)

Pro Vice-Chancellors or Deputy Vice-Chancellors (executive)

Academic Board
(a recommending body to the Vice-Chancellor
and to the Board of Governors)

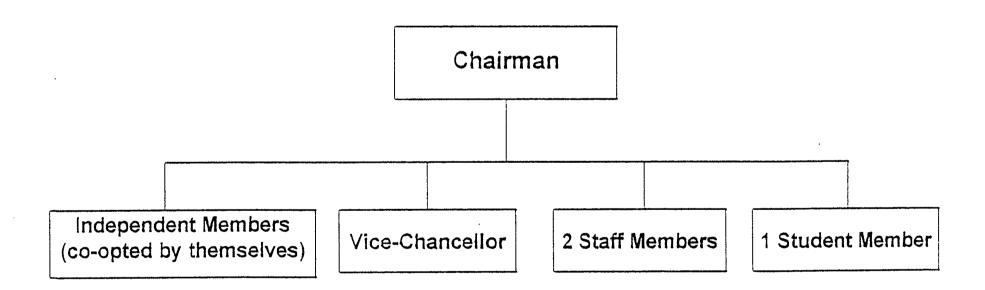


UK TRADITIONAL UNIVERSITY GOVERNING BODY CONSTITUTION (England and Wales)

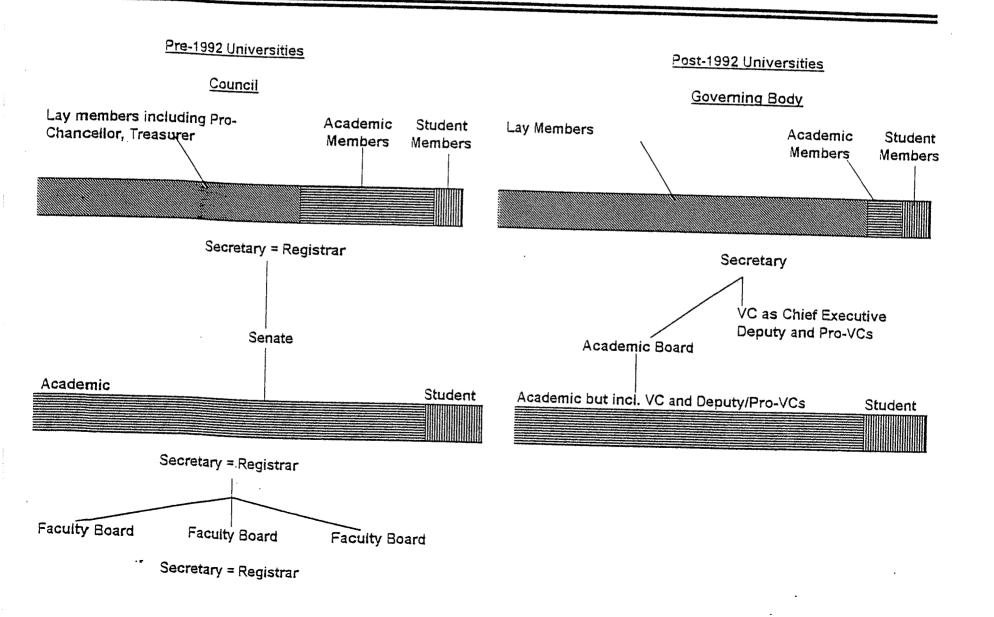


Total membership can be between 40 and 150

UK NEW UNIVERSITY GOVERNING BODY CONSTITUTION



Total membership can be between 12 and 24



THE PROPER CONDUCT OF PUBLIC BUSINESS

- Audit Committee
- Nominations Committee
- Remuneration Committee
- Register of Interests: Declaration of Interests
- Rotation of Membership
- Age Limits
- Openness and Transparency
- Role of Chairman
- Role of Secretary

Argentina 1997

The Generation of Income

1. In today's session I want to look at a range of issues to do with the generation of income in universities. As you will have seen from my remarks in the opening session of the seminar, Warwick has been particularly successful in setting up and running profitable academic and non-academic services to augment the declining funds that it receives from the government. While I want to provide you with some examples from Warwick and to use our experiences as a context, I also want to generalise the lessons that we think we have learnt in this field. In order to do that I propose to deal with the following topics:

OVERHEAD

Earned income is a phrase that I will be using a lot in my talk. What do I mean by it? Some of you may think that it should only refer to academic programmes that are offered which either charge fees sufficient to meet their full costs or which charge fees sufficient to meet their full costs and to make a surplus. My definition would be wider than this and we should think of carned income as all income generated over and above the core funding provided by a university's primary funding body or government. At Warwick, we treat all income except for the principal grant we receive from the government and the associated fees paid on behalf of UK students as carned income. The following overheads demonstrate the way in which the balance of funding between public funds and earned income has shifted at Warwick since our foundation.

OVERHEADS

You will see that the proportion of our income that came from public funds (the white section of the first set of pie charts) started at 77% and remained at about 70% for the whole of the period up to 1980. Then, in the face of the changes that deeply affected universities in the 1980s (the Thatcher effect perhaps), the balance started to change as Warwick responded to the new conditions by establishing an enterprise culture. By the beginning of the 1990s, the position had become where government funds represented well under half of the income to the University, a trend that has continued to this day as the second overhead (a summary of the most recent financial year) shows. It is also worth pointing out that these proportions have altered during a period when the University's income has expanded considerably. So both the volume and percentage of earned income has been in steady growth for nearly 20 years now despite at least two economic recessions in the country and the continued downward pressure on public funding.

The next overhead shows the growth in income and surplus from Warwick's earned income activities in the last five years. You can see that the sums involved are substantial. It has been estimated that, in order to produce the same overall surplus of nearly £21m per annum, the University would need a capital sum of nearly £500m invested in a high interest bank account. In other words, earned income is our endowment and also generates all kinds of interesting academic management challenges that expand the horizons of the University and its staff.

2. But these things are not easily achieved and can of course bring all kinds of problems in their train. So you might want to ask: Why Generate Income?

I have heard plenty of reasons for not generating income:

We cannot generate income because there are no opportunities for my university

We cannot undertake much income generation because of government or institutional regulations or because of individual terms and conditions of service.

We do not want to undertake income generation because it is difficult or not what universities are meant to do or because we do not have the skills to do it.

The next overhead quotes from two former Education ministers in the UK.

OVERHEAD

Notice how both use the word freedom. It is certainly our experience at Warwick that, while we are still of course dependent on the income we receive from government, we have much more independence because of our earned income than we would have without it. We are able to pursue plans and strategies that would otherwise be impossible and to make decisions about the future of the University without constant recourse to the government.

I think therefore that a principal answer to the question Why Generate Income is:

OVERHEAD

Additional income enables a university to pursue its stated aims and objectives to higher standards than would otherwise be possible.

In addition, I would argue that earning income:

Provides opportunities for universities to serve society more effectively by offering services and engaging with external organisations

Provides opportunities for members of staff and departments to benefit from their talents and entrepreneurial ideas

Provides a better environment for students and staff by the investment that earned income brings with it.

Provides experience for those involved in the project and its management with valuable commercial experience and the disciplines of the market place.

3. But how can income be generated?

What I would like to do now, is to break for perhaps 20 minutes and ask you to work in groups to come up with 5 ideas for how your university does or could create opportunities for making money.

I think you will discover that there are a huge number of things that universities already do or could do quite easily which have the potential to earn money.

BREAK FOR GROUPS AND FEEDBACK

Let me show you the list of activities that Warwick has placed within the earned income category and how they contribute to the University. We place each activity into one of four categories:

OVERHEAD

Academic-Driven - these are activities that are the direct products of academic activity

'Spin-Off - these are activities that are direct off-shoots of services that are essential to the University

Stand-Alone - these are largely commercial activities like shops that have little or no academic link with the main purposes of the University

Self-Financing - these are activities that are not intended to be profit-making but are intended not to require a hidden subsidy from the University. They are subject to the same disciplines

as all other activities but tend to contribute income but not necessarily profit to the University's budget

We saw earlier the kinds of surpluses that the University has generated from these activities. I do not believe that it is impossible for any university, anywhere in the world, to find some activities which could be the start of a similar programme.

4. How do you organise a framework in the university to control and run an earned income programme? There is of course no one solution to this question. But a key condition is the university's commitment to the idea of starting an earned income programme; it must have the full support of the Rector and the governing body of the university as well as the senior staff. In order for the commitment to be realised, there must be a link with the agreed strategic plan for the university and the risks and rewards must be fully understood.

At Warwick, all the activities that I listed on the previous overhead come under a formal body in the University called the Earned Income Group. This is chaired by the Registrar and its members represent the senior officers who are responsible for key areas of the earned income programme. In some ways it operates like a board of directors meeting regularly to review progress against plans and targets, discuss problems and resolve outstanding issues. It can also consider new ideas and make decisions about start-up investments to launch a new initiative.

The Earned Income Group is part of the University's committee structure and reports to the Finance Committee. It undertakes an annual exercise to request forward five year plans for all

activities in its control and these are subjected to meetings with the leaders of the activities at which the plans are discussed and the assumptions in them challenged. At the end of the process, targets and budgets are agreed for all activities which are subsequently monitored on a two monthly basis in the following year. The five year plans are of course rolling plans and are subject to revision every year. The purpose of the mechanism is to get early warnings of things that are going wrong (remember that there are risks as well as rewards) but also to ensure that any upward revisions in the expectes surpluses of the activities are taken account of early enough to ensure that the University is able to alter its financial plan and take advantage of the benefits.

An important feature of the Warwick system is that each activity has an identified champion or entrepreneur who leads the activity and is ultimately responsible for it. Each activity also has an identified link officer drawn from senior management staff in the University who are responsible for liaising with the activity and monitoring its progress on behalf of the Earned Income Group.

Having a structure, also implies that you have agreed rules for the way in which earned income is treated and shared. Some universities would allow the income generating department to keep all the profits from the activity once a suitable overhead was paid to the University. Warwick operates in rather a different way. Each activity is of course costed for both direct expenditure and overheads. I will have something more to say about business plans a little later. But we then share the profits of the venture between the University and the Department on a 50:50 basis. In this way there is an incentive for the department to be involved but the University is also a major beneficiary. Remember that a University is not a company: profits are not translated into payments to share holders. All money generated is

used to pursue the academic purposes of the University as it sees fit. This also means that everyone benefits and not just the department running the activity. It is after all, rather easier perhaps for a Department of Engineering to raise income than a Department of History but there is no reason why the Department of History should not be an indirect beneficiary of the opportunities presented in Engineering. This system of mutual benefit through what is in effect taxation and profit-sharing has been a strong and successful feature of the Warwick model.

5. What can you do with the surpluses or profits generated by earned income activities?

Remember the key word in the quotations that I put up on the overhead earlier in this talk:

Freedom. Within the governing principles of your institution you can use the money for many things. At Warwick, the additional income has enabled us to start a large-scale research fellowship scheme, to buy in expertise and staff that we would otherwise be unable to afford, to construct new buildings and develop the campus and to ensure that departments are able to operate at more favourable levels of staffing and finance than in many other universities. The main point is that additional income which has few strings attached can be used with great advantage to enhance the academic standing of the university.

With this particularly in mind, let us now look at some of the advantages of starting an earned income programme:

OVERHEAD

Finance for core activities: We estimate that at Warwick, perhaps as much as £4m of the surplus that we retain from earned income goes back to departments as a subsidy to augment

the grants that we receive for their activities from public sources. What this means is that we have been able to protect them from the worst consequences of declining public funds and maintained good staff:student ratios as well as a high quality resource base. I think that we have seen this benefit reflected in the high ratings we have received for teaching quality which itself brings all kinds of benefits to the University.

Finance for Buildings: Universities in the UK no longer receive capital grants for new buildings from public sources. At Warwick however we have been able to maintain an extensive building programme partly financed from earned income. This in turn enables us to expand our activities and to draw in more income or support the quality of teaching and research. The alternative would be to borrow money for buildings and expansion. The danger with that however is that loan repayments take an increasingly high proportion of your recurrent income thereby subsidising a capital programme from money that might be required for new staffing or the support of teaching.

Services for Core Activities: Additional income could be spent on enhancing library facilities, computing or other support services that advantage the academic mission of the university.

Greater Financial Autonomy: We discussed this point earlier in the context of quotations about the preservation of academic freedom and institutional autonomy through creating independent income for the university. It would be foolish to pretend that at Warwick we could ever free ourselves entirely from the need for government money but our developing financial independence does enable us to take decisions and make investments in our own best interests without recourse to the government.

The Interest Factor: Creating this new dimension for a university is both rewarding and fascinating. We shall look at the risks in a moment but it is easy to forget that running the size of programme that we have at Warwick is both fun and stimulating. New skills have to be learnt, individuals with different kinds of talents are brought to the university and the challenge and rewards can be a positive factor in retaining talented members of staff who might otherwise go elsewhere.

But there are risks and potentially negative factors that also have to be taken into account:

OVERHEAD

The Risk of Losses: All companies are subject to downturns in their markets and the risk of making losses for a variety of reasons. There is no guarantee of continued profits. Earlier I suggested the ways in which careful monitoring can provide early warning of problems but nonetheless there will always be risk that something will go wrong. One of the ways in which we try to reduce these risks at Warwick is to have a diverse portfolio of activities as we saw. The greater the number of businesses, the more probable it is that a disappointing result in one might be compensated for by a better result in another. But even we are concerned by our dependence on two major areas: the Business School and Warwick Manufacturing and would like dearly to identify another major champion to balance these two.

High Administrative Burden: This is the downside of the fun and stimulus factor I referred to among the advantages. Running enterprises brings with it an overhead on central administrative services and at local level. Some of this can of course be costed into the

project but an earned income programme still absorbs a considerable amount of time of the senior officers.

Use of Building Space: While it is true that a successful and relatively large scale programme of income generation can provide the resources for new buildings, there is likely to be a cost in the use of possibly scarce accommodation to start up a new enterprise before it is able to create the resources to fund its own space. The opportunity cost of new activities must therefore be assessed carefully so as to ensure that income generation is not being subsidised by purely academic activities.

Creation of a Non-Academic Image: There is a risk that the university will become known more for its commercial ventures than for its academic achievements. We would argue at Warwick that our reputation for being commercially astute and academically very good merely reinforces the image that we want to project. But unless one can sustain academic excellence, either independently or through the earned income programme, it is possible that the overall image of the university could be damaged.

Competition from Private Competitors: Establishing a commercial venture will inevitably bring a university into direct competition with private suppliers of the same service.

Competition is healthy (and in my view a necessary feature of a successful earned income programme) but it is as well not to underestimate the strength of the opposition.

6. The next topic that I said I would cover is the legal and financial framework in which you may need to operate. The biggest disadvantage of all in starting an earned income project is that it is not permitted either by your constitution as an institution or perhaps by the

government under its current rules governing higher education. In the UK, there is a specific clause in the Act which established the current Funding Council regime which prohibits the Funding Councils from taking the private income of universities into account when determining the grants that they will make. This means that Warwick is not penalised for its success in income generation by receiving a smaller grant than it might otherwise have been entitled to. This is a small but crucial point. The state in which a university operates must be willing to permit and encourage such activity. I have been involved in a project with French and Romanian institutions on the subject of carned income. One of the frustrations in Romania is the stifling nature of the regulatory framework which either actively or indirectly hampers universities from establishing enterprises of their own even though, as you can imagine, Romanian universities are in dire need of additional finance.

At the level below government, you need to assure yourself that the University's charter or Act of establishment does not include any clauses that may make it difficult for you to make surpluses, borrow money, buy and sell property, take out loans, etc. In the earlier days of our activities at Warwick, we had to take legal opinion on the force of some of the clauses in our Charter and Statutes to ensure that they did not prevent us from establishing certain enterprises.

7. Another missing feature that I have found from working with Romanian universities is the lack of experience or training in business practices. Earlier, I talked about the processes by which an earned income programme can be controlled and monitored and encouraged. A key precondition of agreement to start up a new enterprise must be scrutiny of a proposed business plan which will govern the objectives of the enterprise and take into account income assumptions and expected costs. Only from this will it be possible to see whether the idea is

likely to be successful. It is the vehicle by which a bright idea is transformed into a practical possibility. My next overhead is I hope an exhaustive list of the possible topics that need to be considered when drawing up a business plan:

OVERHEAD

Not all of these will be applicable to all proposals but many of them will. At Warwick, we have developed a considerable expertise in our Finance Office to assist departments or individuals with the bright idea to test the marketability of that idea against these financial tests. Sometimes of course a new idea will need investment to launch it and here again the business plan can provide the basic information on which to make a judgement about how sound such an investment is. Thus a business plan is always a guide and not the only factor that needs to be taken into account when a new enterprise is launched.

8. Once you have launched your activity, it is crucial that there are good financial control and monitoring systems in place within the wider financial framework. If the activity is entirely a commercial one (perhaps the opening of a shop on campus) then its profitability (or otherwise) is what matters most. We saw that potential rewards come with very real risks. You must therefore ensure that you have the right people with the right skills to manage your activities. If you open a shop, you probably want someone with retailing experience to run it, not the Professor of Archaeology. Equally, if you run a conference centre, people with hotel training might be preferable to an Academic Registrar with a degree in medicval English. Your managers must have relevant experience, keep uptodate with market changes and legislation and be aware of what competitors are up to. They must be able to react positively to opportunity from their knowledge of the business and be tough enough to take hard

decisions on cutting costs when times are not so good. Having flexible and controllable costs (staff expenses etc.) is a key to being successful.

OVERHEAD

Controls above the level of the manager must be clear and detailed. You will probably want monthly accounts which can be compared with previous periods and you will want to develop performance indicators and monitor carefully outcomes against the agreed plan. This all means that you will need good and effective financial management systems which are run by competent people and which can provide information quickly and clearly to those in charge of the activity. As we saw earlier, these systems are the sinews of the committee structure or accountability mechanisms that you will either already have or will want to put in place.

8. Before I conclude this talk, I would like to say some brief things about companies. It is of course the case that company law and company structures differ from country to country and what I say may not be entirely relevant to Argentina. You can let me know. However, you would find in the UK that some universities have established their earned income activities in single or multiple companies. At Warwick we have tended not to go down this route although we have established two companies for two of our residential training centres as a way of minimising tax liabilities. As the next overhead shows, minimising tax may be a key reason for setting up a company to control an activity:

OVERHEAD

15

Without wishing to go into things I only partly understand myself, the reason that a company

can minimise tax for you (at least in the UK) is that the relationship with the parent body can

be so arranged that any profits are transferred to the University so that in the end of year

accounts there is no surplus liable for tax under UK Company Law. This would not be the

case if the University ran the activity.

The other reasons you might consider are set out on the overhead.

But there are as ever possible reasons for not establishing a company:

OVERHEAD

9. I have tried to give you a tour of some of the issues that you need to consider when

thinking about income generation. I realise that I have had to cover some things rather

quickly but I hope that the topics are the ones you are interested in. Perhaps I can end by

putting up some summarising conclusions:

OVERHEAD

JWN/28.8.97/argentina3

Factors driving the internationalisation of Higher Education

- Diplomacy
- Educational
- Income
- Aid
- Economics

Overseas Student Numbers: University of Warwick

	1981/82	1986/87	1996/97
Total Students	5555 * +	5878 *+	14012 *
Total Overseas	267	565	2456
Postgraduates	108	202	1708
Undergraduates	159	363	748

 \mathbf{o}

o = Heads

^{* =} Excludes franchised, validated and external programmes (DL/MBA)

^{+ =} FTEs

Overseas Students; Concerns and Priorities

- pre-arrival communication/information
- availability of accommodation
- appropriate information, advice and help on arrival - pre-sessional orientation programmes
- content and delivery of programmes/ courses
- contact with academic tutors
- language and study skills
- opportunity to meet British people/experience British culture

Overseas Students; Concerns and Priorities of Staff:

- Financial considerations
- Recruitment/marketing
- Resource implications
- Educational, cultural, social and personal needs of students
- Additional demands of overseas students
- Uneven provision and support for students across the institution
- Co-ordination, a central point of reference
- Staff training

Student Support Services provided by University of Warwick International Office:

- Course information
- Admissions/Accommodation
- Orientation
- Course Selection
- Course assessment, examinations and transcripts
- Student welfare and social programmes

Opportunities for development of international co-operation and collaboration

- Student Exchange Programmes
- Staff Exchange Programmes
- Research Projects/Collaboration
- Networks of Universities

Obstacles:

for Student Exchange Programmes:

- Language and Culture
- Curriculum Development
- Accommodation Provision
- Integration into Student Life
- Advice, Support and Welfare
- Identifying study opportunities for outgoing students
- Grants/finance

for Staff Exchange Programmes:

- Attitude/policy of staff members and academic departments
- Language
- Practical support; tax, legal matters, work permits
- Resources/finance

Strategies for improving internationalisation:

- Development of an institutional policy/strategy on internationalisation
- Organisational framework/infrastructure
- Policy at Faculty level
- Centralised administrative support
- Project Monitoring
- Allocation of resources

Implementation of a Centralised Internationalisation Policy

- Centralised International Office responsible for:
 - supporting the development of an international policy at a University level
 - monitoring external developments at national and international levels
 - disseminating information about external developments and funding opportunities
 - stimulating faculty response to external developments by initiating new international programmes in co-operation with Faculties
 - co-ordination of international programmes at an institutional level
- Faculty level international officers/co-ordinators responsible for:
 - supporting the development of an international policy at Faculty level
 - establishing international contacts and networks (driven centrally and at departmental level)
 - providing administrative support for international exchange programmes
 - promote development of curricula to accommodate international programmes
 - representing the Faculty within and outside the University

Relies upon investment of resources at central and Faculty levels

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Relies upon investment of resources at central and Faculty levels