Reviews of National Policies for Education

Higher Education in Ireland

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Foreword

OECD Reviews of National Policies for Education, *conducted by the Education Committee, provide a means for member countries to engage their peers in examining education policy issues. In 2003, Ireland's higher education policy was reviewed by the Committee at the request of Irish authorities. The review came at a time when the Irish Government had fixed the strategic objectives of "placing its higher education system in the top ranks of OECD in terms of both quality and levels of participation" and "creating a world class research, development and innovation capacity". These two objectives served to frame the terms of reference for the review (see Annex A).*

Part I of the review consists of the report of OECD examiners. Drawing on the Country Background Report prepared by Irish authorities and other inputs, the Examiners' Report analyses the main challenges facing Ireland's higher education system. It recommends a series of actions structured around five themes: strategic steering of the tertiary education system; governance and management of higher education institutions; strategic management of research, R&D and innovation; access and participation; and investment in the tertiary sector.

Chapter 1 examines the context and terms of reference of this review, complemented by a brief historical overview and international comparisons. Chapter 2 analyses the structure of the Irish tertiary education system and identifies the need for a unified concept. Chapter 3 looks at problems in governance and management and recommends change in several areas. Chapter 4 examines the issue of widening participation and lifelong learning, with special attention to provision for adult, part-time and disabled students and recruitment of foreign students. Chapter 5 deals with investment in research and development. Chapter 6 examines strategic management of the sector, particularly the complementary roles of universities and institutes of technology. Chapter 7 discusses the need for larger investment in the tertiary education sector and recommends increased student contributions to the cost of education. Chapter 8, the final chapter of the Examiners' Report, summarises the main conclusions and lists all the recommendations made in Chapters 2 to 7.

The members of the team of examiners were Michael Shattock (UK), who served as rapporteur, Karsten Brenner (Germany), John Dawkins (Australia), Bénédicte Gendron (France), Aims McGuiness (USA), Jo Ritzen (Netherlands) and Abrar Hasan (OECD), who also co-ordinated the publication. Susan Copeland provided editorial assistance and Noëleen El Hachem was responsible for administration.

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Country Background Report

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Executive Summary

The Irish tertiary education system has increased its student body by about 2% per annum since the mid-1960s and has reached an age participation rate of 57%. The system, however, is at a crossroads at it strives to meet the government's strategic objectives of "placing its higher education system in the top ranks of OECD in terms of both quality and levels of participation" and "creating a world class research, development and innovation capacity". These two objectives served to frame the terms of reference for the Education Committee's review of Ireland's higher education system (see Annex A).

The Examiners' Report (Part I of this volume) provides analysis of the main challenges and recommends a series of actions, structured around the following five central themes:

- Strategic steering of the tertiary education system.
- Governance and management of higher education institutions.
- Strategic management of research, R&D and innovation.
- Access and participation.
- Investment in the tertiary sector.

The Examiners' Report draws upon the Country Background Report prepared by the Irish authorities (Part II of this volume), 85 public submissions prepared by various stakeholder groups and organisations, and the review team's visits with different stakeholder groups during its two-week stay in Ireland.

Strategic steering of the system

The Examiners' Report points out that Ireland lacks a unified strategy for its tertiary education system. To address this deficiency, it recommends bringing together the universities and the institutes of technology in a strategic framework, with clear differentiation of roles between the two, under a new Tertiary Education Authority.

Ireland's wish to become an innovation-based, technology-generating economy means that the tertiary education sector needs to act as a key driver of this process. However, public policy is diffused over several government departments and there is no mechanism to provide strategic guidance for the sector. There is a need for an effective co-ordinating mechanism to link national priorities across government departments for issues related to qualified personnel and funding

for institutional infrastructures, research, R&D and innovation. The examiners propose a new National Council for Tertiary Education, Research and Innovation, which would bring together all relevant government departments to determine a rolling national strategic agenda for tertiary education and strengthen its relationship with innovation, skills, and the economy.

Governance and management of higher education institutions

In parallel with changes in the tertiary education system, significant modernisation and adaptation are needed in governance and management of Ireland's higher education institutions (HEI). Within the broader national goals, institutions need to achieve greater strategic focus. This will require action in areas such as governance practices and leadership. The government needs to offer HEIs greater autonomy to manage themselves within the framework of national objectives. Consistent with these objectives, management of institutions must be modernised. The Examiners' Report identifies deficiencies in prevailing arrangements in these areas and offers a range of recommendations.

To link institutions more closely to a national strategy and to improve accountability, the examiners recommend the use of annually renewable contracts for institutions through the proposed Tertiary Education Authority (TEA). The examiners also recommend changes to the size, function and representation of universities' governing boards to make them more manageable and accountable to the public, and more focused on strategic issues. For the institutes of technology, they recommend separating the role of the governing body, which should focus on strategic issues, from the managerial responsibility of the institute's director or president. They offer a number of proposals to lighten the administrative burden on institutions, increase autonomy and provide greater room for modernised management. These include a reasonably secure environment for financial planning (including multi-year funding); arrangements for generating and retaining surpluses; and changes in "core" grant arrangements to provide for long-term maintenance of facilities and buildings. The examiners also recommend linking resource allocation within institutions more closely to their strategic plans through more transparent mechanisms that offer performance incentives.

Strategic management for research, R&D and innovation

The period from 1996 to 2002 saw the most dramatic increase in research funding in Ireland's history. The operation of the Programme for Research in

Third-Level Institutions (PRTLI), with its allocation of significant research funding from 1998 on, is widely believed to have changed the research culture in Ireland. But if the Lisbon target of 3% of GDP is to be met, both industry, which is lagging significantly, and government will need to invest much more. In addition, a number of structural and institutional changes are needed to make most effective use of these resources. The Examiners' Report discusses the main institutional adaptations required to make investment more effective and recommends several policy actions.

The Irish higher education system is weak in graduate studies and research and also in links between R&D and innovation. Industrial investment in R&D is low; indigenous industry accounts for only one-third. The primary objective of the examiners' recommendations in this area is to integrate research, R&D and innovation within the broader strategic framework of tertiary education and economic and regional policy. Key features of the recommendations include maintaining the distinctive roles of the institutes of technology and the universities in research; rationalising the many agencies responsible for research funding by establishing a major national research funding body analogous to the US National Science Foundation; creating a Committee for Research Policy and a Chief Science Policy Adviser to better co-ordinate funding and direction of research; and investing significantly more in postgraduate support with a view to more than doubling the number of doctoral candidates by 2010. At only 5%, the proportion of international to home/EU students is low. As one step towards strengthening its doctoral programmes, Ireland should seek to double its international student population in the next five years. Subsequent to the initial drafting of the Examiners' Report, a Chief Science Adviser was appointed. But the examiners note that he does not appear to have the co-ordinating powers proposed in the Examiners' Report, nor does the Committee for Research Policy have the strategic role recommended.

Access and participation

A great strength of Ireland's tertiary education system is how it has expanded student numbers while preserving quality. However, this expansion has taken place almost entirely among 18-to-21-year-olds and the beneficiaries have been drawn disproportionately from managerial and professional classes. Unless action is taken, current forecasts of a continued rise in the age participation rate will further entrench participation among the middle and upper classes. Both social equity and economic arguments point to the need for renewed efforts to broaden participation in tertiary education. The Examiners' Report makes several recommendations to improve access for disadvantaged groups and adults.

Over the longer term, efforts to improve participation by students from disadvantaged backgrounds will require investment in pre-school and primary education. Strengthening career guidance and counselling in schools can also help. Steps should be taken to implement more fully the recommendations of the Commission on the Points System. Through adjustments in the funding formula for institutions, financial incentives can be provided to recognise additional costs of recruiting and retaining students from disadvantaged backgrounds.

To increase access for adults, efforts are needed to increase the number of part-time students. One possible approach is to eliminate the distinction between part-time and full-time students in determining if fees must be paid or maintenance support will be granted. Arrangements could be made to include part-time students, on a pro rata basis to full-time, in the calculation of recurrent grants. Steps are also needed to generate greater demand for lifelong learning.

Investment in the tertiary sector

Considerable further investment will be necessary to achieve the government's ambitions for the tertiary education sector, especially its role in sustaining a highly innovative economy for Ireland. Failure to invest further in the tertiary education system will put at risk its contribution to strengthening the knowledge economy and fully realising the climate of innovation which Ireland is keen to create. The system faces investment demands for a number of reasons: continued expansion in participation in tertiary education (despite downward demographic trends); research infrastructure; new buildings and maintenance backlogs; rationalisation and modernisation; and to meet objectives of widened participation, improved retention and greater support for lifelong learning.

However, Ireland's education budget must compete with many other demands on the public purse. Within the education envelope, there is little scope for increased funding of tertiary education, as other education spending in Ireland is below the OECD average. Student contributions are one possible source of additional resources for tertiary education. Data point to large private gains for beneficiaries of tertiary education and a part of the enhanced income potential could form the basis of students' contributions. The examiners do not think that this conflicts with the need to widen participation, as the 1995 abolition of fees has had no noticeable impact on trends in the socio-economic make-up of the student cohort. A suitably constructed policy can increase rather than lessen social equity. For such a policy to be effective, however, the government needs to introduce means-testing mechanisms, along the lines of the de Buitleir report on student maintenance. It must also ensure that contributions from

students become a net additional resource for the sector and are not used to offset reductions from the public contribution. Dispensing with the "free fees" policy clearly represents a sensitive and controversial political decision. The examiners believe, however, that if the "free fees" policy remains in place, there must be serious doubts as to whether it is practicable for state funding to meet the demand for additional investment that Ireland's tertiary education system requires.

PART I

Examiners' Report

ISBN 92-64-01431-4
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PART I

Chapter 1

Context and International Comparisons

This chapter describes the context and terms of reference of the review of tertiary education in Ireland. It contains a brief overview of the Irish tertiary education system and some international comparisons.

Introduction

The review was undertaken at the request of the Irish Government as part of the programme of OECD Education Committee policy reviews. The team of examiners comprised:

- Karsten Brenner (Germany), former Director General, German Federal Ministry of Education and Research.
- John Dawkins (Australia), Chairman of Elders Rural Bank and Law Central Ltd., and former Minister for Employment, Education and Training, and Minister for Finance, Australia.
- Bénédicte Gendron (France), Pr. Dr., University of Montpellier III; Researcher at the Centre for Research in Education, Training and Teaching of Montpellier III; and Associate Researcher at the Regional Centre of the French Centre for Research on Education, Training and Employment of Ile-de-France, Université Paris I Panthéon-Sorbonne.
- Abrar Hasan, Head of Education and Training Policy Division, Directorate for Education, OECD.
- Aims McGuiness (USA), Senior Associate, National Centre for Higher Education Management, Boulder, Colorado.
- Jo Ritzen (Netherlands), President of Maastricht University, and former Minister of Education, Culture and Science, the Netherlands.
- Michael Shattock (UK), Rapporteur, Visiting Professor, Institute of Education, University of London.

The team visited Ireland from 15 to 27 February 2004 and met representatives of the Irish Government from the ministries of Education and Science; Finance and Enterprise; and Trade and Employment. It also met with members of the Joint *Oireachtas* Committee on Education and Science, the Higher Education Authority (HEA), the Conference of Heads of Irish Universities (CHIU), the Council of Directors of Institutes of Technology, representatives of research councils, Science Foundation Ireland (SFI) and other research funding agencies, educational qualification bodies, trade unions, the Union of Students in Ireland, and other organisations. It also visited three universities (University College Dublin, University College Cork and University of Limerick) and four institutes of technology (Tallaght, Waterford, Cork and Tralee). It received 88 separate submissions from organisations and individuals (see Annex B). The

full programme of evidence taking and visits prepared by the Department of Education and Science is given in Annex C.

The Terms of Reference, agreed with the Irish Government, are set out in Annex A. These terms of reference are wide-ranging in that they cover the whole higher education system and invite the examination of policy issues and options in all aspects of the system including its role, strategic management and structure, teaching and learning, research and development, investment and financing, and international competitiveness. In particular, the review was set in a context of the government's strategic objective of "placing its higher education system in the top rank of OECD in terms of both quality and levels of participation and by the priority to create a world class research, development and innovation capacity and infrastructure in Ireland as part of the wider EU objective for becoming the world's most competitive and dynamic knowledge-based economy and society, as agreed in Lisbon" (see Annex A). The review was asked to evaluate how well the higher education sector was meeting these strategic objectives and to make recommendations for further progress.

To assist the review, the Department of Education and Science prepared a very helpful Country Background Report, authored by Professor John Coolahan (Part II of this volume). The review team is very grateful for this preparatory work and to the authors of the 88 submissions from interested organisations and individuals which it received. The commitment of Ireland to education and, in this case, to higher education was overwhelmingly demonstrated by the extent and the wide-ranging nature of advice, guidance and recommendations to the review team contained in these submissions. This commitment was fully matched in the sessions where oral evidence was taken. The review team also wishes to acknowledge the professional way in which the Department's officials responded to its request for further statistical and other material during and after the visit.

The Review Report refers throughout to "tertiary education" rather than "higher education", the term used normally in Ireland and in our terms of reference. OECD divides tertiary education programmes into type A, which it defines as "largely theoretically-based and designed to provide qualifications for entry to advanced research programmes and professions with high skill requirements" and type B which are "classified at the same level of competencies" as type A but "are more occupationally-orientated and lead to direct labour market access". Type B programmes are "typically of shorter duration… [and] … generally they are not deemed to lead to university level degrees" (OECD, 2003a). In Ireland, the sub-degree programmes offered by the Dublin Institute of Technology (DIT) and the institutes of technology would generally be described as type B while the degree programmes at both the institutes of technology and the universities would be classified as type A. Unless specifically stated, the Examiners' Report does not distinguish

between type A and type B programmes. The report does, however, retain the acronym HEI to describe higher education institutions as being the most easily internationally recognised shorthand for referring to universities and institutes of technology together.

The role of tertiary education in Ireland

The main objectives of higher education policy in Ireland were set out in the Country Background Report as follows:

- Promotion of the responsiveness of higher education to the needs of society and the economy.
- Expansion of access to higher education for disadvantaged groups and mature students.
- Achieving standards of excellence in teaching and learning.
- Expansion of research activity of international quality.
- Achievement of quality assurance procedures which are effective and transparent.
- Adoption of lifelong learning as a planning motif in higher education.
- Development of innovative models of course delivery, using ICT resources.
- Improvement of governance and accountability procedures within the institutions.
- Promotion of higher education in addressing regional issues.
- Engagement with the "Lisbon" objectives in the promotion of the "role of universities in the Europe of Knowledge".

These objectives are not fundamentally different from those of most OECD countries, but our review suggests that they are being realised with varying degrees of success.

The growth in tertiary education in Ireland has been extraordinary, with the age participation rate rising from 11% in 1965 to an estimated 57% in 2003, and numbers rising from about 21 000 in 1965 to over 137 000 by 2003 (data provided by the Department of Education and Science, Ireland). Ireland was one of the first European countries to grasp the economic importance of education and economists suggest that this up-skilling of the labour force accounts for almost 1% per annum of additional national output over the last decade or so. The growth of tertiary education has been accompanied by a two-and-a-half-fold improvement in average material living standards. There is general agreement among representatives of government and of tertiary education that the expansion has been enormously beneficial both to Irish society and to the economy. Irish tertiary education also includes a small private sector which flourishes mainly in Dublin. The part-time degree

programmes run by the National College of Ireland represent a significant contribution to the national numbers of part-time students and reflect the strong demand for part-time vocational programmes in the Greater Dublin area.

Investment in research came much later than the increases in first degree numbers and began with the establishment of the Programme for Research in Third Level Institutions (PRTLI) in 1998. The success of this programme has created a consensus that investment in research carried out in higher education institutions (HEIs) is a critical element in achieving and sustaining a knowledge-based society with a high capacity for innovation which is at the centre of Ireland's strategy for economic development. However, a great deal more needs to be done both in terms of the size of the investment necessary and the organisational context before the research objective can be said to be met. Claims that Ireland is already "world class" in research in some areas may be justified but the overall research environment is not yet adequate to support the achievement of research of international quality in the range of fields necessary to promote the economic development that Ireland is looking for.

This common understanding and commitment to the social and economic role of tertiary education between HEI leaders and government makes Ireland distinctive amongst European countries and is a source of great strength. Ireland's remarkable economic growth, averaging over 9% per annum from 1997 to 2000 inclusive, is seen as being fuelled by the expansion in the output of high quality graduates in the labour market. But one of the consequences has been a high-income society which needs to be even more competitive internationally if it is to continue to forge ahead in a period of slower economic growth. Over 90% of the expansion has been generated from the 18-to-20-year-old cohort and has been drawn primarily, as in most European countries, from the professional and managerial classes. Lifelong learning, widening participation and the encouragement of mature students to enter tertiary education have not been given such emphasis and must be reinforced in future if Ireland is to capitalise on its success over the last decade. The National Development Plan sets as a priority the "continued investment in education and training and, in particular, through developing a strategic vision for lifelong learning" (Government of Ireland, 1999, paragraph 5.21).

A further and important element in the role of tertiary education relates to regional policy. There are considerable disparities in economic activity, personal wealth and educational attainment between Ireland's regions which the National Spatial Strategy is designed to address. The employment participation rate varies significantly, for example, between the Greater Dublin Region and the Border Midlands and West regions. Sixty-two per cent of net new jobs which employers are expected to create in 2010 are estimated to be likely to require third-level education, compared with less than 30% of existing jobs in 2001. The current level of 66% in the South-East, South-West and Mid-West and Greater

Dublin Regions compares with only 56% in the Border, Midlands and West Regions (FÁS/ESRI, 2004). A major challenge of the Spatial Strategy is to have all of Ireland identified with major technological innovation and the discussion document *Higher Education and the National Spatial Strategy* (McDonagh, 2003) identifies how HEIs are located in relation to regional gateways. In particular, it identifies not only the critical role of HEIs in regional economic development but also the importance of the network of institutes of technology as a major infrastructural asset because of their emphasis on technology and applied knowledge and their role in the provision of skills based education. (They carry the main responsibility for skills-based education and training in the construction industry, hospitality/tourism, the digital content industry and arts and crafts.) This regional aspect adds a further dimension to the role of tertiary education in Ireland and requires that it should be given greater emphasis in any statement of objectives. But the situation is complicated by the fact that while Dublin provides 60% of all first-degree places nationally, it has itself the lowest age participation rate in tertiary education, with the rate in central Dublin estimated at no more than 16%. This further emphasises the importance of giving high priority to lifelong learning, widening participation and encouraging mature students.

The importance of tertiary education to Ireland's economic and social development should not obscure its role in the intellectual and artistic life of the nation and the contribution it makes to citizenship and the civil society. Paragraphs 12 and 14 of the 1997 *Universities Act* set out admirably the objectives of a university but these statements need to be brought together with the much more instrumental wording of the functions of the institutes of technology as set out in paragraph 5 the 1992 *Regional Technical Colleges Act* so that while the different roles of the two kinds of HEIs are recognised, the important and diverse roles of the institutes of technology are more fully stated along with the safeguards to academic freedom accorded to university staff. Tertiary education needs to be seen as a unity with different kinds of institutions fulfilling different roles but contributing together to sustain Ireland as the vibrant innovative society it has become.

We note that the international context is not included in the list of objectives and this is reflected in the relatively modest number of non-EU students which Ireland attracts to its HEIs. We believe this is a weakness for a country which at a governmental level plays such an important international role. Quite apart from the intrinsic value of having a mix of international students, Ireland is failing to attract research students from overseas who could contribute to the research agenda. We therefore urge in the recommendations below that steps be taken to promote the recruitment of an increased number of international students and that this be incorporated into the main policy objectives.

International comparisons

The national economy

From the early 1990s, Ireland has experienced a period of unprecedented economic growth: between 1990 and 1995 the average annual growth rate was 4.78% and between 1995 to 2000 it rose to 9.5% per annum, bringing with it far-reaching social change (Coolahan, 2004). The Gross Domestic Product increased by 59.8% in real terms in the second half of the decade, well ahead of the European trend of 15.7% (for EU) and the OECD country trend of 18.7%. While the growth rate fell sharply after 2000, at 4.8% per annum for 2001-03, it is still much higher than the EU average of 1.0% and the OECD average of 1.6% and is forecast to continue around this level (OECD, 2004a). Ireland is one of the most productive economies with its GDP per capita ranked sixth amongst OECD member countries. Unemployment remains low although it has increased from 4.3% in 2000 to 5.2% in 2003 (Coolahan, 2004). This growing wealth has not, however, been spread evenly and overcoming economic and social disadvantage remains an issue which is high on the political agenda and which education has an important role in addressing.

Educational participation rates

Participation in and completion of upper secondary education as a basis for entering tertiary education has risen phenomenally during the last four decades:

Table 1.1. **Population that has attained at least upper secondary education**[1] **(2002)**

Percentage, by age group

	25-34	35-44	45-54	55-64	25-64
Ireland	77	65	51	37	60
Denmark	85	81	80	72	80
France	79	68	60	48	65
Germany	85	86	84	77	83
Sweden	91	87	79	67	82
Switzerland	88	85	80	75	82
United Kingdom	70	65	62	56	64
United States	87	88	89	84	87
OECD mean	75	69	61	50	65
EU mean	75	68	60	49	64

1. The average of EU member countries whose data are available from EAG 2004.
Source: Education at a Glance: OECD Indicators 2004, Table A2.2 (OECD, 2004b).

The first EU Education Report, *Progress towards the common objectives in education and training,* suggests that in 2002 85.6% of 22 year olds in Ireland had completed upper secondary education as compared to 75.4% across the EU

(CEC, 2004). Participation in and completion of tertiary education have increased significantly to reach 26%, surpassing the OECD average of 24% (Table 1.2). If Tertiary A and B type programmes are counted together, the share of the 25-34 year olds completing tertiary education amounts to 37%, as compared to an OECD average of 28%.

Table 1.2. **Population that has attained tertiary education (2002)**
Percentage, by age group

	Tertiary Type B					Tertiary Type A and advanced research programmes				
	25-34	35-44	45-54	55-64	25-64	25-34	35-44	45-54	55-64	25-64
Ireland	14	10	7	5	10	23	15	12	9	16
Denmark	6	6	5	4	5	23	24	25	18	23
France	17	12	9	6	12	19	11	10	9	12
Germany	8	11	11	10	10	13	15	14	11	13
Sweden	17	18	14	10	15	22	16	17	16	18
Switzerland	10	10	9	7	9	17	17	16	14	16
United Kingdom	8	9	8	7	8	23	18	18	13	19
United States	9	10	10	7	9	31	29	30	26	29
OECD mean	9	8	7	5	8	19	16	14	11	16
EU mean[1]	10	9	7	6	8	17	14	13	10	14

1. The average of EU member countries whose data are available from EAG 2004.
Source: Education at a Glance: OECD Indicators 2004, Table A3.3 (OECD, 2004b).

By 2002 net entry rates into tertiary education Type A programmes had reached 39% of the age cohort (34% men: 43% women) compared to the average for OECD countries of 42% (Table 1.3). If tertiary sector Type B courses are included, the ratio rises to 57% of the age cohort (51% men: 61% women) as compared to 67% OECD-wide. In 2002, 36 500 students entered higher education through the Central Application System, 90% of them in the 17-to-19 age group. The proportion of mature students entering higher education is extremely low: in 1997 the proportion of new entrants into university-level education aged 26 was only 2.3% as compared to over 19.3% in OECD as a whole.

Despite the great expansion in student numbers and the introduction of student grant schemes in 1968, great disparities continued to exist in the participation of students from families of different socio-economic status. This did not change significantly after the abolition of tuition fees for undergraduate studies in 1995/96; the take-up rate in higher education remained highly dependent on socio-economic background. While individual universities are making efforts to redress the balance, it is the case that students from disadvantaged backgrounds find their way more easily to and through the institutes of technology. Failure rates in the first years of study in the institute of

Table 1.3. **Net entry rates into tertiary education (2002)**

	Tertiary Type B			Tertiary Type A		
	M + F	Males	Females	M + F	Males	Females
Ireland[1]	18	17	18	39	34	43
Denmark	12	14	11	50	38	62
France	22	22	22	37	30	45
Germany[2]	15	10	19	35	35	35
Sweden	6	6	6	75	59	92
Switzerland	14	16	12	35	37	32
United Kingdom	27	23	30	47	43	51
United States[3]	–	–	–	64	60	68
OECD mean	16	14	18	51	45	55
EU mean[4]	12	12	14	49	42	53

1. Full-time entrants only.
2. Entry rate for tertiary-Type B programmes calculated as gross entry rate.
3. Data on tertiary Type B are included in the data on tertiary Type A.
4. The average of EU member countries whose data are available from OECD EAG 2004.

Source: Education at a Glance: OECD Indicators 2004, Table C2.1 (OECD, 2004b).

technology sector are, however, relatively high and considerably higher than in the universities. Completion rates differ very much between sectors. They are comparatively high at universities: according to an HEA study of 2001, 83.2% obtained the degree on the course on which they had initially embarked and the drop-out rate from universities seems to be only 10% (Morgan, Flanagan and Kellaghan, 2001). Non-completion is significantly higher at the institutes of technology where about one-third of students leave without finishing their courses successfully. The institutes, however, take more young people from disadvantaged backgrounds and failure is highest in the first year of study at certificate and diploma level (Coolahan, 2004).

Like other countries, Ireland is concerned about meeting the demand for graduates in the fields of science, technology and engineering. According to the EU Education Report, however, Ireland has a much higher proportion of graduates in mathematics, science and technology per 1 000 inhabitants in the 2-to-29 age group, 23.2%, than the EU average 9.3% (CEC, 2004).

National expenditure on education

Total national (public and private) expenditure on education reached EUR 6.0 billion in 2003, a considerable growth over the EUR 1.74 billion expenditure in 1990. This is equivalent to 4.44% of GDP (Coolahan, 2004). Investment in tertiary education stands at some EUR 1.44 billion in 2004 (data provided by the Department of Education and Science, Ireland). Ireland's expenditure on education and on tertiary education in 2001, as compared to a selected number of OECD countries, is shown in Table 1.4.

Table 1.4. **Expenditure on educational institutions as a percentage of GDP for all levels of education (2001)**

	Public[1]	Private[2]	Total
Ireland[3]	4.1	0.3	4.5
Denmark[4]	6.8	0.3	7.1
France	5.6	0.4	6.0
Germany	4.3	1.0	5.3
Sweden	6.3	0.2	6.5
Switzerland	5.4	m	m
United Kingdom	4.7	0.8	5.5
United States	5.1	2.3	7.3
OECD mean	5.0	0.7	5.6
EU mean[5]	5.0	0.4	5.3

"m" indicates that data are missing.

1. Including public subsidies to households attributable for educational institutions. Including direct expenditure on educational institutions from international sources.
2. Net of public subsidies attributable for educational institutions.
3. In 2001, GDP was almost 20% larger than GNP in Ireland; this figure represents 4.88% of Irish GNP.
4. Public subsidies to households not included in public expenditure, but in private expenditure.
5. The average of EU member countries whose data are available from EAG 2004.

Source: Education at a Glance: OECD Indicators 2004, Table B2.1a (OECD, 2004b).

Thus, Ireland's investment in its education system as a whole is lower than the OECD average. In public expenditure it ranks only 25th out of 30 OECD countries and with private expenditure added to public, 23rd out of 27 countries for which data are available (OECD, 2004b). Public expenditure has declined from 4.7% to 4.1% as a proportion of a rapidly growing GDP between 1995 and 2000.

As shown in Table 1.5, investment in tertiary education, at 1.3% of GDP, is slightly below the average of 1.4% and its share of GDP stayed constant at 1.3% in the period of rapid GDP growth from 1995 to 2000. Its investment in 2001 put it 8th out of 26 in the OECD tables. This relatively high level of investment in tertiary education represents the effect of a strong increase in expenditure, along with a doubling of student numbers between 1995 and 2000 compared to an increase of 39% in expenditure on education in general. But this expenditure performance needs to be compared with other high spending states on tertiary education within OECD, notably the USA and South Korea with 2.7% of GDP, Canada 2.5%, Denmark 1.8%, Finland and Sweden 1.7% and Australia 1.5%. By comparison, Ireland is significantly below the international average when it comes to elementary, primary and secondary education.

Expenditure per student in tertiary education amounted to USD 10 003 in 2001 (OECD, 2004b, Table B1.1) slightly below the OECD average of USD 10 052, with Ireland ranking 14th amongst 26 countries. The EU Education Report 2004 gives the following figures: Ireland EUR 9 900 as against the EU average of EUR 8 200 with Ireland ranking 5th out of 15. For cumulative expenditure per

Table 1.5. **Expenditure on educational institutions as a percentage of GDP by level of education (1995, 2001)**

	Primary, secondary and post-secondary non-tertiary education				Tertiary education			
	2001			1995	2001			1995
	Public[1]	Private[2]	Total	Total	Public[1]	Private[2]	Total	Total
Ireland[3]	2.9	0.1	3.1	3.9	1.1	0.2	1.3	1.3
Denmark[4]	4.2	0.1	4.3	4.0	1.8	n	1.8	1.6
France	4.0	0.2	4.2	4.4	1.0	0.1	1.1	1.1
Germany	2.9	0.7	3.6	3.7	1.0	0.1	1.0	1.1
Sweden[3]	4.3	n	4.3	4.2	1.5	0.2	1.7	1.6
Switzerland	3.9	0.6	4.5	m	1.3	m	m	m
United Kingdom	3.4	0.5	3.9	3.9	0.8	0.3	1.1	1.2
United States[5]	3.8	0.3	4.1	3.9	0.9	1.8	2.7	2.7
OECD mean	3.5	0.3	3.8	3.7[6]	1.0	0.3	1.4	1.3
EU mean[7]	3.5	0.2	3.6	3.7	1.1	0.1	1.2	1.2

"m" Indicates that data are missing.
"n" Indicates that magnitude is either negligible of zero.
1. Including public subsidies to households attributable for educational institutions. Including direct expenditure on educational institutions from international sources.
2. Net of public subsidies attributable for educational institutions.
3. Direct expenditure on tertiary-level educational institutions from international sources exceeds 1.5% of all public expenditure.
4. Public subsidies to households not included in public expenditure, but in private expenditure. Post-secondary non-tertiary included in both upper secondary and tertiary education.
5. Post-secondary non-tertiary included in tertiary education.
6. The average of OECD countries whose 1995 data are available.
7. The average of EU member countries whose data are available from OECD EAG 2004.

Source: Education at a Glance: OECD Indicators 2004, Table B2.1b (OECD, 2004b).

student over the average duration of tertiary studies, Ireland ranks 13th out of 27 with a figure of USD 32 411 compared to USD 42 906 as the OECD average. This is mainly due to Ireland's shorter than average period of study. The increase of government expenditure on Irish tertiary education between 1995 and 2000 (87%) has been significantly higher than the growth of student numbers (26%) and expenditure per student has risen by 14.8% (data supplied by the Department of Education and Science Ireland) although the FGS study, *The Future Funding of the Irish University Sector,* commissioned by the Conference of Heads of Irish Universities (CHIU), claims that direct state support per student in the university sector fell by EUR 1 240 (at 2002 prices) between 1995 and 2001 (FGS Consulting for CHIU, 2003).

In the last two years, the trend of public funding for higher education institutions has turned downwards. According to CHIU's estimates there was a reduction (in real terms) of 4% in 2003 and 10% in 2004.

Institutional funding

Irish tertiary education is strongly dependent on public funding. According to the FGS study for the Conference of Heads of Irish Universities (November 2003), the sources of university sector funding in 2001/02 were:

Table 1.6. **Sources of funding for universities, 2001/02**

Percentages

Exchequer funding block grant	55.5
Exchequer funding academic fees on behalf of students	29.6
Postgraduate fees paid by students	3.6
Student contributions *i.e.* student service charge	2.8
Fees paid by international students	4.4
Other sources	4.1

Source: FGS Consulting for CHIU, *The Future Funding of the Irish University Sector*, Figure 2, page 15 (FGS for CHIU 2003).

This indicates that the state contribution to university sector funding is about 85% (the DES estimates 82%); while the state contribution to the institute of technology sector is 90%. The introduction of "free fees" for undergraduate courses in 1995/96 resulted in a substitute of public funding for potential private (fee) contributions.

National expenditure on R&D

Irish expenditure on R&D as a proportion of GDP is well below EU and OECD averages, but during recent years the country has rapidly increased its investment. Publicly financed research is mostly conducted in higher education institutions, predominantly in the university sector; institutes of technology engaged in applied research but on a limited scale. There is also a significant sector of government research institutes outside higher education. EU/Eurostat in its 2003 edition of *Statistics on Science and Technology in Europe* shows the following:

Table 1.7. **R&D expenditure in Ireland as a percentage of GDP, 2001**

Percentages

	All sectors	Tertiary institutions	Government institutions	Business enterprises
Ireland	1.17	0.26	0.11	0.80
EU	1.98	0.41	0.25	1.30
USA	2.82	0.40	0.20	2.10

Source: EC/Eurostat, *Statistics on Science and Technology in Europe*, Table 2.1 (EC 2003).

This relatively low level of Irish expenditure is confirmed by two other and more up-to-date indicators: in 2003, Irish Government budget appropriations or outlays on R&D (GBAORD) amounted to 0.33% of GDP, compared to an EU average of 0.75% and the share of government investment in R&D as part of total government expenditure was 0.97%, compared to countries like Iceland (3%), Finland (2.02%), France (1.92%, Spain (1.73%), the Netherlands and the UK (1.70%) (EC/Eurostat, 2003, Table 5.4).

However, Ireland started from a very low level of research intensity. In the 1990s, and particularly since 1998, the country has undertaken great efforts to increase its level of public investment in research with quite remarkable annual growth rates: 5.9% in the period 1992-97 and 12.3% between 1997 and 2002 (in the first years slightly lower than GDP growth, in the second well above). The new political priority has been reflected in the National Development Plan for 2000-06 where the government has allocated 2.5 billion EUR to research, technology, innovation and development, a five-fold increase compared to the period 1994-99 (Government of Ireland, 1999).

Given the government's firm intention for the country to be a significant international base for research and innovation, the budget increases of the last years need to be sustained for a long period, as is envisaged in the National Plan where it is stated that by 2010 the government aims at public investment in research equivalent to 0.58% of GDP. But this is only one side of the coin. There is also an under-investment in R&D from business and industry. Ireland will only be able to come near the EU objective, set in Lisbon, to invest 3% of GDP in the future-oriented area of R&D, if industry shoulders two-thirds of the costs as is the case in the most developed economies. This will require a growing readiness amongst multinational firms to undertake R&D on their Irish sites (so far only a quarter of them are active R&D performers) as well as a greater investment amongst indigenous companies. Irish-owned firms account for only one-third of total business expenditure on R&D.

Output indicators thus show that Ireland still has some way to go to achieve its goals in research and innovation, but they also suggest that significant progress is being made. With regard to scientific publications per million population, Irish researchers at 327 are well below the European (460) and OECD country averages (402). Ireland contributes a relatively low number of triadic patent families (11.3 per million inhabitants) compared with the average of 36.3 for EU countries. With 49 researchers per 10 000 of the labour force, Ireland is below the EU (53) and the OECD average of 62 (OECD, 2003b). But the growth rate of scientific productivity is one of the fastest and the Irish research community performs above the European average and the United States in terms of highly cited papers as percentage of total number of scientific publications (data from 1997-99). Irish patent applications to the European Patent Office (year 2001) amount to 86 per million inhabitants

against the EU average of 161 (Sweden is at 367, Finland 338, Germany 310), but Ireland is improving its performance steadily, at significant growth rates (EC/Eurostat, 2003, Table 5.4).

International comparisons of expenditure data are by no means the whole story, but they confirm the enormous strides Ireland has made over the last 15 years in raising its tertiary education age participation rate without any evidence of lack of quality. However, as we have seen, this expansion has not been evenly spread; it has concentrated on full-time tertiary education for 18-to-21-year-olds at the expense of widening access and lifelong learning. Expenditure on tertiary education has fallen as a proportion of GDP and has grown more rapidly than expenditure on education as a whole. Tertiary education institutions are very heavily dependent on public expenditure, as compared for example to the UK. In research, Ireland is engaged in a catching up process which will require sustained investment over a long period. But the most recent data shows that both public and private investment, particularly the latter, are well below the EU average and a long way off the Lisbon target for 2010.

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ISBN 92-64-01431-4
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PART I

Chapter 2

A Crossroads in the Development of Irish Tertiary Education

This chapter analyses the structure of the Irish tertiary education system. It identifies the need for a unified concept of the sector and makes several recommendations to address problems, including the creation of a Tertiary Education Authority.

As the above international comparisons show, the development of Irish tertiary education is at a significant point of departure. It has achieved an improvement in the age participation rate in tertiary education which puts it amongst Europe's leaders and it is beginning to invest significantly in research. All this was fuelled by a very fast-growing economy, as well as being a signal contributor to that growth. The slowdown in the economy, and the likely flattening off of the growth rate, was paralleled in the rate of expenditure on tertiary education. But this adjustment is not the only reason why a review of tertiary education is timely. The very full evidence, both written and oral, that we received suggests that there are a number of other major factors which put the tertiary education system at a crossroads:

- Ireland's determination to move from being a technology-importing, low cost economy to an innovation-based, technology-generating society requires that Irish tertiary education and research and innovative indigenous enterprises have to become the new drivers of economic development and of the country's international competitiveness.
- As the National Development Plan makes clear, Ireland is facing considerable pressure for increased public investment in a number of fields other than tertiary education, relevant to economic development, notably in health, transport and the environment as well as in primary and secondary education (Government of Ireland, 1999).
- The birth rate, which in the 1970s was about twice the European average (at 23 per thousand population), is forecast to decline to 13 per thousand by 2016. With the concentration of the entry into tertiary education being predominantly in the 18-to-20 age group (90%), this could lead to a decline in the annual cohort of second-level school leavers from around 70 000 in 1990 to around 53 000 by 2015 unless school staying-on rates improve considerably. The Higher Education Authority projects an increase in the age participation rate to over 66% by 2015, but this will require a significant improvement in the staying-on rates of pupils from economically disadvantaged backgrounds.
- The recognition that more needs urgently to be undertaken to widen participation in higher education (although not a task for tertiary education alone), to increase the mature entry and invest in lifelong learning as well as to address regional issues in line with the National Spatial Strategy.

- The need to sustain investment in research and innovation and to address research infrastructure issues in a co-ordinated way so that the investment can be effectively and strategically managed.
- The need to determine the future role in research and the status of the institutes of technology and to respond to the recommendations of the Cromien Report on the responsibilities of the Department of Education and Science (DES, 2000a).
- The evidence that present resource allocation approaches, financial management methods and accountability requirements are increasingly at odds with managing a productive higher education system.
- The urgent need to modernise and rationalise the higher education system after a period when institutions have concentrated on very rapid growth so as to ensure that the system and the institutions are managed to achieve full effectiveness and value for money.
- A perception that Irish tertiary education is not punching its weight or achieving adequate recognition internationally.
- The need to position Ireland to be internationally competitive, innovative and successful in the economic conditions of the next two decades.

Ireland has moved exceptionally quickly and with much foresight to address the weaknesses apparent in the early 1980s and has reaped extraordinary benefits in the way its economy has grown. But the need to embed a research culture, manage institutions better, broaden the base of funding, and redress imbalances that inevitably developed in the years of rapid growth sets a new agenda both for government and for higher education.

The structure of the Irish tertiary education system

Ireland has 20 main publicly-funded tertiary education institutions, seven of them universities and 13 of them institutes of technology (together with some small teacher training institutions). There are also some mainly privately-funded tertiary education institutions of which the largest, the National College of Ireland, has some 900 full-time and nearly 3 000 part-time students. Two of the universities, Dublin City University and the University of Limerick, were created from national institutes of higher education in 1989. Most of the institutes of technology were originally designated as regional colleges of technology and were given their present titles in 1998 but three institutes have been formed since then and one, Limerick, was upgraded from technical college status. The Dublin Institute of Technology (DIT), which was established in 1978 on the basis of an amalgamation of six vocational colleges is the largest institute and unsuccessfully sought a transfer to university status in 1997. DIT, after a long period of partnership with Trinity College,

Dublin has, since 2001, been accorded full degree awarding powers (for first, masters and doctoral degrees). In 2003, the Higher Education and Training Awards Council (HETAC) accorded Waterford and Cork the right to award their own first degrees and Waterford has now been permitted to award masters degrees (teaching). Other institutes are seeking similar powers and all are engaged in fostering studies to the doctorate level. The universities are funded through the Higher Education Authority (HEA) and the institutes directly by the Department of Education and Science (DES). The Cromien Report recommended that the DES should divest itself of the executive funding role in respect to the institutes (DES, 2000).

One of the consequences of there being so many HEIs in a country with a population of 4 million is that even in spite of the high age participation rate, institutions are comparatively small by international standards. The largest university is University College, Dublin (UCC) with just over 15 000 full-time and 4 000 part-time students, while the smallest is Maynooth with 4 500 full-time and 600 part-time students. The institutes are much more diverse in size with the DIT standing out with nearly 10 000 full-time and over 5 000 part-time higher education students but with many being much smaller, at around 3 000 and below, full-time and usually much smaller part-time numbers. Since many of the institutes are strategically sited in areas where populations are low, that is not surprising. But the question of institutional size becomes important when issues of research concentration and postgraduate numbers have to be addressed because of the high cost of providing the appropriate infrastructure, both physical, in terms of facilities, and human, in terms of size of research teams and technical and other support.

The diversity of the system

One of the strengths of Ireland's tertiary education system is the extent to which a diversity of mission has been maintained between the university and the institute sectors, as well as within the sectors. This has been reinforced by organisational differences and the difference in funding regimes and accountability mechanisms between the two sectors. We believe that it is critical to maintain that diversity even if (see below) some of the organisational factors change. We are particularly impressed by the extent to which the institutes see themselves as different from the universities and the role they play in respect to the National Spatial Strategy in local economic development, in encouraging wider participation through local catchment, their support for apprenticeship and craft skill training and the provision of ladders of opportunity through different educational levels, and in the applied character of their work. We do not believe that location in a designated regional gateway provides a justification for the transfer of an institute to university status; indeed we think it is essential that the applied focus which their current differentiation of mission prescribes for

their role in regional gateways is preserved and utilised to the full. The role of DIT is significantly different to that of other institutes by reason of its age, size, academic range and location in Dublin but we believe that its mission too as a comprehensive higher education institution serving the very broad educational and vocational needs of Dublin must be retained. The success of the institute sector needs to be nurtured and celebrated so that its differentiation from the university sector is not seen as conferring lower status but defining it as an equal partner in a dynamic higher education system which covers a diverse range of functions. For this to be fully realised, some of the organisational disadvantages of the present structure need to be addressed and these are dealt with below.

The lack of a unified concept of a tertiary education system

The Irish case has demonstrated that a mass higher education system should respond both to the diversity of interests, talents and inclinations of young people but also to the demands of the labour market and the economy for a range, rather than a single set, of qualifications. We therefore believe that Ireland should retain a differentiated tertiary education system but should take steps to integrate the components better than it does at present. In spite of the general recognition of the complementary roles of the institute and university sectors, the concept of a unified tertiary education system remains unrealised; we were constantly told of the fragmentation of policy and policy implementation which has stifled development. This is reinforced by the separation of the management of the two sectors between the DES and the HEA. Although we saw evidence of local co-operation in, for example, Cork between the University and the Cork Institute of Technology and we heard of other examples, we gained the impression that even though the PRTLI had greatly stimulated partnership arrangements, the sense of a unified system was lacking. Even in the case of Cork, where collaborative arrangements over degree programmes work well, an attempt by the two institutions to develop a joint marine/nautical research and teaching centre was frustrated by an inability to arrange complementary funding from national sources within a workable time frame. Internationally, competition between institutions is generally regarded as a force for quality and institutional development but Irish HEIs need to recognise that they are relatively small and that the undoubted strength of the system will only be fully realised through institutional collaboration whether in research, postgraduate programmes, first degree work or lifelong learning. We believe that collaboration should be incentivised in funding mechanisms in order to break down the sectoral and other barriers that undoubtedly exist. Such collaboration, particularly in relation to widening access and to lifelong learning generally needs to be extended to the further education colleges in order to ensure that ladders of opportunity reach down as far as possible into local communities.

A Tertiary Education Authority

A major step towards reinforcing the sense of a single system of tertiary education would be taken if the institutes and the universities were brought under a single funding authority which we propose should be called the Tertiary Education Authority (TEA). This has been in prospect for some time, and we firmly recommend it, but do so with the caveat that the new Authority must contain machinery to prevent mission drift in either direction. The new machinery required for this is described below. Not the least of the advantages of the transfer will be the removal of a range of managerial constraints that the institutes believe disadvantage them in comparison with universities and hinder them from reacting quickly to pressures and opportunities in their own regions. These include the absence of a block grant and the requirement that they obtain approval for the filling of vacancies or the establishment of new posts from the Department; ministerial approval for the declaration of redundancies; the provision of monthly accounts; the absence of borrowing powers (even within the constraints imposed currently by the HEA on universities); the reversion to the Department of income from "entrepreneurial" activities; the need to gain approval from the Department for new academic programmes; the special arrangements for the appointment of institute directors, and other bureaucratic controls that might have been appropriate when the institutes were much smaller and less mature than they are now (we were told that institutes suffered from six separate reporting mechanisms). It is essential that the institutes which have performed so well in the last decade should be given every incentive to continue to do so because the future economic success of their local and regional communities is strongly linked to their success and their freedom of manoeuvre. It could be argued that there are dangers in freeing up the institutes in this way as would occur if they were transferred to a "lighter touch" regime under a new authority. Inevitably an element of management risk is involved, (some controlling mechanisms are proposed below), but all over Europe, and perhaps particularly in the nearby UK, governments are devolving responsibilities and freedoms to educational institutions, balanced by tough accountability mechanisms, in order to encourage them to act more innovatively and to be more adaptable and responsive to local opportunity. Such changes require balances to be struck between effective governance (see below) and greater budgetary freedom and accountability, but evidence suggests that they can motivate initiative and encourage local flexibility.

There are three particular areas where institutes want change, seeing themselves at a disadvantage as compared to universities. The first is in relation to the need for them to obtain approval from the Department before a new degree programme is initiated, unlike the universities who are free to develop programmes when and as they see fit. In a system threatened with demographic downturn, this complaint has real substance and we agree with

the need to provide a more "level playing field". On the one hand, we believe that in general the market is the best mechanism for determining which programmes survive in a situation of a downturn in applicants, whether demographic led or not, but on the other hand, we think it is inappropriate for institutions to take academic decisions which will have the effect of destabilising partner, and usually neighbouring institutions. We propose below a new approach to funding higher education institutions (HEIs), which will in part achieve this but in addition we recommend as a safeguard that machinery be established in the new funding authority to which HEIs can take their case if they can show that a neighbouring institution is deliberately creating new programmes to cut into their market. The Tertiary Education Authority's decision must be binding on both parties.

A second area of concern is that the universities and the institutes should have a common quality assurance scheme for their programmes. We support this in principle but note that the Inter-University Quality Board has not been in full operation for long. We believe it would be sensible to allow this to mature and settle down before imposing more changes. Moreover, there are moves in the European tertiary education area to establish new quality arrangements under the Bologna Declaration and it would be unwise to establish, no doubt after considerable argument, a new unified quality system in Ireland only for it to be overtaken by new Europe-wide cross-border systems of quality assurance that are emerging which might offer an attractive internationally-based alternative.

Finally, the institutes, some of which have attracted quite significant research support either through PRTLI or from other sources, believe that they should be allocated research infrastructure funding on a recurrent basis to enable them to compete on an equal terms with universities for research grants and contracts. This is dealt with in Chapter 5.

Recommendations

1. *That the differentiation of mission between the university and the institute of technology sectors be preserved and that for the foreseeable future there be no further institutional transfers into the university sector.*
2. *That steps be taken to co-ordinate better the development of the tertiary education system by bringing the universities and the institutes under a new common authority, the Tertiary Education Authority, but that machinery be established within the Authority to prevent mission drift.*
3. *That in transferring the institutes of technology to the new Authority, the managerial controls on their freedom to manage themselves to meet institutional objectives be reviewed with a view to lightening drastically the load of external regulation.*

4. *That greater collaboration between institutions be encouraged and incentivised through funding mechanisms in research, first-degree and postgraduate-degree work and in widening access and lifelong learning.*
5. *That in a situation of potential demographic-led decline in student numbers, institutes of technology be given the same freedom to initiate new academic programmes as the universities and that the new funding Authority establish a mechanism, which should be binding on both institutions, to deal with complaints that an institution was deliberately creating a new programme which would cut into the established market of a neighbouring institution.*
6. *That, in principle, there should be a common quality assurance machinery covering both sectors of tertiary education but that implementation should be deferred to give the university quality assurance machinery created under the 1997 Act more time to develop and pending longer-term clarification of the cross-border systems of quality assurance that are emerging under the Bologna Process.*

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ISBN 92-64-01431-4
Reviews of National Policies for Education
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PART I

Chapter 3

The Governance and Management of Irish Tertiary Education Institutions

This chapter analyses problems in governance and management of the Irish higher education institutions that cover both the universities and the institutes of technology. It recommends changes in the areas of financial management, human resource management, accountability, institutional governance structures, institutional leadership and resource allocation.

As indicated in Chapter 1, by international comparisons Ireland has funded its higher education system well for teaching (and remarkably well from the point of view of keeping up with the rapid expansion of the system) but less well for research. This is borne out by the evidence provided by ratios of academic staff to students which in 2002/3 stood at 1: 17.8 for the university sector and 1: 13.8 (or 1: 14.8 if DIT is excluded) in the institute of technology sector (data provided by the Department of Education and Science, Ireland). These figures would be regarded as generous, at least for the institutes of technology in comparison with many parts of Europe, where the consequence of the move to mass higher education has been a considerable worsening in the ratios of academic staff to student numbers. If Ireland's ambitions are to be met, not only will further investment be required but it will need to be better targeted and its expenditure better managed at institutional levels in order to achieve the best results. Although the system has adjusted remarkably to the considerable expansion in student and staff numbers and resources which has characterised the last decade and a half, it has not made major adaptations yet in the way institutions are managed. Ireland has funded the expansion very effectively but that phase is over and attention must now be given to modernising the system and giving HEIs the environment in which the modernisation of their own management can take place. The issues set out at the beginning of Chapter 2 render this an essential next step; unless modernisation takes place there is a risk that the investment of additional resources will fail to be effective.

Changes required to the financial environment

Institutions will only operate effectively, develop strategies and implement them if the financial environment encourages good practice and provides a reasonably secure platform for decision-making. Although the funding methodology to be adopted by the new Tertiary Education Authority will be critical in this regard, there are areas of government financial practice which themselves need to be addressed. Some of these, which are particular to the institutes of technology, have been referred to in Chapter 2 and in our recommendation in respect to the transfer of their management and funding to the new Authority. But others were raised with us constantly in written and oral evidence and are commented on below.

Multi-year-funding

There are actually two problems related to multi-year funding: first, the government's financial year runs on a calendar basis from 1 January to 31 December whereas the HEIs' financial year runs on an academic year; second, government financial allocations are made so late in the year that the financial year has often run through a first quarter before the recurrent allocation for the year is confirmed. The first is essentially a technical issue but we believe that it should be addressed if only to remove confusion and unnecessary uncertainty. The second is critical to the effective management of institutions. Fluctuations in government funding, while undesirable, are perhaps an inevitable consequence of modern conditions, but should not be visited on institutions mid-year. To do so destroys credible planning and vitiates efforts to develop longer term strategies for institutional development. Uncertainties about longer-term funding are particularly damaging in building research environments and managing research teams and will undermine future investment programmes in research.

Offsetting income earned by institutions

There is considerable uncertainty in both sectors in regard to the incentives for generating private (non-state) funding, particularly through external earnings, and practice is not consistent. The university sector is dependent for over 80% of its funding from the HEA and the institute of technology sector for 90% from the DES. We are of the opinion that this is no longer a balanced way of funding HEIs and is increasingly out of line with the situation and trends in some other advanced industrial nations where non-state income is a growing element in institutional budgets. We recommend that the government make an unequivocal statement that generating non-state resources whether through fees from overseas students, income from short courses for industry, income from spin-out companies, or from other commercial activities should be retained by the institution concerned and should not be taken into account in any way in the calculation of recurrent grant. This will remove any disincentive to institutions to generate additional resources by their own efforts and will encourage institutional diversity.

Generating and carrying forward institutional surpluses

Good institutional management requires that institutions generate surpluses and create reserves but both appear to be discouraged under current financial rules. A recent OECD/IMHE report on institutional sustainability in higher education (OECD/IMHE, 2004) drew attention to the need to put aside 4% to 5% of the insured cost of all HEI buildings for long-term maintenance in order to cope with major refurbishment or replacement costs in later years.

Nearly all Irish HEIs have buildings dating from the 1960s and 70s which already need substantial renewal programmes, and because of the rapid expansion, all of them have a significant tranche of newer buildings for which no financial provision for renewal has yet been made. This represents a serious financial overhang which will place increasing demands on institutional or government expenditure in the future and which needs to be addressed now before the situation worsens. HEIs need reserves to cover equipment and furniture replacement costs, to build up resources to invest in major new activities or to cover significant downturns in income or fluctuations in student numbers. For a research-intensive institution anxious to compete in a global academic market for key research leaders, the availability of reserves to meet unanticipated demands represents a critical weapon in an institution's armoury. We recommend that restrictions on retaining surpluses and building up reserves be dispensed with and that institutions should be encouraged to aim to achieve surpluses equivalent to 3% of expenditure and to set aside funds for long-term maintenance.

Academic and academic-related salaries

By international comparisons, academic salaries are quite high and, being linked to civil service salary scales, are provided with some protection against fluctuations in institutional fortunes. But the linkage also creates inflexibilities. This particularly applies in recruiting from overseas where a larger salary package may be required than is provided for in civil service scales. We were told that ways have been found around these problems in individual PRTLI or SFI grant situations where HEIs have found ways to attract leading researchers from overseas outside the established salary structures. But this is not an adequate basis for competing in an international market for key research leaders, as will be necessary if Ireland is to compete internationally in research. We believe that salary restrictions need to be removed so that HEIs can act more entrepreneurially and more quickly to attract or retain particular individuals who have key skills, academic expertise or experience that the institution needs. We are confident that efficient and accountable internal procedures can be devised to ensure that the freedom to offer individualised salary packages is not abused.

Accountability

We recommend below that institutions be funded through a contract against an agreed strategic plan, which will significantly increase accountability for performance. However, at the most basic level of financial accountability, we believe the current situation could be much improved. At the moment, HEIs, while having their own "internal" auditors, rely on the Comptroller and Auditor General to audit their accounts. This process is often subject to delay because of

the other demands on the Comptroller and Auditor General's staff and is conducted on a purely financial basis. We recommend that, except in exceptional circumstances, HEIs be not audited directly by the Comptroller and Auditor General but be required to have an internal audit service reporting to an Internal Audit Committee and to employ external auditors from the private sector whose reports would be available to the Tertiary Education Authority which itself would employ an audit team to act on behalf of, and in consultation with, the Comptroller and Auditor General. The Authority could then require audited accounts earlier than is now the case (and act on them more quickly if required) and would be in a better position to analyse them, both individually and on a system wide basis and report accordingly to the Department and to the Comptroller and Auditor General.

Institutional governance and management

In a period when internationally there is intense competition among public sector agencies for resources, questions about the delivery of services whether in health, or in education, or in welfare become paramount. In every country, resources are finite but their investment can be enhanced or diluted by the effectiveness or weakness of the organisations through which they are targeted. Irish universities and institutes of technology have been transformed through extremely rapid growth over the last 15 years but their internal structures have not been much modified to adapt to the new pressures they find themselves under. Their governance and management now need to be reformed in order to be able to compete not just with one another but in broader international settings. Fortunately the likely slow down in expansion, if not decline, in student numbers provides the opportunity to undertake the necessary modernisation process. This is particularly the case for the universities where so much of the research investment must be placed if they are to become significant vehicles for the continued development of what the National Development Plan describes as the "knowledge-based" economy where "intellect and innovation will determine competitive advantage… [and to which] the accumulation of 'knowledge-capital' represents a key contribution" (Government of Ireland, 1999, paragraph 6.35). We received testimony on all sides of the culture-changing role of the PRTLI programme in focussing institutions to make selective choices. But if this programme's success is to be built on effectively, the process of making decisions between competing claims, the recognition that resources should be allocated against potential outcomes, the construction of strategic plans that reinforce certain academic areas at the expense of others, and the human resource policies that reward excellence and discourage lack of performance must be reinforced. This does not represent a case for the introduction of crude managerialism or the elimination of collegiality but for creating the decision-making

mechanisms where priorities can be agreed and carried through. If Irish universities wish to be among the best, they will take note of the way the best universities world wide equip themselves to take decisions in intensely competitive environments.

Governing bodies

There is a considerable interest in governance issues in both the corporate world and in universities in Europe. Many European countries which have not previously had lay elements in their governance have now introduced them and are increasingly using them as "non-executive directors" both to provide institutional accountability mechanisms in, for example, the remuneration of senior post holders and in audit but also to play important roles in strategy. The former role was highlighted in *The Financial Governance of Irish Universities* (HEA and CHIU, 2001) but the latter was emphasised in the Hoare Report in Australia (Commonwealth of Australia, 1995) and the Dearing Report in the UK (National Committee of Inquiry into Higher Education, 1997). If one excludes from the statistics Trinity College, Dublin which has an almost wholly academic governing body, analogous to the situation in Oxford and Cambridge, Irish universities' governing bodies have an average of 36 members, half of the members drawn from outside the university (*i.e.* laymen). This pattern should be compared to US boards of regents or trustees which are smaller and, other than the university president, are made up entirely of lay people or to the UK where external (lay) members have a large majority over academic representation. We believe that governing bodies in Ireland are too large to play the important strategic role they should now be exercising and that the balance of lay to academic members is too low. We would favour governing bodies of no more than 20 members (including student members) with a significant majority of lay members. We think that this would make them better placed to think strategically. We would expect that the major conduit of academic views on strategic issues would come via reports from the senate but that the role of a governing body, either acting on its own or through some joint body with the senate, must be to reconcile, and if necessary, prioritise academic requirements with financial considerations and the requirements of physical planning.

This reduction in size would necessitate a review of the composition of governing bodies. We would favour a simpler process of determining membership than that contained in the 1997 *Education Act* to the effect that the chair would always be drawn from the existing lay membership, but elected by the whole governing body, and that the lay membership would be nominated by a nominations committee of the governing body, made up primarily of lay members after the governing body had itself determined the range of skills and experience it wished to attract onto the board. This would emphasise the strategic needs of the institution over the representative

nature of the present governing bodies, leaving the governing bodies themselves to determine the size and depth of local representation, the range of professional skills, business links and other factors which would contribute most effectively to the development of the institution.

Leadership

We received clear evidence from the universities we visited of the recognition of the importance of institutional leadership. We believe that the post of university president should be publicly advertised and that universities should always encourage and seek out external applicants. However, leadership needs to be distributed in universities, not concentrated in a single post. We recommend that procedures be created for the rotation of headships of departments so as to stimulate new ideas being fed into departmental processes and for mechanisms to be created to ensure that such appointments are approved by the governing body on the recommendation of the president. We strongly endorse the idea of "the central steering core" (Clark, 1998), to assist the president in the management of the institution and in maintaining its strategic focus. Universities are multi-product organisations with core missions in teaching, research and service to the wider society and they benefit from shared decision-making and a sense of corporate responsibility in priority setting.

Resource allocation

We did not find clear evidence of internal resource allocation processes within universities through which central strategic plans, for example for the investment in one subject area or department at the expense of reductions elsewhere, were translated into actual allocations of resources. In a period of rapidly expanding student numbers, such decisions are easier to make because funds themselves are increasing each year, but in a steady-state situation, matching priorities to resources is much more difficult. Essential data about academic performance, staffing levels and other costs were not easily available and processes which promoted equity over rewarding performance seemed to predominate. But if universities are to become major research institutions with sustainable research profiles, differentiated investment in new staff, incentives for performance and the allocation of research infrastructure support are critical for long-term success. In many cases, allocations of increased resources need to be balanced against the need to withdraw funding from less academically successful areas to pay for such investments. To establish such an organisational culture, universities need to create transparent resource allocation mechanisms closely reflecting their strategic plans and mission statements as approved by their governing bodies, and put in place processes by which they can be implemented.

Human resource management in universities

Universities have not, until the PRTLI programme, had to consider a differential reward system to recognise success or lack of it in research. Academic staff are appointed on a two-year probationary period and in effect therefore are judged on their performance in order to be given a permanent appointment shortly after completing their first year. This gives an inadequate period in which to judge an academic record. We recommend that tenure decisions be significantly delayed, perhaps to the fifth year of service as in the United States, and that research performance be given equal prominence to teaching. At more senior levels, staffing structures are too inflexible and contain too few incentives for high performance. Promotion to personal chairs, that is, non-established professorships conferred solely on the basis of individual performance in research and research leadership, is almost unknown so that top researchers are forced either to look for posts elsewhere, often abroad, or to wait till a professorial vacancy occurs. Most universities would agree that they have a significant body of staff who are not research active, and with student numbers unlikely to increase by much, if at all, there will be difficulty in bringing in new blood except on limited-term research contracts. We believe that universities need to address this situation actively: they need to be more selective at the tenure stage, be more flexible about promoting staff to reflect research excellence, develop ways either of incentivising research-inactive staff back into research or of creating space, through early retirement schemes, to continue to make new-blood appointments. All this emphasises the need for a more positive approach to staff development in both universities and institutes of technology and the commitment of institutional resources to staff development programmes covering the whole range of work in tertiary education, in particular in the development and updating of teaching skills, in addressing wider societal needs such as access and widening participation or in areas relating to research and the exploitation of research findings. We believe that this is of such importance that we recommend that the new Tertiary Education Authority set up a monitoring process to ensure that a high priority is given to staff development in all HEIs.

Governance and management in the institutes of technology

Some institutes have suffered from a confusion in the roles of governing bodies and institute directors as to which should be responsible for the control and conduct of their institutions (see the *Regional Technical Colleges Act, 1992*). We recommend that these powers be removed from the remit of the governing body as pertaining to the managerial rather than the governing function of institutions. We also believe that the terms of membership of the external (lay) members should be amended so that the institutes can themselves appoint members using the nominations committee system we recommended for the universities. We are confident that they will continue to draw on local

(stakeholder) bodies as this will reflect their best strategic interests. We also believe that their governing bodies should elect their own chairs, rather than have them appointed from outside and that the institutions should be regarded as now mature enough for the governors to appoint a director using whatever committee structure they deem appropriate rather than through the machinery outlined in the 1992 Act.

Recommendations

7. *That the issue of multi-year funding should be addressed both in relation to the alignment of financial years and in relation to mid-year allocations in order to give HEIs a secure base for financial planning on a year-to-year basis.*
8. *That in order to incentivise HEIs actively to seek external sources of funding, the government make a clear statement that income they generate from sources outside those provided by the state will not be subject to offsetting against state funding.*
9. *That HEIs be required to plan to generate financial surpluses and encouraged to build up reserves against future necessary expenditure.*
10. *That greater flexibility be introduced into academic salary structures in order to permit institutions to take special steps to attract or retain particular individuals with key skills or experience that an institution needs.*
11. *That the present arrangements for auditing HEI accounts be amended in accordance with the recommendations in Chapter 3.*
12. *That university governing bodies be reduced in size to a maximum of 20, including student members, to improve their effectiveness, and that lay members be required to constitute a substantial majority.*
13. *That each university or institute governing body should create a nomination committee, made up primarily of lay members, to propose replacements for vacancies amongst lay members against a template of skills and experience required on the board to be determined by the governing body.*
14. *That university or institute governing bodies should elect their own chairs.*
15. *That the post of university president or institute director should be publicly advertised and external candidates encouraged to apply. Appointments should be made by governing bodies through appointing machinery they should devise.*
16. *That the headships of university departments be given limited terms so that there can be rotation when appropriate, and that appointments or reappointments be made by the governing body on the recommendation of the president.*
17. *That universities review their resource allocation processes with a view to ensuring that resources are allocated in line with established institutional strategic priorities.*

18. *That universities review their human resource strategies with a view to making the probation period longer and the granting of tenure more rigorous and to providing promotion routes to personal chairs as a reward for exceptional research performance or leadership.*

19. *That HEIs give higher priority to staff development issues and allocate resources accordingly, and that the Tertiary Education Authority be asked to monitor the process.*

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ISBN 92-64-01431-4
Reviews of National Policies for Education
Higher Education in Ireland

PART I

Chapter 4

Widening Participation and Lifelong Learning

Although Ireland has an impressive legislative framework for dealing with lifelong learning, this chapter identifies poor performance in provision for adult, part-time and disabled students. The chapter makes recommendations for improving performance in these areas, including through arrangements for recognition of prior learning. The chapter also discusses the international dimension of Ireland's tertiary education sector. With 5% of its total student enrolment from overseas, Ireland is on the OECD average but it has not done as well in attracting non-European students. The chapter proposes steps for encouraging foreign student recruitment and their fee treatment.

Entry to tertiary education for the great majority of students is via the "points system" allocated on the basis of performance on six subjects of the Leaving Certificate Examination. The maximum potential points which can be scored is 600 and to obtain entry in high-prestige, professional courses like medicine, dentistry, pharmacy, veterinary and some other programmes, a performance of more than 550 points is required. Ninety per cent of the entry are school leavers aged 17 to 18 who have just taken the Leaving Certificate. Mature students (over age 23) represented only 5% of new entrants in 1998, and about 2% of the university-based student body, although the points system is flexible enough to permit a student to enter on the basis of personal assessment which can include an interview. Ninety-five per cent of those who apply for a place in higher education through the central admissions system receive an offer of a place, though not necessarily at their first-choice institution or in their first-choice programme (*Commission on the Points System, 1999*). The Clancy Report, *College Entry in Focus: A Fourth National Survey of Access to Higher Education*, illustrated the social disparity of this intake: nearly 100% of the children of higher professionals and over 80% of the children of employers and managers enter higher education as compared with only around 20% of the children of unskilled and semi-skilled manual workers (Clancy, 2001). The report also provided evidence that within the university sector the offspring of the higher professional group clustered in medicine, law, veterinary science and dentistry (Clancy, 2001). Overall these figures may not in themselves be much out of line with many other European countries. What is surprising, however, is that if the figures for the National College of Ireland are excluded, part-time numbers make up only 20% of total student numbers.

Ireland has an impressive legislative framework for dealing with adult education and lifelong education. The 1997 *Universities Act* identified a role for the universities in promoting lifelong learning through the provision of adult and continuing education. This was followed by the *Qualification (Education and Training) Act* in 1999 and the *National Training Fund Act* in 2000. In 2000, the government issued a White Paper on Adult Education, *Learning for Life* (DES, 2000). The National Adult Learning Council was established in 2002 and the National Qualifications Framework in 2003. Concern about the impact the points system was having on second-level education prompted the appointment of a Commission on the Points System which reported in 1999. In addition, the following major reports have been published: *Access and Equity in Higher Education: An International Perspective On Issues and Strategies* (Skilbeck and

Connell, 2000), *The Report of the Action Group on Access to Third Level Education* (DES, 2001), and *Supporting Equity in Higher Education* (DES, 2003), and the National Development Plan allocated very significant funding for 2000-06 for a Third Level Access Fund (Government of Ireland, 1999).

The range of these reports and the weight of government activity provide clear evidence of the extent of official concern to rectify social disparity in access to tertiary education, but their impact has not so far been very great in changing the position. The problems, self evidently, begin much earlier in the education system and higher education entry is largely a reflection of this. One sixth of children do not attempt the Leaving Certificate Examination and in some disadvantaged areas the proportion not attempting the exam rises to one-third. Indeed the representatives of the Cork City Partnership argued strongly that the problems began at the primary school level and that unless they were addressed vigorously there, and especially in the most deprived areas, change would be very slow to come (oral evidence). The St. Vincent de Paul Society described the sums available for early childhood education as "grossly inadequate to begin the work and investment needed to facilitate and encourage disadvantaged children to engage with and study in school". These issues then remain complex, wide-ranging and not soluble by higher education alone.

Similar difficulties seem to apply to students with disabilities. Again the legislative framework is now in place or being put in place through the *Education for Persons with Disabilities Bill*. However the Disability Federation of Ireland (DFI) told us that there would still be a potential shortfall in supporting people with disabilities in third level and further education. Despite the legislative advances, the DFI argued that people with disabilities "continue to experience practices of exclusion" often because the complexities of individual impairment "demand a more fluid approach to 'mainstreaming' that can challenge individual pieces of legislation, strategies or supports" (DFI submission to the Review).

The need for renewed action by HEIs

Nevertheless, we believe the time is ripe for a further attack on the problem not least because, with the demographic downturn, not only will HEIs need to broaden their catchment of students to retain resources but there is the risk of a national shortfall of qualified new entrants to the labour market. We saw and heard many examples of good practice and would particularly commend the Area Partnerships movement for its concentration on local development social inclusion programmes. In Cork we found examples of the university and the institute of technology working together on these issues and establishing special relationships with schools in deprived areas (the Bridging the Gap project) to provide routes into higher education outside the

points system. The fact remains that in spite of the Points Commission recommendation that target dates of 2005 and 2015 be set for institutions to establish quotas of 15% and 25% respectively for the admission of mature students in each third-level institution, the first target is unlikely to be met by all institutions. We received evidence that many mature student applications were rejected because the quota was already met on a particular programme rather than against an overall institutional target. It has also been argued by some of our witnesses that the recommendations of the Points Commission have not always been vigorously pursued and implemented.

The National Qualifications Framework now provides a basis for recognising qualifications obtained through further or community education courses. HEIs should utilise them much more widely than they do at present. An increasing number of Leaving Certificate students (21% in 2001) are taking the Leaving Certificate Vocational Programme which includes three activity-driven link modules on enterprise education, preparation for work and work experience. These link modules are awarded more points by the institutes of technology than the universities, thus giving a negative view of how the universities rate them, in spite of the Points Commission's recommendation that universities should give the same level of points as the institutes of technology. The Points Commission also supported the view of the National Council for Curriculum and Assessment that the Leaving Certificate should recognise a wider range of student skills and attributes. A National Office for Equity of Access to Higher Education has now been established and we recommend that it be tasked with following up all the recommendations of the Points Commission to establish which have been implemented and where more needs to be done. We are also conscious of the rising costs of widening access and the complementary investment necessary for improving retention rates. Indeed one institute of technology told us that it had to maintain a staff student ratio of nearly 1:1 in an engineering support service for this reason. We recognise that special support arrangements may be required for some students and recommend that in its allocation model the new Tertiary Education Authority provide a supplement to the normal grant to serve as an incentive to institutions to recruit and retain students from disadvantaged backgrounds.

Part-time education

Another important area is part-time education, which is normally seen in many countries as an established route through tertiary education for students, often mature students, from disadvantaged backgrounds. In Ireland the attractiveness of such a route is dissipated by the fact that, unlike full-time students, part-time students are not eligible for maintenance grants and have to pay fees. We were told of a foundation course in an institute of technology that failed solely because students were forced to pay fees and that, in an

industrial area like Tallacht, there was potentially a huge market for part-time programmes if fees were remitted. We believe that discriminating between part-time and full-time students in this way creates a severe disincentive to students. Moreover, there was very little incentive to institutions to take special steps to recruit part-time students because they were not clear whether or not the fee income was being offset against their recurrent grant. We believe that part-time numbers should be significantly increased as a proportion of total student numbers in tertiary education. We recommend that part-time and full-time students be treated on a similar basis in respect to fees and eligibility for maintenance grants and that institutions be reassured that part-time students should count fully (on a *pro-rata* basis) in the calculation of recurrent grant. Similar considerations should apply to continuing education carried out in the evening so that such activities can be fully integrated into institutional life rather than being often regarded as a separate and distinct operation employing different staff. Continuing education must be "mainstreamed" if it is to feed into mainstream programmes and its priority in higher education programmes must be given due recognition.

HEA projections of future student populations

The most recent projections of future student populations put forward by the HEA suggest a full-time age participation rate for school leavers of over 60% by 2010. We have two comments: the first is that the figures take no account of the growth of part-time student numbers which we would strongly urge and perpetuate the sense that manpower needs will only be satisfied by increasing the numbers of full-time students, and the second is that it is very important that any increase in the age participation rate is not achieved by simply drawing more on the dominant socio-economic groups currently entering tertiary education, as has happened, for example, in the expansion of numbers in the UK. The recognition that Ireland needs a higher age participation rate to fulfil projected skilled manpower requirements must act as a spur to ensuring that measures are taken to greatly increase the participation by lower socio-economic groups or the current disparities in participation will widen and will in the future be even more difficult to even up.

Credit transfer and the Accreditation of Prior Experiential Learning (APEL)

The Department of Education and Science Green Paper, *Adult Education in an Era of Lifelong Learning* (DES, 1998), argues that the key elements of the concept of lifelong learning are "providing learning opportunities over a life span rather than only in the early years, widening recognition to embrace new forms of learning [and] recognising that learning takes place in a range of settings wider than schools and colleges". We regard it as critical that the

cause of lifelong learning be reinvigorated. It is self-evident that significant generations of potential graduates did not penetrate higher education in the past and that, though on a lesser scale, the situation continues now. It is important, both on grounds of equity but also for the pragmatic reason that the demographic downturn will demand it, that new routes into higher education should be found for those who missed opportunities in their early school years. Much more needs to be done to facilitate credit transfer and accumulation, including the recognition of work experience and prior experience. This is an intrinsic part of the agenda of the National Qualifications Authority of Ireland (NQAI), which is seeking to promote a culture change whereby emphasis is placed on the outcomes of programmes achieved by the learner. The NQAI is working to standardise qualifications so that transfers between institutions and the recognition of prior certified learning can be facilitated. However, progress is slow and there is an urgent need to secure agreement across the various providers and to move on to develop a mechanism to enable the introduction of the Accreditation of Prior Experiential Learning to encourage adult students to resume learning. We recommend that the DES and the new Authority put their weight strongly behind the NQAI's efforts.

Workplace learning is an important element of lifelong learning. OECD countries are using a variety of measures to promote access to learning opportunities for adults, including at the workplace, through legislation, financial incentives and contractual agreements. One approach, used in France, Spain, the Province of Quebec and one canton of Switzerland is for a company levy. In France, company expenditures surged beyond the 1.5% levy on company payroll after the introduction of the levy, but there remain downsides to this approach, notably its weak impact on small firms and on the quality of training achieved (OECD, 2003b). For these and other reasons Australia and Korea have abandoned this approach and attempts are being made both to improve the levy approach and to develop a range of others. Among the latter, co-financing mechanisms, such as learning accounts, are being experimented with in several countries (OECD, 2004c). A key element of the more successful approaches is a closer involvement of the social partners from the early stages of their development. Schemes funded by central and regional governments can be successful in engaging public authorities, social partners and companies in greatly expanding lifelong learning opportunities.

Retention

The institutes of technology are on the front line of the widening participation agenda and will be key players in this in future years. They have higher proportions of local students and attract far more students from less advantaged socio-economic groups than the universities. They also provide

ladders of opportunity through apprenticeship and other training and through sub-degree professional qualifications to degrees. It is not surprising, therefore, that this sector also has the lowest retention and completion rates. But low retention rates seem to be exacerbated by certain factors. Wastage is primarily a first-year issue. Students told us that there was an inadequate investment in counselling services in schools so they received little advice on courses they should choose or institutions to apply to. Selection via the "points system" often led to students accepting places on courses they had not applied for to get into an institution of choice and this created difficulties, especially for students who may be only 17 or just 18 when they leave home for the first time for tertiary education. One institute of technology told us that their analysis of student wastage was that 85% of the cases in their institution were caused by students entering the wrong courses. In addition no institution has introduced a full credit accumulation system and students are mostly required to pass all the modules of one year before passing to the next year.

The government's fee exemption system contributes to this rigidity as students who fail to pass all modules within a year are not eligible for further fee exemption until they pass all the modules of that year. Many students who fail some modules at the end of the first year, or any subsequent year, drop out of the system with no credit for what they have achieved rather than repeating a full year in order to pass the small number of modules failed. We note that there is already an Inter-Universities Retention Network in place but the retention issue, as we have seen, goes much wider than the universities and there are many overlapping issues with the institutes of technology which in any case have larger retention problems. We believe that these issues need to be re-addressed and we recommend that CHIU and the Council of Directors of Institutes of Technology should tackle them together in conjunction with the new Authority. We also recommend that the funding methodology should take account of high wastage rates to provide an incentive at institutional level to remove some of the structural issues which appear to increase the wastage problems.

The international dimension

It is surprising, when Ireland itself has such a strong commitment to, and reputation for, international activity within Europe, OECD and the United Nations that Irish tertiary education does not have a higher international profile. Within Europe, the Irish record for attracting EU research monies has been excellent and Ireland has played a significant role in European student exchange schemes but it has not taken the steps necessary to generate significant non-European overseas student numbers in the way that many other European countries have done. With 5% of its total student enrolments from overseas, Ireland is on the OECD average but some countries have encouraged very large expansions in the

last 15 years, with Australia increasing its enrolments by sixfold and the UK and Japan by fourfold. In 2001, China sent 124 000 students to OECD countries for tertiary education and students from Asia studying abroad made up over 40% of all overseas students in higher education. In Australia, the proportion of the postgraduate student body from overseas rose from 5.6% to 21.2% between 1988 and 2000, and in the UK from 38% to 56% between 1996 and 2001. A recently published report by the British Council with Universities UK and IDP Australia suggests that the numbers of students globally studying abroad in 2003 is 2.1 million and is likely to grow to 5.8 million by 2020 (Bohm *et al.*, 2004).

It is clear that Ireland has not benefited from the very great expansion of international students and that certain countries are attracting very significant proportions of the totals going to OECD countries: the United States (31%), United Kingdom (15%), Germany (13%), France (10%), Australia (8%) and Japan (4%). Many European countries value the international element in their student body so highly that countries like Germany, Belgium, the Netherlands and Spain are now undertaking a high proportion of their postgraduate teaching in English. There are two main reasons why they are doing this: first because they want to increase their postgraduate numbers and thus their research base, and second because international students pay fees which provide a critical supplement to state income. When one looks at the enterprise shown in some countries to attract international students – overseas recruitment offices, partnership agreements with overseas universities, attendance at recruitment fairs, expenditure on publicity, and in a few cases, the establishment of overseas campuses – it is hard not to escape the conclusion that Irish tertiary education has chosen to look to the state rather than to the international market for its income, and in doing so has missed out on valuable support for research through overseas postgraduate students as well as on an important income stream.

The investment now being made in research in Irish universities provides a platform on which a significant campaign ought to be launched by individual research-intensive universities to actively recruit international students. The publicity that such campaigns would generate would be beneficial to Irish HEIs' international profile and would build partnerships with foreign institutions that might have long lasting results. At the research level, Irish universities should build on the Science Foundation Ireland research partnership initiatives and on their success in the award of EU grants to establish solid research relationships across international boundaries. No country, however strong, can be self-contained in its research, and smaller economies like Ireland, will benefit hugely from international partnerships with research teams in larger research environments. Ireland is a country with an almost unique international profile and its higher education institutions need to play their own part in this endeavour. However, the evidence from other European nations and from Australia is that success comes from individual institutional effort, not as a

result of national campaigns. Irish HEIs need to project their individual "brand" images at international events and in recruiting international students rather than relying on a common Irish identity. They have a great deal to offer the international student market but they do not always differentiate themselves sufficiently to compete with institutions in other countries. They should aim to double the numbers of international students in the next five years and increase the international fee element in their budgets to 10% or risk the danger that other countries establish such a holding in the international market that Irish institutions will not be able to establish a presence.

Recommendations

20. *That the National Office for Equity Access to Higher Education be tasked with following up the recommendations of the Commission on the Points system to establish where more needs to be done.*
21. *That the Tertiary Education Authority recognise in its funding formula the additional costs of recruiting and retaining students from disadvantaged backgrounds.*
22. *That every effort be made to increase part-time student numbers as a proportion of total numbers in tertiary education and to this end distinctions between part-time and full-time students be removed for the purpose of the obligation to pay fees and receive maintenance support and that part-time students should count (on a pro rata basis to full-time) for the calculation of recurrent grant.*
23. *That continuing education evening courses (other than those strictly for leisure) should be supported by recurrent grant and should be fully integrated into an HEI's academic programme.*
24. *That the DES and the new Tertiary Education Authority put their weight strongly behind NQAI's efforts to secure agreement between providers of non-standard qualifications and developing mechanisms to enable the introduction of APEL (Accreditation of Prior Experiential Learning).*
25. *That the Conference of Heads of Irish Universities (known since 2005 as the Irish Universities Association) and the Council of Directors of Institutes of Technology jointly address the question of issues surrounding retention, in consultation with the Tertiary Education Authority and make a report.*
26. *That the Tertiary Education Authority find ways of taking account of wastage figures in the calculation of recurrent grant in order to provide an incentive to institutions to remove some of the structural barriers to retention.*
27. *That Irish institutions of tertiary education should market themselves more energetically internationally with a view to doubling the international student population in five years.*

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ISBN 92-64-01431-4
Reviews of National Policies for Education
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PART I

Chapter 5

Research, R&D and Innovation

Ireland's level of investment in research and development is well below the Lisbon target of 3% of GDP, largely because of the low level of industrial investment in R&D, of which indigenous industry accounts for only one-third. The chapter identifies other problem areas and recommends the establishment of a co-ordination body for civil science across government bodies. The creation of a National Council for Tertiary Education, Research and Innovation for setting national targets and strategies is recommended.

The period 1996 to 2002 saw the most radical increase in the funding of research in Ireland's history. From 1998 the Programme for Research in Third Level Institutions (PRTLI), managed by the HEA, has committed EUR 605 million to research infrastructure in universities and institutes of technology. Apart from representing an enormous boost to research in the tertiary education sector, it also emphasised in a dramatic way the importance of selectivity within institutions, the value of competition and the advantages that can spring from collaboration between research groups in different institutions (and sectors). There is general agreement that PRTLI changed the culture. In addition the government set up a Technology Foresight Fund of EUR 711 million over seven years addressed particularly at research niche areas of Information and Communications Technologies and Biotechnology. Science Foundation Ireland (SFI) was established by the Department of Enterprise, Trade and Employment in 2000 to administer the Fund. SFI has awarded over EUR 250 million to fund outstanding researchers and their research teams and has invested EUR 42 million in three new Centres for Science, Engineering and Technology (CSETs) to create research partnerships which will connect Irish universities with world leading research corporations and with Irish ICT and biotechnology companies. The National Development Plan envisages nearly a doubling of annual spending from public sources on research between 2001 and 2006 (EUR 341.8 million per annum to EUR 664.8 million per annum) and a further increase up to EUR 765.2 million per annum by 2010 (Government of Ireland, 1999, paragraphs 6.35 to 6.47).

This record of investment represents a remarkable attempt to change the fundamentals of the Irish economy, and is well documented in the HEA's 2002 report *Creating and Sustaining the Innovation Society* (HEA, 2002). It is evident that significant steps have been taken towards this goal. But if the Lisbon target of 3% is to be met, not only will industry, which is lagging in R&D expenditure, need to invest another EUR 1 600 million over the period to 2010, but a corresponding increase of EUR 800 million in public funding is required. However, for these resources to be invested effectively, whether at the current level or at the level that would be required to meet the 2010 Lisbon target, a number of measures need to be put in place to create a sustainable research culture which will provide the depth of resource necessary to attract overseas companies in far greater numbers than currently to invest in R&D in Ireland, and to sustain and enhance indigenous industry which at the moment

accounts for only a third of the current Business Expenditure on R&D (BERD) in Ireland. These measures include:

- A clear distinction between the roles of institutes of technology and universities in research.
- Better co-ordination of funding for research (and research infrastructure), through research funding agencies under the Department of Enterprise, Trade and Employment and other departments, and funding for university infrastructure through the DES and the new TEA.
- A continuous investment in generic, or basic, research to sustain the flow of new research ideas, some of which, but not all, will lead to strategic "downstream" R&D.
- A much greater investment in postgraduate support with the aim of more than doubling the number of doctoral candidates by 2010.
- Implementing the reforms in HEI governance and management outlined in Chapter 3.
- Rationalising the number of resourcing bodies for research and producing an organisational structure better able to sustain a research strategy over a long period.

The distinctive roles of institutes of technology and universities in research

Under the present division of responsibilities, institutes of technology are designated as being restricted to applied research. Nevertheless, many have research active groups and are participating with university partners in PRTLI research projects and one, Waterford, is a lead partner in a PRTLI project. The institutes are quite naturally keen to receive research infrastructure support as part of their recurrent grant and argue with conviction that their regional role requires them to be research active across many areas if they are to fulfil their role of working with industry, and particularly SMEs, and partnering local economic activity. There can be no doubt that individual institutes of technology and individual staff in them have performed outstandingly in maintaining a research profile and attracting external research support in disadvantageous circumstances and in spite of high teaching loads. However, international experience suggests strongly that research support needs to be institutionally concentrated in order to yield the most effective results. Ireland's size suggests that it is already well supplied with universities and that even within the present university sector some greater concentration of research funding will emerge over time. It would, therefore, not be effective to fund institutes of technology as a sector to support a generalised research function on the same basis as the universities. The role of the institutes of technology should be much more

targeted towards particular areas of applied research so that they can act as technology development partners to industry, especially SMEs, particularly on a regional or even a national basis. To undertake this role, they will require research infrastructure support to identifiable areas of specialist expertise. We believe the research support should be provided not from the Tertiary Education Authority but from Enterprise Ireland to ensure that the support is targeted against clear national or regional economic priorities and that such support should be firmly aligned to specific designated areas of activity. The institutes, as we have said above, must not be allowed to lose their focus as key actors in regional economies. It would represent a dissipation of scarce resources if they were to become entitled to automatic recurrent research funding support on a non-targeted basis.

Co-ordination of research, research infrastructure and capital funding

The pause in PRTLI funding caused widespread concern because of the implication that what had been regarded as a considered long-term investment in research infrastructure was not as stable and secure as had been thought. This has now been rectified but the concern illustrates the extent to which research can be destabilised by stop-go funding policies. The PRTLI programme primarily fed capital support to HEIs to build new facilities for research to take place in. However, for as long as teaching and research are seen as closely linked and mutually supportive activities, the capital requirements of a physics department, for example, will be a function not just of teaching needs but of growth in research and in postgraduate numbers. Because until 1998 Irish universities were not funded explicitly for research, research capacity in terms of buildings was given a low priority. Many science and technology buildings built in the 1960s and 70s are no longer fit for purpose and are seriously in need of renewal to meet the new research priority. Capital support, however, is fragmented between HEA either through PRTLI or through capital programmes funded from DES, or increasingly through SFI and the Department of Enterprise, Trade and Employment or through the Health Research Board. Such a situation demands co-ordination and rationalisation. We make some organisational proposals below. But we regard it as important that the development of research is not made dependent on capital grants from central agencies for new buildings and that universities should be resourced recurrently so that they can plan the use of their resources strategically (and occasionally utilise their borrowing capacity) to provide for the development of their physical requirements as part of a total strategic process, which takes into account general infrastructure needs and long term maintenance.

Developing a research infrastructure to sustain a research intensive environment goes beyond the provision of appropriate capital facilities, however, and includes equipment, technician, library and IT support and the

provision of appropriate career paths and remuneration packages for research staff so that sustainable expertise can be built up in research teams which teams do not break up if there is a temporary hold-up in grant moneys or specialist staff leave. We are strongly supportive in this respect of Professor Downey's report, *Creating Ireland's Innovation Society: The Next Strategic Step* (Downey, 2003). Again, as discussed in Chapter 3, if basic research provides the feedstock necessary to generate applications and innovation, universities need to have built into their resources an element that can be allocated differentially and on a selective basis to those areas of the institution that are research active (so that some departments may have considerably more favourable staff student ratios than others). Unless a university is able to fund academic departments so that they can pump prime new young lecturers to enable them to move into research immediately on appointment in a competitive research funding market, it will be difficult for such staff to get started in research and may waste their potential. A university also needs to be funded so that it can encourage research on a broader basis than merely in those areas selected by national research bodies. A "dual funding" system both offers the prospect of bottom-up innovation and provides "floor funding" to maintain an institutional research infrastructure. Ireland will need to translate its investment in niche research areas in universities into a broader and deeper R&D culture before one or more of those universities can be classed as a "world class" research university.

The need for continuous investment

Research and researchers need stable funding to succeed: research teams have to be built and sustained; doctoral students need an assurance both of secure funding to stay in research and career structures which offer them personal security; research leaders who are working abroad need to be assured of a long-term research funding regime to be tempted to return; technician support needs long-term training to establish the requisite specialist skills base, and so on. Consideration even now needs to be given to the future of the PRTLI programme, whether the recurrent support is to be absorbed into institutional budgets or made the subject of future competitive bids. Decisions need to be taken to sustain and enhance the Technology Foresight Fund. The conviction that Ireland must be an Innovation Society to succeed economically is now deeply rooted but needs constant reinforcement with assurances of continuous funding support not just for strategically targeted research but for basic research in universities which will provide the seed corn of people and ideas for future targeted programmes.

Postgraduate numbers

Comparative data suggest that Ireland must broaden its personnel base in R&D. The share of R&D personnel as a proportion of the labour force was 0.95% in Ireland as against an EU average of 1.39 % with some competitor countries much higher: Finland, 2.60%; Sweden, 2.43% and Denmark, 2.11%. The number of PhD graduates per 1 000 head of population aged 25-29 is at 1.8%, much lower than the EU average of 2.9% and far below countries like Finland and Sweden (5.8%) or Germany (5.5%). Postgraduate numbers have not grown as fast as might have been expected. For example, in science, numbers have only increased from 1 500 to 2 072 between 1991-2 and 2001-2. The average university postgraduate population stands at only about 25% (masters and doctoral students) and the current number of doctoral students at 3 000 is not much more than can be found at a single major research-intensive university in some other countries in Europe. Overall, postgraduate numbers comprise only 16% of the student body in tertiary education and much of this is concentrated in Dublin (Coolahan, 2004). Three factors that have contributed to this are the favourable job prospects for science graduates, the relatively low numbers of international students, and the failure to invest in enough postgraduate awards at competitive financial levels. There is an urgent need to increase rapidly the number of doctoral students for the following reasons:

- The research investment currently planned and the additional investment that is necessary to match the government's strategy will require a dramatic increase in doctoral students to support the up-scaling of the research that is envisaged.
- A significant proportion of university staff are not research active and will need supplementation by a new generation of doctoral students.
- With an academic staff which has expanded rapidly to match the rise in student numbers, the replacement of retiring staff will require an increasingly large pool of candidates.
- Industry, and perhaps particularly, young innovative science-based companies need a steady flow of doctorally qualified staff if industrial R&D investment is to continue to expand to match the Lisbon target.

We believe that the lack of a sufficient supply of doctoral students – and this is not restricted to a comment on science and technology numbers – could be a significant bottleneck to the effective expenditure of the increased resources now available for research and could, in the future, seriously hinder Ireland's aim to create a research intensive university system and stimulate much higher levels of industrial R&D. We recommend that immediate and comprehensive steps be taken to address the problem. In the meantime, we strongly support the moves reported to us to establish inter-university "graduate colleges" around particular research strengths to provide advanced training and intellectual support for research students.

Within the problem of numbers lies the issue of quality. Postgraduate numbers represent about 2% of the proportion of student numbers in the institutes of technology, all of which, other than the DIT, are relatively small institutions, sometimes very small. Every institute is proud of having a small number of PhD candidates, however, and there is no doubt that they contribute significantly to the establishment of research cultures. We believe that there are dangers in permitting institutes of technology to become doctoral awarding institutions and that there is academic value in concentrating research awarding powers in universities where there are significant research populations which create critical research environments. While DIT with its special status should be an exception here, we believe strongly that, in general, PhD awarding powers should be restricted to the university sector and that doctoral students working in institutes of technology should always be registered for university degrees and under a university supervisor, but with a joint supervisor in the institute. Where doctoral awarding powers have been granted by HETAC, they should be rescinded except in the case of DIT.

The organisational structure for research

Table 5.1 below reveals a very large number of organisations for a small country concerned in the public funding of research, many of which are responsible for distributing quite small sums of money. It is also worth noting that about 40% of the public investment in research goes to institutes and organisations outside tertiary education. While there is a consensus about the importance of investment in research to create a knowledge-based society there appears to be a lack of a clear strategic framework within which such public funds are invested. Investment programmes seem to have been embarked upon to meet individual institutional perceived needs rather than as part of a co-ordinated approach.

We are aware that links have been developed between the Higher Education Authority (HEA) and Science Foundation Ireland (SFI) and between SFI and the Health Research Board but we do not believe this goes far enough. Our first recommendation is that SFI should be accepted as the major national research funding body and that it be given a broader remit than is currently contained in legislation so that it is turned into something more like an analogue of the US National Science Foundation, although in this case we would recommend that its role expand to include the responsibilities of the Irish Research Council for the Humanities and Social Sciences (IRCHSS) as well as those of the Irish Research Council for Science, Engineering and Technology (IRCSET). In recommending this important organisational change we are in no way critical of the work of the two councils but simply concerned about the overlap of IRCSET and IRCHSS business with SFI and the need to generate a strategic focus into the funding of basic and strategic research. But the new SFI

Table 5.1. **Public funding of R&D in Ireland, National Development Plan Estimate**

Million EUR

Organisation	2001	2003	2006	2010
HEA/PRTLI	80.4	106.0	130.8	146.0
Dept. of Ed. and Science	41.1	62.4	158.4	175.3
SFI	11.1	70.0	131.0	153.0
DETE				
Higher Education	16.0 }	78.4	99.2	120.6
Own Labs	62.4 }			
Teagasc	40.1	38.5	40.3	41.0
Dept. Agr./Food				
Higher Education	5.4 }	13.9	16.1	16.3
Own Labs	13.2 }			
Marine Institute	9.7	11.0	13.0	15.0
Bord Iascaigh Mhara	8.4	2.7	4.0	6.0
Public Enterprise	18.0			
HRB	14.1 }	17.9	44.0	60.0
Dept. Health	1.4 }			
EPA				
Higher Education	2.9 }	4.0	6.0	7.0
Other	1.6 }			
Other	16.0	17.0	22.0	25.0
Total	**341.8**	**421.8**	**664.8**	**765.2**
GNP (billion EUR)	**96.8**	**110.8**	**119.4**	**131.8**
Public R&D/GNP (%)	**0.35**	**0.38**	**0.56**	**0.58**

Source: National Development Plan, 2000-2006 (Government of Ireland, 1999).

will need to move from the top-down approach that Ireland needed to boost research in technologies considered to be the key to the country's innovation potential to also supporting bottom-up initiatives and providing machinery for research training and research career promotion, areas where IRCSET and IRCHSS have been active. It will also need a new board structure with stakeholder representation from research, industry, partner agencies and tertiary education, and should include some international membership. For the reasons set out in the paragraphs headed "Co-ordination of research, research infrastructure and capital funding" and "The need for continuous investment", there must be close links between the new SFI and the new Tertiary Education Authority to ensure that their programmes are developed concurrently in respect to investment in research infrastructure and capital investment.

However, that still leaves a significant number of other government bodies with research resourcing powers without effective machinery for co-ordinating a government strategy. We believe that two steps are necessary. The first is the

appointment of a Chief Scientific Adviser to the government who would be responsible for the co-ordination of civil science across government departments but who in particular would seek to co-ordinate the work of other government departments and agencies with that of the expanded SFI and the new Tertiary Education Authority. The second step should be to establish a Committee for Research Policy reporting to the Cabinet which would seek to develop and oversee a national strategy for research and R&D and their links to innovation.

Both these steps have in part been taken by the government since our Review was launched and while we were drafting our report. However the announcement does not go as far as our recommendations (Department of Enterprise, Trade and Employment, 2004). The role of the new Chief Science Adviser is to "provide independent expert advice on any aspect of science, technology and innovation" whereas our recommendation is that the post should be responsible for "the co-ordination of civil science across government departments" and in particular to co-ordinate the work of government departments with an expanded SFI and the new TEA. In regard to the second step, the new proposed Cabinet Committee is intended to "address and co-ordinate science and technology issues" where our recommendation was for a committee which, reporting to the Cabinet, "would seek to develop and oversee a national strategy for research, R&D and innovation". We would urge that further consideration be given to these issues in the light of our report.

Innovation

Foreign-owned firms account for two-thirds of business expenditure on R&D (BERD) in Ireland. This inevitably makes the growth of R&D dependent as much on world economic factors as on the efforts of the Irish Government or Irish higher education. It also emphasises the need, for Irish HEIs to develop a higher international profile. The policy of the government must be, as it now is, to continue to invest heavily in research in Irish universities and to ensure that this fact is widely publicised internationally in order to persuade internationally mobile firms to utilise its products in terms of manpower and ideas. The need for a radical increase in postgraduate students recommended above will represent a further incentive to foreign firms to start R&D operations in Ireland. We believe that if these recommendations are implemented, the Department of Enterprise, Trade and Employment has an important role to play in marketing the investment in research and in postgraduate education to overseas clients.

But the ambition to create an Innovation Society must critically depend on the development of an indigenous research-based economy. We note that indigenous industry contributes EUR 17 billion to the Irish economy and over half the industrial jobs. The linkage of these firms, especially in areas of emerging

technology, with the HEIs is therefore critical. BERD surveys by *Forfás*, Ireland's national policy and advisory board for enterprise, trade, science, technology and innovation, suggest that while 27% of foreign-owned R&D-active companies collaborate with Irish HEIs, only 17% of Irish R&D-active companies do (*Forfás*, 2003). This points to the need for an improvement in the interfaces between Irish-owned companies and HEIs; industry in Ireland should be contributing more in terms of total resources to the tertiary education budget. Enterprise Ireland pointed out to us the important role of the institutes of technology in working with SMEs and the extent to which their teaching and research offering was very appealing to the Enterprise Ireland client base (Enterprise Ireland submission to the Review). We have recommended that Enterprise Ireland should be encouraged to give targeted research infrastructure support to the institutes. But we would not wish to see lines being drawn too narrowly between the universities' and the institutes' contribution to innovation; modern (so-called "Mode 2" related) research is as likely to spark off new exploitation ideas from commercial partnerships or direct from upstream basic research as it is from more downstream applied research (Gibbons *et al.*, 1994). We note that all the institutes have business incubator centres and we would encourage similar developments in the university sector. Nearly all the institutes' incubator developments, however, were funded by Enterprise Ireland and we would strongly urge that private capital also be sought from banks or other private sector sources, as evidence from other countries indicates that there is great value in involving private capital at an early stage. Private sector finance through venture capital has been shown to be a powerful driver of small high tech company development.

The considerable investment in the PRTLI in 1998 pointed out the need for greater expenditure within HEIs in professional research offices whose task was to assist in the exploitation of research. We believe that the new TEA should fund an expansion of this activity in all HEIs and should make HEIs accountable for such activity. We support the view of *Creating and Sustaining the Innovation Society* that a broad portfolio of policy instruments is required to stimulate activity and that these should be mission-focused and effectively co-ordinated (HEA, 2002). We also think they should be accountable so that lessons in respect to good practice and "what works" can be learnt and applied quickly. We were impressed by the extent to which the organisations and agencies that met us spoke with a common voice on the need to accelerate the exploitation process in every way possible, but as an increasing level of investment is made in research it will be important not to lose sight of the underlying argument why the investment is necessary.

Recommendations

28. *That public investment in research and R&D needs to be further increased if the requirements of the Lisbon declaration for 2010 are to be met.*
29. *That the institutes of technology should continue to concentrate on applied research and that underpinning research resources should be the subject of specific investment by Enterprise Ireland, and not by the new Tertiary Education Authority, in targeted areas against clear national or regional economic priorities.*
30. *That resources for research and for research infrastructure, including capital resources, be better co-ordinated through closer links between the new Tertiary Education Authority and an expanded Science Foundation Ireland (see Recommendation 34) and with universities being funded on the basis that they are required to accept responsibility for major building refurbishment or building replacement within the recurrent resources available to them.*
31. *That consideration should be undertaken now in respect to the future of PRTLI.*
32. *That steps be taken radically to expand the numbers of doctoral students in universities with the intention to more than double them by 2010.*
33. *That degree-awarding powers for doctoral awards be concentrated in universities and that, except in the case of DIT, where such powers have been granted to institutes of technology by HETAC, they should be rescinded.*
34. *That SFI be confirmed as the national agency for the funding of basic research and publicly funded R&D in higher education and that its powers and responsibilities be extended as described in Chapter 5 and that its board structure be amended to reflect its new role.*
35. *That the responsibilities and programmes of the Irish Research Council for the Humanities and Social Science and of the Irish Research Council for Science, Engineering and Technology should be subsumed under an expanded SFI.*
36. *That the government appoint a Chief Scientific Adviser reporting to the* Tanaiste *and the Minister for Enterprise, Trade and Employment who would* inter alia *be responsible for the co-ordination of civil science and in particular co-ordinating the research investment conducted by other departments and agencies with that of the expanded SFI and the new Tertiary Education Authority.*
37. *That a Committee for Research Policy reporting to the Cabinet be formed which would develop and oversee a national strategy for research, R&D and innovation.*
38. *That all HEIs should have business incubator units or other facilities to encourage the exploitation of research through spin-out companies; every effort should be made to involve private sector finance in such ventures.*
39. *That the new TEA should fund an expansion of professional research exploitation services in all HEIs and ensure that HEIs are accountable for such activity.*

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ISBN 92-64-01431-4
Reviews of National Policies for Education
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PART I

Chapter 6

The Strategic Management of the Irish Tertiary Education System

Ireland has a relatively large number of higher education institutions for a population of four million. Although the diversity of missions has been well maintained through the universities and the institutes of technologies, their complementary roles have not been integrated within the concept of a unified tertiary education system. The chapter makes a series of recommendations, including the creation of a single funding authority for the institutes and the universities.

The structure of the proposed Tertiary Education Authority

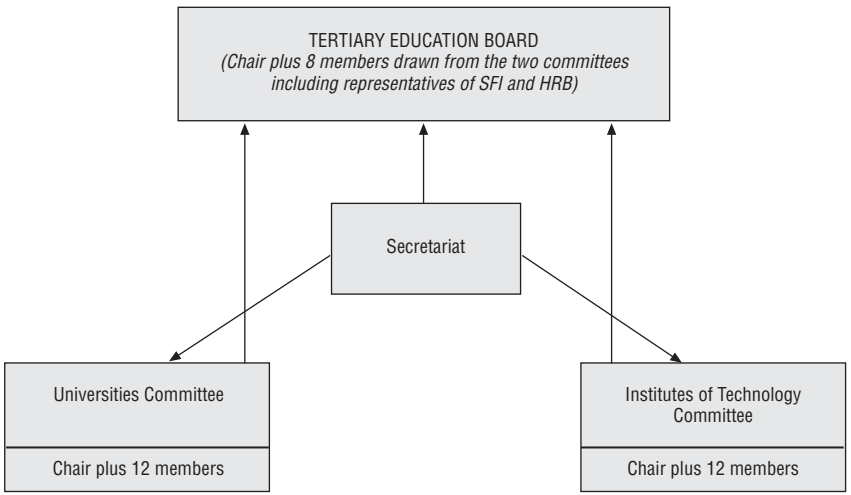
We have already recommended that a new Tertiary Education Authority be established which would take over the functions of the HEA but which would also be responsible for the management and funding of the institute of technology sector of higher education. We describe below how we see the new TEA relating to government departments and other agencies but in this section we are concerned to define the changes we believe are necessary in the HEA structure to accommodate the additional responsibilities which will fall on the TEA with the transfer to it of the institutes of technology. Although the positioning of the institutes of technology under the DES is unsatisfactory for the reasons described in Chapter 2, it has had the advantage of preventing mission drift and has maintained a "binary" division between the universities and the institutes. The danger of a simple transfer of the institutes away from the DES and into a TEA that, however, remained in all but name, the HEA, would be the risk in the longer term of a blurring of that division and inevitable pressures for a rationalisation of institutional titles and possibly functions. Any new structure must preserve this division of function but create a more integrated and more permeable system of tertiary education. We believe that the effective way of doing this is to create, within the TEA structure, two committees to be served by a common secretariat, one responsible for the university sector and the other for the institute of technology sector. The two committees would have a common chair. Both committees should be statutory, in the sense that their structure and terms of reference would be embodied in the legislation required to create the TEA and their members would be subject to ministerial appointment. The Authority itself would primarily exercise a strategic and co-ordinating role and would comprise a chair, who would also chair the two committees and a small board drawn from the membership of the two committees. The committees would recommend to the board. The post of Chair of the Authority would be subject to public advertisement (like the presidents of universities or the directors of institutes).

The membership of the two committees should be largely drawn from stakeholder interests outside higher education; it will be important that regional concerns are well represented (especially on the Institutes of Technology Committee) as well as research (especially on the Universities Committee), together with interests in manpower, skills and enterprise and some academic

representation. We have laid great stress on the need for a better co-ordination of teaching and research interests in the strategic management of tertiary education and believe that it is important that the two responsible ministries (Education and Science; and Enterprise, Trade and Employment) work closely together, since they will each be accountable for a very substantial investment in higher education; the membership of the committees must reflect this. It is also essential that the TEA should be represented on the expanded SFI and the Health Research Board (HRB) in order to ensure that funding policies are appropriately co-ordinated.

Figure 6.1 is a diagram of the structure we propose:

Figure 6.1. **The proposed Tertiary Education Authority**



The formulation of a national strategy towards tertiary education and innovation

All the evidence we received from government departments and from institutional representatives pointed to the critical importance to the economy which Ireland accorded to the primary products of tertiary education: qualified workforce and research. It was also apparent that although the investment was substantial, an effective co-ordinating framework was often lacking and the machinery for determining overall strategy had not been created. Ireland lacks a national strategic agenda for change in the third sector of education and most importantly, the alignment of such a strategic agenda with policies for investment and funding. Funding policies are powerful tools for change and experience shows that where budget and funding policies are inconsistent with a strategic agenda, then policies which are embedded in the budget and in funding

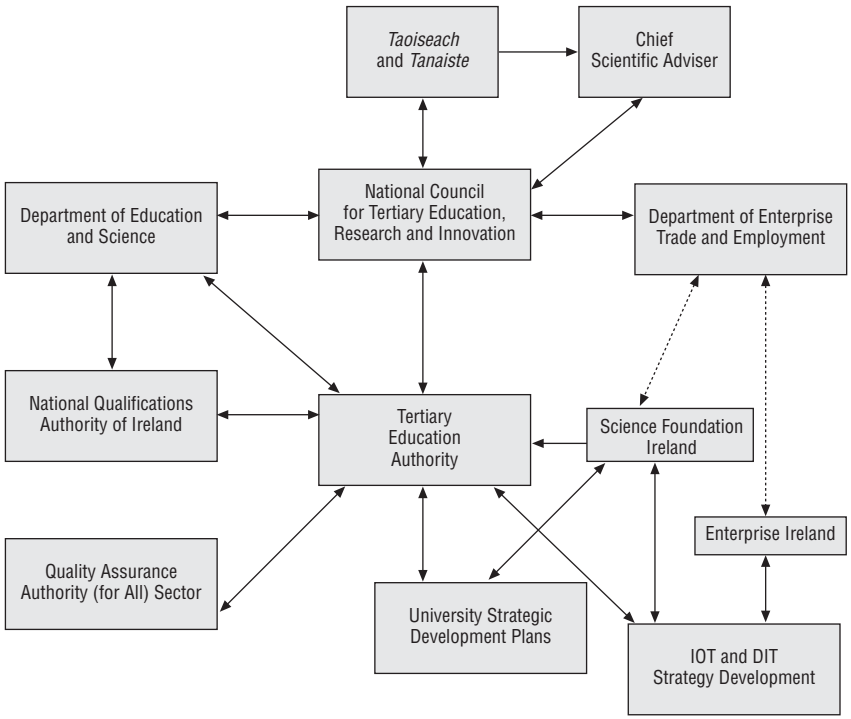
policies prevail. In Ireland, funding policies seem to have been developed in isolation from one another and there is little capacity for systematically connecting them one with another or linking them to a long-term tertiary education strategy or to a broader strategy relating to the economy as a whole. The state's focus on an annual budget process reinforces the weakness in long-term development planning. The competition for public resources, referred to in the National Development Plan, is likely to intensify and it is essential that the public moneys allocated to tertiary education, research and innovation be directed strategically and with appropriate levels of national accountability so that policy and policy implementation can be evaluated. We believe that machinery for this needs to be created at the very highest level of government. We recommend therefore that a National Council for Tertiary Education and Innovation be established, to be chaired by the *Taoiseach*, which would bring together the relevant government departments (Education and Science; Enterprise, Trade and Employment; Health and Children; Agriculture and Food; and Industry and Finance) to determine a rolling three-year national strategy agenda for tertiary education in its relation to innovation, skilled workforce and the economy. We would not see this body meeting frequently but it would have the key function of co-ordinating the requirements of government with the outputs of the tertiary education system. It might also provide a direct link to revisions to the National Development Plan. The secretariat for this body should be provided by staff of the new TEA so as to ensure close linkages between national policy considerations and the strategic management of the tertiary education system.

Figure 6.2 is a diagram of the structure we propose.

Institutional strategy and performance

All higher education systems which are heavily dependent on public support face the dilemma of how to marry the benefits of institutional autonomy (commonly regarded as the freedom to back individual initiative), the encouragement of institutional competitiveness, the opportunity to develop a distinctive institutional "brand", the ability to be entrepreneurial, the development of institutional self-reliance and the maintenance of academic freedom with the requirement to meet publicly-determined targets and contribute to national strategies, as well as to meet the needs of public accountability. Most OECD countries that have historically had largely state-funded tertiary education systems are increasingly opening them up to market mechanisms in order to provide a counterweight to control by the state. Ireland's tertiary education system does not fit easily into this position, as the university sector, although heavily state supported, has traditionally had a great deal of institutional freedom, while the institute of technology sector has been strongly state controlled. We believe that a new approach is

Figure 6.2. **The proposed national structure for the governance and strategic management of tertiary education**



necessary but that the following special policy characteristics of the Irish situation need to be taken into account:

- The balance which has to be struck between the demands posed by the concentration of population and economic activity in the Greater Dublin area and the needs of the National Spatial Strategy.
- The importance of maintaining the difference in mission between the institute of technology and the university sectors.
- The danger that with demographic change one sector might suffer a disproportionate loss of student numbers rendering some institutions non-viable.
- The need to broaden access to higher education for economic as well as social reasons.
- The requirement that institutional governance and management be reformed as a prerequisite to the increased investment of research funding.
- The enhancement of Irish HEIs competitive position internationally.

Irish tertiary education institutions need a high degree of autonomy in order to flourish in the new European tertiary education area and internationally, but mechanisms need to be in place to ensure that both individual institutions and the system as a whole also meet the needs of the Irish state.

We believe that current mechanisms are not adequate to the task and we propose that a formal contract between the new TEA and the institutions be established which guarantees funding against performance. The contract should specify the Authority's expectations and also the provisions for institutional accountability and would be signed, on the institution's side, by its president or director, following approval by the governing body and on the TEA's side by the Chair of the Authority. The contract should be renewable annually after a face-to-face dialogue between each institution and the Authority against the background of an institutional strategic plan. Such a plan is explicitly required from universities in the 1997 *Universities Act*, but no such requirement appears to be in place for the institutes of technology. This dialogue would offer the opportunity to institutions to bid for special strategic funding as well as give the Authority the chance to raise questions about performance and strategic development. Such a mechanism would provide a clear policy linkage between the national strategic agenda of the Council for Tertiary Education, Research and Innovation, the system-wide decisions of the TEA Board and the performance and strategic management of the institutions themselves. It would also offer institutions a direct line of communication to the TEA by which they could make representations about particular interests or difficulties. The contract should be drafted so as to protect institutional autonomy but also to ensure that the institution is making an appropriate contribution to the national strategic agenda.

Investment and funding policies

Recurrent funding from the state to the university sector is currently made up of four main components but allocated through a block grant mechanism:

- A core grant determined on the basis of a formula-based unit-cost allocation system dating from 1993.
- A grant in lieu of fees, based on student enrolments, which dates from the introduction of fee remission (free fees) for eligible full-time undergraduate students in 1996.
- A targeted initiatives funding scheme which is linked to priority areas identified by the HEA which amounts to about 2% of total grant.
- A skills initiatives funding scheme which mainly relates to increasing the output of ICT graduates but which also includes the output of teachers and health professionals where shortages have been identified, amounting to about 8% of total grant.

Recurrent funding for the institutes of technology is based on an annual negotiation of programme budgets between individual institutions and the department on an incremental basis, with allocations based on a division between pay and non-pay budget items. In addition, there are specific funding initiatives in the area of access and retention. Both sectors receive income from students from several sources: students who are not eligible for free fees (including part-time students, non-EU and postgraduates), the Student Service Charge, and certain other charges for service (in the university sector). In the case of the institutes of technology, fees for part-time students and postgraduates are consolidated in the allocated budget and can be used to offset departmental funding. Capital funding is provided for both sectors by the Department based on an analysis undertaken by the HEA.

At the time of our review, the HEA was conducting a consultation exercise on a new and more flexible funding model based on multi-year financial envelopes with a balanced mix of core and competitive funding underpinned by an external evaluation system. According to the HEA's evidence to us the new model had the following objectives:

- To support institutional autonomy, while providing meaningful accountability to the various stakeholders.
- To promote a strategic approach by institutions to their long-term development, consistent with their existing strengths and capabilities.
- To reward institutional responsiveness to national and regional needs.
- To support excellence in teaching, learning and research.
- To increase opportunities for students from all types of backgrounds to benefit from tertiary education.
- To provide positive incentives to institutions to diversify and increase their income from non-state sources, consistent with their mission.
- To provide stability in funding from year to year and encourage efficiency in the use of public funding.
- To be transparent and rational.
- To monitor and review outcomes, but not give rise to disproportionate compliancy costs.

Using these design principles, the funding framework envisaged by the HEA is as follows:

- **Core funding** linked to student numbers and types but distributed on a block grant basis, *i.e.*, the internal allocation of funds is at the discretion of the institution. Money should "follow the student". The funding rate and criteria should be relatively simple, transparent, rationally based and equitable between institutions, and should reflect cost differences between

subject disciplines and student categories. Some performance-related elements should be included in the core funding formula (*e.g.* intake and output rates). Ideally these should be benchmarked against best international practice. Share of performance-related funding should be sufficiently large to influence institutional behaviour positively, while at the same time it should not put at risk the financial stability of the institution.

- **Strategic funding** to be provided in priority areas and to be allocated on a competitive and performance related basis.
- **Major new initiatives** to be funded on a competitive basis, *e.g.*, new faculties, research programmes, etc.; experimental and innovative programmes to be provided, as appropriate, on a pilot basis, after which they should be evaluated and either abandoned or mainstreamed.

The HEA proposes that about 10% of the overall block grant, possibly rising to 15% over time should be made available to support "the development of strategic long-term planning and processes" in institutions, and that this should be evaluated by an "independent assessment panel comprising both international and Irish members" (HEA, 2004).

We have no great disagreement with the statement of objectives as they stand but our preference would be to emphasise certain points more strongly. We believe a funding model deriving from public funds must provide implicit strategic directions for the tertiary education system consistent with the maintenance of institutional autonomy. Any new funding model must therefore complement a comprehensive, integrated and coherent set of financing policies which aligns the goals in the national strategic agenda with those of tertiary education. Such policies should:

- Link national strategy effectively with institutional strategies, as appropriate.
- Provide incentives for institutions, individually and in collaboration with one another to address national priorities.
- Create and sustain the capacity of institutions in a manner consistent with their mission including ensuring:
  - ❖ that the revenues available from the state and from students are sufficient to allow them to fulfil their missions at high levels of quality;
  - ❖ that all institutions are being treated fairly relative to their missions and needs;
  - ❖ that the mechanisms provide stability and are fairly predictable from year to year;
  - ❖ that there is a relationship between institutional research performance and the financing of research infrastructure;

  - ❖ that incentivised institutions are to make provision for sustainability, including responsibility for the long-term maintenance of their facilities and estate.
- Make tertiary education affordable for all Irish students in terms of fee levels and the availability of student financial assistance.
- Be consistent with the goal of lifelong learning and the priority of widening access and improving retention rates.
- Reflect a realistic assessment of the capacity of the state to fund tertiary education in relation to tax capacity and other state commitments.
- Be fair and equitable so that all parties in the equation – students, HEIs and the state – feel that they are being treated fairly and are receiving and providing their fair share.

Arising from these priorities we have the following comments on the HEA's proposed funding model:

- Although there should certainly be many common elements, we do not think that a single funding model should automatically be applicable to both sectors, which we understand was HEA's intention. This would tend to encourage a drift away from a diversified system and would limit the use of incentive/performance funding that takes account of sectoral differences.
- The model retains a strong emphasis on "cost reimbursement" which may work well in periods of expansion but may be difficult to sustain in a period of demographic change.
- There are strong arguments for keeping the core funding methodology as simple and transparent as possible and uncoupling performance budgeting from a proportionate relationship to the core budget. There are areas such as widening access and lifelong learning that are so important that they deserve targeted funding rather than funding which may be difficult to identify in a core budget.
- The model does not explicitly reflect the demands of research or the effects of differential success in research. We would expect to see the core grant include some element for research infrastructure in the university sector but it should also include some incentive funding to reward research success. At the same time discussions should be undertaken between the new TEA and the expanded SFI as to the co-ordination of infrastructure support and grant support and the payment of cost effective overheads (that is, more than 30%). Similar discussions should be held with Enterprise Ireland in respect to research support to the institute sector.
- There needs to be explicit recognition of the importance of widening participation, and the costs associated with it, and incentives should be offered to encourage the development of part-time education and lifelong learning.

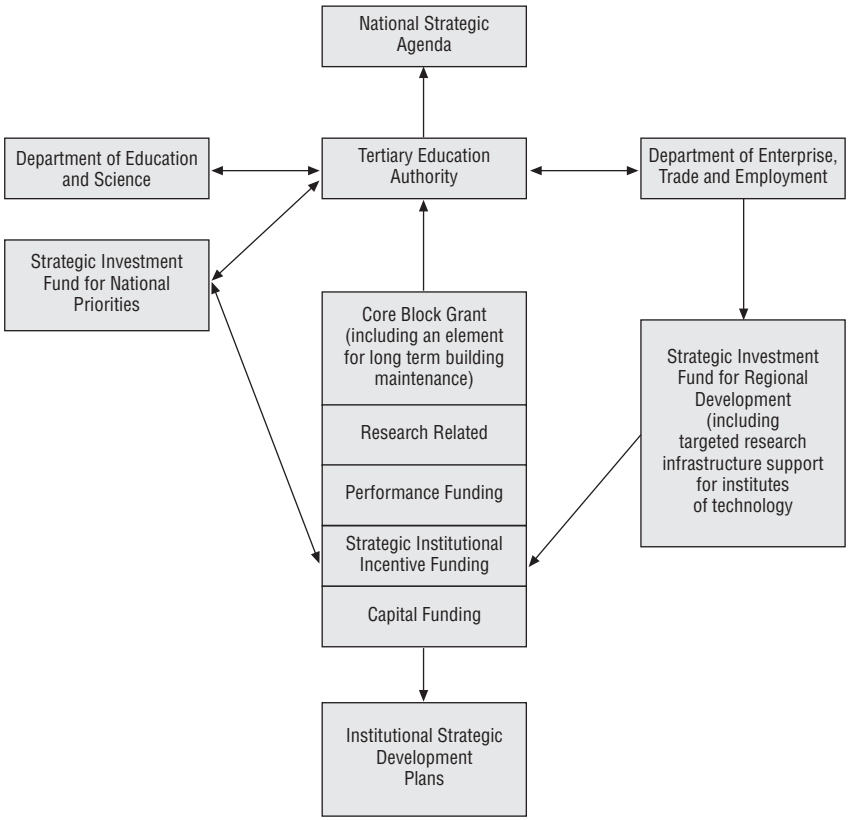
- Institutional collaboration should be made a priority. Irish HEIs are generally small by international standards – and some are very small. The system would be strengthened if a greater level of institutional collaboration could be incentivised both in teaching and research. Collaboration, however, can often add to operational overheads and needs, therefore, to be recognised in grant allocations.
- The model does not make explicit provision for long-term maintenance and capital refurbishment. We believe that while there may be a case for one-off catch-up capital maintenance support, funding policies should assume that institutions bear the responsibility for maintaining their facilities and estate.
- The strategic funding element should be specifically linked to the extent to which an institution's strategic plan reflects national priorities.
- Capital funding for new building needs to be incorporated into the funding allocation process, and not be left as a separate exercise conducted by the Department. With the slowdown in the rate of expansion, if not demographic-led decline, the pressure for wholly new capital projects is more likely to come from the need to adapt buildings to obtain best fit or from new research initiatives, which would be the subject of joint discussion and co-ordination between the TEA and the expanded SFI. In practice, most capital development of this sort might be expected to emerge from the annual discussion of institutional strategic plans referred to earlier in this chapter.
- This model assumes a continuation of the fee remission scheme but in the following chapter, we propose a new approach to the fee question.

A simplified diagram of the resource allocation model we propose is set out in Figure 6.3.

Within this model there are three kinds of strategic investment funds:

- **Strategic Investment Fund for National Priorities:** These funds would be allocated competitively to universities or institutes of technology and might follow the PRTLI model.
- **Strategic Investment Fund for Regional Development:** These funds would be allocated by Enterprise Ireland and would be available to both institutes of technology and universities and would include infrastructure support, against specific projects, for institutes of technology.
- **Strategic Institutional Incentive Funding:** The purpose of this funding would be to support each institution's own strategic development plan. The intention would be to leverage internal institutional change in line with the institutional development plan as agreed as part of the contract process. For example, 5% of an institution's block grant could be reserved to be allocated to match an internal reallocation toward institutional priorities or to leverage non-state funding.

Figure 6.3. **The allocation of recurrent resources to tertiary education institutions**



The introduction of new funding formulae invariably produces unintended consequences and the transition from one model to another must therefore be undertaken with care. This is particularly the case in respect to the institute of technology sector which to date has been funded on a very different basis. Moreover there has not been enough detailed co-ordination in the past over data definitions, and data collection between the two sectors for the new Tertiary Education Authority to be confident that a common basis for a formula funding approach can be employed immediately. We therefore recommend that devising the detail of a new funding model (or models) within the model proposed and consulting on its strategic implications should be a first task for the TEA and that transitional funding arrangements should be introduced until agreement has been reached on a new model (or new models).

The provision of national tertiary education statistics

There is a dearth of publicly available statistics on Irish tertiary education; we note from its evidence that the HEA is seeking to address this. We recommend that the TEA be mandated to publish annual digests of statistics covering all tertiary education institutions, public and private dealing with student numbers (including data on widening participation and retention), staff numbers, and institutional costs (including research expenditure). This information needs to be in the public domain for reasons of public accountability and to enable institutions to benchmark themselves and analyse aspects of their performance. The provision of such data would provoke a better informed debate about the national strategic agenda for higher education and, at a local level, the effectiveness of institutions in responding to national and regional needs.

Recommendations

40. *That the structure of the new Tertiary Education Authority should comprise a small board concerned with strategy and resource allocation and two committees, one for the university sector and one for the institute of technology sector (see Figure 6.1).*
41. *That the Chair of the Board of the TEA should also chair the two committees; the post should be publicly advertised.*
42. *That there should be a National Council for Tertiary Education, Research and Innovation to be chaired by the* Taoiseach*, which would bring together the relevant government departments with an interest or involvement in tertiary education to determine a rolling national strategic agenda for tertiary education and its relation to innovation, skilled labour force and the economy (see Figure 6.2).*
43. *That relations between the new Tertiary Education Authority and publicly-funded individual institutions of tertiary education should be governed by a contract renewable annually on the basis of an institutional strategic plan approved by the TEA, after a formal face-to-face dialogue with the institution.*
44. *That there should be a new model for resource allocation to HEIs as described in Figure 6.3. The first task of the new Tertiary Education Authority should be to devise the detail of the model after consulting on its strategic implications. Such a funding model, although containing many common elements, should be differentiated between the university sector and the institute of technology sector so as to preserve the distinctive roles of the two sectors.*
45. *That the principles incorporated into the funding model should include keeping the core funding block grant as simple and transparent as possible.*
46. *That the core grant should make provision for long-term maintenance of facilities and buildings.*
47. *That capital funding for new building should be included within the new Tertiary Education Authority's resource allocation process but should be linked to the*

strategic funding component which itself should be geared to the achievement of the national strategic agenda.

48. *That there should be a Strategic Investment Fund for National Priorities, along the lines of PRTLI, managed by the TEA and a Strategic Fund for Regional Development managed by Enterprise Ireland. Both sectors of tertiary education should be eligible to bid for these funds.*

49. *That the new Tertiary Education Authority should be mandated to publish annually appropriate statistical data about tertiary education to enable an informed public discussion to take place about the extent to which the national strategy agenda is being achieved and to enable institutions to benchmark their performance with one another and internationally.*

Reference

HEA (Higher Education Authority) (2004), *Creating Ireland's Knowledge Society: Proposals for Higher Education Reform, A Submission by the Higher Education Authority to the OECD Review of Higher Education in Ireland*, HEA, Dublin.

ISBN 92-64-01431-4
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PART I

Chapter 7

The Need for Further Investment in Irish Tertiary Education

Ireland needs larger investment in its tertiary education sector; failure to provide this investment can put at risk the sector's contribution to strengthening the knowledge economy and realising Ireland's full innovation potential. Student numbers are expected to continue to rise, despite a downward demographic trend, because of demands for widened participation, increased retention and greater support for lifelong learning. The system faces substantial capital demands for new buildings and maintenance backlogs, and for research infrastructure. The chapter makes a case for increased student contributions to the cost of education. Without that, the larger investment in tertiary sector would be difficult to achieve. These increased contributions should, however, be in line with private benefits to students and be accompanied by appropriate guarantees of socio-economic equity in access to tertiary education.

As made clear in the National Development Plan, the education budget is under severe pressure from competing demands elsewhere in the public sector and, as the OECD comparative statistics show, Ireland's expenditure on education, outside tertiary education is below the average. We received compelling evidence from the St. Vincent de Paul Society and the Cork City Partnership Ltd. that the problems of low participation in tertiary education by students from disadvantaged backgrounds begin in early childhood and are manifest in performance in primary education. The report, *Supporting Equity in Higher Education*, concluded that there was a "worrying tendency for educational disadvantage to cluster in specific schools/areas and to be reproduced across generations" (DES, 2003, p. 7). The St. Vincent de Paul Society urged that if social cohesion deficits and structural deficits were to be addressed, "long term investment in our early education and primary education systems must be prioritised". No evidence was produced throughout our review that the decision in 1995 to remit fees for first-degree study had more than a limited impact, if any, on the disparity of participation rates amongst the different social/occupational classes. Economic arguments – which we accept – point to the need for further investment in tertiary education in, for example, improved staff: student ratios (to support research or to recognise the demands of widening participation) and in educational or research infrastructure (libraries, IT, laboratory refurbishment and building maintenance). But at the same time, there is growing competition for resources within the education budget itself as well as from other parts of the public sector.

Reintroduction of fees

We do not believe that with the economic and fiscal realities facing Ireland it will be possible to develop the globally competitive tertiary education system and research capability that it seeks by relying on state funding alone. We have therefore reached the conclusion that a policy to charge fees to students pursuing first degrees should be reintroduced. In coming to this conclusion we adduced the following arguments which may be broadly categorised in terms of national funding requirements and social equity:

- Ireland does need to invest more in tertiary education both for economic and social reasons but will find it increasingly difficult to do so because of the competing claims from other parts of the education system as well as from other parts of the public sector of the economy.

- Irish tertiary education institutions are over-dependent on public funding; less reliance on the state would make them more competitive.
- Further investment in tertiary education, particularly at the postgraduate level, and in terms of research infrastructure would over time make Irish HEIs more attractive to fee-paying international students.
- The free-fees policy has not had the effects that were hoped for in improving participation from students from disadvantaged backgrounds and we received evidence from a number of experts in access issues, both individuals and organisations, that they thought that the solution to improving participation lay elsewhere.
- The free-fees policy is inequitable because it provides substantial subsidies to students whose families could well afford to pay tuition fees. (An estimated 20% of students enrolled in universities and receiving the benefit of free fees are from families with incomes in excess of EUR 70 000 per annum.)
- The rate of return to a third-level education, both now and predicted for the future, fully justifies students bearing a share of the cost of their education.

We also noted with interest the way the National College of Ireland, a private sector HEI, combined an effective policy of widening access with a buoyant student population which was fee paying. Of course there are special features, both of location in Dublin and in the college's concentration on vocational courses where employment opportunities are readily available, which would not apply elsewhere.

Student finance system

But any reintroduction of fees must be undertaken in the context of a sound student finance system which will be in place on a long-term basis. The major components of such a system might be:

- Fees that represent a reasonable student contribution to the cost of tertiary education based on residence and maintenance costs, potential rates of return and equity considerations.
- A significantly reformed means-tested student support scheme along the lines recommended by the de Buitleir Review of the Student Grant Scheme: equitable and administered in a transparent, efficient and nationally consistent manner.
- A targeted student grant scheme to assist low income and other special-needs students to pay for student fees. This scheme could be tied to the eligibility for means-tested maintenance grants and could be operated in co-ordination with the National Office for Equity Access.

- Explicit incentives for parents/families to contribute to their children's education such as for expanded tax incentives to serve for students' needs as well as pay a share of the fees or to pay upfront fees (that is to pre-pay at a discount) which would increase cash flow from private sources for a Higher Education Contribution Scheme (HECS).

The way forward

We examined various approaches to the reintroduction of a private contribution to the funding of higher education as adopted in other countries, including the proposal put forward in a personal capacity by Dr. Don Thornhill, Chairman of the HEA, for a scheme that charged fees only for a fourth and subsequent years of third-level education. All such schemes are politically sensitive and require detailed access to a highly sophisticated database before final decisions can be made. We have not embarked on such an exercise believing that our first responsibility was formally to recommend that, for the reasons given above, the principle should be accepted that student fees should be reintroduced. In considering the principles lying behind the various national schemes available we thought that no single scheme necessarily fitted the Irish situation and we concluded that perhaps the simplest way forward would be as follows:

- Subject the present "free fees" to a means test which would incorporate the changes proposed by the 1993 de Buitleir Review of the Student Grant Scheme which were not implemented, especially those relating to the need for a regular review of income level and the inclusion of assets in the means test.
- Allow institutions to set fees (which would incorporate the Student' Services Charge) above the government-regulated level, subject to a control on the actual level and continued control on student target numbers.
- Extend the means-tested free fees programme to cover:
  - ❖ the fee actually set by the institution;
  - ❖ fees for part-time courses;
  - ❖ second/higher degrees.
- Establish a loan scheme with the banks or other financial partners, which would include an interest rate subsidy, paid by the government, for those students who were required by the means test to pay fees.
- Retain in the tertiary education budget and make available for distribution by the TEA the finance generated by the new policy.

Such a scheme, even if fees were held at the present free fee level, could bring significant further funds into the tertiary education sector and would provide a baseline for future funding increases. It would not absolve the government from making further investment in the higher education sector,

particularly in relation to research and increasing postgraduate study, but it would significantly add to institutional resources and would reinforce their autonomy and self reliance.

An alternative approach, one that has been market tested successfully in Australia (the Higher Education Contribution Scheme or HECS) and has now been legislated for in the United Kingdom, would be the introduction of a Graduate Contribution Scheme. Under this type of scheme, actual payment of fees may be deferred for the period of study and for some period afterwards, and then monthly repayments are linked to the tax system. We can see strong arguments for the introduction of this alternative, which, however, involves initially a more complicated implementation process than the first option proposed, although the long term benefits may be greater. If the details of the repayment are adjusted appropriately, this may offer an option which is more equitable to students from disadvantaged backgrounds and more supportive for mature students. It would even be possible to combine the two alternative approaches. Under the means testing of "free fees" and depending on the nature of the means test, a proportion of students would be liable for the payment of fees. This liability could be deferred through the provision of a Graduate Contribution Scheme until the graduate's income reached a level at which payments would commence. In this hybrid model, some students would pay no tuition fees, through their eligibility for "free fees"; some might elect to pay fees up front, perhaps at a discount; others would defer the payment until their post-graduation income triggered repayments. Provision should be made to impose a minimum repayment obligation on those graduates who leave the country before their debt has been fully repaid. For those remaining, the level and rate of repayment could be tied to their actual taxable income. By deferring the payment obligation of the student, it would also defer the additional resources available to the tertiary education system. It is imperative, whatever scheme is adopted, that the additional income generated is not offset against reductions in state income and represents a real and tangible increase in the resources available to HEIs.

It is recognised that the reversal of a policy which came into effect in 1995 is a significant step for any government to take. But since then, the extent to which the higher education system has become a crucial economic driver has become clearer and the need for increased investment to ensure that both Ireland and its tertiary education system are internationally competitive has become more pressing. The 1995 reform did not have the effect expected in improving access to higher education. In fact, in the 1990s, Ireland's income per head rose from 60% of the EU average to more than 100% and from 2005 Ireland will no longer be eligible for "objective one" funding earmarked for Europe's least developed regions. In a state which retains considerable disparities of income, making the wealthier section of the community contribute to the costs of their third-level education is

not the potential burden that it was when the requirement to pay fees was remitted. The "Celtic Tiger" effect is now attracting a great deal of attention from EU accession states, many of which have larger private sectors of higher education already. The introduction of a change of policy of this kind is never easy but current predictions from FAS/ESRI that Ireland will need a greatly increased number of graduates in the workforce by 2010 and beyond, together with the economic situation, make this an appropriate time to make such a change, which could be introduced on a phased basis.

We believe that Ireland also has a real opportunity if it invests further in its present higher education base to attract significant numbers of international students, which could provide a counterweight to the potential demographic decline, boost postgraduate numbers and hence research activity, attract international companies, and generate significant additional funding for the system. Irish tertiary education institutions are inevitably constrained by their over-dependence on state funding; the introduction of various streams of non-state funding will not only provide a better financial base but will also encourage new initiatives and innovation, which will themselves serve as a stimulus to the economy. In summary, we see the reintroduction of fees to be a necessary strategic step which will invigorate the tertiary education system and make it more competitive world wide, but which will not constrain policies directed towards social inclusion or damage the widening participation policies already in place.

Recommendations

50. *That, subject to means testing, fees for undergraduate study be reintroduced as described earlier in this chapter and the "Free Fees" policy be withdrawn.*

51. *That the government consider schemes, as described in Chapter 7, where means testing would incorporate the changes proposed by the de Buitleir Report and where the institutions, subject to appropriate controls, could set fees, which incorporate the Student Services Charge, above the present "Free Fee" limit, and where a loan scheme financed through the private sector but supported by an interest rate subsidy from the government or a graduate contribution scheme along HECS lines, would be available to students not eligible for a fee waiver.*

52. *That if tuition fees for undergraduate study are reintroduced, it should be axiomatic that the additional income is not offset against reductions in state income and should therefore represent a real and tangible increase in HEIs' resources.*

Reference

DES (Department of Education and Science) (2003), *Supporting Equity in Higher Education: A Report to the Minister for Education and Science*, DES, Dublin.

ISBN 92-64-01431-4
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PART I

Chapter 8

Conclusion

This chapter summarises the main conclusions of the Examiners' Report and lists all the recommendations made in Chapters 2 to 7.

Tertiary education in Ireland is at a crossroads. It is recognised, perhaps more strongly than in almost any other country in Europe, that tertiary education is a key driver for the economy. The Irish tertiary education system has performed well. It has expanded its student numbers by about 2% per annum since the mid-1960s and has reached an age participation rate of 57% with a higher than European average of graduates in science and technology. Since the late 1990s, it has begun to fund research selectively, has developed a highly focused investment in key disciplinary areas and has committed itself to further investment. Both skilled manpower issues and the need to strengthen the research base to create an innovation society are thus being addressed, but more investment is needed if Ireland's national goals are to be realised; and system-wide structural and other issues need to be addressed in order for the investment to be effective.

The institutional base

We begin with the institutional base. For a country with a population of a little over four million, Ireland has a significant number of HEIs and it is essential that their missions are differentiated so that institutions can concentrate on particular defined functions. The present differentiation between universities and institutes of technology should be preserved and we recommend that there should be no further institutional transfers into the university sector. The institute of technology sector has an enormously important role in relation to the regional economies and in respect to a broad range of qualifications and applied research. The institutes of technology need renewed support in respect to student access and retention and for the infrastructure necessary to underpin their role in relation to SMEs and the regional economy. The university sector should be expected to carry the major research role especially in fundamental/basic research. At the moment, policy towards tertiary education is fragmented, with universities funded through the HEA and the institutes of technology through the DES. The system needs to be unified under a new Tertiary Education Authority (TEA) whose organisation should be constructed to prevent mission drift in either direction through a funding approach based on individual institutional contracts. We make a number of recommendations intended to rationalise and modernize HEI management and governance which are designed to enable institutions to work more effectively and allocate resources against performance rather than on an historical basis. A transfer of the institutes of technology to the TEA

would be expected to give them more managerial flexibility and lighten the load of external regulation. We are concerned that higher priority be given to staff development issues such as that, in the university sector, the granting of tenure should be made on the basis of a longer period of service than at present, that there should be more freedom to promote to professorships on the basis of personal performance and that more flexibility should be available in relation to academic salary issues.

Reform at the institutional level needs to be paralleled at the national level. The new TEA will have the task of unifying the tertiary education system and creating a funding model which embodies strategic considerations much more comprehensively than has been possible under the present structure. This, when combined with the renewable contract with HEIs, will incentivise and reward performance and emphasise distinctiveness of mission. It also needs to make provision within the core grant for the long term maintenance of facilities and buildings which is essential if teaching is to take place in modern conditions and research is to be carried out effectively.

The great strength of the Irish tertiary education system is the way it has expanded student numbers while preserving quality. The strategic importance of this to the national economy is well recognised. However, this expansion has taken place almost entirely at the 18-to-21-year-old level and the beneficiaries have primarily been drawn from the managerial and professional classes. The current forecasts of a further rise in the age participation rate will, unless action is taken, further entrench middle class participation and do much less to expand participation from lower socio-economic groups. Both social equity and economic arguments point to renewed efforts to broaden participation in tertiary education. Partly this is a matter of long-term investment in nursery and primary education, partly of strengthening careers guidance and counselling in schools, partly of greatly increasing the proportion of part-time students and facilitating this by treating them on the same basis as full-time students in respect to fees and maintenance support, and partly of re-energising the demand for lifelong learning. We suggest ways in which the new TEA can incentivise action by HEIs, but the fundamental requirement is that government and the tertiary education system recognise the nature of the problem and commit themselves to reversing current trends.

At the postgraduate level, numbers do not match national aspirations and in particular PhD numbers are far too low to service the growing commitment to publicly-funded research, to provide an adequate pool to replace existing HEI staff or to work in R&D in the private sector. The numbers need to be doubled as a matter of urgency. This will require a considerable investment programme. Unlike many other European countries, Ireland has not so far sought actively to expand the number of international students and at 5% the proportion of international to home/EU students is low. With its

current investment programme in research, Ireland might have been expected to be more active in the recruitment of overseas doctoral students and we urge that institutions be incentivised to compete internationally for the growing number of international students who wish to study abroad. With many continental European universities now choosing to teach at the postgraduate level in English, Irish institutions are in danger of not participating in a valuable influx of highly motivated postgraduates and of missing out on a valuable source of income. Ireland should be looking to double its international student population in the next five years.

Research and innovation

The second element of tertiary education's contribution to the economy lies in research. Ireland's level of investment in research and R&D is currently well below the Lisbon target of 3%, but this is very much because of the low level of industrial investment in R&D, of which indigenous industry accounts for only one third. The government's aim is to leverage up industrial R&D spending through a major investment in research in the public sector and particularly through tertiary education. The reform and modernisation of the university and institute of technology sectors are key to achieving the concentration of support and the differentiation of effort that is required. There needs to be much greater co-ordination of funding for research and for research infrastructure through the new TEA, the SFI and Enterprise Ireland (in respect to the institutes of technology) than exists at present to ensure that HEIs have the infrastructure to deliver research within competitive timescales. Some rationalisation of the many agencies responsible for research funding also needs to be undertaken, with the aim of making the SFI the major national research funding body analogous to the US National Science Foundation. However, tertiary education is only one, albeit a very important, component of the national research environment, and there are a significant number of other public bodies with research resourcing powers. We argue it is necessary to appoint a Chief Scientific Advisor to the Government to co-ordinate civil science across government departments, along with the expanded SFI and the new TEA, reporting to a new Cabinet Committee for Research Policy which would seek to develop and oversee a national strategy for research and R&D and their links to innovation.

Throughout our review we have been struck by the consensus about the importance of the contribution of tertiary education to Ireland's economic future but also by the absence of a national strategy to ensure that the various components are well co-ordinated to achieve the performance levels that will be required if the nation's ambitions are to be realised. Tertiary education necessarily falls within the remit of several government departments: while it is formally the responsibility of the Department of Education and Science which is the sponsoring body for the HEA, the Department of Enterprise, Trade and

Employment has a strong interest in it as a prime investor in its research outcomes and their linkage to the economy as a whole, as to a lesser extent have the Departments of Health and Agriculture. We have recommended specific machinery for the better co-ordination and strategic direction of research and R&D. We are convinced, however, that the effectiveness of the tertiary education system and the relevance of its products are so critical to the long-term nature of Ireland's economy that some permanent overarching machinery is necessary to provide a national strategy for the tertiary education system and its various functions which can guide the work of the different operational levels and monitor the system's overall performance. We are recommending, therefore, the establishment of a National Council for Tertiary Education, Research and Innovation. Meeting perhaps twice a year, it would set targets and review the performance of the system and lay down strategic guidelines to steer the system's operational machinery.

The tertiary education system that Ireland needs to sustain the highly innovative economy which is its fundamental objective will require considerable further investment. The system faces substantial capital demands for new buildings and for maintenance backlogs, and for research infrastructure. Rationalisation and modernisation will be costly; the agenda for widening participation, improved retention rates and greater support for lifelong learning will require additional financial support. Current predictions suggest that, in spite of the downward demographic trend, student numbers may continue to rise though at a slower rate than in the past, and that this will accord with the needs of the economy. At the same time there are competing claims for state support from other parts of the public sector, not least from within the education sector itself. We are convinced that these factors point towards the introduction of an enlarged student contribution to the cost of their education. We do not think that this conflicts with the need to widen participation: the abolition of fees in 1995 has had no noticeable impact on the trends in the socio-economic make up of the student body and if a fee policy is constructed appropriately, it can increase, rather than lessen social equity. For such a policy to be effective, however, means-testing mechanisms need to be tightened up along the lines of the de Buitleir Report on student maintenance. We have not sought to prescribe the details of such a policy but have chosen simply to outline some alternatives, recognising that such details will represent an integral part of the political decision that will have to be taken if fees are to be reintroduced. Without such a policy, we believe there must be serious doubts as to whether it is practicable for state funding to meet the demands for additional investment that the tertiary education system requires while seeking to meet other legitimate demands for state finance in the public sector. Failure to invest further in the tertiary education system will put at risk its contribution to strengthening the knowledge economy and realising to the full the innovatory climate which Ireland is keen to create.

Complete list of recommendations

1. *That the differentiation of mission between the university and the institute of technology sectors be preserved and that for the foreseeable future there be no further institutional transfers into the university sector.*
2. *That steps be taken to co-ordinate better the development of the tertiary education system by bringing the universities and the institutes under a new common authority, the Tertiary Education Authority, but that machinery be established within the Authority to prevent mission drift.*
3. *That in transferring the institutes of technology to the new Authority, the managerial controls on their freedom to manage themselves to meet institutional objectives be reviewed with a view to lightening drastically the load of external regulation.*
4. *That greater collaboration between institutions be encouraged and incentivised through funding mechanisms in research, first-degree and postgraduate-degree work and in widening access and lifelong learning.*
5. *That in a situation of potential demographic-led decline in student numbers, institutes of technology be given the same freedom to initiate new academic programmes as the universities and that the new funding Authority establish a mechanism, which should be binding on both institutions, to deal with complaints that an institution was deliberately creating a new programme which would cut into the established market of a neighbouring institution.*
6. *That, in principle, there should be a common quality assurance machinery covering both sectors of both sectors of tertiary education but that implementation should be deferred to give the university quality assurance machinery created under the 1997 Act more time to develop, and pending longer-term clarification of the cross-border systems of quality assurance that are emerging under the Bologna Process.*
7. *That the issue of multi-year funding should be addressed both in relation to the alignment of financial years and in relation to mid-year allocations in order to give HEIs a secure base for financial planning on a year-to-year basis.*
8. *That in order to incentivise HEIs actively to seek external sources of funding, the government make a clear statement that income they generate from sources outside those provided by the state will not be subject to offsetting against state funding.*
9. *That HEIs be required to plan to generate financial surpluses and encouraged to build up reserves against future necessary expenditure.*
10. *That greater flexibility be introduced into academic salary structures in order to permit institutions to take special steps to attract or retain particular individuals with key skills or experience that an institution needs.*
11. *That the present arrangements for auditing HEI accounts be amended in accordance with the recommendations in Chapter 3.*

12. *That university governing bodies be reduced in size to a maximum of 20, including student members, to improve their effectiveness, and that lay members be required to constitute a substantial majority.*
13. *That each university or institute governing body should create a nomination committee made up primarily of lay members, to propose replacements for vacancies amongst lay members against a template of skills and experience required on the board to be determined by the governing body.*
14. *That university or institute governing bodies should elect their own chairs.*
15. *That the post of university president or institute director should be publicly advertised and external candidates encouraged to apply. Appointments should be made by governing bodies through appointing machinery they should devise.*
16. *That the headships of university departments be given limited terms so that there can be rotation when appropriate, and that appointments or reappointments be made by the governing body on the recommendation of the president.*
17. *That universities review their resource allocation processes with a view to ensuring that resources are allocated in line with established institutional strategic priorities.*
18. *That universities review their human resource strategies with a view to making the probation period longer and the granting of tenure more rigorous and to providing promotion routes to personal chairs as a reward for exceptional research performance or leadership.*
19. *That HEIs give higher priority to staff development issues and allocate resources accordingly, and that the Tertiary Education Authority be asked to monitor the process.*
20. *That the National Office for Equity Access to Higher Education be tasked with following up the recommendations of the Commission on the Points System to establish where more needs to be done.*
21. *That the Tertiary Education Authority recognise in its funding formula the additional costs of recruiting and retaining students from disadvantaged backgrounds.*
22. *That every effort be made to increase part-time student numbers as a proportion of total numbers in tertiary education and to this end distinctions between part-time and full-time students be removed for the purpose of the obligation to pay fees and receive maintenance support and that part-time students should count (on a pro rata basis to full-time) for the calculation of recurrent grant.*
23. *That continuing education evening courses (other than those strictly for leisure) should be supported by recurrent grant and should be fully integrated into an HEI's academic programme.*

24. *That the DES and the new Tertiary Education Authority put their weight strongly behind NQAI's efforts to secure agreement between providers of non-standard qualifications and developing mechanisms to enable the introduction of APEL (Accreditation of Prior Experiential Learning).*
25. *That the Conference of Heads of Irish Universities (known since 2005 as the Irish Universities Association) and the Council of Directors of Institutes of Technology jointly address the question of issues surrounding retention, in consultation with the Tertiary Education Authority and make a report.*
26. *That the Tertiary Education Authority find ways of taking account of wastage figures in the calculation of recurrent grant in order to provide an incentive to institutions to remove some of the structural barriers to retention.*
27. *That Irish institutions of tertiary education should market themselves more energetically internationally with a view to doubling the international student population in five years.*
28. *That public investment in research and R&D needs to be further increased if the requirements of the Lisbon declaration for 2010 are to be met.*
29. *That the institutes of technology should continue to concentrate on applied research and that underpinning research resources should be the subject of specific investment by Enterprise Ireland, and not by the new Tertiary Education Authority, in targeted areas against clear national or regional economic priorities.*
30. *That resources for research and for research infrastructure including capital resources be better co-ordinated through closer links between the new Tertiary Education Authority and an expanded Science Foundation Ireland (see Recommendation 34) and with universities being funded on the basis that they are required to accept responsibility for major building refurbishment or building replacement within the recurrent resources available to them.*
31. *That consideration should be undertaken now in respect to the future of PRTLI.*
32. *That steps be taken radically to expand the numbers of doctoral students in universities with the intention to more than double them by 2010.*
33. *That degree-awarding powers for doctoral awards be concentrated in universities and that, except in the case of DIT, where such powers have been granted to institutes of technology by HETAC, they should be rescinded.*
34. *That SFI be confirmed as the national agency for the funding of basic research and publicly funded R&D in higher education and that its powers and responsibilities be extended as described in Chapter 5 and that its board structure be amended to reflect its new role.*
35. *That the responsibilities and programmes of the Irish Research Council for the Humanities and Social Science and of the Irish Research Council for Science, Engineering and Technology should be subsumed under an expanded SFI.*

36. *That the government appoint a Chief Scientific Adviser reporting to the* Tanaiste *and the Minister for Enterprise, Trade and Employment who would* inter alia *be responsible for the co-ordination of civil science and in particular co-ordinating the research investment conducted by other departments and agencies with that of the expanded SFI and the new Tertiary Education Authority.*
37. *That a Committee for Research Policy reporting to the Cabinet be formed which would develop and oversee a national strategy for research, R&D and innovation.*
38. *That all HEIs should have business incubator units or other facilities to encourage the exploitation of research through spin-out companies; every effort should be made to involve private sector finance in such ventures.*
39. *That the new TEA should fund an expansion of professional research exploitation services in all HEIs and ensure that HEIs are accountable for such activity.*
40. *That the structure of the new Tertiary Education Authority should comprise a small board concerned with strategy and resource allocation and two committees, one for the university sector and one for the institute of technology sector (see Figure 6.1).*
41. *That the Chair of the Board of the TEA should also chair the two committees; the post should be publicly advertised.*
42. *That there should be a National Council for Tertiary Education, Research and Innovation to be chaired by the* Taoiseach, *which would bring together the relevant government departments with an interest or involvement in tertiary education to determine a rolling national strategic agenda for tertiary education and its relation to innovation, skilled labour force and the economy (see Figure 6.2).*
43. *That relations between the new Tertiary Education Authority and publicly-funded individual institutions of tertiary education should be governed by a contract renewable annually on the basis of an institutional strategic plan approved by the TEA, after a formal face-to-face dialogue with the institution.*
44. *That there should be a new model for resource allocation to HEIs as described in Figure 6.3. The first task of the new Tertiary Education Authority should be to devise the detail of the model after consulting on its strategic implication. Such a funding model, although containing many common elements should be differentiated between the university sector and the institute of technology sector so as to preserve the distinctive roles of the two sectors.*
45. *That the principles incorporated into the funding model should include keeping the core funding block grant as simple and transparent as possible.*
46. *That the core grant should make provision for long-term maintenance of facilities and buildings.*

47. *That capital funding for new building should be included within the new Tertiary Education Authority's resource allocation process but should be linked to the strategic funding component which itself should be geared to the achievement of the national strategic agenda.*

48. *That there should be a Strategic Investment Fund for National Priorities, along the lines of PRTLI, managed by the TEA and a Strategic Fund for Regional Development managed by Enterprise Ireland. Both sectors of tertiary education should be eligible to bid for these funds.*

49. *That the new Tertiary Education Authority should be mandated to publish annually appropriate statistical data about tertiary education to enable an informed public discussion to take place about the extent to which the national strategy agenda is being achieved and to enable institutions to benchmark their performance with one another and internationally.*

50. *That, subject to means testing, fees for undergraduate study be reintroduced as described in Chapter 7 and the "Free Fees" policy be withdrawn;*

51. *That the government consider schemes, as described in Chapter 7, where the means testing would incorporate the changes proposed by the de Buitleir Report and where institutions, subject to appropriate controls, could set fees, which incorporated the Student Services Charge, above the present "Free Fee" limit and where a loan scheme, financed through the private sector but supported by an interest rate subsidy from the government, or graduate contribution scheme along HECS lines, would be available to students not eligible for a fee waiver.*

52. *That if tuition fees are reintroduced it should be axiomatic that the additional income is not offset against reductions in state income and should therefore represent a real and tangible increase in HEIs' resources.*

PART II

Country Background Report

ISBN 92-64-01431-4
Reviews of National Policies for Education
Higher Education in Ireland

PART II

Chapter 9

Ireland in Brief

This chapter provides the contextual and historical setting for Ireland's tertiary education sector. It describes the legislative arrangements for the sector, the demographic, economic and labour market trends, and aspects of social change.

Historical overview

The history of Ireland, which includes many instances of invasion and settlement from abroad, has resulted in a rich mixture of ancestry and traditions among Irish people today. The island has been inhabited for about 9 000 years. During the sixteenth and seventeenth centuries, the entire country was brought under English control. Much of the old Gaelic system was overthrown during that time, in particular with the Tudor and subsequent plantations. Irish lands, especially in Ulster, were confiscated and colonised with Protestant English and Scottish settlers, who, largely because of religious differences, did not assimilate with the Catholic native population. This process was intensified after the victory of King William III in the Wars of 1689-91. The majority of the population of Ireland remained Roman Catholic. During the 18th century under the Penal Laws, the Roman Catholic and dissenter populations of Ireland were curtailed in their economic, social and political participation in public life. These laws were repealed in the late eighteenth and early nineteenth century.

In 1801, the *Act of Union* of the United Kingdom of Great Britain and Ireland came into operation, ending four centuries of a separate Irish parliament, controlled by the Protestant ascendancy. A single parliament then served all of Great Britain and Ireland. One hundred members represented Ireland in the new House of Commons in Westminster and thirty-two additional members became part of the House of Lords in London. A representative of the ruling monarch was appointed as resident Lord Lieutenant and head of the executive government in Ireland. A Chief Secretary acted as his assistant and dealt with the executive functions of government. Irish legislative matters were dealt with in Westminster. However, separate legislation continued to be enacted for Ireland as for other parts of the United Kingdom. Thus, there were distinct policies with regard to local government, agriculture and land reform, law and order, health and education.

During the nineteenth century, the executive structure of the Government of Ireland developed under the prevailing Lord Lieutenant and Chief Secretary. Thus, various boards and commissions were established under the Chief Secretary. These employed growing numbers of officials or public servants to deal with such matters as education, health and local government in Ireland. There were also officials working in Ireland who were part of various British structures, such as the post office. In 1898, the system of local government in Ireland was changed by legislation, and county and urban councils were introduced. By 1922,

there was a large civil service already in existence as part of an administrative structure that had developed over the years. The organisation and structure of the modern State of the Republic of Ireland has much of its origin in the bureaucratic developments of the nineteenth century. During that time, a centralised education system commenced. Health, welfare, security and postal services were also introduced and the beginnings of other aspects of Irish infrastructure were put in place.

Sustained efforts to establish Home Rule for Ireland failed. In Easter 1916, a military uprising against the British was suppressed. However, a strong momentum for political independence became very evident in subsequent years. In January 1919, a War of Independence began against the British. The Irish Republican Army began a series of attacks on the Royal Irish Constabulary and the Crown Forces in Ireland. Following a general election in 1919, *Dáil Éireann* was set up in Dublin as an Irish parliament attended by the victorious Sinn Fein deputies, who abstained from attendance at Westminster. The War of Independence lasted until July 1921 when a truce was agreed. The *Government of Ireland Act*, 1920, had proposed partition with one parliament in Dublin and one in Belfast. On 6 December 1921, the Anglo-Irish Treaty ratified this and established the Irish Free State, which consisted of 26 counties. Thus, the majority of the island was to be a Free State, but remaining within the Commonwealth. The six northern countries were to remain in the United Kingdom, and to be known as Northern Ireland.

The result of this partition was a Civil War between those who supported the Treaty (the Free Staters) and the anti-treaty group (or Republicans). The Civil War ended in April 1923 with the pro-treaty group victorious. A truce was agreed in May. This Anglo-Irish Treaty (1921) marked a change in the meaning of the term "The British Empire". The Treaty described the Irish Free State as "a co-equal member of the Community of Nations forming the British Commonwealth of Nations". Ireland then became an independent member of the League of Nations.

The influence of being part of the United Kingdom of Great Britain and Ireland had an effect on developments in the new Free State from 1922. Some roles and offices in the Constitution of the Free State reflected that legacy. The administration of the new state was provided by a pre-existing professional civil service. The Free State was a new reality from 1922 but the influences of the past were evident at constitutional, administrative and political levels.

In the first thirty years of independence, Irish politics was dominated by W.T. Cosgrave, Head of Government from 1922-32, and Eamonn de Valera who was Head of Government for most of the period from 1932 to 1959. De Valera had founded a political party, *Fianna Fáil*, in 1926. Literally, *Fianna Fáil*, means Soldiers of Destiny. In May 1937, De Valera issued a new Constitution that

defined Ireland as a "Sovereign Independent Democratic State". The British Prime Minister, Neville Chamberlain, accepted the constitutional changes. Shortly afterwards, in April 1938, the *External Relations Act* ended the trade war that had prevailed between Ireland and Great Britain from 1932-38. Under an inter-party government, Ireland became a republic in 1948. The *Fianna Fáil* party came back into power in 1957 and continued for sixteen years until 1973. While there had been sporadic unrest and sectarian conflict in Northern Ireland from its establishment, it was from 1969 onwards that serious unrest in Northern Ireland became an issue of concern for the two governments, north and south.

A new era in political and educational developments began for the Republic of Ireland from the latter half of the 1950s. The first and second Programmes for Economic Expansion (1958 and 1963), the Anglo-Irish Free Trade Agreement (1965), the *Investment in Education* report prepared for the OECD (1965), and entry into the European Community (1973) all contributed to development and economic growth. From the early sixties, under Dr. Patrick Hillery as Minister for Education, the need for structural reforms in the Department of Education had been acknowledged. Important developments in the provision of free secondary education ensued (1966) and were to make a significant contribution to economic growth.

From 1973 (when the *Fianna Fáil* government was defeated) to 1989 (when the party first entered a coalition), there were sixteen years of a variety of coalition governments formed by the Fine Gael and Labour parties and short periods of *Fianna Fáil* governments. Partly as a result of this new unpredictability in electoral competition, two new political parties emerged: the Progressive Democrats in 1985 and Democratic Left in 1992. It was with the six elected Progressive Democrats that *Fianna Fáil* formed its first coalition government in 1989. In 1997, Democratic Left and the Labour Party began to examine the feasibility of some type of affiliation, and eventually merged.

Following a general election in late 1992, a government was formed in January 1993 comprised of a new coalition arrangement between the *Fianna Fáil* and the Labour Party. This government collapsed in 1994 and a new coalition was formed: Fine Gael, the Labour Party and the Democratic Left Party. This three-party coalition lasted until June 1997 when a coalition of *Fianna Fáil* and the Progressive Democrats formed the government. In the general election of 2002, this government was returned to power. Several senior personnel, including *Taoiseach* (prime minister), *Tanaiste* (deputy prime minister) and Minister for Finance retained their positions. The Minister for Education and Science, Noel Dempsey TD, was a member of the *Fianna Fáil* party. He had held a different ministerial post in the previous government during the course of which there were two *Fianna Fáil* Ministers for Education – Michael Martin and Dr. Michael Woods.

By the beginning of 1982, an Anglo-Irish Intergovernmental Council was formed to facilitate talks between officials of the Irish and British Governments about Northern Ireland. Three years later, on 15 November 1985, the Anglo-Irish Treaty at Hillsborough was signed. This agreement gave the Irish Government a "constant and official involvement" in Northern Ireland affairs. However, the Agreement caused disharmony among some parties in Northern Ireland in spite of the fact that it was passed in the British House of Commons. It came into force on 29 November and was recognised by the United Nations as a formal agreement. It was 1993 before genuine hope of a peaceful solution for Northern Ireland became evident. The process of seeking and building peace has continued to date at national, international and local levels. On Thursday, 6 December 1999, London's direct rule of Northern Ireland ended. That same day the new British-Irish agreement was sealed in Dublin. In January 2000, a new Northern Ireland Assembly came into being. A number of cross-border bodies have been jointly developed with funding from the Northern Ireland Executive, the Irish Government and the British Government. In October 2002, the Northern Ireland Assembly was suspended, prompted by a lack of trust between some of the political parties in the Executive. Direct rule from London was restored as a temporary measure. New elections took place in Northern Ireland in November 2003.

Main executive and legislative bodies

Ireland is a parliamentary democracy with a written constitution (*Bunreacht na hÉireann*) adopted by referendum in 1937. This replaced the first Constitution of the Free State, enacted in 1922. According to the 1937 Constitution, the legislative and judicial powers of the government derive, under God, from the people. The form of government, the powers of the president and parliament (*Oireachtas*) are defined in the constitution. The *Oireachtas* has two principal functions: the appointment of the *Taoiseach* (prime minister) and government, and the enactment of laws. Article 28.4.1 states that "The Government shall be responsible to *Dáil Éireann*". The same article requires the government to present annual estimates of income and expenditure to the *Dáil* for consideration.

The national parliament (*Oireachtas*) consists of the president (*Uachtarán*) and two Houses of the *Oireachtas*, a House of Representatives (*Dáil Éireann*) and a Senate (*Seanad*). Only the *Oireachtas* has power to enact law. However, the Supreme Court has power to annul any law that is repugnant to the constitution. According to the Irish Constitution, the power to run the Irish State is divided between legislative power (given to the *Oireachtas*), executive power (given to the government to carry out with the assistance of the civil service and other branches of the state), and judicial power (given to the courts).

The *Dáil* considers legislation proposed by ministers or private members, and expenditure proposals from ministers for their departments. In addition, *Dáil* debates and motions also take place and the *Dáil* provides a forum for questions and answers. Members of the *Dáil* are elected by a system of proportional representation at general elections while members of the *Seanad* are either nominated by the *Taoiseach* or elected from various panels. There are 166 elected members of parliament, *Teachta Dála* (TD). According to the Constitution, there may not be less than one TD for every 30 000 people and may not be more than one TD for every 20 000 people. TDs represent constituencies (electoral areas). There are 41 such constituencies at present, each with a minimum of three TDs. As far as possible, the ratio of population to TD must be equal in each constituency. The maximum life of the *Dáil* is five years, although the *Taoiseach* (prime minister) may advise the president to dissolve the *Dáil* at any time during the life of the government. The government is headed up by the *Taoiseach*, who is nominated as such by members of the *Dáil* and appointed by the President of Ireland. The *Taoiseach* nominates the other members of the government for appointment by the president. At present there are 15 departments of state with responsibility for various matters such as finance, foreign affairs, health, education and so on. A minister is appointed with responsibility for each of these departments. From time to time, the *Taoiseach* has adjusted the areas of responsibility of some ministers.

Within the *Oireachtas*, there are four types of committees: Standing Committees, Select Committees, Joint Committees and Special Committees. The Joint Committees include those with responsibility for Education and Science and for Health and Children.

The *Seanad* (Senate) is the upper house of the *Oireachtas*. There are 60 members of the *Seanad*; 49 of these are elected and 11 are nominated by the *Taoiseach*. There are also three senators representing the National University of Ireland and three senators representing Trinity College Dublin. Elections for the *Seanad* take place within ninety days of the dissolution of the *Dáil*. Senators are elected from five panels other than the universities: industry and commerce; public administration and social services; agriculture, fisheries and related areas; labour matters; Irish language and culture, education, law and medicine.

Ministers with responsibility for education, training and young people

The Minister for Education and Science has overall responsibility for educational matters at primary, post-primary and tertiary levels. The Minister's responsibility also includes adult or lifelong and early childhood education. The Minister for Education and Science is assisted by a Minister for State in the Department of Education and Science, with special responsibility for adult education, youth affairs and educational disadvantage, and at the Department of Health and Children (with special responsibility for children). The Minister

for Enterprise, Trade and Employment has responsibility for Vocational Training and retraining through FÁS, the Training and Employment Authority (*Foras Áiseanna Saothair*), which helps regulate designated apprenticeships. The Minister for Health and Children and the Minister for Justice, Equality and Law Reform share some responsibility for child welfare and provision for delinquent youth. The Minister for Agriculture and Food has responsibility for education and training in agriculture.

Local government

At local level, the elected authorities are the county councils (29), borough councils (5), city councils (5), and town councils (75). The members of these authorities are elected on a system of proportional representation. Such elections take place about every five years. The main function of a local authority is to promote local community interests. These include social, economic, environmental, recreational, cultural and community roles as well as the general development of the local area. They are involved in providing artistic, cultural, leisure, environmental and heritage activities and resources. They are also responsible for local planning and the maintenance of essential services such as housing, roads, sewage and fire services.

The *Local Government Act* (2001) underpins local government renewal by providing a modern statutory framework for local government structures, functions and operations. The central aims of this act are to enhance the role of elected members, support community involvement and enhance participative local democracy, and to modernise local government legislation. Planned changes are to take effect at the local elections in 2004. Members of the *Oireachtas* (the *Dáil* and the *Seanad*) are no longer entitled to be members of local authorities. Some of the functions of local authorities are carried out by the members acting as a body at meetings. Others are carried out by committees such as the Vocational Education Committee (VEC). The Vocational Education Committees are appointed by county councils, borough councils, city councils and some town councils. Local authorities continue to administer certain grants related to higher education. Local authorities do not have a role in the management or administration of primary schools or second-level schools other than those owned and controlled by the Vocational Educational Authority. Most schools are in private rather than state ownership.

Some population trends

The population recorded in the census of 2002 was the highest recorded figure since the foundation of an independent Irish State in 1922. The decade of the nineties was particularly influential in the population rising by 2.8% between 1991 and 1996, and by a further 8% between 1996 and 2002. The population in the 2002 census was just under four million, at 3 917 336. By

December 2003, the Central Statistics Office recorded that the population had risen to over four million, for the first time since 1871. While the birth rate declined in the 1980s, it has been increasing both in terms of actual numbers and per 1 000 population since 1994. The number of births registered in 1994 was 47 929 (representing 13.4 per 1 000 population). It rose each subsequent year and in 2001 there were 57 882 births registered (representing 15.1 per 1 000 population). The excess of births over deaths rose from 17 500 in the twelve-month period ending April 1995 to 31 000 in the corresponding period ending in April 2003.

Although the population is getting older, Ireland continues to have the youngest population in the European Union. In 1998, 24% of the Irish population was in the 5-to-19 age group, as against an average of 18% in the rest of the EU. By 2002, the Irish percentage had fallen to about 22.5%. In 2002 11.5% were under 15 years of age, with 63.9% under 64 years. Projections for 2006 are that 11.8% would be under 15 years and 67.7% under 64 years. While it is expected that the numbers of pupils at primary level in the EU will fall by 12% over the next decade, Irish trends are already beginning to rise, and this will continue over the next years. The average age of the population in 2002 was 35.1 years. The age dependency ratio has been declining which means that a greater proportion of the population will be at work relative to those under 15 or over 65 years of age.

Ireland continues to have a low density of population with an average of 57 inhabitants per square kilometre. There are significant differences in the number of inhabitants per square kilometre across the different provinces. For instance, Leinster in the east of the country is the most densely populated with 76 inhabitants per square kilometre compared with Munster which has 37 and Connacht in the west, which has only 23 inhabitants per square kilometre. There has been a very significant shift in the pattern of urban-rural habitation over the years. In 1926, 68% of the population were rural based, with 32% living in urban areas. By the year 2002, this has almost become reversed with only 40% now in rural areas and 60% urban based. The greater Dublin area accounts for 25.6% of the total population.

Traditionally, Ireland experienced high levels of emigration, but this trend has been reversed in recent years. Emigration, which was 20 700 in the twelve months to April 2003, was the lowest since the Central Statistics Office began compiling such data in 1987. In 1998, the number of inward migrants was twice the number of those who left the country. This trend has continued. Figures released in 2002 show that there has been a net inward migration of 150 000 since 1996. In the year up to April 2002, returning Irish nationals accounted for 38% of all inward migration. In the same year, just over a third, 35%, of all immigrants came from countries other than the United States and

EU States. Thus, Ireland has a more multi-cultural and multi-ethnic population than before. However, in the census of 2002, 91.6% of the population declared themselves to be of Irish nationality.[1]

Religious affiliations

The Irish Free State as established in 1922 was formally non-sectarian in character. No one religion was defined as the official religion of the state. However, in reality, a large majority of the people were Roman Catholic. The numbers of those belonging to minority Christian denominations declined after the foundation of the state for a variety of reasons including emigration, low rates of marriage and the *Ne Temere* rule of the Roman Catholic Church regarding the upbringing of the children of mixed marriages. Under the Free State Constitution, enacted in 1922, freedom of conscience and freedom to profess and practise religion was guaranteed, subject to public order and morality.

The constitution enacted in 1922 was replaced in 1937, and this document remains in place today. The new constitution can only be amended by a majority vote at a referendum. A number of articles of the 1937 Constitution reflect Roman Catholic social thinking and teaching of the time. These are underpinned by the notion of subsidiarity, stressing minimal state interference in the life of the family. These include Article 41, dealing with the family and marriage, and Article 42, dealing with education. Article 42 states that parents are the "primary and natural educator" of their child/children and defines the role of the state in this regard as requiring that children receive "a certain minimum education, moral, intellectual and social". What exactly is meant by a certain minimum education has never been defined.

While the 1937 Constitution was clearly more Roman Catholic in character, nonetheless, it remained the case that no one religion was defined as the official belief system of the state. Article 44.2.2 prohibits the state from endowing any religion. The 1937 Constitution originally included an article recognising the special place of the Roman Catholic Church in Ireland. This was removed as a result of a referendum during the 1970s. While the relationship between the Roman Catholic Church and the state was not officially or legally defined as a close one, in practice there were many close connections in terms of consultation on policy (particularly in the areas of sexual morality and the family). This was also true with regards to the roles of the state and the main churches in the provision of social services.

Denominational bodies played an important role in the provision of health and education, a situation that had its origins in the nineteenth century, prior to the foundation of the state. Religious bodies owned and managed most schools at primary and second level. Almost all primary schools continue to remain in the ownership and control of religious bodies, be they religious orders or parish

bodies. Approximately 94% of primary schools are in Roman Catholic control; most others are controlled by the minority Protestant denominations, including the Church of Ireland, the Methodist and Presbyterian churches. There are a handful of schools operated by other religious groups including Ireland's Islamic and Jewish communities. Since the 1970s, groups of parents have become active in founding multi-denominational schools. There are now 24 such schools in operation throughout Ireland, the majority of which are in large urban areas. In November 1999, the Department of Education and Science announced that it was increasing the capital grant-aid for national schools to 95% of total cost and that it was putting a cap on the required level of the local contribution provided by the parish community. Furthermore, the state would also purchase the site for a new school where it had already been given recognition and had demonstrated long-term viability. The state's grant-aid to schools using temporary rented premises was also increased.

The majority of Irish people continue to indicate that they are affiliated to Christian denominations in their religious belief. According to the census of 2002, 88.4% declared themselves as Roman Catholic, a decline from the 91.6% registered in 1991. Protestant denominations (Church of Ireland, Presbyterians and Methodists) amounted to almost 5% of the population. Muslims increased more than fourfold from the small base of 3 900 in 1991 to 19 100 in 2002. Orthodox numbers were also low but increased from 400 in 1991 to 10 400 in 2002.[2]

Official and minority languages

The Irish Constitution (*Bunreacht na hÉireann*) states that the Irish language (*Gaeilge*), the national language, is the first official language. The Constitution recognises English as the second official language. The reality for the large majority of the Irish population is that English is the mother tongue and the language of daily usage. *Gaeilge* is a Celtic language and therefore is a member of the Indo-European family of languages. It is akin to Scottish Gaelic and Manx and is related more distantly to Welsh, Breton and Cornish. It is a significantly older language than English.

From the middle of the nineteenth century, Irish declined rapidly from being the language of the majority of the population to its position today as a minority language in Ireland. In spite of efforts to encourage its use, Irish is now spoken as an everyday language in limited areas, mainly along the western seaboard and known collectively as the *Gaeltacht*. In the 2002 census, 42.8% of the respondents to the question "Can you speak Irish?" responded in the affirmative. Of those who could speak Irish, 21.6% were reported as speaking it on a daily basis, most of whom were of school-age, 15-to-19-years-old. Irish speakers represented 72.6% of those within *Gaeltacht* areas and of those,

55.6% speak Irish on a daily basis and a further 11% on a weekly basis.[3] Pupils are obliged to study Irish and English during the compulsory stage of education (age 6 to 16). Irish is taught also in the senior cycle of post-primary schools (age 15/16 to 17/18). Irish is a compulsory subject for matriculation to the four National University of Ireland institutions.

The National University of Ireland, Galway (NUIG) has a statutory obligation to promote courses through the medium of Irish. Competence in the Irish language is an essential requirement for entry to the primary teaching career and to some public service occupations. There is a radio and television station specifically devoted to Irish language medium programmes and newspapers are available in the Irish language.

The small but increasing number of immigrant children whose mother tongue is not English or Irish, and the variety of their first languages pose problems for the teaching of languages, including their mother tongue, in schools in Ireland. English is the main second language acquired by all immigrant children. Irish language learning, normally compulsory for children beginning in primary schooling in Ireland prior to reaching the age of 11, can be waived under the terms of Circular 10/94, which allows schools to grant exemptions to pupils coming from abroad with no understanding of English or Irish. Assistance with language learning is provided for immigrant children, regardless of legal status. Integrate Ireland Language and Training (formerly the Refugee Language Support Unit), under the auspices of Dublin University (Trinity College) and supported by the Department of Education and Science, provides training and support in this context. At primary level, additional teacher posts or additional funding are made available to schools to provide assistance through a system of withdrawal for the learning of English. In post-primary schools the Department of Education and Science funds additional language support for immigrant children.

While Irish and English remain the official languages of the primary school, about 400 primary schools have been state-aided to provide an orientation to another EU language, as a pilot measure. In some schools, parents pay for tuition in another EU language, to be taught outside of formal school hours.

Economic and labour market trends

From the early 1990s up to 2001, Ireland has been experiencing a period of unprecedented economic growth, well ahead of the OECD average. Ireland achieved an average GDP growth rate of 4.78% between 1990 and 1995, and 9.5% from 1995-2000. As well as benefiting from indigenous entrepreneurial flair and investment, it has also benefited from a high level of investment by multinational companies. There has been significant growth in the area of high technology enterprises such as information and communication technologies, chemical and pharmaceutical industries, and financial services. The concentration of growth in

these sectors was sustained by the high quality of the graduate workforce available. Its continued growth will place demands on the future supply of a highly qualified workforce. From an earlier period of high unemployment, the country moved to a position of virtually full employment by the year 2000. In 2003 the unemployment rate was 5.2%, which is low by international standards. Instead of an older tradition of emigration, the pattern has shifted to inward migration and the active recruitment of foreign workers. However, the economic situation changed in 2002. The growth rate reduced to less than 3% per annum and the returns from taxation have been less than anticipated. In line with economic difficulties being experienced internationally, external investment has slowed. The inflation rate rose to about 5%, much higher than the EU average, but in late 2003 reduced to 2.2%.[4] Factors such as these indicate a much tighter national economic context than that which prevailed in recent years.

While commentators do not consider that the economy is likely to go into recession, nevertheless, adjustments need to be made in economic policy and planning. This is the context in which negotiations took place on a sixth national agreement between the government and the social partners, to replace the outgoing Programme for Prosperity and Fairness (PPF), which expired in spring 2003. The negotiation of a new national agreement was regarded by all the stakeholders as a formidable task. However, an eighteen month agreement, "Sustaining Progress", was negotiated, and was ratified by the main stakeholders in late March 2003. A significant new development was the provision of "benchmarking" awards for public service employees, subject to industrial relations stability, productivity and modernisation agreements. The more difficult economic situation will call for prioritisation in educational expenditure. The prioritisation needs to be underpinned by clear, cohesive policies with a strategic emphasis.

A new climate of uncertainty prevails which could have implications for the financing of aspects of the lifelong learning agenda. Wage increases have been noticeably higher in Ireland between 1999 and 2002 compared with the EU average. In the EU, wage increases averaged 2.5% over the three years, compared with an average rise of 8% during the first two years, and 9% during 2001 in Ireland. The increase in GDP for the year 2001 was 5.9%. Participation by women in the Irish labour force at 47.5% is slightly higher than the EU average of 47%. However, for women in the 25-to-54 age group labour force participation by Irish women is 66% compared with the higher rate of 72.6% for the same age group in the rest of the EU. For the year 2003, the unemployment rate was 4.4%, which is less than that of many European countries. During the last two decades, the education levels of young people entering the labour market have risen dramatically, compared with those of previous generations. At present, 48% of all 20-year-olds entering the labour force have a third-level (tertiary) qualification. It predicted that over 55% of 20-year-olds will need to have such a qualification if

the supply of skilled labour is to meet projected demand by 2015. However, the education levels of the older section of the population were highlighted as a cause of concern in the government's White Paper, *Learning for Life* (2000), and a range of policy measures has been designed to improve this situation.

Aspects of social change

While the Irish economy experienced an unprecedented degree of economic growth over the last twelve years or so, at a broader level, Irish society experienced very compacted and accelerated social change over recent decades. What had been a rather traditional society with a great deal of continuity and stability in its social structures was faced with many profound social changes, for which other developed societies had a longer lead-in period. The family, which had been a strong, stable institution, became subject to much change including the legalisation of divorce, increased incidence of breakdown and separation, increase in single parent families and increasing incidence of cohabitation by unmarried partners. The influence of the Catholic Church, which had been very pervasive in moral and ethical issues, was increasingly challenged. Major public debates took place on divorce, which was legalised, and on abortion, which was legalised for certain medical conditions. A number of high-profile sexual scandals involving some clergy and the exposure of a disturbing pattern of sexual abuse of children by clergy in institutions of child care proved to be a shock to public attitudes. The role of religious in society continues to be respected, but it was seriously tarnished by the actions of the minority of abusers. This, coupled with general tendencies to a more secular society highly influenced by the media and pervasive advertising, has changed the character of society. Consumerism and material possessions have become higher priorities for citizens.

House ownership continues to be a very prominent desire for Irish people and, while apartments are now more frequent, it is still the desire of most people to own their own homes. This is becoming increasingly difficult for many medium- and low-earner families as the cost of housing has increased enormously from what it was ten or fifteen years ago. The cost of living in Ireland has increased greatly in line with greater affluence. For many people the standard of living has greatly increased, domestic facilities are highly modernised, and holidays abroad, often to exotic destinations, as well as the possession of designer clothes form part of a new lifestyle. Car ownership has increased enormously which gives rise to considerable traffic congestion in cities and on a road infrastructure which is still in the process of being modernised.

Increased affluence may also be a factor in an unexpected level of corruption by public officials, and tax evasion by citizens which has been exposed by a number of legal tribunals enquiring into a range of such issues. A small minority of politicians have been implicated which has contributed to a degree of cynicism

regarding politics, which was not previously a significant factor for the electorate. Patterns of tax evasion by citizens placing finance illegally in offshore accounts have also dented public confidence in probity and concern for the common good.

Other negative features which have become more common are the incidence of violent crime and indulgence in various forms of drug abuse. These, of course, are not unique to Irish society, and the extent of these vices is less than in other countries, but they tend to shock a society which, not so long ago, saw only limited incidence of them. An older tradition of indulgence in alcohol, however, has become very ubiquitous. Over-indulgence in alcohol affects many people. One of the most disturbing features of this is the degree to which teenagers and young adults abuse alcohol, to the detriment of their health, and sometimes involving them in violence.

The economic affluence of modern Irish society did not remove poverty as the lot of a significant minority of the population. In 2003 Ireland continues to have one of the highest poverty rates in Europe. According to the National Action Plan against Poverty and Social Exclusion (2003-05), while 15% of Europeans live below the 60% of average income poverty line, the percentage for Ireland is 18%, and is worse than that for Portugal, Greece, Spain and Italy. This has spill-over effects on children and their educational life chances. Many schemes, run by a variety of agencies, endeavour to make inroads into this difficult situation.

Despite serious blemishes on the face of modern Ireland, it has many advantages going for it. There is still a good tradition of community neighbourliness. There is a strong vocational commitment within the caring professions. There is a concern for heritage and environment with a great variety of organisations devoted to their care. The society also exhibits a great dynamism in the arts in all their forms – literature, drama, art, music, dance, films. Creativity is alive and well. Book publication and purchasing, in poetry as well as prose, is very high per capita. Newspaper sales indicate that the written word withstands all the news presentations on television and radio. Sport, in all its many manifestations, is highly prized by the Irish, both from a participative and spectator point of view. There has been a general improvement in leisure and sports facilities, and increased affluence allows greater participation in more expensive sports such as golf, horse racing, sailing and motor car racing. Although the Irish soccer and rugby teams attract the attention of the media for their international engagements, the traditional Gaelic games such as hurling and football are the ones with the highest number of supporters. The Gaelic Athletic Association (GAA), which administers these games, is generally regarded as the greatest amateur sporting organisation in the world.

In line with its long traditions, Ireland retains a strong international orientation. Its people have a keen interest in international affairs. Young and old travel a great deal. Ireland takes its participation in bodies such as the UN,

the EU and the OECD very seriously, and seeks to contribute effectively to the work of these organisations. Not surprisingly, in view of its long missionary heritage, Ireland's contribution to the developing world through personnel and resources is well recognised. Ireland's younger generation has benefited from their exposure to extended educational provision. This generation tends to reflect great energy, confidence, flexibility and communication skills, and find the global village a comfortable place in which to live.

Notes

1. Population figures and trends from the 2002 Census, issued by the Central Statistics Office, particularly the volumes *Principal Demographic Statistics* and *Principal Socio-economic Results*, and figures released by the Central Statistics Office, 10 December 2003.
2. *Ibid*.
3. *Ibid*.
4. *The Irish Times*, 12 December 2003.

ISBN 92-64-01431-4
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PART II

Chapter 10

Education System and Policy

This chapter explains the structure and different components of Ireland's education system. It discusses the system's key policy goals and trends in funding, standards and evaluation and describes the administrative structure of higher education and the state of adult education and third-level colleges.

A positive education tradition

Education has always been highly valued by the Irish people. Even in historic times of great political, economic and social difficulty, the people's desire for education was very much in evidence. Prior to the state's establishment of a national system of primary education in 1831, there was already in existence a vast network of schools, the great majority of them provided by a people who had been dispossessed of their lands and who were experiencing harsh penal legislation. In later times, whenever opportunities for education were provided, the population was quick to utilise and take advantage of them. During the seventeenth and eighteenth centuries, many Irish people had to go abroad to access higher education, using the Irish Colleges network. This debt was more than repaid later by the great diaspora of Irish scholars, teachers and missionaries to the English-speaking world over the last two centuries.

The provision of universal primary education and its take-up by the people has been an impressive feature of Ireland's education story. Secondary education was more confined in its impact until the 1960s, when government policy greatly expanded its provision leading to massive take-up, so that about 82% of the age cohort now completes the senior cycle of secondary schooling, with about another 4% in training courses. As was the case with many countries, for a long time, higher education was the preserve of a small elite of the population. Over the last generation, this has altered dramatically as Ireland moved into the era of mass higher education. From the small base of about 5% of the school leavers going forward to higher education in the early sixties, it is now the case that about 55% of school leavers go forward to tertiary education.

Education is now regarded as a central plank in the economic, social and cultural development of society. Governments and the social partners view it as strategically interlinked with national planning. There is a high level of public interest in educational issues, which has been further developed by the consultative approach adopted by the government in the formulation of education policy. The career of teaching is held in high regard, and Ireland is fortunate in still benefiting from an over-supply of high quality recruits to teaching. The great majority of parents and pupils are highly motivated towards education and consequently, educational achievement is held in high regard. This buoyant social dynamic in relation to education also exhibits a confidence

about the quality and standards of the education system. The public examination system enjoys the confidence of parents and employers, even though there is a desire to modernise its procedures. Irish pupils have been performing in the top sectors in international studies such as the OECD PISA evaluations. Employers, both national and international, affirm the quality of graduates from the education system. Whether working in Ireland or across the world, graduates of Irish higher education are well regarded and tend to be successful both in further post-graduate studies and in their career paths.

Administration and shaping of the modern education system

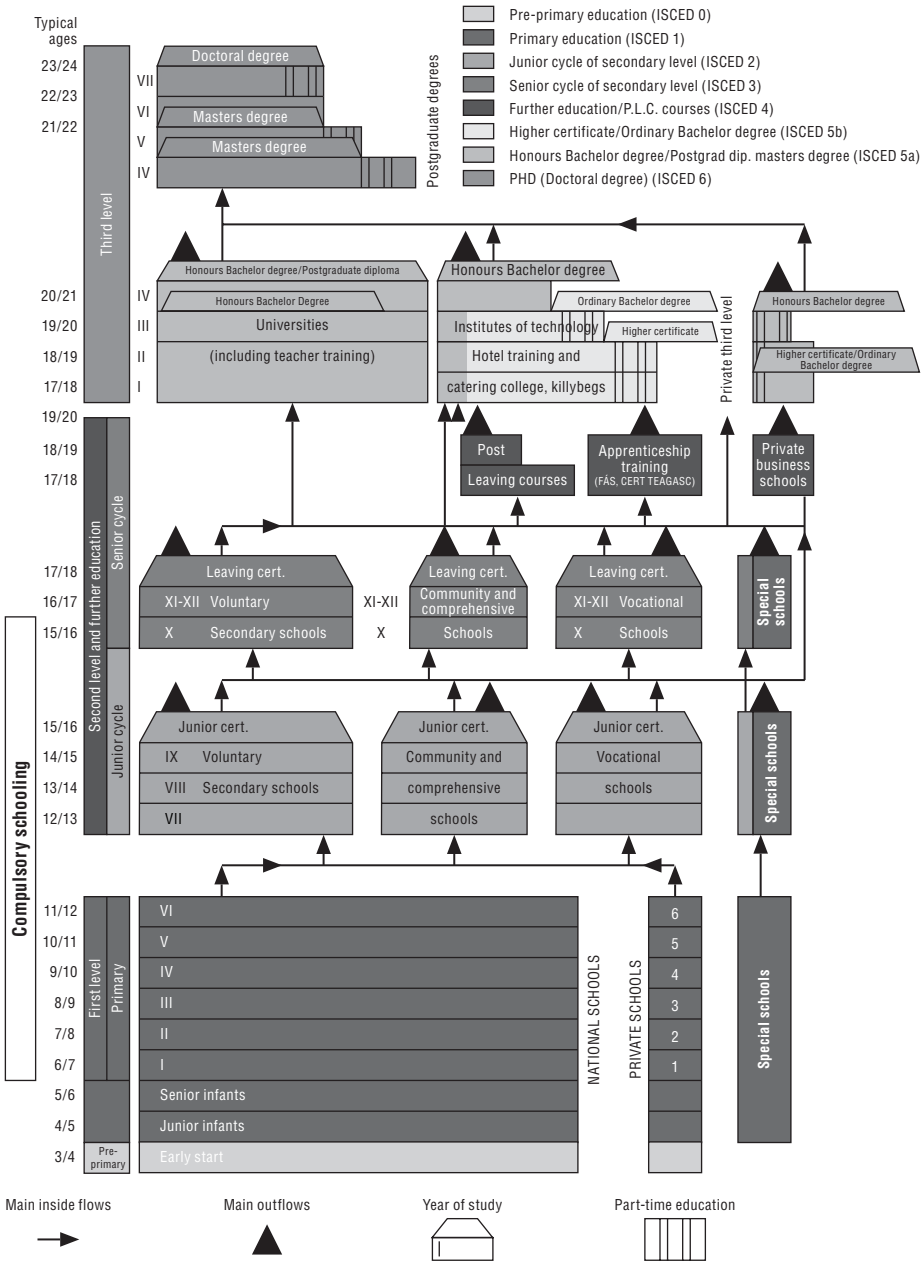
The Department of Education and Science (DES) is responsible for the administration of public education, primary, second-level and special education. In addition, government subsidies for the universities and third-level institutions are channelled through the department. The aim of the department is to ensure the provision of a comprehensive, cost-effective and accessible education system of the highest quality as measured by international standards. Figure 10.1 is a diagram of the education system in Ireland. The mission statement of the department is directed towards an education system that will "enable individuals to develop to their full potential as persons and to participate fully as citizens in society, and contribute to social and economic development". The DES is led by the Minister, two Ministers of State and the Secretary General of the Department, who acts as chief executive officer.

The Department of Education and Science was established in 1924, following political independence in 1922. National education policy and its implementation became centralised within the Department, and the centralised character of the educational system has not fundamentally changed, although a number of statutory agencies have educational responsibilities. There is no comprehensive regional structure in Irish educational administration, with most schools dealing directly with the DES. The *Public Service Management Act*, 1997 puts a statutory obligation on the DES to pursue excellence and transparency in its dealings with the education partners. The DES first published its Strategy Statement in 1998, and in recent years has been reforming some of its internal structures.

Primary education

Following the publication of the *Investment in Education* report in 1965, which was a joint initiative between the Irish Government and the OECD, the government and the DES became more pro-active in upgrading the education system to meet the needs of a rapidly changing society. At primary level, many of the old and small primary schools were closed or amalgamated. Improved approaches in school buildings and design resulted in the provision of many new schools of high standard. A radically new curriculum for primary schools was

Figure 10.1. **Education system in Ireland**



Source: DES (Department of Education and Science).

introduced in 1971. This has again been reformed and up-dated by the primary curriculum which became operative in 1999. Teacher education for primary teachers was extended from two to three years, and became a university awarded B.Ed. degree in 1974. Very significant improvements occurred in pupil-teacher ratios, declining from 34:1 in 1970, to about 19:1 in 2001. The policy of the integration of pupils with special needs, which has become pronounced in recent years, has led to an impressive expansion of resource and special needs teachers. Reforms in primary school management have meant that primary schools now have management boards comprising representatives of parents, trustees, teachers and co-opted community representatives. Schooling is now compulsory from 6 to 16 years of age. The great majority of children aged four and five continue an old tradition of attending primary schools. In recent years, the state has given greater support for the provision of pre-school education. The usual age for pupil transfer from primary to post-primary school is 12 years.

Post-primary education

Up to the 1960s, Ireland had a two-tier post-primary system, with secondary schools in the general grammar school tradition and vocational schools, which provided a two-year continuation course of practical and applied studies. In the context of significant reforms of education in the 1960s, the state upgraded the status of vocational schools, and gave the first capital grants to the private secondary school sector. It also took the initiative of establishing two new kinds of post-primary school, the comprehensive school and the community school, now categorised as one comprehensive/community school sector. Boards of management representative of the partners (trustees, teachers, parents and community) have been introduced to most schools. Free post-primary education was introduced in 1967 which led to a great increase in pupil participation. The state espoused a comprehensive type curricular policy for all post-primary schools. The issue of curricular reform, with its associated pedagogic and assessment concerns, has been an ongoing area of policy attention. In 1989, the two traditional junior cycle public examinations were converted into the Junior Certificate Examination, usually taken by pupils at age 15 or 16 years. The Leaving Certificate Examination was established in 1924 as the terminal examination for post-primary education, and holds a very prominent place in public attitudes. Success in this examination is highly prized as it is the key threshold for entry to higher education and occupations. With the more heterogeneous pupil clientele now completing senior cycle post-primary education, successful efforts have been made in recent years to provide a variety of tracks within the Leaving Certificate course provision. The National Council for Curriculum and Assessment is statutorily established to advise the Minister for Education and Science on curricular and assessment issues. In 2003, the DES devolved the administration of the state examinations to the State Examinations Commission.

Although the three types of post-primary school – secondary, vocational/community college, comprehensive/community school – evolved from distinctive historical contexts, they have a great deal in common. They follow the same state-prescribed curriculum and take the same state public examinations. They are taught by similarly qualified teachers who are paid the same salary scale. The curriculum offered by all is of a comprehensive character, rather than a dual system. The vocational/community college sector would be regarded as serving a larger proportion of disadvantaged pupils than the two other categories. The 5% of secondary schools which charge fees are patronised by the more wealthy parents.

For pupils who drop out of mainstream schooling, for a variety of reasons, second-chance and alternative programmes are available. Notable in this context is the Youthreach programme. This is a two-year programme of education, training and work experience available to young people who have left school with no formal qualification. Year one is a foundation year and is followed by a progression year. Youthreach is run jointly by the Vocational Education Committees and FÁS. It is funded by the Department of Education and Science and Department of Enterprise, Trade and Employment with assistance from the European Social Fund. Youthreach courses are free of charge.

Higher education

Ireland was relatively late by European standards in obtaining its first university, which dates from 1592 with the establishment of the University of Dublin, more popularly known from its single college, Trinity College. A large time gap intervened before the state established the second university in 1849, the Queen's University with its three constituent colleges at Cork, Galway and Belfast. As the University of Dublin was very associated with the ethos of the Established Church, and the Queen's University was non-denominational, the Catholic hierarchy was unhappy with these institutions and established the Catholic University in 1854. A satisfactory resolution of the university question was one of the major political problems in the second half of the nineteenth century. Eventually, after much political travail, a resolution which lasted was achieved by the *Irish Universities Act* of 1908. This established the new National University of Ireland as a federal university with three constituent colleges – University College Dublin, University College Cork and University College Galway. Queen's College Belfast was raised to the status of an independent university, and the University of Dublin was left undisturbed. Following the partition settlement of 1922, this university framework remained intact but, of course, Queen's University Belfast was now under the aegis of the Northern Ireland State. Higher education was not an issue of major public or political attention during the first four decades following political independence.

However, over the last forty years this has greatly altered and there has been a transformation with regard to higher education's role, structure, content, and place in the socio-economic and cultural affairs of the nation. In the context of many wide-ranging changes in Irish society, two major reviews of Irish higher education took place in the mid sixties. One was the Commission on Higher Education, and the other was the Steering Committee on Technical Education, both of whose reports were available in 1967. The government now recognised that higher education had an important role to play in its plans for the socio-economic growth and development of the country and it adopted a more proactive stance in relation to it.

Among key features of the changed configuration of higher education was the establishment of a strong binary system. While the universities were to be greatly expanded, the second prong of the policy was the building up of a strong non-university sector with a scheme of new regional technical colleges, the development of the Dublin Institute of Technology and the setting up of National Institutes of Technology in Limerick and in Dublin. This prong of the binary system was intended to be more technical and applied than the university sector and to come more directly under state control. Even when the National Institutes of Technology at Limerick and Dublin were raised to the status of independent universities in 1989, it did not break the policy approach for a binary higher education system. The Higher Education Authority (HEA) was established in 1968 as a key intermediary agency between the state and the universities, with important planning and budgetary responsibilities for the university sector. In 1972, the National Council for Education Awards (NCEA) was set up with academic responsibilities for the non-university sector. The Central Applications Office was set up in 1971 to process applications for all university undergraduate courses, on the basis of a points system linked to performance in the schools' Leaving Certificate Examination. The diversification provided by many of the new higher education institutions was matched by the expansion of existing institutions, and by new and restructured course offerings.

Over a thirty-year span, full-time student numbers increased five-fold from 1965 to 1995, rising from 20 698 to 102 320, with about 57% of them attending the university sector by 1995. There were a further 12 000 enrolled on a part-time basis in 1995. The current expenditure for higher education increased from IEP 10 million (Irish pounds) in 1965 to IEP 430 million by 1995, with the capital expenditure increasing from IEP 11 million to IEP 36 million. By 1995, expenditure on higher education, as a percentage of total expenditure on education, was close to the OECD average of 24%. In general, the government sought to ensure that higher education was responsive to the perceived economic and social goals of society and subjects such as engineering, electronics, information and communication technology, business and entrepreneurship, chemical and pharmaceutical subjects and applied science, were strongly

supported. Institutions were encouraged to establish links with industry and to seek sponsorship from the private sector. Technology parks and campus industries were established by many institutions. The following is an outline of the higher education framework which has evolved:

a) Seven universities with their associated colleges of education and recognised colleges.

b) Thirteen institutes of technology (formerly regional technical colleges), the Dublin Institute of Technology and the Tipperary Rural and Business Development Institute.

c) A range of state-supported further education and training institutions.

d) A number of private higher education institutions whose qualifications are validated by Irish and foreign institutions. These include colleges such as Portobello College, Griffith College and the American College Dublin.

e) Open and distance provision by a number of institutions, but particularly by OSCAIL, the national distance learning agency located on the campus of Dublin City University, and by the Open University of Great Britain, whose courses are available to Irish citizens.

Preparing Irish education for the knowledge society

In common with other developed countries, Ireland has been experiencing a period of profound economic, social, technological, occupational, cultural and demographic change. It has probably had to accommodate this accelerated pace of change within a shorter time span than most developed countries. An education system is expected to serve the needs of society and when that society is undergoing such significant change, as at present, pressures emerge to improve the alignment between education and society. Effective education systems need to have the adaptability to engage constructively with society in the light of new needs and developments. Over the last decade, Irish society and its education system have been engaged in seeking to establish a satisfactory and constructive alignment. A great deal of reappraisal and analysis of the education system has been undertaken during the 1990s, leading to the formulation of an educational policy and legislative agenda which are the most significant in the history of the state. In the context of what is often referred to as the emerging knowledge society, the government has been determined that Ireland should build on its educational strengths and reform, adapt and modernise its education system so that it can continue to serve the needs of its citizens in a rapidly changing environment.

In 1987, a national agreement was negotiated by the government with the social partners which was to be the first of five such agreements which created a stable and secure environment for investment, with a minimum of industrial

unrest. This contributed to over a decade of sustained economic growth and social development. In 1991, the government decided that education should be viewed as a central plank of national policy. This coincided with the publication of a review of Irish education by the OECD in 1991, which affirmed many strengths of the education system, but also pointed the way for improvement and modernisation. To initiate strategic planning for primary, post-primary and tertiary education, the government, in 1992, published a Green Paper (a government discussion paper) with proposals for education change in all sectors. The Minister for Education adopted a highly consultative approach and invited all stakeholders in education to engage in discussion of the proposals. This proved to be a remarkable success, involving very wide-ranging debate throughout the country and including the input of a thousand written submissions. To help clarify issues, analyse submissions and foster consensus, a National Education Convention was convened in autumn 1993, which was attended by representatives of forty-two stakeholders over a two-week period. The Convention, convened by the Minister for Education, was organised by an independent secretariat of academics, and it proved to be highly successful. The *Report on the National Education Convention* (1994) paved the way for the government's White Paper, *Changing Our Education Future*, in 1995. This was a major statement of government policy on primary, post-primary and tertiary education. Among major outcomes of these processes were two comprehensive education acts, the *Universities Act* (1997) and the *Education Act* (1998), which formed the legislative framework for the change agenda. Meanwhile, other development work in areas such as curriculum reform was progressing concurrently. Much of this latter was undertaken by the National Council for Curriculum and Assessment (NCCA), an advisory body to the Minister for Education, set up in 1987, and representative of major stakeholders. The NCCA was statutorily established by the *Education Act* of 1998. These consultative processes did much to foster a good degree of consensus and ownership of new policy measures by major actors in the system. Despite changes of government during the period there was great continuity of the broad lines of policy. The only area of significant disagreement was that one government favoured the establishment of regional education boards, while the other favoured the retention of centralised governance. This latter was the viewpoint which got enshrined in legislation. The sustained economic buoyancy also assisted both the resourcing of, and the climate for educational change.

Ireland held the Presidency of the European Union in the second half of 1996 and took as its major educational task the preparation of "A Strategy for Lifelong Learning". This strategy was approved by the EU Council of Education Ministers in December 1996, and was to influence subsequent EU policy directions, as well as extend the agenda for reform in Ireland. This coincided with renewed interest in this concept by international agencies such as the OECD. Lifelong learning was

now viewed as the guiding principle for education in the new century in Ireland and internationally. If "a cradle to the grave" approach was to become a reality, the ground had to be prepared in the two areas – early childhood and adult education – which had got less attention in the policy formation of the early nineties. Thus, a major consultative forum, The National Forum for Early Childhood Education, was convened in March 1998. It operated on the lines of the earlier National Education Convention, and it also proved to be a success in fostering consensus and a sense of ownership of proposed changes. The report on the forum influenced the government's White Paper, *Ready to Learn*, published in 1999, setting out government policy for early childhood education. The Department of Education and Science has since established an Early Childhood Education and Development Centre in St. Patrick's College in Dublin and Ireland participated in a recent OECD thematic study of early childhood education. The government also published policy proposals on adult education in its Green Paper, *Adult Education in an Era of Lifelong Learning*. This was followed by a national consultative conference on adult education, which fed into a White Paper, *Learning for Life* (2000). This set out policy on lifelong learning with a particular focus on adult education.

Better provision was also made for the education of people with disabilities, partly prompted by court decisions. A policy of integration of special education within mainstream education, as far as possible, has been adopted. Thus, within a decade all aspects of Irish education had been analysed, reappraised and given new policy formulation, following a great deal of public debate and consultation among the citizenry. Ireland has also been keen to maintain international perspectives and linkages in reshaping its educational policies. Thus, in 2002 as well as enthusiastically participating in the OECD study, "Attracting, Developing and Retaining Effective Teachers", it has been actively involved with its EU partners in the promotion of the EU's new "Objectives in Education and Training", the interim report of which will be made during Ireland's EU Presidency in the first half of 2004.

From the 1990s, government policy also gave much higher priority than hitherto to investment in research, as Ireland sought to position itself within the knowledge society (new policies on research for higher education are dealt with in Chapter 11). Ireland had intelligently deployed funds from the European Regional Development Fund (ERDF) and the European Social Fund (ESF) which made significant contributions in supplementing national resources in the building up of its education and training infrastructure. This contribution was arbitrated in a more programmatic approach which has underpinned the use of Structural Funds in Ireland since 1989. Many aspects of educational provision, particularly those promoting lifelong learning and social inclusion are also included in its current National Development Plan, 1999-2006. While Ireland's impressive economic performance won for it the description "The Celtic Tiger"

in the nineties, it was also the case that the gap between the rich and poor widened. A significant minority of the population remained disadvantaged and in danger of marginalisation and of being poorly positioned to cope within a fast-changing society. To counteract this situation, the government established the National Anti-Poverty Strategy, reflecting an inter-sectoral approach to targeting poverty. It is succeeding in making significant inroads on the percentage in the proportion of the population classified as being in consistent poverty. Concern for the educationally disadvantaged became a higher public and political issue, with many intervention schemes established with the aim of ameliorating the problems among the pre-school and school-going population. OECD studies, as well as national research, also highlighted the relatively poor levels of functional literacy among sectors of the older adult population, who had lost out on the expansion of schooling which has been achieved in recent decades, and from which the younger age groups have benefited. Progress with these two sectors of the population – the disadvantaged and mature learners – is regarded as an essential prerequisite in achieving the learning society.

Key educational policy aims

The school system

In its White Paper, *Charting Our Education Future*, 1995, the government set out five principles to underpin its education policy: quality, equality, partnership, pluralism and accountability. These continue to be a basic framework for policy reference. The main objectives and purposes of government policy in its educational reform measures may be summarised as follows:

- Equality of provision whereby all pupils have equal opportunity, with special government support for pupils experiencing socio-economic disadvantage, forms of disability, and ethnic marginalisation. A policy of integration of all pupils in the mainstream school system applies.
- Promotion of quality within the education system by means such as ongoing curricular, pedagogic and assessment reform, including the incorporation of ICT into teaching, learning and educational administration.
- Progression and retention of all pupils up to the end of post-primary schooling, or the completion of a senior training course.
- Promotion of curricular and assessment reform at all levels.
- Promotion of greater teacher collaboration within schools including engaging in school development planning, the promotion of school self-evaluation and in whole-school evaluation processes.
- Promotion of the school as a caring institution with close links to parents and local communities.
- Development of improved levels of school leadership and management, with an accountability ethos.

- Promotion of a more sophisticated awareness of the needs of early childhood education and implications of this for the early primary school years.
- Promotion of greater awareness of the implications for schools of a lifelong learning policy.

Higher education

The main objectives of higher education policy can be summarised as follows:

- Promotion of the responsiveness of higher education to the needs of society and the economy.
- Expansion of access to higher education for disadvantaged groups and mature students.
- Achieving standards of excellence in teaching and learning.
- Expansion of research activity of international quality.
- Achievement of quality assurance procedures which are effective and transparent.
- Adoption of lifelong learning as a planning motif in higher education.
- Development of innovative models of course delivery, using ICT resources.
- Improvement of governance and accountability procedures within the institutions.
- Promotion of higher education in addressing regional development issues.
- Engagement with the Lisbon objectives in promotion of the "role of universities in the Europe of Knowledge".

Trends in educational funding

Actual expenditure on education increased from EUR 1.74 billion in 1990 to about EUR 6 billion in 2003. However, while actual expenditure increased substantially it has not kept pace with the very high increase in GDP, particularly in the period 1997-2001, which results in a steady decline in investment in education as a percentage of GDP. In 1999, expenditure represented 4.6% of GDP and it has declined further since then. *Education at a Glance: OECD Indicators 2002* noted that Ireland's expenditure per pupil in primary and secondary schooling is much lower than the OECD average, ranking 18th of 24 countries for primary education and 19th of 26 countries for secondary. For both sectors, Ireland ranks lowest of the OECD countries surveyed when the expenditure is standardised at per capita GDP. (GNP is a more appropriate measure of national output for Ireland due to the volume of transfers from multi-national organisations based in Ireland. However, the GDP measure is used to facilitate international comparison.) One reason for the

comparatively low levels of per-pupil expenditure in Ireland was the higher proportion of the Irish population accounted for by children of school-going age, which, in 1998, was one-third higher than the rest of the EU. The OECD comparative data for teacher salaries show that Irish teachers are relatively well paid by international standards, ranking in 7th place of the 27 countries surveyed. In Ireland, the proportion of current educational expenditure applied to teacher salaries, at about 76%, was significantly higher than the EU average. Correspondingly, the share of the current expenditure available for qualitative inputs to the schooling system, other than the teaching force, has been markedly less. The relatively high salaries have reflected the traditional status of the teachers' position in the public mind, and probably also help to explain the high quality of those attracted into the teaching force.

In relation to expenditure on educational institutions per student, Ireland is ranked 17th out of 28 OECD countries. Ireland is ranked joint 16th out of 28 countries in terms of expenditure on third-level education relative to per capita GDP (OECD, 2003a). (More detail on this in Chapter 12.)

Evaluation and standards

Traditionally, evaluation of the system at primary level is the responsibility of the individual teachers, school principals and the inspectorate of the Department of Education and Science. The inspectorate has a long tradition of active involvement in assessing the work of teachers in primary schools. There is no formal national test of pupil performance at primary level although most teachers use a variety of tests of a diagnostic, formative and evaluative character. The inspectorate has not had as great an involvement in the evaluation of the work of schools at post-primary level. However, this is changing under Section III of the *Education Act* of 1998, which sets out the functions of the inspectorate in all recognised schools. These include the evaluation of the organisation of schools, the education standards and assessment of the effectiveness of programmes. The inspectorate has been reorganised and will be laying special emphasis on whole-school evaluations. Performance in the state examinations has traditionally been a major criterion of school achievement, particularly in relation to the Leaving Certificate Examination. The publication of school league tables, based on examination results, is prohibited by law, but parents are usually well informed on how schools fare in the examination stakes. The Leaving Certificate Examination is an externally set examination at which students take predominantly written examination papers. The examination enjoys a very high level of public credibility, although many agencies, including the National Council for Curriculum and Assessment (NCCA), have been seeking a more varied format of examination. Higher education institutions set their own examinations according to agreed marks and standards, and subject to the approval of examining bodies. In the case of most of the non-university institutions they

need to follow criteria laid down by the Higher Education and Training Awards Council (HETAC). The recently established National Qualifications Authority of Ireland (NQAI) plays an important overseeing role in the evaluation and accreditation of the non-university higher education sector. The award of high honours degrees tends to be lower in Irish universities than in English universities. External examiners reports tend to emphasise the high standards which prevail in Irish institutions. All higher education institutions are required to have quality assurance mechanisms in place.

Irish post-primary students tend to do well in international tests such as PISA, doing particularly well in reading and scientific literacy, and above the OECD average in mathematical literacy. OECD *Education at a Glance* also indicates that Irish students have a higher graduation rate from university than their peers in most other OECD countries. However, there is a high level of dropout from certificate, diploma and some further education courses. Senior staff in multinational companies have been high in their praises of the qualities they find in Irish school leavers and higher education graduates. The standard of the Irish education system has been clearly identified as one of the main reasons why they decided to locate in Ireland. In comparison to other EU and many OECD countries, the resources applied to education in Ireland, particularly on a pupil per capita level, at school level, are significantly less. However, in a recent study (2002) of the productivity of Irish education, the economist, statistician, and former prime minister, Dr. Garrett Fitzgerald stated, "In terms of what might be called 'educational productivity' – output in qualitative and quantitative terms related to input of resources – Ireland seems to have been performing about 50% better than the rest of the EU" (Fitzgerald, 2003, p. 130). Even if this high level of productivity may be open to some challenge, it is clear that the productivity of Irish schooling is impressive.

Structure and administration of higher education

Higher education in Ireland is provided mainly by the universities, institutes of technology and colleges of education. In addition, a number of other third-level institutions provide specialist education in such fields as art and design, medicine, business studies, music, law. Most of the third-level education is provided in institutions supported very substantially by the state, which receive about 80% of their income from the state.

The Higher Education Authority (HEA), a statutory body established primarily as a planning, co-ordinating and financing agency, liaises between the DES and the universities and other designated institutions. The HEA has responsibility for furthering the development of higher education and assisting in the co-ordination of state investment in higher education and preparing

proposals for such investment. In addition, the authority advises the minister on the need, or otherwise, for the establishment of new institutions of higher education and on the nature and form of those institutions. The universities submit their budgets for approval to the HEA. In line with the *Universities Act* of 1997, the HEA has overseeing powers in relation to a number of aspects of the work of universities, including their quality assurance procedures. The HEA has also managed the Programme for Research in Third Level Institutions (PRTLI), which is a competitive research bidding system introduced in recent years. The universities have traditional rights to academic freedom, and have the right to confer their own awards.

There are now seven universities. Dublin University (Trinity College Dublin) is the oldest university dating from 1592. University College Dublin (UCD), University College Cork (UCC), National University of Ireland Galway (NUIG) and the National University of Ireland Maynooth (NUIM) are constituent universities of the National University of Ireland (NUI). The NUI was established in 1908. Under the recent *Universities Act* of 1997, the constituent universities operate to a large degree as independent institutions, but still engage in the Senate of the NUI on academic and policy areas of common concern. The two most recent universities are the University of Limerick and Dublin City University, which were given university status in 1989. All seven universities operate within the modern legal framework provided by the *Universities Act* (discussed in more detail in Chapter 11). St. Patrick's College Drumcondra and Mater Dei College are associated colleges of Dublin City University. Mary Immaculate College of Education Limerick is an associate college of Limerick University. The Church of Ireland College of Education, Froebel College, Sion Hill and Marino College of Education are associated with Trinity College. The Royal College of Surgeons, the National College of Art and Design, the Institute of Public Administration and the Shannon College of Catering are recognised colleges of University College Dublin. St. Angela's College Sligo is a recognised college of the NUI Galway.

Each university has a governing authority which has the responsibility of preparing strategic plans, producing annual reports, being accountable for budgetary arrangements, ensuring quality assurance procedures are in place, and promoting best practice in teaching and learning. Internal administrative arrangements provide for academic councils and faculty structures. Each university has an elected president, or provost, who holds office for a ten-year period. The seven presidents constitute the Conference of the Heads of Irish Universities (CHIU). The Conference promotes university education and research through formulating and pursuing collective policies, strategies and programmes. A recent initiative has been the establishment in 2003 of the Irish Universities Quality Board (IUQB). One of the primary functions of this board, comprising various stakeholders and international experts, is to act as a public guarantor, at home and abroad, for the quality of Irish university education.

The non-university higher education sector is comprised of the Dublin Institute of Technology (DIT), thirteen other institutes of technology, the Tipperary Rural and Business Development Institute and a small number of private institutions. The DIT operates under the *Dublin Institute of Technology Act* (1992). It has six constituent colleges, which were formerly administered by the City of Dublin Vocational Education Committee. It has a governing body, a president and a directorate comprised of the directors of faculties and cross-institute directors. The DIT confers its own degrees and has done so since 1998-99.

The other Institutes of Technology are located on a regional basis as follows: Athlone, Carlow, Cork, Dundalk, Galway-Mayo, Letterkenny, Limerick, Sligo, Tallaght, Tralee, Waterford, Blanchardstown and Dun Laoghaire. They operate under the remit of the *Regional Technical Colleges Acts* of 1992 and 1999. Each institute has a governing body, a director, and academic council. The directors are members of the Council of Directors of Institutes of Technology, which acts as a co-ordinating agency on policy and research issues for the institutes. The Council also acts as a negotiating body with the Department of Education and Science on matters of importance to the institutes. The Waterford and Cork Institutes have the right to award their own degrees. All the institutes, including the DIT come under the general framework of the National Qualification Authority of Ireland and HETAC is the validating body for most of their awards. As part of its programme of structural reform, the designation of the institutes of technology under the Higher Education Authority is being actively considered by the DES.

Adult education

In recent years, adult education has assumed a higher priority in policy as the concept of lifelong learning within the knowledge society has taken greater hold. During its EU Presidency in 1996, Ireland took the initiative of preparing "A Strategy for Lifelong Learning", which was endorsed by the other EU Education Ministers. In 1998, the government published a Green Paper, entitled *Adult Education in an Era of Lifelong Learning*. This was followed by a national consultation process including a National Forum on Adult Education. Then in 2000, the government published its White Paper, *Learning for Life*, which set out its policy on adult education for the years ahead. The *Universities Act* (1997) identified the role of the universities in promoting "lifelong learning through the provision of adult and continuing education". The *Qualifications (Education and Training) Act* of 1999 is regarded as of major importance in the recognition, validation and accreditation of adult programmes. This work is now being developed by the NQAI, and its associated agencies, Further Education and Training Awards Council (FETAC) and HETAC. The Adult Learning Council specified in the White Paper was established in 2002. This council and representatives of key stakeholders are expected to play a pivotal role in adult

education provision. The *National Training Fund Act* (2000) reformed the method in which adult and continuation education is financed. Thus, it can be seen that an impressive framework of policy formulation and legislation has recently given a greater impetus to adult and community education.

The significant agencies relating to adult education are AONTAS, the National Association of Adult Education and NALA, the National Adult Literacy Agency, which were established in 1969 and 1980 respectively. There are a great many providers of adult education in the state. The Vocational Education Committees (VECs) traditionally have provided a central role in the provision of adult education, and they continue to do so, directly through their schools and colleges and through supporting agencies such as Community Training Workshops, the Prison Education Service and community groups. Community and comprehensive schools also offer adult education services and, recently, some secondary schools also provide adult courses. Most third-level colleges are actively involved in the provision of adult education through extra-mural courses, distance-learning facilities, etc. The colleges of the National University of Ireland in Cork, Dublin, Galway and Maynooth have separate Adult Education or Extra-Mural Departments. NUI Maynooth offers certificate, diploma, degree, masters and doctoral degrees in Adult and Community Education. It also offers a diploma in Adult Guidance for trainers of adults. The National Distance Education Centre (NDEC), located at Dublin City University (DCU) ensures that adults throughout the country have access to higher education through distance learning arrangements. Many other private and voluntary institutions currently provide education and training courses for adults. Notable among these are the National College of Ireland (NCI), the Institute of Public Administration (IPA) and the Peoples' College. As well as college and institution-based activity, there is also emphasis on distance learning, community-based learning and workplace learning, and these areas are in the process of growth and development.

A range of schemes under the broad label of "Back to Education Initiative" (BTEI) has been put in place to encourage further engagement with education. These include:

- Basic and Community Education Provision.
- Youthreach.
- Senior Traveller Training Centres.
- Vocational Training Opportunities Scheme (VTOS).
- Post Leaving Certificate Courses (PLCs).
- Adult Literacy.

The priority of the BTEI is to tackle the low literacy levels in Ireland in international terms as highlighted by the International Adult Literacy Survey (1997) and the low levels of educational attainment in the 25-to-64 age-group

(only 51% of this age cohort have completed second-level education). It also seeks to address the inflexibility that has been a feature of adult education provision, by making courses more accessible and available. Supports are provided to enable participants to combine further education with work and family commitments. One of the key aims is to engage the most marginalised and hard-to-reach groups in society. The BTEI hopes to increase the number of participants annually from 32 000 at present to 52 000 by 2006. A number of other schemes such as those run by the Area-Based Partnership Companies are aimed at supporting community development and social inclusion through education training and services in designated disadvantaged areas.

It may be noted that for a small country, Ireland has a great variety of agencies with responsibilities for different aspects of education. An advantage of this is the sense of engagement by many personnel and agencies with specialist expertise in different sectors. While some fragmentation may exist, good relations and communications generally exist between the different agencies, and the size of the country also facilitates personal contacts between the personnel involved.

Third-level colleges other than universities and institutes of technology

As well as the seven universities, the thirteen institutes of technology and the DIT, there are many other institutions which are involved in the provision of third level education. These vary greatly in their origin, ownership, status (private or state-aided), modes of governance, range of studies, and validation of courses. Some are private commercial and others are private non-profit-making. Some are linked to particular careers or professions, while others are devoted to general public administration or to management in the private sector. A number of colleges focus particularly on subject areas such as theology, art or music. There are colleges which are closely linked with existing universities for their academic work and awards, while many others are linked to the HETAC, to professional awarding bodies or to non-national universities for their qualifications. Significant inflows of overseas students come to private colleges. Some private colleges provide outlets to higher education for students who do not achieve sufficient points for entry to certain career paths in the universities. One college is particularly devoted to part-time studies, and lifelong learning provision for non-traditional students. An emerging trend is for a number of institutions to be devoted to distance and online learning. Thus, there is a great diversity in the type of higher education which is provided by the many institutions existing apart from the universities and institutes of technology.

While some of the institutions have been long established, there has been a notable expansion in the colleges and the range of third-level courses on offer over recent decades, but particularly since 1990. This trend matches the increasing public demand for third-level education, is linked to the impact of "points system", is associated with shortages of places in some established third-level institutions at a period of a bulge in school leavers, and is influenced by the awareness of the value of a lifelong learning approach. Throughout the 1990s, the colleges were increasingly integrated into the third-level sector. Such recognition included:

- The Institutional Designation of a number of colleges by the National Council for Educational Awards (NCEA) now the Higher Education and Training Awards Council (HETAC).
- The validation by the NCEA (HETAC) of undergraduate and postgraduate awards, where previously such validation was sought outside the state.
- The provision of tax relief for those studying approved programmes in independent colleges.
- The inclusion of the colleges in the Central Applications Office (CAO) system.
- State funding of students on specially designated programmes (*e.g.* Griffith College Dublin's undergraduate computing science programmes as part of the Government Skills Initiative, extension of means-tested grants to students at St. Nicholas Montessori).

In 1993, a number of the colleges established the Higher Education Colleges Association (HECA) to represent the independent colleges. Current members are: Griffith College Dublin, Dublin Business School, HSI Limerick, Skerry's College Cork, St. Nicholas Montessori Dun Laoghaire and Kimmage Manor. Other independent colleges, not members of HECA, include Portobello College, American College Dublin and Hibernia College.

The range of subjects being offered has expanded to include accounting, business, computing, design, finance, language, law, marketing, media, philosophy, teacher training, and theology. Most of the programmes are taught but there is a small amount of postgraduate research activity, for example, in the theology and philosophy fields. The majority of the academic programmes are offered at certificate, diploma and degree level, with a growing number of programmes being offered at postgraduate diploma and masters level. The sector also continues to be actively involved in the provision of preparation programmes for professional examinations.

The majority of the academic programmes lead to HETAC awards and are operated within NQAI structures. A minority of academic programmes are also offered under the auspices of UK or US universities (*e.g.* Liverpool John Moore's, University of Glamorgan, Nottingham Trent University, Lynn University, etc.).

The independent colleges represent a significant and growing sector of third-level education in Ireland attracting both Irish and international students to their programmes. Statistics of the Department of Education and Science for the year 2001-02 indicated that about 3 100 full-time students were in state-aided third-level institutions, other than HEA-designated institutions, institutes of technology and teacher education colleges. In non-state-aided institutions, there was a total of 6 259 full-time students, bringing the overall total for such full-time students to nearly 10 000. It is noteworthy that 34% of these students were aged 23 or above, much higher than the ratio in the other national institutions. It is also significant that in the year 2003, HETAC made 3 360 academic awards to these institutions.

It is not possible to give a detailed account of the various institutions in this report. However, it may be illustrative of the sector to give an outline of the main institutions and a general categorisation of their activities and mode of awarding qualifications.

Colleges of Education

Colleges of Education are devoted predominantly to teacher education of primary and post-primary teachers, although in recent years some of the colleges offer general degrees and postgraduate studies. The colleges are privately owned, but state-supported. All of the colleges of education are closely linked to universities either as Recognised Colleges or as Associated Colleges. Accordingly, their academic and quality assurance procedures come within the university framework and follow its patterns. The two largest colleges are St. Patrick's Drumcondra, a college of Dublin City University, and Mary Immaculate College Limerick, a college of the University of Limerick. Three smaller primary teacher education colleges (*Coláiste Mhuire*, Marino Institute of Education; the Church of Ireland College of Education; and Froebel College of Education), all located in Dublin, are associated colleges of Trinity College Dublin. Mater Dei Institute specialises particularly in the education of post-primary teachers of religion and school chaplaincy, and is a college of Dublin City University. St. Angela's College of Education for Home Economics Teachers, Sligo, is a recognised college of the National University of Ireland, Galway. All these colleges benefit from state support and free student undergraduate fees. Their academic awards are made by the relevant university. Their governing, management and staffing procedures are university approved. In almost all cases, the relationships with the universities date from the early 1970s.

St. Nicholas Montessori College

Located in Dun Laoghaire, Dublin, this private college is devoted to the training of teachers in the Montessori method, with special emphasis on early childhood. Its qualifications are accredited by HETAC.

Institutions linked to public service careers

The Institute of Public Administration (IPA)

The Institute of Public Administration became a Recognised College of the National University of Ireland Dublin in 2001. Accordingly, it comes under the academic regulations of the university, which validates its qualifications. The institute offers undergraduate, postgraduate and professional courses in public management and related subjects. Most of these courses are available both by lecture and distance education modes of study. The institute receives a grant-in-aid from the Department of Finance.

Garda College, Templemore

As its name indicates, this college is devoted to the training of Garda (police) recruits. The recruits follow a two-year course which leads to a diploma awarded by the HETAC. The college offers an undergraduate degree for senior staff, also validated by the HETAC. The Garda Training College is financially supported by the Department of Justice and Law Reform.

The Military College, Curragh Camp

Devoted to the training of defence forces, some of the courses of the Military College are validated by HETAC, which awarded 50 qualifications in 2003. Senior officers now participate in a masters course, jointly provided by the Military College and the National University of Ireland Maynooth.

Colleges linked to professional careers

Royal College of Physicians of Ireland (RCPI)

This college, whose first charter dates to 1667, is an Examinations and Conjoint Examination Body. The college grants a Fellowship (FRCPI), a Membership (MRCPI) and a Diploma in Obstetrics.

Royal College of Surgeons in Ireland (RCSI)

Founded in 1784, the College began to train doctors in its medical school in 1866. In 1977 the RCSI became a Recognised College of the National University of Ireland Dublin (UCD). The RCSI graduates receive an MB degree, in addition to the letters testimonial LRCP and LRCS. Its academic procedures and awards come under the approval of UCD. The college is an independent institution. The RCSI has developed into a major international medical school with undergraduate students from 43 different countries.

The Honorable Society of King's Inns

The Society provides a course of education and training which enables its students to be admitted to the degree of barrister-at-law and be called to the Bar of Ireland and admitted to practise in the Courts of Ireland.

Law Society of Ireland

This is the representative body of the solicitors' profession in Ireland. It exercises statutory functions in relation to the education and regulation of the profession. It provides a two-year diploma in legal studies, prior to entry to the profession.

Independent non-profit institutions

National College of Ireland (NCI)

Dating from 1951, the National College of Ireland is a non-profit, third-level college which offers a range of full-time and part-time courses at different levels from foundation, through to certificate, diploma degree and postgraduate level. NCI has two schools: the School of Business and Humanities, and the School of Informatics. The NCI's courses are accredited by HETAC and FETAC. Of its current student enrolment of 5 500, 70% are over 23 years of age, and 85% study part-time. As well as its campus in central Dublin, NCI makes courses available through 40 off-campus centres, operating distance and online methods. At present, 50% of the part-time students study off-campus and online. The NCI is a state-assisted institution, with government funding of about 40% in relation to its full-time student provision.

Irish Management Institute (IMI)

The IMI is an independent organisation owned by its corporate and individual members. The institute offers management development programmes from half-day to multi-year primary and masters degree programmes aimed at improving the level of corporate performance. Its courses are open to civil servants as well as private industry managers and employees. As well as courses leading to HETAC awards, it also offers programmes jointly with the University of Dublin (Trinity College).

Tipperary Rural and Business Development Institute

Established in 1998, the Tipperary Institute combines third-level education with rural and business development. The institute has two campuses, located at Thurles and Clonmel. Its courses are validated by HETAC, which in 2003 conferred 128 academic awards to its students.

American College Dublin

This is a non-profit private institution, established by Lynn University, Florida, USA, in 1993. It is fully accredited by HETAC and offers degree courses. In 2003, 61 of its students were awarded degrees by HETAC.

Other private colleges

Portobello College Dublin

Portobello College is a private third-level institution, founded in 1989. The college offers degree programmes in accounting and finance, marketing, business studies and law. It also provides National Certificate courses in business and computing subjects. The college's emphasis is on employment-focussed qualifications. Its courses are accredited by HETAC and Edexcel in the United Kingdom. In 2003, students from Portobello College were awarded 224 qualifications by HETAC.

Griffith College Dublin

Griffith College has a student enrolment of about 3 000 full- and part-time students. It offers the full range of programmes from certificate level to masters degree, all awarded by HETAC. Other professional qualifications are also offered. Griffith College also provides courses overseas in Pakistan, Russia and China. HETAC granted 390 awards to students of this college in 2003.

Dublin Business School (DBS)

Established in 1975, DBS is a private third-level college which specialises in career-focussed undergraduate, postgraduate and professional education. It offers courses in the arts, business, humanities and psychology. It is a designated institution of HETAC and of Liverpool John Moore's University and its various programmes are validated by these bodies. In 2003 the DBS was acquired by Kaplan, the education division of the Washington Post Company. About 4 000 students are enrolled in the DBS. Its student body includes a growing enrolment of overseas students, and it also operates a satellite campus in Kuala Lumpur, Malaysia. Students from DBS and its associated School of Art were conferred with 492 HETAC awards in 2003.

Hibernia College

Hibernia is a recently-established college providing online higher education and training programmes. Its courses are accredited by HETAC. They include programmes in public administration, criminal justice, hospitality management and primary teacher training.

HSI Limerick Business School

The HSI Limerick Business School was founded in 1951. It offers national certificate, national diploma and bachelor courses in business studies and marketing which are validated by HETAC. It has a range of other courses in subjects such as management, electronics, and accounting technicians, with qualifications awarded by other validating bodies and professional associations. The school also offers diploma courses at night in business psychology and computer subjects.

Skerry's Cork Business School

This school provides a range of courses at certificate, diploma and bachelors level very similar in range and in validation procedures to the HSI Limerick Business School, which operates under the same management.

Colleges for arts subjects

National College of Art and Design (NCAD)

The NCAD traces its origin to 1746. It is now a Recognised College of the National University of Ireland Dublin (UCD). It provides courses in design, fine art, history of art and design, and it acts as a centre for the training of teachers of art for post-primary schools. As a Recognised College its academic courses and procedures come under the approval of the university.

The Burren College of Art

This is an independent third-level fine art college. Designated under HETAC, it offers semester and summer programmes to Irish and international students. A masters programme in association with NUIG was introduced in September 2003.

Royal Irish Academy of Music (RIAM)

Dating from 1848, the RIAM teaches music to all age levels through the earliest grades to diploma level, undergraduate and postgraduate degrees. Students begin third-level music education having already experienced up to 15 years of study, with assessment and examination on an annual basis in most cases. The RIAM offers four diplomas for teachers and performers. The RIAM's BA in Music Performance is validated by Dublin City University. Dublin City University also validates its Masters Degree in Music Performance. The RIAM has plans to introduce a doctoral programme in the near future.

Colleges with a special emphasis on religious and cognate studies

St. Patrick's College, Maynooth

Founded as a seminary in 1795, St. Patrick's College became a Pontifical University in 1895. The Pontifical University comprises the Faculties of Theology, Philosophy and Canon Law. Currently, a number of educational institutions in Ireland and Great Britain are affiliated to the Pontifical University, which provides accreditation for the degrees and diplomas that are taught in these centres. St. Patrick's College has co-operative links with the National University of Ireland Maynooth and the two institutions share the same campus.

The Milltown Institute

The Milltown Institute dates its origin as a third-level college to the 1880s. It comprises a Pontifical Athenaeum and a civil dimension which is designated under HETAC. The Pontifical Athenaeum offers pontifical degrees up to and including doctorates in philosophy, theology, spirituality, sacred scripture and pastoral studies. The institute also offers a range of courses from the level of national certificate to doctorate, which are validated by HETAC in subject areas such as theology, philosophy, spirituality and biblical studies. In 2003 HETAC conferred 83 awards to students from the institute. The Milltown Institute also offers civil awards validated by the University of Wales, Lampeter. Mature students comprise more than half the student body. The civil dimension of the institute has applied to the National University of Ireland for Recognised College status, which is expected to be granted in 2004.

Development Studies Centre, Kimmage Manor

Established in 1974 by the Congregation of the Holy Spirit (Holy Ghost Fathers), the centre offers courses in development studies at national diploma, graduate diploma and masters levels, full-time and part-time. These courses are all accredited by HETAC.

Irish School of Ecumenics

Since 2001, the Irish School of Ecumenics has been an integrated institute within Trinity College Dublin. It offers courses leading to M.Phil. and PhD degrees and postgraduate diploma awards. It offers a range of continuing education courses at outreach centres in the Republic of Ireland and Northern Ireland with an emphasis on peace and reconciliation studies.

All Hallows College

All Hallows, one of Ireland's first missionary seminaries, was founded in 1842. Nowadays, it provides full- and part-time courses for lay people, religious and seminarians. Its BA, graduate diplomas, masters and PhD degrees are

validated by Dublin City University. Its BA subjects include theology, philosophy, psychology, pastoral theology and English literature. It also offers graduate diploma/masters courses related to pastoral ministry and leadership, as well as continuing professional development courses.

St. Patrick's College Carlow and St. Patrick's College Thurles

These colleges, established as diocesan seminaries, now offer some third-level courses accredited by HETAC. In 2003, St. Patrick's College Carlow had 154 students conferred with HETAC awards. The number at St. Patrick's Thurles was much smaller with four conferees.

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ISBN 92-64-01431-4
Reviews of National Policies for Education
Higher Education in Ireland

PART II

Chapter 11

Recent Reform and Legislative Framework in Higher Education

This chapter describes the legislative framework of higher education and its evolution in recent decades. It highlights the goals and processes of higher education reform, the Universities Act of 1997, the development of the non-university sector and the national qualifications system, and changes in research policy.

Background to reform

During the 1990s, Irish education experienced an unprecedented level of analysis, appraisal and policy formulation. Education was viewed by government as a strategic plank of policy in the promotion of economic, social and cultural development. From 1987 to the present, social partnership agreements concluded between the government and key stakeholders have highlighted the importance of education. The agreements also gave rise to a high degree of stability in industrial relations. This favoured the ongoing success of government plans in attracting foreign investment, particularly from world business leaders in information technology, chemical and other industries. It was realised that investment in education was crucial in human resource development. The remarkable levels of economic growth, which emerged gradually over the decade, both provided the resources and fostered the confidence for such investment.

Arising from its own analysis and engagement with international organisations such as the OECD and the EU, Ireland was alert to the emergence of the knowledge society. Within this context, it was recognised that higher education and research would assume greater priority of attention. Within the overall educational reform framework, the restructuring and further development of higher education was undertaken.

Goals and process of reform

The Department of Education and Science and key agencies in higher education have, over recent years, engaged in much debate, reflection and planning as they seek to chart the way forward for higher education in this challenging era. In 1992 the government published its Green Paper, *Education for a Changing World*. The section on higher education opened with a strong recognition of its achievements, stating:

> Higher education has contributed greatly to the personal education of students, to cultural, economic and social development, to the promotion of the professions, and to the provision of new knowledge and scholarship. (Government of Ireland, 1992)

In setting out proposals under many headings, the document referred to the approach in Ireland as being "fully in line with approaches in all other developed countries". It included proposals on such themes as course structures, research, quality assurance, funding and co-ordination, college-industry links and legislation. Taken together, these signalled many new directions for policy within

the higher education sector. With regard to legislation, it noted that the NIHEs at Limerick and Dublin had been granted independent university status by legislation in 1989. It focussed attention on new legislation in hand to give the DIT and the RTCs statutory status with more institutional autonomy. The Green Paper stated that new legislation would be prepared to give greater autonomy to the colleges of the federal National University of Ireland (NUI). It also promised that more comprehensive university legislation would be brought forward for all the universities "that would be more compatible with the role, function and operation of the universities in modern society". These statements signalled the most comprehensive legislative package for higher education ever attempted in Ireland.

One of the distinguishing features of Irish educational policy formulation in the recent past has been the extensive consultative process on which the stakeholders have engaged. The Green Paper was debated widely for fifteen months before the establishment of the National Education Convention in October 1993. This was a forum for multilateral dialogue by all the education partners under the control of an independent, academic secretariat. The responsible agencies in higher education made presentations and engaged in discussions. Key issues raised by the Green Paper were explored, with more detailed discussion focusing on research and quality assurance issues. A good degree of consensus was established between participants.

Shortly after the National Education Convention, in December 1993, the Minister for Education requested the Higher Education Authority to set up a Steering Committee to advise her on the future development of the higher education sector. A Technical Working Group, set up to support the Steering Committee, issued an interim report in January 1995. The Steering Committee's Report on *The Future Development of Higher Education* was published in June 1995. The government also published its White Paper, *Charting Our Education Future*, in 1995.

Having stated at the outset that "the State will respect the autonomy of institutions to determine ways and means through which they will fulfil their particular roles, within the overall aims for the system and the policy framework articulated by the Minister", the White Paper went on to set out government policy positions on key areas of higher education. The Minister for Education reiterated her intention of giving greater individual autonomy to the colleges of the NUI, while retaining the National University of Ireland as an institutional framework. These changes would be on the basis of proposals put forward by the senate of the NUI. More comprehensive legislation for the university sector as a whole was promised. The legislation for the DIT and RTCs had been passed by the *Oireachtas* in 1992. As was to be expected, the prospect of university legislation aroused a good deal of interest and concern. During autumn 1995, the Department of Education held discussions with the presidents of the universities,

in their personal capacities, on proposals for draft legislative provisions. The minister issued a position paper on university legislation in November 1995. Building on the outlines of the White Paper, it fleshed out more specific issues which the legislation would address, and the rationale of proposals. Considerable debate took place in higher education institutions and organisations on the implications of planned legislative change.

The *Universities Act*, 1997

Eventually, in July 1996, the Universities Bill was published. It was a comprehensive measure which applied to all universities in the state. It included provisions for the recognition of the NUI colleges as largely autonomous universities, as had been promised. The bill set out the objects and functions of a university, the structure and role of governing bodies, staffing arrangements, composition and role of academic councils, arrangements for planning and evaluation of progress and sections relating to finance, property and reporting. With such a comprehensive approach, it was not surprising that the bill drew a great deal of reaction, with the universities expressing concern on many aspects of it, particularly those sections where great sensitivity existed on the interface between the powers of the Minister for Education and Science, and the HEA *vis-à-vis* the institutions. Arising from discussions with involved parties and debates in parliament, a large number of amendments were made to the draft legislation, which was enacted in May 1997. The *Universities Act, 1997* is the most significant piece of university legislation since the state was founded. It represents a modernisation of the university system in line with contemporary thinking on the role of the university in modern society. It would appear that a reasonable balance has been struck between safeguarding key aspects of institutional autonomy and providing for the needs of public policy and accountability, while updating the composition of governing authorities and modernising institutional procedures. Section 14 of the Act states:

A university, in performing its functions shall … be entitled to regulate its affairs in accordance with its independent ethos and traditions and the traditional principles of academic freedom, and in doing so it shall have regard to:

i) the promotion and preservation of equality of opportunity and access;

ii) the effective and efficient use of resources; and

iii) its obligations as to public accountability.

In the context of the mass higher education era, new accountability procedures are incorporated in the *Universities Act*. The governing authorities are required to see that strategic development plans are prepared for periods of not less than three years. Governing authorities are also required to see that the chief officer of a university establishes procedures for evaluating the quality

of teaching and research carried out in the university. The Higher Education Authority has an overseeing role with regard to the strategic plans and the quality assurance procedures. Each university is required to prepare an equality policy focusing on access by economically and socially disadvantaged students and on equality, including gender equality, in all the activities of the university. The chief officer is also required to prepare an annual report on the operation of the university during the year. New budgetary arrangements have been introduced; unit cost accounting prevails; and the HEA and the Comptroller and Auditor General have significant powers of approval and investigation. Such measures are reflective of tighter accountability concerns in view of the large public investment in higher education. Overall, it can be concluded that the *Universities Act, 1997* is a landmark in the history of university education in Ireland.

Development of the non-university sector

As was noted earlier, since the 1960s, Ireland has developed its higher education system as a binary model, with the universities forming one dimension and the DIT and RTCs (now institutes of technology) forming the second prong. The National Higher Education Institutes (NIHEs) of Limerick and Dublin had also formed part of this sector, but legislation in 1989 granted them university status. The RTCs, established in the early seventies, operated under the aegis of the Vocational Education Committees (VECs) of their region, as did the Dublin Institute of Technology in Dublin. Increasingly, during the 1980s, these institutions regarded this as an out-dated and restrictive framework. Eventually, in 1991, a bill was introduced designed to give the RTCs a greater degree of autonomy and self-governance, and following long debates in parliament, the bill became law as the *Regional Technical Colleges Act* (1992). The RTCs, however, which continued to be monitored directly by the Department of Education and Science, pressed for more power and status, with Waterford RTC in particular pressing for recognition as a university. In 1995, the HEA Steering Committee Report had recommended that the title of RTCs should be altered to "Regional Technical Institutes". In 1997, the Minister for Education agreed to confer the title Institute of Technology on Waterford RTC, but, predictably, this caused concern to other RTCs which considered that they also had a claim to such status. The Minister appointed a special group to advise her on the technological sector. It recommended that all RTCs should be designated Institutes of Technology, which occurred in January 1998. It was also envisaged that in future, institutes could apply following the fulfilment of certain criteria to award their own sub-degree and degree qualifications. By 2003, two institutes (Waterford and Cork) had the right to award their own degrees. Waterford still retains the aspiration of being recognised as a university and continues to press its case.

Contemporary with the *Regional Technical Colleges Act* of 1992, was the *Dublin Institute of Technology Act (DIT Act)*, which removed it from the authority of the City of Dublin Vocational Education Committee. The *DIT Act* allowed it to confer diplomas, certificates or other awards. It was also granted other functions which could include the conferring of degrees, postgraduate degrees and honorary degrees, which, under the act, could be assigned to it by the Minister for Education. In December 1995, the Minister for Education appointed an international review team to review quality assurance procedures in the DIT. In its report, published in the following year, the group recommended that degree-awarding powers be extended to the DIT for the awards to be granted from the year 1988-99, which came into effect as recommended. In the context of the debate in parliament on the *Universities Bill*, 1996-97, the DIT lobbied strongly that it be awarded recognition as a university under Section 9 of the bill. This was not conceded, but the Minister for Education agreed to set up a body to advise the government on whether the DIT should be established as a university. This international review group reported in 1998. From a range of options, the review group recommended that, pending some developments, university status could be granted within a three to five-year time-span. In its response to this report, the Higher Education Authority recommended against the award of university status, and stated that it would require a further review group in later years, if DIT was to be designated as a university.

Thus, it can be noted that the non-university sector of higher education has experienced a very significant alteration within the last fifteen years. The two NIHEs were designated as universities, the RTCs got new legislation and were renamed as institutes of technology, with expanded powers, and the DIT also got new legislation, increased academic powers, and has been seriously considered for university designation. Yet, in parallel to these developments, official policy statements and reports have continued to emphasise the binary character of the higher education system, and the non-university sector continues to come under the general control of the Minister for Education and Science. In 1992, the Green Paper concluded that "it is important that the distinctive missions of the two sectors should be maintained and fostered", while it urged that links between the universities and the RTCs be improved to better serve regional needs. The binary issue was discussed at the National Education Convention and its report recorded strong pressure from the RTC sector against any "capping" of its degree-level work, but also noted concern by others of a danger of "academic drift" by this sector to the disadvantage of the colleges' mission. The White Paper (1995) came down unambiguously on the maintenance of the binary system stating:

> The diversity of institutions and the separate missions of the two broad sectors will be maintained to ensure maximum flexibility and

> responsiveness to the needs of students and to the wide variety of social and economic developments. (Government of Ireland, 1995)

The report of the HEA Steering Committee (June 1995) also favoured the retention of a binary tradition stating:

> The Committee fully endorsed the maintenance of a diversified system of higher education to meet the varying needs of students, of society and of the economy. (HEA, 1995)

It urged the extra-university sector to develop its distinctive role in the area of technician training, the "practical" orientation of its programmes, the engagement with applied research and experimental work in product development, and the regional focus of its work. While recognising the difficulty in projecting forward with accuracy in this area, the Steering Committee recommended that the percentage of the total number of students in the extra-university sector should increase from 40% in 1994/95 to 44% by the year 2000. While such endorsements of the binary system are significant, and official policy has not altered, it seems clear that the distinguishing characteristics of both sectors are becoming more blurred, as the concept of a tertiary education sector takes shape, responsive to mass higher education needs in contemporary society.

Toward a National Framework of Qualifications

Of great significance for the extra-university sector was the statement of government policy in the White Paper to establish an Irish national certification authority, TEASTAS, which would be "responsible for the development, implementation, regulation and supervision of all non-university third-level programmes, and all further and continuation education and training programmes". The Minister for Education established an interim TEASTAS authority in September 1995. In its *First Report*, TEASTAS emphasised the potential for two-way transfer within the binary system:

> The Board believes that the possibilities for access, progression and mobility are likely to significantly increase in the future through greater two-way transfer of students between universities and institutions within the TEASTAS framework. (TEASTAS, 1997)

TEASTAS laid the groundwork in preparation for the *Qualifications (Education and Training) Act*, 1999. This act established the National Qualifications Authority of Ireland (NQAI), the Higher Education and Training Awards Council (HETAC), and the Further Education and Training Awards Council (FETAC). These latter councils absorbed the work of the National Council for Educational Awards (NCEA), the National Council for Vocational Awards (NCVA) and a range of other existing award agencies. The awards of the institutes of technology are under the general aegis of the NQAI. The universities and DIT are providers of programmes

and are also awarding bodies in their own right. They are required to liaise with the NQAI so that their awards fit within the NQAI's National Framework of Qualifications, which was formally launched in October 2003.

Based on the guiding principles of access, transfer, progression and quality, the framework aims to provide a comprehensive pattern of awards whereby all certificated study and approved learning experience are accredited in a way which maximises the opportunities for citizens to progressively engage in education. The awards are structured on ten levels based on learning outcomes criteria. In essence, it is the National Qualifications Authority that now has the responsibility for all certified awards and qualifications in the non-university sector. It is expected that good collaboration will exist between the Authority and the universities. In a lifelong learning era, it is considered that issues of access, credits, equivalence, and certification should be clear for all citizens and a seamless web should exist for learners throughout their lives to have the maximum opportunity for access to and certification of educational endeavours.

The changed role of the HEA, set out in the government's White Paper, *Charting Our Education Future*, also presaged new developments for the framework of higher education. The remit of the HEA was to be extended, on a phased basis, to all publicly funded third-level colleges including the DIT and RTCs. Among its extensive responsibilities "across the whole sector" would be:

> Ensuring, within agreed policy parameters, a balance of level, type and variety of programmes among the various institutions, including an appropriate balance between certificate, diploma, degree and postgraduate work, as well as relevance to the occupational and skill needs of the economy. (HEA, 1995)

This emphasises that, while the binary approach is being maintained in government policy, the comprehensive overseeing role of the HEA, as envisaged above, is intended to ensure appropriate balances in course provision aligned to the needs of the economy. As previously indicated, it is proposed that the institutes of technology will come under the remit of the HEA, but further planning is needed.

Changing research policy

As with other areas of higher education policy, the issue of research has come under close scrutiny in a range of reports and policy documents from the early 1990s. This was against a backdrop of very inadequate funding of research allied to a serious underestimation of its significance for a developed country with aspirations for economic growth and social development. For instance, in 1982 public funding of research amounted to only about £12 million. Over the subsequent decade, it grew to about £48 million, largely due to EU funding which, in turn, tended to dictate the nature of the research being undertaken.

Capital funding for research purposes was very inadequate, while the ongoing provision of about £2 million per annum for research equipment was derisory in modern circumstances.

The debate at the National Education Convention (1993) deprecated the low level of funding for research and the gross undervaluation of the importance of higher education research for Irish society. It also urged a more explicit national policy on the funding of research. A strong recommendation also emerged that national research councils should be established for the natural sciences and for the humanities and social sciences. Among key policies set out in the White Paper (1995) were that the unified teaching and research would be provided in a separate budget open to competitive bidding, most basic and strategic research would be conducted in the universities, while the focus of the extra-university sector would be on applied, regionally-oriented research. Each institution would be required to develop and publish an explicit policy on its approach to research. The White Paper held off on a more explicit policy on research as a number of studies on the issue were pending. The report of the HEA Steering Committee on the future of higher education only dealt lightly with the topic. In 1995 the Science, Technology and Innovation Advisory Council (STIAC) took a strategic view on how science and technology could be more utilised for the benefit of Irish society. This was followed in 1996 by a White Paper on science and technology. In April 1997, a new Advisory Council was established for this area. Meanwhile, the HEA commissioned the CIRCA Group to carry out a study of an unprecedented character. It attempted a comparative international assessment of the organisation, management and funding of university research in Ireland and Europe. Its report was presented to the HEA in December 1996. Its findings had significant implications for future research policy and deserve to be highlighted. In its comparative assessment of Irish research the report stated:

> In terms of quality, many areas of Irish university research now appear to be at or above world levels… Against a background of chronic underfunding, it is quite remarkable that the Irish universities have managed to improve both their research output and their contribution to industry and services in Ireland. … Considering the scientific, social, cultural and economic contributions of university research, it is apparent from our analysis that there is something seriously amiss with public policy towards the support of higher education research in Ireland. (HEA, 1966a)

As regards, funding, the report stated:

> Public funding of higher education research in Ireland is among the worst in the OECD… There is virtually no financial support for basic science, little post-graduate support and very inadequate funding structures. (HEA, 1996a)

Not surprisingly, in view of the tradition of gross underfunding, when the CIRCA team examined the management, planning, organisation, evaluation and reporting mechanisms for research in Irish universities, it found that these lagged behind best practice in the European universities which the team visited. As well as its recommendations for increased funding for research and new structures for its distribution, most of the CIRCA team's recommendations emphasised the need for Irish universities to strengthen the organisation and management of university research. The report supported the proposal of setting up two research councils, the further development of a dynamic interface with industry and services, and the establishment of inter-university and multi-disciplinary collaboration.

In the light of subsequent developments, the focus and debate on research policy in the mid-nineties may be noted as a turning point for research in Irish higher education. The analysis, diagnosis and prescriptions had been made and, crucially, the political, public and collegiate will were not found wanting with regard to strategic decisions in setting a new and dynamic agenda for high-level research. The Programme for Research in Third Level Institutions (PRTLI) was launched in 1998. This programme, which is managed by the Higher Education Authority on behalf of the Minister for Education and Science, has established a competitive framework for research bids by higher education institutions. It is now in its third cycle and has expended over EUR 600 million. This was funded in part by the private sector, which is a recent trend in Irish education funding. The PRTLI programme is already funding over 1 500 researchers on some 60 research programmes, and has also founded 33 new research centres. The PRTLI focuses on building institutional capacity (physical and human capital) across a range of disciplines, and funds priority areas. The PRTLI has significantly improved the national research infrastructure and has made Ireland a more attractive location for world class researchers. The improved research capacity has also attracted investments from other sources, *e.g.* the Framework Programmes of the EU.

The Minister for Education and Science set up two new research councils, as had been earlier recommended. These are the Irish Council for Science, Engineering and Technology (IRCSET) and the Irish Research Council for the Humanities and Social Sciences (IRCHSS). These councils operate a competitive research bidding process by individual researchers, or small clusters of researchers. A new agency, Science Foundation Ireland (SFI), with a budget of over EUR 500 million has been established to invest in basic research in economically strategic priority areas. The first two areas selected for SFI funding are biotechnology and ICT. The SFI has been very successful in attracting world-class scientists to work in Ireland, and in raising consciousness about the need for investment in science. Spending by the Health Research Board and Enterprise Ireland has also been increased. In its National Development Plan, 1996-2006, the Irish Government allocated EUR 2.5 billion to research, technology and

innovation. Thus, over recent years, a dramatic change has occurred in research in higher education in terms of policy, funding and administration. While there are worries that cut-backs in expected funding occurring over the last year may signal a "stop-go" policy, it would seem that the strategic role of research in the creation, organisation, dissemination and use of knowledge within the knowledge society is now firmly established.

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ISBN 92-64-01431-4
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PART II

Chapter 12

The University System

This chapter provides an in-depth look at the Irish university system. Key topics are the changing role of universities, management and administrative systems, financing, quality of teaching and learning, and research trends and developments.

History and development of the university

The story of university education in Ireland is very closely interlinked with Ireland's complex and difficult history. Ireland did not benefit from the great movement of medieval universities in Europe. It was not until 1592 that its first university was established. This was the University of Dublin with its one college, Trinity College. It was founded by Queen Elizabeth I, on the foundation of All Hallows Monastery, which had been taken over by King Henry VIII. The university was established as an *instrumentum regni*, which would promote two key aims of the Tudor conquest – the extension of Protestantism and of the English language and culture. Up to the late eighteenth century, its facilities were confined to those who adhered to the Protestant faith. Subsequent to that date, Catholics and Dissenters could participate. However, the ethos and character of the college retained a strong Ascendancy and Protestant character. In the context of moves towards Irish independence in the early twentieth century, it remained strongly affiliated to the United Kingdom of Great Britain and Ireland. Following political independence, it tended to remain an enclave apart from the mainstream of Irish life. This relative isolation was buttressed by Catholic Church attitudes which prevented Catholics attending there without special permission.

During the 1950s, internal reforms in Trinity College signalled a more expansive approach, and a policy towards greater integration with Irish society. This gathered momentum with the socio-economic changes of the sixties, and was further strengthened by the removal of the Catholic ban on attendance in 1970. The general public was also eager to obtain the benefits of university education in a college of great longevity, in a city-centre situation, and with a distinguished reputation for scholarship.

The second oldest third-level institution in Ireland is St. Patrick's College Maynooth, founded in 1795, with state aid, as a countermeasure to Catholic students going to revolutionary Europe for their studies. St. Patrick's became one of the great seminaries of the English speaking world. Its graduates spread far and wide as part of the Irish diaspora in the nineteenth and twentieth centuries. It became a Pontifical University in 1896 and became a recognised College of the National University of Ireland (NUI) in 1910, following the establishment of that university. Under the *Universities Act* of 1997 the recognised College was raised to the status of a Constituent University of NUI, while St. Patrick's College retained its role as a seminary and Pontifical University.

In 1849 the English Government took the initiative of establishing the Queen's University as a federal institution with three constituent colleges – Queen's College Cork, Queen's College Belfast and Queen's College Galway, whose construction had begun in 1845. These were designed as non-denominational, non-residential, low-fee institutions devoted to modern and applied learning, as well as some of the traditional subjects. While benefiting from impressive new buildings of a neo-gothic character, they faced many obstacles, including an inadequate supply of "feeder schools". From 1850, the Catholic Church opposed their non-denominational character and was also opposed to the state's shaping influence on education. As a counter measure, following the Synod of Thurles in 1850, the Catholic Church set up its own Catholic University which opened in 1854 with John Henry Newman as its rector. Despite Newman's influential writings on the nature of university education, tension arose between himself and members of the hierarchy, and he withdrew in 1858. The Catholic University did not thrive, as it lacked a charter and suffered from limited financial resources. Nevertheless, the institution survived, with some distinguished staff and students until it became absorbed as one of the Constituent Colleges of NUI, University College Dublin, under the Act of 1908.

The issue of satisfactory university education for Catholics was one of the big political questions of the second half of the nineteenth century. In 1879, the government abolished the Queen's University and replaced it by the Royal University. This, however, was purely an examining body which set examinations and awarded degrees to students from the three Queen's Colleges, the Catholic University and students of any institution, or who were privately educated. The Royal University was never regarded as a satisfactory solution, and many efforts continued to be made to resolve the issue. The Robertson and Fry Commissions of the early years of the twentieth century did not produce a solution. Eventually, under Chief Secretary Augustine Burrell, a way forward was found in the *Irish Universities Act* of 1908. This act set up the National University of Ireland, as a federal university, with its three constituent colleges, University College Cork (UCC), University College Galway (UCG) and University College Dublin (UCD). The old Queen's College Belfast was raised to the status of Queen's University Belfast. The institutions were to be non-denominational, non-residential and co-educational. Their courses reflected a strong professional emphasis. The University of Dublin, or Trinity College as it had become more popularly known, had formally decided to stand alone from the new developments, and it formed the third university on the Irish landscape.

The arrangements arrived at in 1908 proved to be an enduring arrangement for many decades. Following political independence, Queen's Belfast became the University of the new Northern Ireland State and tended to look to the British mainland rather than to the Irish Free State for its

influences. In the South, during the first four decades of independence, neither the government nor the business community took a serious interest in the work of the universities. They were neglected as regards funding and resourcing. The universities tended to evolve as elite-type institutions favoured by the middle class who aspired to professional careers for their children. By 1960, the government had accepted that the whole question of higher education, which would form a crucial element in the planned socio-economic development of the state, needed to be examined. With this end in view, the Minister for Education, Patrick Hillery, appointed a 28-person Commission on Higher Education in 1960. Its terms of reference were very wide, and, in effect, included the surveying of every feature of higher education: "Having regard to the education needs and to the financial and other resources of the country, to inquire into and to make recommendations in relation to university, professional, technological, and higher education generally…" (Commission on Higher Education, 1967, pp. i, xxviii).

This was the first comprehensive survey of higher education in Ireland and the first commission since independence to examine the academic and administrative issues involved. Perhaps it was the wide scope and the vast range of issues that were considered that caused the delays in completing the commission's work, and raised problems about some of its proposed solutions. The Commission took seven years to conclude and present its report, a very long time at a period when many educational issues were pressing for resolution.

It is worth noting that while the Commission was engaged in its deliberations, several other educational inquiries were set up and a number of important decisions were taken by government. Just as the Commission was the first major survey of higher education, the *Investment in Education* inquiry, jointly established by the Irish Government and the OECD in 1962, was the first comprehensive survey of the first- and second-level systems. In 1963, a joint study was also undertaken with the OECD on scientific research and technology in relation to Irish economic development. Furthermore, in 1963, the Minister for Education announced his intention of establishing regional technical colleges and, in 1966, the Minister (Donogh O'Malley) set up a steering committee on technical education to advise on regional technical colleges. In December 1966, the Minister brought his major proposal for merging TCD with UCD to the cabinet, which deferred a decision pending the conclusion of the Commission's report. By this stage, the delay in concluding that report was giving rise to political controversy and acrimony.

The Commission's report, as published in 1967, comprised Part I, *Presentation and Summary,* and the *Report* proper in two volumes amounting to 400 000 words. Its 32 chapters were by far the most thorough examination ever made of higher education in Ireland. First, the Commission set out and assessed the structure of

the existing provision for higher education. This produced a rather dismal picture but one that influenced the commission greatly in its recommendations for the future. The piecemeal character of the system and the lack of planning machinery came in for criticism. The commissioners considered that increasing numbers of students, low entry standards, and inadequate staffing and accommodation placed academic standards in jeopardy. They were not impressed by what was being achieved in the areas of postgraduate studies and research, and they criticised the appointments system within the NUI, and the constitution and administrative structures of the higher education institutions.[1] In general, they considered that the inadequacies revealed were "so grave as to call for a concentrated effort to remove them" (Commission on Higher Education, 1967, Presentation and Summary, pp. 22-23).

In trying to establish a guiding principle by which to evaluate future development, the Commission set down "a view of the university": "The university is not a professional academy, or congregation of professional academies, existing merely to provide a training for the several professions… The university is a place for the study and communication of basic knowledge… The university adds to existing knowledge and advances it beyond its present frontiers." The Commission went on to draw a distinction between pure and applied learning and education in the scientific or philosophical principles on the one hand, and training in techniques and practice on the other. It stated that "study of first principles is the distinctive function of the university, and herein lies the university's major obligation in professional training" (Commission on Higher Education, pp. i-122).

In a later section dealing with the university and technology, the Commission argued that the responsibility for technological education should not lie with the university (Commission on Higher Education, 1967, pp. 143-144, 184). Throughout the report there was a consistent view that the university was concerned with first principles and basic research, as distinct from professional training and applied research. This view, coupled with concern about safeguarding standards, which seemed to be at risk under existing conditions, underlay many of the specific recommendations of the commission. These considerations formed the pivotal axis of the report's analysis and its recommendations for the future. The commissioners' solution was to maintain the existing universities for what they saw as their proper role, and to protect standards, by proposing a new type of third-level institution – the "new college" – and diverting some of the professional work to other existing institutions for applied research. The "new college" was devised essentially to help meet the growing demand for third-level places, to enrich the intellectual and cultural life of the provinces, and to provide forms of higher education, lower in standard and with a different emphasis from that of the university.

Interestingly, the Commission ruled out the desirability of a technological university, and did not recommend raising the colleges of technology under the Dublin Vocational Education Committee (VEC) to the status of advanced colleges of technology, on the lines of the contemporary British polytechnics. It did, however, recommend the setting up of a technological authority that would have responsibilities for ensuring that advanced technological education, training, and research were provided in relation to the needs of Irish industry. In keeping with its views on the distinctions between basic and applied learning, that is, "between research and training", the Commission recommended the establishment of a separate national college of agricultural and veterinary sciences "as a fully integrated teaching and research organisation of university standing". And while the university should be concerned with original research in the fields of law and business, the practical and vocational training in these fields should be provided outside the university.

Among other significant recommendations was the dissolution of the NUI in favour of independent university status for the constituent colleges. However, the commission was strongly in favour of greater co-operation between the universities and recommended the establishment of a statutory council of Irish universities, with a right to determine policy in a number of academic areas. It also recommended the setting up of a statutory commission for higher education, with overall planning and budgetary responsibilities, which "would be the keystone of the future structure of higher education". New governing structures for the universities and other higher education institutions should be introduced, along with new appointment procedures, the promotion of research and postgraduate studies, improvements in staff-student rations, a student grants scheme, and improved student facilities (Commission on Higher Education, 1967, conclusion, p. ii). The recommendations concerning students coincided with a period of worldwide unrest by university students, who sought more democratic structures and better facilities.

The Commission's report, finally completed in February 1967, had been impatiently awaited. Reaction was mixed, for the time lag since the Commission had begun its deliberations meant that the debate had, in some respects, moved on. Public attention quickly focussed on a number of specific issues, and the controversy surrounding them tended to distract attention from the overall plan. Many of the criticisms related to the basic core of the Commission's analysis. The distinction between research and training, and the exclusion of the latter from the university, was seen by many as a basic error. The "new colleges" proposal had been, to some extent, prefigured by the government's decision to establish regional technical colleges.

An issue that gave rise to greater public debate concerned the future structure of university education. Here government thinking diverged from that of the Commission, and it was to vary further in subsequent years, giving rise to

much uncertainty. The Commission had recommended the dissolution of the NUI in favour of independent status for its constituent colleges, while leaving Trinity College as it was, but the Minister for Education, Donagh O'Malley, rejected this advice. On 18 April 1967, he made the dramatic announcement that it was the government's intention to establish a single multi-denominational university in Dublin, to contain two colleges based on UCD and Trinity College. O'Malley argued that his proposal made economic, educational, and social sense. It certainly caught the attention of the general public. The minister's perspective was not, however, shared by many interested parties, and very divergent views were expressed in the ensuing controversy, concerning what became popularly known as "the merger proposals".

On 5 July 1968, the new Minister for Education, Brian Lenihan, announced the government's detailed proposals on the reorganisation of the universities. The NUI was to be dissolved, with UCC and UCG gaining independent status. Trinity and UCD were to form a single multi-denominational university based on the two colleges. The statement set out a division of faculties between the colleges. Maynooth College was to become an associated college of this new university. In line with the commission's report, a conference of Irish universities was to be set up to deal with academic issues common to all universities. Also in line with the report, a permanent authority to deal with financial and organisational problems of higher education was to be established.

This latter proposal was the first to be implemented. In the following month, August 1968, the Higher Education Authority (HEA) was established on an *ad hoc* basis; it was given statutory recognition in 1971. Its terms of reference were wide-ranging in respect of the budgetary and planning aspects of higher education. The Minister informed the Authority at its first meeting on 12 September 1968 that it was "an autonomous body" and "in no way an executive arm of the government or of any department of state". The first task deputed to the Authority was to advise the ministers on the nature of the legislation required to put into effect the "decisions already taken by the government on higher education". Accordingly, the HEA opened discussions with university interests and sought their opinions on the proposed changes.

In December 1971, the HEA presented its report on university reorganisation to the Minister for Education. The report took note of the high level of opposition to the single-university proposal for Dublin. By April 1970, representatives of the NUI and TCD had come together and worked out a set of joint proposals, referred to as the NUI/TCD agreement, which was presented to the HEA. The HEA considered that the government proposals of 1967-68 had concentrated the minds of the college authorities and created a context for co-operative planning in the hope of avoiding a fate that neither institution desired. Furthermore, the removal by the Catholic hierarchy in 1970 of the ban on Catholic attendance at Trinity had opened up new possibilities, and Trinity itself had decided to limit its

intake of foreign students to 10% of the total. It was also the case that the continuing increase in student numbers alleviated some of the apparent wastage of resources in unnecessary duplication. The HEA report declared that "in view of these fundamentally altered circumstances we have felt impelled to reassess the entire situation". The HEA's favoured solution was for two universities in Dublin linked by a statutory conjoint board. Certain faculties should be developed in one institution only, with special joint arrangements for medicine and engineering.

In December 1974, the coalition government put forward a different model of university organisation. It favoured a comprehensive model, over the binary model. Among specific proposals there were to be three universities in the state – the National University of Ireland, comprising UCC and UCG; the University of Dublin (Trinity College); and a university constituted from the existing UCD. Maynooth would have the option of becoming a constituent college of any of the three universities. These proposals were, of course, directly contrary to those of the previous government. The National Institute of Higher Education (NIHE) at Limerick would become a recognised college of the national university, as would Thomond College, and the National Institute of Higher Education in Dublin would become a recognised college of one of the Dublin universities. The NCEA would become a council for technological education with responsibilities for co-ordinating and awarding non-degree third-level qualifications. The range of bodies designated under the HEA would be extended, and a conference of Irish universities, meeting on an *ad hoc* basis since June 1974 would be made permanent. The two proposed Dublin universities would acquire a conjoint board, and a division of faculties between the two was set out.[2]

The clear aim of this policy was a concentration of higher-level institutions within a framework of three universities. Other third-level institutions would be linked to one or other of these universities for all degrees and postgraduate work. The status of the NCEA would be reduced. The overall role of the HEA would be expanded as the key overseeing body of the third-level institutions. The conference of Irish universities and the conjoint board of the two Dublin universities were intended to improve co-ordination and co-operation between the universities.

While the emphasis of the new policy was clear, this government shared the previous government's failure to set out a detailed rationale, or an overall conception of what constituted university education. The public was presented with decisions on restructuring, but without the benefit of argumentation on which they were based. Like the previous government's recommendations for higher education, the coalition proposals were highly controversial; like them, they were destined for the most part not to be implemented. However, degree-awarding powers were removed from the NCEA. This created some immediate problems for the non-university sector. The most awkward of these faced

Thomond College and NIHE, Limerick, which were now forced to adapt their courses in line with UCC's requirements in the case of Thomond, and UCG's in the case of NIHE.

In July 1976, the government amended its policy and announced proposals for the setting up of five universities, based on TCD, UCD, UCC, UCG, and Maynooth, with scope for associated and recognised colleges linked to them. A working party, chaired by the Minister for Education, took on the task of preparing the necessary legislation. The return of a *Fianna Fáil* government, following the general election of 1977, led to a further change of policy whereby the "comprehensive" model was abandoned and the "binary" model reinstated. The emphasis of legislation now shifted towards giving statutory status to the new institutions. Degree-awarding powers were restored to the NCEA under new legislation in 1979. Thomond College was given statutory status in 1980. In the same year the National Institutes of Higher Education in Limerick and Dublin were established as independent institutions looking to the NCEA for the validation of their courses and the awarding of their qualifications. The series of legislative enactments in 1979-80 put the seal on the binary approach and gave the new institutions the sense that their foundations were secure. However, a decade later, in 1989, the NIHEs were raised to the status of independent universities, the first established since the state's foundation.

Thus the decade 1967 to 1977 can be regarded as very turbulent, complex and confusing with regard to national policy on the expanding higher education sector. Many of the new institutions felt buffeted by the contradictory policy directions. They did not enjoy a stable period of "settling down" and establishing a clear sense of their own identity. The universities were uncertain for many years of what their future configuration would be. A notable feature of the government's policy initiatives, notably the "merger" proposals of Minister O'Malley and the "comprehensive" model favoured by the coalition government in 1974, was their surprise elements. They had not been preceded by any consultation with the major parties involved. They were very much top-down initiatives, with a view that governments know what is best for the structure of higher education. As regards the universities, following all the proposals and subsequent discussion, the outcome was that no change took place in their legislative status from that which existed in 1960.

The government produced a White Paper on Educational Development in 1980. The opening paragraphs indicated that the government was determined that its own priorities would be paramount in the allocation of funding, and there were signs of impatience with the HEA's status as an independent agency between government and the higher education institutions. The announcement that a bill was to be introduced at an early date for the dissolution of the NUI and the establishment of its constituent colleges as independent universities was not carried through. The early and mid-eighties were a period of stringency in the

national finances, and there was little scope for new investment in higher education. In 1984, the Minister for Education, Gemma Hussey, published a *Programme for Action in Education, 1984-87*. Chapter 6 was devoted to higher education. Its proposals reflected a concern to secure greater productivity and economies in higher education. To improve the "throughput" of students, it was proposed to explore the possibility of a four-term academic year, cutting back four-year degree courses to three years, the introduction of a unit cost system of funding, and a rationalisation of courses within and between institutions. Priority in financial support was to be given to technological studies, and links between higher education and industry were to be intensified. It was also stated that legislation would be brought forward to establish independent universities (Department of Education, 1984). Little of this was carried out, but the concern with the cost of higher education and emphasis on applied studies continued to influence public policy. In 1989, the first new universities in independent Ireland were founded when the National Institutes of Higher Education in Limerick and Dublin were raised to the status of independent universities. It was not until 1997 that legislative changes affecting all the universities were achieved through the *Universities Act* of that year .

One of the striking features of the period from the report of the Commission until the 1990s was the failure to introduce legislation to give effect to different governments' intentions regarding the universities. In the event, this may have been no bad thing and the arrangements arrived at under the 1997 Act seem to have given institutional satisfaction to the seven universities involved, with each enabled to develop its own mission, while being bound by the common features of the legislation, which answered the state's need for modernisation and accountability.

Changing character of university life

While a great deal of public attention periodically focussed on government's legislative intentions, which did not come to pass, at another level an unprecedented period of growth and development was taking place regarding the academic life and facilities of the universities. Each of the universities benefited from new buildings and physical infrastructure. In the case of UCD, it transferred from a confined city-centre site to the more spacious surroundings of its current campus in Belfield, Stillorgan. The University of Limerick also benefited from a spacious, pastoral setting on the outskirts of Limerick. While not having the same space, Dublin City University has established itself as an impressive campus on the northern suburbs of Dublin. The other four universities, Trinity College, NUI Maynooth, NUI Galway and University College Cork, have all greatly expanded and improved their physical plant and environment.

The developing campuses catered for a greatly expanding student clientele. The following table reflects the growth of university student numbers over recent decades.

Table 12.1. **Growth in university full-time student numbers 1965-2003**

1965-66	1975-76	1985-86	1995-96	2002-03
16 007	23 121	32 388	56 698	73 600

Source: Interim Report of the Technical Working Group (HEA, 1995), p. 24 and figures supplied for the HEA, DES.

This represents an almost five-fold increase since 1965, with university students now comprising about 60% of all higher education students. The proportion of women students increased from about 30% in 1964-65 to about 50% in 2002-03. The number of post-graduate students rose from the very small base of about 4% in 1964-65 to 20% in 2002-03.

Despite the great expansion in student numbers, and the introduction of student grant schemes (1968), significant disparities continued to exist in the participation of different social classes in higher education. A variety of studies over the years reveal significant inequities in participation in university education of economically weaker groups. As would be expected, there was a great expansion in course provision, with increased diversification of courses and greater specialisation. Demand for places in the professional faculties led to the introduction in 1969 of a points system based on performance at the school Leaving Certificate Examination for entry to such faculties. This has subsequently become a much publicised aspect of entry to higher education. A *numerus clausus* policy was introduced for high-status professional faculties in universities, which led to very keen competition among aspiring applicants. An expansionary academic staff recruitment policy was adopted to match the increased student body and course provision. Research became a more integral part of the work of academics. The administration of universities became more professionalised, and ICT was incorporated for administrative purposes. Governing structures became more democratic, and included student representatives. Student unions became more highly organised and provided a range of facilities and services for students.

Over recent decades, the government has assumed a much more involved and steering role with regard to university education. As well as expanding participation in line with social demand, it sought to ensure that higher education was responsive to the perceived economic and social goals of society. The subjects which got priority support were technology, engineering, business and entrepreneurship, electronics, information technology and applied science. Institutions were encouraged to establish links with industry and to seek sponsorship from the private sector. Technology parks and

campus industries were established by many institutions. These trends were not without their tensions, and academics have voiced concern about the danger of an imbalance in higher education involving an underestimation of the importance of basic research and of the humanities and social sciences.

By the 1990s, it was clear that university education had been transformed from the condition described by the Commission on Higher Education in 1967. The system had expanded and diversified impressively, a new dynamism and innovatory spirit was in evidence, and a confidence existed about future prospects for development. Then, with the reforms and policy developments of the 1990s, discussed in Chapter 11, the university system was well positioned to cope with these reforms. The following sections set out some trends, pressures and challenges affecting the universities as they seek to position themselves for the years ahead, within the knowledge society.

Developing roles of the university

Ireland, in common with other developed countries, has entered the historic era of mass higher education, which poses new challenges and calls for new responses to the changing circumstances involved. In analysing contemporary societal trends, both national and international commentators have identified these characteristics as leading to a new era, the knowledge society. As the name implies, this form of society places a premium on knowledge – its discovery, articulation, dissemination and application. Both the OECD and the EU have emphasised the need to prepare for such a society with university education as the academic and research pinnacle of the education system assuming a centre-stage priority. In line with the demands of the knowledge society, lifelong learning has been identified as the guiding principle for educational development in the new century. The EU has set out a range of objectives to be achieved by 2010, to ensure that Europe's education system is seen as the key reference framework within the highly competitive globalisation context. In outlining "the role of the universities in the Europe of Knowledge," the European Commission allots a pivotal role to the universities:

> Given that they are situated at the crossroads of research, education and innovation, universities in many respects hold the key to the knowledge economy and society. (CEC, 2003, p. 5)

As with other university systems, Irish universities have been engaged in what might be termed the traditional role of the university. Its characteristics could be summarised as follows:

- Conserving the heritage of knowledge.
- Examining the heritage rigorously and reformulating it.
- Pushing the frontiers of knowledge through research.

- Protecting academic autonomy for the exercise of "the unrestricted desire to know".
- Exhibiting good standards of scholarship and teaching.
- Preparing new cohorts of scholars for the professions, public service and academia.

While these responsibilities continue to be at the core of the university's role, new roles are emerging as various stakeholders seek responses and engagements, emphasising that universities are key agencies in the development of the knowledge society. The government, which pays up to 80% of the concurrent costs of university education, is keen to ensure that universities contribute to national agendas of economic and social development. The organised business community, which for so long took little, if any, direct interest in the university and made few, if any, direct contributions to university education, has greatly changed its perspective in recent decades. It now sees great potential in a higher education system for producing the type of qualified graduates that business requires and the quality of research from which business can benefit. Links between the Irish Business an Employers Confederation (IBEC) the employers federation, and CHIU have been forged. Businessmen have become sponsors of initiatives in universities and most universities have incubator companies which act as a bridge between academia and the external business world.

This greater permeability between the university and the community is also observable in the increased extent to which academics are drawn upon by the public service and by private enterprise for consultancy purposes. In the context of lifelong learning, the professions are also looking to a greater degree to the universities for continuing professional development services. Apart from the profession of teaching, this was weakly developed in the past, but is likely to become more pronounced in the future. Furthermore, the university now operates within a developed tertiary education sector. Academic linkage, student transfer and joint research projects have become more evident within the family of higher education institutions, and may become more established in the future. The establishment of the National Qualifications Authority of Ireland (NQAI), as the national body with responsibilities for all non-university educational qualifications, also involves the universities in closer relationships with these institutions. The university also has been seeking to come closer to its communities by providing courses in outreach centres and by various forms of distance education. The establishment of concert halls within some of the universities and the evidence of art collections, choirs, drama groups and so on reflect part of the universities' contribution to the celebration of the arts in the community. At the other end of the scale from the local community, the universities have been building up a stronger international profile. This relates to student mobility, staff exchanges, joint research projects, and participation in

policy areas such as with the European University Association (EUA). Modern communications technology greatly facilitates linkages, the exchange of ideas and sharing research findings between university staffs on a worldwide basis. Thus, in summary, it can be noted that the role of the university in contemporary Irish society has become very multi-faceted. To fulfil the traditional role and the evolving role poses challenges to the universities, which are being addressed as they reshape themselves to match their new identity.

Management and administration changes

The inherited management structures of an era when universities were small and their role limited were no longer appropriate for institutions which were expanding and changing quickly. Policy documents such as the Green Paper (1992), the Report on the National Education Convention (1994) and the White Paper (1995) discussed proposals for modernising management structures. Many of these were incorporated in the *Universities Act* of 1997, which focussed on new governing structures, the role of the chief officer, new accountability and budgetary arrangements, new planning and reporting procedures, quality assurance responsibilities and the role of academic councils. These have now become "bedded down" and are operating according to legislative intent. The governing bodies are the governance structure and they incorporate representatives of various categories of academic staff, student representatives, graduates' representatives, government nominees and representatives of the business and cultural communities. The governing bodies decide on policy and have the responsibility to ensure that the administration of the university is conducted according to the agreed policy. The president or provost of the university is, of course, a member of the governing body, and sometimes is its chairman. The president is the chief officer of the university and carries the main management and accounting responsibilities. According to the 1997 Act, the chief officer "is to manage and direct the university in its academic, administrative, financial, personnel and other activities". The traditional collegial mode of decision-making within the institution resides in departmental, faculty and academic council meetings, as well as in a range of other representative committees, appointed by the governing authority to conduct the affairs of the university.

As might be expected in contemporary circumstances, a great deal of discussion and debate takes place on issues affecting universities, and higher education generally. The HEA, in part fulfilment of its remit, has been very proactive in making available a range of reports on issues such as equity and access, the financial governance of universities, student retention patterns, the use of open and distance learning, student participation patterns, and the social and living conditions of students. The CHIU, sometimes in association with the HEA, has sponsored a series of consultants' reports on particular aspects of

higher education such as the potential of e-learning or more general issues facing the universities such as the report, *The University Challenged: A Review of International Trends and Issues with Particular Reference to Ireland* (Skilbeck, 2001). CHIU has also organised a series of strategic planning seminars for university leaders to promote best practice in university governance. The National University of Ireland and individual universities have a tradition of sponsoring conferences and seminars on higher education issues aiming to promote informed public debate and dialogue. On occasion, the Department of Education and Science organises conferences such as that of June 2003 on the implications for Irish higher education of the European Commission Education Objectives, 2010. Overall, it can be stated that valuable debates have been taking place and well-researched reports made available on contemporary issues with relevance for university education. However, it should also be noted that there is a counter-trend whereby many academics and researchers do not engage much in these broader issues (FGS Consulting for CHIU, p. 7). At this period of major change and adjustment it is difficult to engage the full communities of the universities with the broad university-societal interface issues. It may well be that the increasing specialisation of academic work, coupled with the significance for career progression of peer-reviewed published research, as well as the general workload, are deterring university staff from active engagement with policy-type issues which do not directly impinge on their work. This may be a necessary consequence of the way of life of large-scale universities, but it could lead to an impoverishment of the character of university life.

Research trends and challenges

Quite obviously, in the context of a knowledge society, research assumes a position of central importance for universities and their societies. But, as was pointed out in Chapter 11, Ireland had a very spartan tradition regarding the funding of academic research. The turning of the tide was late in coming, towards the late nineties, but was all the more valuable when set against the background of deprivation. The establishment of the Programme for Research in Third Level Institutions (PRTLI) under the aegis of the HEA, of the two research councils (the IRCSET and the IRCHSS) as well as Science Foundation Ireland have greatly altered the research landscape. Substantial funding became available as the government sought to position Ireland for research and development, and to move employment up the added-value claim. In the light of various analyses, the government realised that it was necessary for Ireland to move from being a technology-importing, efficiency-based society to one where development was innovation based.

The new research bodies and modes of funding have been creating a change of culture within the universities. The competitive basis of funding has greatly sharpened researcher skills in preparing research proposals. Furthermore, it has

encouraged collaborative bidding efforts and cross-departmental, cross-faculty and sometimes cross-institutional partnerships. This collaborative approach, with an added international dimension, has also been fostered by the EU framework research projects. Irish academics have increasingly been engaged in partnership research with colleges in a whole variety of European countries. Under Science Foundation Ireland research projects eminent international researchers have been induced to come to Ireland and work with teams of Irish researchers in new university research centres. Collaboration, critical mass and international networking are procedures which are becoming firmly rooted within the Irish university research tradition.

This is not to take from the ongoing engagement by individual researchers on areas of their own special research interest. Also, within the Irish universities, the concept of research as being essential for enriched teaching is very much cherished. While it is understood that institutions need to develop speciality research niches, the culture would be very much against a demarcation as between "research" and "teaching" universities. Some academics also express concern at trends which they perceive lead to imbalances in the research agenda. Certain areas of science and technology linked to new products and economic needs tend to get most public attention, support and approbation. There may be a danger that research in more traditional disciplines with deep cultural value may lose out in the "research relevance" debate. The universities continue to engage in basic research, but also are involved in applied research. The emergence of campus-based industries and technology parks associated with some universities is a striking indication of this.

The universities have established Deans of Research over recent years, whose offices co-ordinate, facilitate and initiate research proposals. Most universities have set out a research strategy, and have put in place research charters. These set out values and objectives and guidelines on procedures and the rights of various stakeholders. They have also established efficient budgetary and accountability processes. The key concern for the future is the sustaining of sufficient research funding to allow this recently more vitalised aspect of Irish university life to deliver on its promise into the future. Research policy needs to take the long view, behind which consistency, trust and partnership can be built. Ireland is on the threshold of a new era in its research agenda. It needs sustained support to ensure long-term success.

Funding of universities

The expansion of university education over recent decades evolved from a very spartan tradition of expenditure. In 1965, the current exchequer expenditure for universities amounted to less than IEP 10 million. In 2002 it reached the figure of EUR 550.9 million. At face value, this is an impressive change, but, on closer examination, there are serious problems affecting the funding of universities.

The huge expansion in student numbers with the associated costs of the provision of good quality university education for them puts significant strains on the financial management of the institutions. When this is coupled with high government aspirations of establishing Irish university education "in the top rank of the OECD in terms of quality and participation", a credibility gap opens between the aspirations and reality. Some figures indicate Ireland's comparative position regarding expenditure on third-level education. *Education at a Glance: OECD Indicators 2003* shows that Ireland ranks 18th out of 28 countries in terms of expenditure on third-level education relative to per capita GDP. Ireland ranks 10th out of 18 countries in terms of cumulative expenditure per student over the average period of third-level studies. Ireland ranks 8th out of 29 countries in terms of expenditure for higher education institutions as a percentage of GDP. Ireland spends 1.5% of GDP on third-level education, compared to an average of 1.3% across OECD countries. In terms of expenditure per student on Research and Development in Higher Education Institutions, Ireland is ranked 14th out of 21 countries. Ireland spends only 0.3% of GDP from private sources on higher education compared to 2.7% for the US, and 2.6% for Canada and Luxembourg, the top rank countries. Thus, such indices demonstrate that, in terms of funding for higher education, Ireland is not in the top rank league of OECD countries. For instance, it represents 54% of US, 60% of Swiss, 73% of Norwegian and 74% of Canadian expenditure levels. In the context of awareness in developed countries of the strategic significance of investment in higher education, new plans and enhanced investment are endeavouring to better position such countries within an increasingly competitive environment. Thus, if Ireland is to achieve the eminence in the higher education arena to which it aspires, there is a great deal of catching up to do.

However, it would seem that the policy trend is in the opposite direction. Analysis by consultants FGS conducted on behalf of CHIU in November 2003 stated that the direct state support per student to universities fell by EUR 1 240 (in 2002 prices) between 1995 and 2001 (FGS Consulting for CHIU). A study of the estimates for 2004 indicates a further cut of 840 EUR per student. The Estimates for 2004 indicate zero increase in the recurrent costs for university education, which has been interpreted by CHIU and external commentators as a cut of at least 10%. Capital funding is also being seriously cut back.[3]

Thus, financial constraints pose very serious dilemmas for the Irish universities as they strive to establish Irish university education with a quality mark of the highest international standards. University education in Ireland is very heavily dependent on direct state subsidy for its support. For instance, in the year 2000-01, five of the seven universities were dependent on the state for over 80% of their funding, with the two largest, UCD and Trinity College, relying on the state for 78% and 76% respectively. The abolition of undergraduate fees since 1996 made the universities even more dependent on the exchequer.

Ireland, as a small country with an economy which was not prosperous up to recently, did not have a tradition of private endowments in support of universities. Apart from an American philanthropic foundation in the nineties, there has been negligible endowment for recurrent expenditure. It has been calculated that with the foundation's input, only 0.5% of current expenditure came from private sources, and the foundation has now changed its priorities. There has been valued sponsorship of a number of capital projects by wealthy private individuals, but the monies are clearly designated for specific projects. There is no reason to think that in the medium term, at least, private philanthropy will ever be a major source of funding for Irish universities, unlike some universities more fortunately positioned in other countries.

Nevertheless, it is recognised that there is a need to diversify funding sources for university education for the future. University authorities are scanning a variety of possible sources such as fees from international students, revisiting the student fee issue, provision of for-profit courses, boosting research income, seeking more commercial income and industry sponsorship, as well as philanthropy. However, expected income from most of these areas is seen as being very limited. Thus, it is clear that the continued development of the Irish university is poised on a precarious edge. It can look back with some satisfaction on an era of significant achievements in many areas. Many reforms and worthwhile developments have been accomplished. However, the necessary resourcing for ensuring a future where the university achieves higher standards in a competitive global arena is not being made available. This poses challenges for all stakeholders with a responsibility for the well-being of Irish university education.

Shaping a quality university culture

In the context of mass higher education, it is understandable that there would be concerns for accountability and quality assurance in higher education, as with most modern institutions. The international emphasis in developed countries on accountability, transparency and quality was also clearly observable in Ireland. There was a need for a more demonstrable manifestation of the qualitative work to which universities asserted they were devoted. In 1995, the CHIU took the initiative of establishing new forms of quality assurance within the universities. It evolved a system whereby the work of departments and administrative units would, on a cyclical basis, be subject to formal, internal self-appraisal procedures. The self-appraisal reports would be submitted to selected external peer reviewers, who would also visit the departments, examine their facilities and hold meetings with staff, students and other stakeholders. In the light of their investigations, the peer reviewers would prepare a report for submission to the university authorities. These reports would form the basis for discussions with the department or unit involved, with a view to the

implementation of any recommendations. The external reviewers' reports and the responses of the departments under review are usually published on the university's website. The *Universities Act 1997* also has provision for overall institutional review. At the time of writing, such a review of the universities was being planned by the HEA. The HEA has a general overseeing role to ensure that the processes for quality assurance are operated satisfactorily. One of the great gains of the quality assurance mechanism that was adopted by CHIU was that it has fostered a sense of ownership within the academic institutions. It has helped change the culture from one of relative departmental insularity on its quality processes to one which is open, co-operative and working to agreed norms as a part of the general life of the institution. Each of the universities has also set up a quality promotion unit, or its equivalent, to guide the process forward and to act as a liaison agency between the department and the external reviewers.

A very significant initiative was taken early in 2003 when CHIU, in association with the HEA, established the Irish Universities Quality Board (IUQB). This is comprised of a number of Irish academics, some international experts and personnel external to the universities, and the board is chaired by a judge. This agency will be the guarantor for Irish university quality standards and will liaise with similar international agencies. The Irish universities have also established close links with the European Universities Association (EUA) which itself is committed to promoting quality assurance. The institutional review of Irish universities, which will take place in 2004, is to be conducted under the auspices of the EUA.

Notes

1. By the 1970s, the National University of Ireland colleges had introduced specialist assessment boards for appointments, which reported to the various consultative and appointing bodies.
2. Press release of Minister Richard Burke on new government proposals, 16 December 1974.
3. Garret Fitzgerald, *The Irish Times*, 22 November 2003.

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ISBN 92-64-01431-4
Reviews of National Policies for Education
Higher Education in Ireland

PART II

Chapter 13

The Institutes of Technology

This chapter describes Ireland's system of institutes of technology. It covers the special role of the Dublin Institute of Technology, the development of regional colleges of technology, the management system of the institutes and the need and pressures for a new legislative framework.

Introduction

The institutes of technology are a relatively new feature on the Irish educational landscape, emerging during the 1970s. To get an understanding of the context, origin, mode of development, course content, accreditation processes, modes of student participation, quality assurance mechanisms and legislative frameworks, it is considered best to treat these in a unified way in this chapter, as they are very closely intertwined with the development phases experienced. Changes which occurred are only understood in the context of what was a very varying policy environment. While the time span of thirty years is relatively short, the institutions involved experienced a great deal of policy change, sometimes of a contradictory character. Many political battles have been involved in the evolution of the story to the present. Furthermore, it would appear that the story is by no means ended. There is a dynamic of change to be detected as the new century unfolds. Overall, despite a good deal of policy problems, the institutes of technology are a well-recognised success story in modern Irish higher education.

There are two distinct categories of institutes of technology. One relates to a group of thirteen, many of which emerged originally as regional technical colleges; the other institute, the Dublin Institute of Technology (DIT), had a very different origin and emerged quite distinct from the regional technical colleges. At present, the DIT has more students than any other higher education institution in Ireland, with a very wide range of courses. In the interests of clarity the development of these two types of institute is dealt with separately.

Origin of the regional technical colleges

At the beginning of the 1960s, Ireland had a very underdeveloped provision of higher education technical colleges. The only significant ones were those conducted by the Vocational Education Committees of Dublin and Cork. Their output of technicians and higher technical graduates was modest and most students were registered with the City and Guilds of London Institute for examination and awards. At that time, Ireland was on the threshold of a period of major economic and social change. In 1958, the government published a White Paper on economic expansion, which led to the first economic programme and changed attitudes to economic and industrial development. Economists were now emphasising that education was an economic

investment, rather than a consumer service. The prosperity of a modern society and economy depended on the availability of an educated workforce, including a sufficient supply of technicians and those technologically qualified.

A range of appraisals of Irish education was undertaken to assess its fitness for purpose in relation to new plans for industrial development. Notable among these were the Commission on Higher Education (1960-67), the *Investment in Education* study (1962-65) and the OECD study, *Training of Technicians in Ireland* (1962-64). In the context of an industrially underdeveloped society, the OECD reviewers on technician education encountered a lack of statistical data, and a lack of clarity regarding needs surrounding technical and technological education. The OECD report urged action on the provision of advanced technical education based on mathematics and the physical sciences. The reviewers also urged the appointment of a national committee to deal with course structure, curriculum design, industrial experience, and so on. The report was finalised following a review meeting in Paris in January 1963. A few months later, on 20 May 1963, the Minister for Education, Dr. Hillary, among other educational policy changes, announced that the government was to establish a number of regional technical colleges and to inaugurate a technical school leaving certificate (OECD, 1964, pp. 90-92, 110-112).

The *Investment in Education* report (1965), in its study of the probable manpower requirements and the probable supply needs of suitably qualified personnel for the labour force projected for 1971, estimated that there would be serious deficiencies of technically qualified personnel, unless remedial action was taken. The Commission on Higher Education also drew attention to the inadequacies of technological and technician education.

It was against this background that the regional technical colleges were developed. In September 1966, the Minister for Education announced that the government had decided to set up eight regional technical colleges. He appointed a Steering Committee to advise him on technical education and, in particular, on the best role for the proposed colleges. The committee was also asked to advise a consortium of personnel deployed to build the colleges with a brief for the colleges. The Steering Committee presented its report in April 1967. The committee saw the role of the colleges as educating for trade and industry over a broad spectrum of occupations ranging from craft to professional level, notably in engineering and science, but also in commercial, linguistic and other specialities. For planning purposes, it was assumed that the colleges would provide:

- Senior cycle post-primary courses leading to the Leaving Certificate.
- Junior and Senior Trade Certificate courses.
- Courses for technician qualifications at various levels.
- Courses leading to higher education qualifications, or, in some cases, to professional level.
- Adult education courses.

The Committee advised the Minister to proceed as soon as possible with all eight regional technical colleges, and it also made recommendations on the building process. The committee made two other important recommendations. One was to set up a National Council for Educational Awards (NCEA) with wide-ranging responsibilities for course approval and accreditation. Such a council was established on an *ad hoc* basis in 1972. It also recommended the establishment of Regional Education Councils, having accountability for all education in each of the regions. This proposal never came to pass (Steering Committee for Technical Education, 1969). It was noteworthy that the role envisaged for the regional technical colleges by the Steering Committee was more focussed on second-level and further education, than on tertiary education. However, as the colleges developed, over subsequent years, it was the tertiary education which got prominence. Apart from the regional education council proposals, the conclusions of the Steering Committee were largely adopted as government policy.

The Steering Committee had not envisaged that the regional technical colleges would come under the management control of the vocational education committees where they were located, considering that they would benefit from a fresh image for technical education. However, the officers of the Irish Vocational Education Association lobbied to gain management control of the colleges. Early in 1969, the Minister for Education announced that the colleges would be managed by a board of management appointed in accordance with Section 21(2) of the *Vocational Education Act* of 1930. It was also significant that the staff union of the colleges was to be the Teachers' Union of Ireland (TUI), which was strongly established in the second-level vocational schools. The consequences of these structural arrangements – which existed until the *Regional Technical Colleges Act* (1992) was put in place – were many and proved constricting to the colleges as they shaped their future predominantly as third-level institutions. The Chief Officer/Accounting Officers for the Regional Technical Colleges (RTCs) were the Chief Executive Officers of their parent VECs. This produced ambiguity regarding the role of principal of the RTC *vis-à-vis* the CEO. Tensions occurred, as there was a tendency to treat the RTC somewhat in the way second-level schools in the VEC system were managed. The TUI role – given its experience at second-level – and the many RTC staff, who had taught apprentices for years in the VEC system, prior to the opening of RTCs, adopted a "second-level" attitude to teaching and management matters, including an agreement with the Department of Education that teaching staff would be free of duties from 20 June to 1 September each year. Originally, the emphasis was very much on a teaching role for the RTCs, with little emphasis on, or provision for research. The RTCs were funded directly by the Department of Education and Science by means of an earmarked grant channelled through the VEC.

The development of the regional technical colleges

The first five RTCs (Athlone, Carlow, Dundalk, Sligo and Waterford) commenced full operation in autumn 1970. A scholarship scheme was introduced for students in the RTCs, but, unlike the higher education grants scheme introduced in 1968, these scholarships were competitive. The RTC in Letterkenny opened in 1971, that in Galway in 1972, and that in Cork in 1974, and the Tralee Technical College was raised to the status of an RTC in 1977. Thus, over a short few years in the seventies, a new network of RTCs had come into existence with a strong remit to respond to the educational and training needs of their regions. The development of courses at technician and higher technician levels absorbed a large part of the work of the colleges in the early years, at certificate and diploma levels.

The National Council for Educational Awards (NCEA) was set up on an *ad hoc* basis in March 1972, modelled on the Council for National Academic Awards (CNAA) in Britain. The NCEA became the validating body for courses in the RTCs and the awarding body for qualifications for most of the courses on offer. However, some colleges also prepared students for the examinations of professional bodies, which were the certification agencies for these courses. The NCEA appointed boards of studies, which in turn set up panels with expertise necessary to carry out the assessment of specialised areas. It also appointed a range of extern examiners to monitor student performance in the terminal examinations. The personnel involved a broad range of experience and expertise, including from outside the sphere of formal education, which enriched the perspectives feeding into the discussions on course issues. The course framework evolved to include a National Certificate to be awarded after the equivalent of two years full-time study; a National Diploma to be awarded either after a further year of specialised study, or on the completion of a three-year course, and a degree which would require the equivalent of four years of full-time study. The following table shows the growth in student numbers at RTCs from 1970 to 1974:

Table 13.1. **Growth in full-time student numbers at RTCs, 1970-74**

Date	Second-level	Third-level	Total
1970-71	278	194	472
1971-72	529	590	1 119
1972-73	560	1 214	1 774
1973-74	526	1 600	2 120

Source: Clancy, P. (1982), *Participation in Higher Education: A National Survey*, HEA.

However, the progress of the NCEA and the RTCs encountered a very buffeting policy period, following the surprise decision of the coalition government in December 1974 to abandon the binary policy for higher

education in favour of a comprehensive model. Degree awarding powers were to be withdrawn from the NCEA, and it was to be restructured as the Council for Technological Education, which would plan and co-ordinate courses, and validate and award non-degree third-level qualifications in the RTCs and some other institutions. The impact of the decisions is dealt with in Chapter 12. Suffice it to note here that the change of direction caused considerable upset to the non-university sector. The principals and staff of the RTCs expressed their concern, at what they regarded as the downgrading of this developing sector. Although a working party was established by the Minister for Education in September 1976 to draft an education bill to give effect to the government's plans, it was overtaken by events. Following a general election in June 1977 a change of government took place, which re-established the binary policy, and restored degree-awarding powers to the NCEA. The NCEA was awarded statutory status by the *NCEA Act* of 1979. Under the act, the NCEA had the general function of promoting, co-ordinating and developing technical, industrial, scientific, technological and commercial education provided outside the universities, whether professional, vocational and technical, and it also had a function in promoting liberal education. It no longer had any function in planning.

Despite the political upheavals of the mid-1970s, students in the non-university sector benefited from funds from the European Social Fund (ESF) from 1975. The policy adopted was to direct such financial resources to the expansion of short-cycle higher education. By 1984-85, there were 12 000 students on ESF funded courses. From the very small short-cycle sector before 1970, a transformation had taken place. By 1981, internationally, Ireland had, after the Netherlands, the largest proportion of third-level students taking sub-degree courses (White, 2001, p. 164). The number of full-time students in the RTCs grew impressively in their first ten years of operation, from 194 in 1970 to 5 965 by 1980, an increase of 145%. The RTCs had about 10 000 part-time students at that time (White, 2001, Appendix 1, pp. 282-283). Students in the RTCs benefited from much more favourable staff-student ratios than existed within the universities, but the administrative staff was more limited. A number of surveys also showed that those completing vocational courses in the RTCs in general were successful in obtaining subsequent employment.

While it may have seemed that the framework of the non-university binary sector had been settled by 1980, this was not to be the case. The various institutions continued to expand and succeed and they became restless within this framework. In particular, the two National Institutes of Higher Education (NIHE), located in Limerick (1972) and in Dublin (1980), pressed for recognition as universities. In 1986, the government appointed an international study group, led by Dr. Tom Hardiman, which, among other things, was asked to examine the case for the establishment of a technological university with the two NIHEs as

constituent colleges. The report of the study group concluded that the two NIHEs should be self-accrediting and established as independent universities: the University of Limerick and Dublin City University. In May 1989, legislation was passed in the form of an amendment to the NIHE Acts to change the titles of the institutes to universities, and those of the directors to presidents, to confer the power to award degrees, diplomas and certificates and to give the governing authorities the authority to extend the functions of the universities with the approval of the Minister for Education. Thus, these two institutions moved into the university sector, which was interpreted by some commentators as a weakening of the binary model.

Towards a new legislative framework

The RTCs, which by the late eighties had demonstrated that they had been a highly successful innovation within Irish higher education, were now finding their management framework and restrictions for self-initiated action very frustrating. Even though Minister Hussey's Green Paper of 1985 had recommended greater autonomy for the RTCs and removing them from the control of the VECs, a move also favoured by the Hardiman report, it took some time and much political activity before this was achieved. As was noted in Chapter 11, the *Regional Technical Colleges Act* of 1992 removed the RTCs from the authority of the VECs and allowed them more independence of operation, subject to the approval of the Minister for Education. The Act gave the institutions the authority to exploit knowledge in the interests of regional and national development. Much needed improvements took place in administrative arrangements. The applied research and consultancy roles were greatly expanded. Over the last decade the colleges have been engaging in Research and Technology Transfer Programmes with industry. The regional role of the institutions continues to be of primary importance. Their geographical location and industrial focus ensure that they are important stimuli for local industrial development. Their role within the National Spatial Strategy Plan (2003) seems destined for further development. The successful work by some of the institutes over recent years with campus based innovation facilities and enterprise development initiatives is likely to be of significant value to regional enterprises. In 1998, a company was formed jointly by the Institutes and Enterprise Ireland – the Technology Network – to maximise the impact of research and technology transfer on regional economic development.

In 1998, the title of the colleges was changed to "Institutes of Technology". It was also agreed that following fulfilment of certain criteria, institutes could be permitted to award their own degrees. By 2003, the Institutes of Waterford and Cork had won the right to award their own degrees. In late 2003, HETAC also gave the Waterford Institute the right to confer its own masters and doctoral degrees.

It had long been recognised that there were serious problems in the provision for and access to non-university tertiary education in the greater Dublin area. The establishment of Tallaght Institute of Technology was an initiative to meet this need. More recently, the Dun Laoghaire Institute of Art, Design and Technology and the Institute of Technology in Blanchardstown were established, strategically located to serve the greater Dublin Area. Also, in 1998, the Limerick Technical College was raised to the status of the Limerick Institute of Technology, bringing the total number of institutes of technology to thirteen.

Indicators of the success of the RTCs

While the various organisational arrangements were being evolved, student numbers continued to expand over the years, as is indicated by the following table:

Table 13.2. **Full-time student enrolment in the RTCs/institutes of technology, 1980-2001**

	1980-81	1985-86	1990-91	1995-96	2000-01
No. of students	5 965	11 139	16 801	26 820	38 000

Source: CDIT (1999), *Technological Education: The Key to the Competitive Knowledge Society* and DES figures.

The institutes also catered for large numbers of part-time students, amounting to about 33 000 in 2001, on a variety of course types.

The institutes currently account for 40% of the enrolments and some 53% of first admission to higher education. About 80% of the students are studying at National Certificate and Diploma levels, while the remainder are engaged at Bachelor or postgraduate degree levels.

The institute of technology sector is conscious of the success it has had, and of how it has grown and developed. In a number of submissions to government, it is clear that the Council of Directors of Institutes of Technology is keen to achieve as much autonomy as they conceive the universities to have (CDIT, 1999; CDIT 2003). The directors look to this new legislation needed to bring them under the HEA, to achieve their objective.

The Dublin Institute of Technology (DIT)

The history and evolution of the Dublin Institute of Technology was very different from that of the other institutes of technology. It needs some separate treatment to understand its role in Dublin higher education. The DIT was established by the City of Dublin Vocational Education Committee

(CDVEC) in 1977, by an amalgamation of six colleges it controlled in various parts of the city. The colleges had a long history under the CDVEC. They were:

- College of Technology, Kevin Street, (1881).
- College of Music, Chatham Row and Adelaide Road (1890).
- College of Commerce, Rathmines (1901).
- College of Marketing and Design, Mountjoy Square (1905).
- College of Technology, Bolton Street (1911).
- College of Catering, Cathal Brugha Street (1941).

In the early years of these colleges, the courses offered were mainly of a second-level, rather than tertiary character, but in responding to changing needs gradually tertiary-level courses took over. The colleges focussed on applied education and training in a wide range of occupations, trades and skills, in consultation with relevant industries, professions and trade unions. Up to the 1970s, they were almost the sole providers of technician and technological training and education.

With the new emphasis of government policy in the late sixties and seventies towards promoting technical, technological and applied education over a range of disciplines, the colleges too reorganised their courses to serve the needs of a more industrialised Ireland. However, they stayed apart from the new RTC college movement. In the mid-seventies, the government intended that the third-level courses under the CDVEC would be transferred to the planned NIHE in Dublin. However, the CDVEC successfully fought off this initiative and determined to restructure its colleges as a distinct entity, under its own management control. The NIHE Dublin opened its doors in 1980 on the Ballymun site in North Dublin which the CDVEC had earlier earmarked for its own combined colleges. The CDVEC rejected plans to have its senior courses transferred to NIHE while only retaining some diploma, certificate, craft/apprentice and adult education courses.

The CDVEC came to the conclusion that the best interests of its six colleges lay in a new confederation. Thus, the Dublin Institute of Technology was set up on an *ad hoc* basis in 1978. The function of the DIT was to further co-ordinate the work of the six colleges and of their College Councils. A governing body was formed with a more broadly based membership than the CDVEC itself. The Individual College Councils, the Academic Council and the Apprentice Education Board reported to it, rather than to the parent CDVEC. The DIT aspired to the situation of a closely knit federation of colleges where identification with the DIT rather than the individual college would occur. However, staff continued to see their work more related to their individual colleges than the broader DIT identity. Nevertheless, the DIT did bring about greater co-ordination, improved facilities and established a brand image that won increasing regard.

DIT's partnership with Trinity College

The DIT did not link with the NCEA regarding its courses or accreditation. It awarded some of its lower level courses itself and it had long-established links with external awarding agencies and some professional bodies. A very significant development took place in 1976 when a partnership agreement was negotiated with Trinity College Dublin (TCD), whereby Trinity would confer some of the degree courses offered by the DIT (University of Dublin/CDVEC, 1976). A great deal of control of degree courses remained with the DIT, subject to assessment of each course by the university together with joint approval of external examiners. Over subsequent years, a large range of DIT courses in applied arts, built environment, business, engineering, science, tourism and food were recognised for degree awards by TCD. From 1975 to 1999, almost 12 000 graduates of DIT diploma courses became eligible for degree awards by Trinity College (Duff, Hegarty and Hussey, 2000, p. 76). The academic link with Trinity College also acted as a stimulus for staff in the DIT to pursue postgraduate degrees. A fee-waiver was an encouragement to so engage. The university's recognition of PhD-type research by students in the DIT was slower to emerge. Eventually in 1992, a memorandum of agreement was reached concerning the registration of DIT candidates for higher degrees by research.

The partnership with Trinity College over the 25-year period from 1976 to 2001 was a valuable and productive one for DIT, promoting a growth in degree programmes and postgraduate research activities within the colleges. It may also have helped to raise the academic image of DIT. It was an unusual collaborative venture between two city-centre academic institutions with different histories, traditions and ethos. However, new developments during the 1990s were to call into question its long-term future as a viable partnership. While relationships continue to be cordial and a few joint programmes will continue to be offered, the academic year (2003-04) will see the end of the awarding by Trinity College of DIT degrees.

Towards a new legislative framework for the DIT

As was the case with the RTCs, the development during the 1980s of much higher education work and the emergence of a research and consultancy emphasis, gave rise to tensions and feelings of constraint that the remit of the *Vocational Education Act* of 1930 was now altogether inadequate as the legislative framework for the DIT. The concern for a new framework was included in the government's Green Paper, *Partners in Education*, in 1985, and it was also commented on by the International Study Group on Technological Education in its 1987 Report. Just as the RTCs were given their Act in 1992, so too was the DIT. While there were considerable structural similarities between the two acts, the main difference was that there was no provision in the

Regional Technical Colleges Act for RTCs to make their own awards. DIT, on the other hand, could confer, grant or give diplomas, certificates or other awards. Great pressure was brought to bear by the DIT during the legislative process to win the right to award its own degrees. What it succeeded in getting was "other functions which could include the conferring of degrees, postgraduate degrees and honorary awards which, under the Act, could be assigned by the Minister for Education". Another difference was that the title of President was allocated to the DIT, while that of Director was applied to the chief officers of the RTCs. The DIT Act set out the functions of the Institute, the principal one being to provide vocational and technical education and training for the economic, technological, scientific, commercial, industrial, social and cultural development of the state. Provision was also made for the Institute to engage in research, consultancy and development work, either on its own or in association with other institutions. While the Act modernised the legislative framework for the DIT, some of its central activities continued to be subject to the approval of the Minister for Education.

The issue of degree awarding powers remained to be resolved. In December 1995, the Minister for Education requested the HEA to appoint an international review team which might advise her with regard to this issue. The review team's report was made available in 1996, and was approved by the HEA and the Minister. As well as making a variety of recommendations for the DIT, it stated "that degree awarding powers be extended to the Institute with effect from the 1998-99 academic year, and the existing relationship with the University of Dublin be phased out commencing from that date" (HEA, 1996b). The ministerial order giving effect to this recommendation was signed on 15 May 1997. The process of preparing for the quality review team's visit, the discussions which took place during the visit, the endorsement of the work of the DIT in the report, and the constructive recommendations for improvement were of great benefit to the DIT. The right to award its own degrees was an historical landmark for the DIT.

Retaining a distinctive mission within a changed status

The DIT was keen to push for one more step in its institutional development – formal recognition as a university. In July 1997, the new Minister for Education, Mr. Martin, appointed an international review group to advise him on this issue. In its report, while it did not favour the immediate establishment of a university, it stated that university status should be granted at a later date (HEA, 1998). The HEA did not agree with the key conclusion, and at the time of writing, no public decision had been made.

One of the distinctive features of DIT is the extent and range of its course provision from apprenticeships to PhD courses. It has almost as many part-

time as full-time students. The following table indicates the percentages in the DIT in the year 2001 at different academic levels:

Table 13.3. **Percentages of students at different levels of study in the DIT, 2001**

Certificate	Diploma	Degree	Postgraduate	Other
17	17	58	4	3

Source: O'Hare, D. (March 2003), *Universities and Institutes of Technology: Their Roles and Relationship in a Future Irish Education System*, paper prepared for CHIU.

The next table gives a general break down of the fields of study by full-time students in the DIT:

Table 13.4. **Proportion of full-time students by field of study in DIT, 2001**
Percentages

Business/humanities	Science	Engineering	Comp.	Other
56	13	25	4	2

Source: O'Hare, D. (March 2003), *Universities and Institutes of Technology: Their Roles and Relationship in a Future Irish Education System*, paper prepared for CHIU.

The DIT is also developing mature student programmes and is proactive on access programmes. Over the years, it has greatly improved its teaching resources. It has had a long tradition of applying quality assurance procedures and these have been sharpened in the context of international reviews in recent years. Both of the international review teams were keen that DIT would preserve its distinctive features and its interactive relationships with industry, professions and trades. The DIT is very conscious that many of its buildings are very crowded, with limited leisure amenities for students. It plans to move to an identified site at Grangegorman on the north side of Dublin. This would be a major gain in terms of amenities, but will take time to bring about. While the DIT's roots lie in the nineteenth century, it is well poised at the beginning of the twenty-first century to continue its impressive progress of recent decades.

Management systems of the institutes

As all the institutes of technology have evolved under recent legislation to being more independent third-level institutions, their management structures have all been modernised. Each institute has its governing authority with designated responsibilities. The directors, or president in the case of DIT, are the chief officers responsible for the implementation of governing authorities' policies. All of the institutes require the approval of the Minister for Education for key decisions. This has caused some dissatisfaction and the institutes are

pressing for some legislative change to allow them a similar measure of autonomy granted to the universities by the Act of 1997. It is hoped that arrangements in hand to facilitate the transfer of the institutes from the suzerainty of the minister to the authority of the HEA will provide for a greater level of institutional autonomy.

The administrative staff in the institutes, which had been a weakness, has been strengthened. The institutes still enjoy better student-staff ratios than the universities. Each institute has an academic council, departments or, in some cases (DIT), faculties which facilitate academic staff planning and discussions. Student representation is well established in all relevant administrative bodies. Staff development programmes are in existence in all the institutes. Quality assurance mechanisms have tended to be well rooted in the institutes' traditions, as they had to comply with the evaluative requirements of the NCEA, and, currently HETAC. However, the institutes themselves have also been proactive in this regard and have been putting external peer reviews of departments into place. In future years, it may well be that the institutes will progress and evolve on different patterns, depending on their size, range of studies, qualifications of staff, research achievement, location, and so on. The directors of the institutes, while devoted to the general network of institutes, nevertheless are keen that more differentiation of role for individual institutes be recognised.

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ISBN 92-64-01431-4
Reviews of National Policies for Education
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PART II

Chapter 14

Provision in Higher Education

The chapter discusses various aspects of provision in higher education, including equity of access. Among the topics covered are mode of student selection, patterns of participation by programmes of study, graduation and retention patterns, participation by the disadvantaged, teaching and learning issues, expenditures on student support, student exchanges and services, and lifelong learning.

Mode of student selection into higher education

Student entry to state-aided higher education is operated on the basis of points accumulated on six subjects of the Leaving Certificate Examination, at the termination of second-level schooling. This has come to be known as the "points system". Points are allocated for different levels of performance in the Leaving Certificate Courses. The processing of applications is done by the Central Applications Office (CAO), established by the educational institutions as an independent company in 1976. Since then it has established a very strong reputation for efficiency, accuracy and communication processes. The CAO operates in association with the admission offices of the institutions, and maintains close links with the Institute of Guidance Counsellors and other stakeholders. Each year the CAO issues a booklet outlining all the higher education courses on offer and makes application forms available to all prospective applicants. Applicants need to complete the application forms before the end of January of the year in which the course commences. School leaver applicants usually seek the advice of school guidance counsellors and parents in filling up their course preferences, bearing in mind their career interests and levels of ability. The CAO allows for a change of mind option prior to the examination results becoming available.

As is to be expected, competition is most intense for the limited places available in the high prestige professional courses, such as medicine, dentistry, pharmacy and veterinary medicine, although some other courses with restricted places also require high points. Overall, a student can potentially achieve 600 points. A performance of 550 points is required for successful entry into courses with most competitive entry. A wide spectrum of points achievement operates regarding the majority of courses, with the points for university courses, in general, higher than those needed for the institutes of technology.

Over the years, there was considerable public discussion on the possible negative impact the points system was having on the quality of education at second level. So much emphasis was being placed on success in the system that it may be distorting the true purposes of second-level education, particularly for pupils not aspiring to higher education. A Commission on the Points System was set up to examine all relevant issues involved. Its report, in 1998, favoured the retention of the points system as the most equitable and appropriate mechanism which was available. However, it suggested reforms in the mode of examining at the Leaving Certificate Examination as a way of addressing problems. Other

agencies, including the National Council for Curriculum and Assessment, have also urged reforms in this examination, but to date it has continued largely in its traditional format. It is also being considered that, as the health sciences have the largest impact on the "points race" but only involve small numbers of students, health science studies might be restructured to postpone specialisation to postgraduate work and reduce pressure at university entry level. In addition to achieving points, students also need to meet the matriculation requirements set by the individual universities where they wish to study. Furthermore, some faculties have particular requirements in terms of subjects, *e.g.* mathematics for engineering, science for medicine.

Most institutions have special quota provisions for access students. These are usually from schools located in areas of serious socio-economic disadvantage. Access officers liaise with such students and support them following entry to the institution. Another category is that of "mature" students. These are students of 23 years or more who do not fulfil the normal entry requirements. Institutions have individual schemes for interviewing, monitoring and advising such students and retain a quota of places for those deemed likely to succeed. The places are usually in the arts faculties.

Patterns of student participation and course provision

Demand for places in higher education has continued to increase impressively. Table 14.1 illustrates the pattern of full-time enrolments from 1990/01 to 2001/02.

Table 14.1. **Full-time enrolments in institutions aided by the state, 1991/92, 1996/97 and 2001/02**

Full-time	1991/92	1996/97	2001/02
Third level			
HEA institutions	43 741	58 090	72 168
Institutes of Technology/Killybegs HTC/Tipperary Institute	29 648	41 000	49 890
National College of Ireland, Mater Dei Institute and Pontifical College	–	567	1 508
Teacher training			
Primary – HEA	–	1 033	2 309
Primary – Non-HEA	839	3 443	644
Home economics	221	204	379
Higher diploma in education	757	840	950
Total third level	**74 449**	**100 204**	**124 589**

Source: Key Education Statistics, Department of Education and Science.

The increase in the total number of students of almost 82% in this short time span is quite striking, and is observable in the different types of institution.

Table 14.2 takes the academic year 2001/02 and sets out the pattern of enrolment in individual institutions for both full-time and part-time students. This table provides a useful overview of the distribution of students and of the

Table 14.2. **Number of students enrolled in third-level courses in institutions aided by the Department of Education and Science in 2001/02**

Institutions	Full-time enrolments	Part-time (third-level only)
Higher Education Authority	**72 168**	**13 826**
National University of Ireland, Cork	12 001	1 226
National University of Ireland, Dublin	15 316	4 291
National University of Ireland, Galway	10 093	1 485
Trinity College, Dublin	11 212	2 905
National University of Ireland, Maynooth	4 510	606
Dublin City University	8 218	1 459
University of Limerick	10 010	1 830
National College of Art and Design	808	24
Institutes of Technology/Other Technological Colleges	**49 890**	**18 042**
Dublin Institute of Technology	9 873	5 443
Athlone Institute of Technology	3 282	841
Institute of Technology, Carlow	2 539	1 015
Cork Institute of technology	5 929	3 482
Dundalk Institute of Technology	2 585	499
Galway – Mayo Institute of Technology	4 436	851
Letterkenny Institute of Technology	1 919	308
Limerick Institute of Technology	3 464	1 136
Institute of Technology, Sligo	3 310	441
Institute of Technology, Tallaght	2 364	1 563
Institute of Technology, Tralee	2 396	515
Waterford Institute of Technology	5 542	1 252
Dun Laoghaire Institute of Art, Design and Technology	1 120	55
Institute of Technology, Blanchardstown	626	324
Tipperary Institute	269	258
Hotel Training/Catering College, Killybegs	236	59
Other Colleges	**2 531**	**3 097**
Coláiste Mhuire, Marino Institute of Education, Dublin	348	0
Church of Ireland College of Education, Rathmines	85	0
Froebel College, Blackrock, Co., Dublin	211	0
St. Angela's College, Lough Gill, Co. Sligo	279	0
St. Catherine's College, Sion Hill	100	0
National College of Ireland	900	2 929
Mater Dei Institute, Clonliffe Road, Dublin	252	131
Pontifical College, Maynooth, Co. Kildare	356	37
Overall total	**124 589**	**34 965**

Source: HEA Statistical Reports.

relative size of student bodies in the various higher education institutions in Ireland. An analysis of age patterns of the student cohort reveals that 56% are between 17 and 20 years of age; a further 32% are between 20 and 24 years, while only 12% are 25 years and over. Thus, the pattern of young age ranges in full-time higher education is still a pronounced feature of Irish higher education. Interestingly also, of the 124 589 full-time students in 2001/02, 54% were female. The female proportion of the student body is most pronounced in the HEA-designated institutions, at about 58%.

Table 14.3 shows the pattern of study level by full-time students over the period 1991/92 to 2001/02.

Table 14.3. **Full-time enrolments in HEA institutions by level of study 1991/92, 1996/97 and 2001/02**

Full-time	1991/92	1996/97	2001/02
Undergraduate			
Degree	36 184	47 661	57 394
Diploma and certificate	328	940	3 134
Occasional	793	1 091	1 276
Total	**37 305**	**49 692**	**61 804**
Postgraduate			
Postgraduate degree	4 821	6 867	8 882
Postgraduate diploma and certificate	2 001	3 152	3 644
Occasional	33	12	10
Total	**6 855**	**10 031**	**12 536**
Less those in more than one category	20	103	–
Total full-time	**44 140**	**59 620**	**74 340**

Source: HEA Statistical Reports.

Quite clearly, degrees continue to be the predominant pattern of undergraduate study in the HEA-designated institutions. It is noteworthy that the proportion of postgraduate study to the overall pattern remains steady at about 16%.

Table 14.4 illustrates the fields of study favoured by undergraduate students in these institutions for the years 1991/92 and 2001/02.

It is clear from Table 14.4 that arts subjects continue to attract the great majority of students. Notable also is the growth in education studies, medicine and nursing, and computing and IT. It is also to be noted that science and commerce have also held well.

Table 14.5 shows the pattern of fields of study by full-time postgraduate students in the HEA institutions in 1991/92 and 2001/02.

Table 14.4. **All full-time undergraduate students by field of study in 1991/92 and 2001/02**

Field of study	1991/92	2001/02
Arts	11 742	16 677
Education	777	3 813
Art and design	566	649
Business, economic and social studies	967	1 338
Equestrian	10	107
European studies	700	543
Social science	493	800
Communications and information studies	774	707
Commerce	5 080	8 065
Law	945	1 563
Science	5 397	7 814
Engineering	4 540	5 037
Architecture	202	250
Medicine and nursing	3 506	7 558
Dentistry	435	450
Veterinary medicine	313	381
Agriculture science and forestry	526	785
Food, science and technology	332	540
Computing and information technology	n.a.	4 710
Combined studies	–	17
Total	**37 305**	**61 804**

Source: HEA Statistical Reports.

Although part-time students are liable for fees for undergraduate as well as postgraduate courses, part-time students still form a significant minority of students in HEA institutions. Table 14.6 gives the levels of study pursued by part-time students in 1991/92 and 2001/02.

It is noteworthy that Diploma, Certificate, and Occasional, feature much more strongly with part-time undergraduate students than with their full-time colleagues. Interestingly, 54% of the part-time postgraduate students were engaged in postgraduate degrees in 2001/02. The growth in part-time postgraduates over the ten years is also significant.

The pattern of level of study of full-time students is different in the institutes of technology sector. Table 14.7 shows the pattern for the academic year 2001/02, including the DIT and the Tipperary Rural Business Development Institute (TRBDI).

It can be seen from the table that the majority of the work is conducted at undergraduate level and only a small proportion at postgraduate level, for the sector as a whole. Table 14.8 shows the breakdown when students are categorised by field of study.

It is noteworthy that business and the humanities feature so prominently.

Table 14.5. **All full-time postgraduate students by field of study in 1991/92 and 2001/02**

Field of study	1991/92	2001/02
Arts	1 498	2 506
Education	926	1 870
Art and Design	15	67
Business, Economic and Social Studies	90	187
Equestrian	–	0
European Studies	95	27
Social Science	99	327
Communications and information studies	120	172
Commerce	974	1 382
Law	256	412
Science	1 500	2 072
Engineering	835	782
Architecture	50	120
Medicine and nursing	139	837
Dentistry	20	36
Veterinary medicine	16	46
Agriculture science and forestry	123	186
Food, science and technology	99	127
Computing and information technology	n.a.	1 331
Combined studies	–	49
Total	**6 855**	**12 536**

Source: HEA Statistical Reports.

Table 14.6. **Part-time enrolments in HEA institutions by level of study in 1991/92 and 2001/02**

Part-time	1991/92	2001/02
Undergraduate		
Degree	1 423	2 978
Diploma and certificate	1 805	2 843
Occasional	837	1 327
Total	**4 065**	**7 148**
Postgraduate		
Postgraduate degree	1 720	3 722
Postgraduate diploma and certificate	886	2 538
Occasional	230	638
Total	**2 836**	**6 898**
Less those in more than one category	12	–
Total part-time	**6 889**	**14 046**

Source: HEA Statistical Reports.

Table 14.7. **Levels of study in the institutes of technology (including DIT and TRBDI)**

Percentage

Certificate	Diploma	Degree	Postgraduate	Other
39	28	30	2	2

Source: O'Hare, D. (March 2003), *Universities and Institutes of Technology: Their Roles and Relationship in a Future Irish Education System*, paper prepared for CHIU.

Table 14.8. **Full-time students by field of study in the institute of technology sector**

Percentage

Business/humanities	Science	Engineering	Computer	Other
43	12	25	13	7

Source: O'Hare, D. (March 2003), *Universities and Institutes of Technology: Their Roles and Relationship in a Future Irish Education System*, paper prepared for CHIU.

Performance patterns vary between different institutions. For instance, Waterford Institute of Technology has a strong degree role with 37% of students enrolled in degree courses. The current provision of undergraduate full-time courses by discipline in the institute of technology sector is set out in Table 14.9.

Table 14.9. **Provision of courses by discipline in institute of technology sector**

Discipline	*Ab initio* degree	Certificate/diploma	Add-on degree	Total
Accounting/business/commerce	18	52	49	119
Hotel management/travel/heritage	4	13	12	29
Sports science/recreation/leisure studies	1	8	5	14
Construction/surveying/valuation	7	13	3	23
IT/Computer science/computer applications	23	30	18	71
Engineering/technology	8	65	41	114
Architecture/architectural technician	–	5	1	6
Arts/humanities	6	6	2	114
Music	2	–	–	2
Science/applied; science/food science and tech. technolgy	8	34	30	72
Agriculture/horticulture	–	9	2	11
Health sciences	–	4	1	5
Legal studies	–	2	2	4
Social Studies/social care	2	7	4	13
Art/design/photography/media	3	24	13	40
Nursing	15	–	–	15
Total	**97**	**272**	**183**	**552**

Source: CDIT Expert Working Group 2003, *Institutes of Technology and the Knowledge Society*, p. 29.

The DIT's student and course profile is different from the other institutes, as set out in Tables 14.10 and 14.11.

Table 14.10. **Full-time undergraduate students by faculty in DIT, 2002/03**

Faculty	Degree	Diploma	Certificate	Total	%
Applied arts	1 275	226	147	1 648	17.6
Built environment	820	198	215	1 233	13.2
Business	1 586	135	560	2 281	24.4
Engineering	768	322	857	1 747	18.7
Science	916	284		1 200	12.8
Tourism and food	793	255	208	1 256	13.4
Total	**6 158**	**1 420**	**1 787**	**9 365**	**100.0**
%	65.8	15.2	19.1		

Source: DIT Annual Returns, 2002/03.

Table 14.11. **Postgraduate students by faculty in DIT, 2002/03**

	Taught full-time	Taught part-time	Research full-time	Research part-time	Total postgrad.	%
Applied arts	214	44	33	45	336	25.6
Built environment	24	37	6	13	80	6.1
Business	81	81	23	22	207	15.8
Engineering	30	56	25	47	158	12.1
Science	18	91	47	61	217	16.6
Tourism and food	30	66	13	23	132	10.1
Teaching and learning centre		61			61	4.7
NITL (Sept. 2002)		120			120	9.2
Total	**397**	**556**	**147**	**211**	**1 311**	**100**
%	30.3	42.4	11.2	16.1	100	

Source: DIT Annual Returns, 2002/03.

As Table 14.10 highlights, two-thirds of the undergraduate work was at degree level. The DIT's postgraduate profile has also been expanding impressively and, in 2002/03, the pattern was as shown in Table 14.11. It is noteworthy that 42% of postgraduates on taught courses are part-time students, with a further 16% on part-time research study.

Demand-supply ratio by subject area, 1991-2001

The HEA, in conjunction with the CAO, has done an analysis of the demand/supply ratio of places at degree and diploma and certificate level for all institutions over the decade 1991-2001. Over this decade, there has clearly been an expansion in the demand for higher education places. The supply of places

over the same period has increased in response to this change in level of demand. Based on CAO data, first preferences by subject area and award level are used as an approximation of school leaver demand for higher education places. Net acceptances were used as an approximation of the supply of places by award type and discipline. On this basis the following ratios emerge:

Table 14.12. **Demand/supply ratio by subject area and award level**

Degree		
Subject area	Average demand/supply ratio (1991-2001)	Range
Arts/social science	2.23	1.87-2.47
Science/applied science	1.79	1.51-2.17
Administration/business	3.44	2.75-2.56
Engineering/technology	3.13	2.64-3.40
Aggregate for four disciplines	2.57	2.38-2.83
Diploma/certificate		
Subject area	Average demand/supply ratio (1992-2001)	Range
Arts/social science	10.03	6.51-15.83
Science/applied science	2.64	2.15-3.11
Administration/business	3.90	2.99-5.27
Engineering/technology	2.48	2.09-2.87
Aggregate for four disciplines	3.35	2.76-3.70

Source: Statistical Table supplied by HEA.

The ratio of first preferences to net acceptances by subject area generates an average demand/supply ratio. A low average demonstrates a close matching of programme provision to student demand.

The range of this demand/supply ratio over a period of time can be seen as an approximation of how quickly and to what extent institutions adjust their supply to reflect student demand. A broad range would therefore indicate programme provision which is at significant variance to student demand.

An overview of the data indicates that the higher education system has been, on the whole, responsive to changes in student demand. Within the current system, which allows for institutional innovation in programme provision in the university sector, and a somewhat reduced capacity for innovation in the technological sector, institutions have demonstrated the capacity for self-regulation and the effect of this responsiveness has been to bring the system close to equilibrium by keeping social demand and labour market requirements in balance.

Student graduation and retention patterns

A number of studies have been conducted over recent years on the extent of student dropout from and non-completion of higher education courses. While it is to be expected that some wastage will occur, there is concern that an unexpectedly high level of such dropout was taking place. For instance, a study of first-year students enrolled in three institutes of technology in 1996-97 reflected an average 37% non-completion rate among the first year students across the three institutes. These findings were not dissimilar from other such studies. The author of the above study found no single factor to explain the high level of completion. She reported:

> A range of academic, social, personal, financial and institution-specific variables seem to contribute to early leaving and/or failure. The principal social and personal factors associated with non-completion rates were low grades in the Leaving Certificate examination; unclear career aspirations; lack of information and guidance on course and career options' unsuitable course choices; difficulties with some or all of the subjects taken, and financial and work-related problems. The principal institutional factors were lack of facilities and support services in the Institutes to meet course requirements; and poor communication between staff and students (Carpenter, 1999, p. 27).

The HEA sponsored a major study of the progress of the full-time student entrants to the seven universities in 1992. This comprehensive study was published in 2001. Its key findings were that 67.9% graduated within the expected time, 15.3% graduated late and 16.8% did not complete the course. Thus, 83.2% obtained the degree on the course on which they had initially embarked. While this overall finding is favourable, by comparative standards, the study highlighted a number of problem issues. Considerable variations existed between performance within different universities, and between men and women. Significant difference also showed up in various subject areas. For instance, in computer studies only 59.1% completed the course on time and, 26.9% did not complete the course. In science, as many as 22.2% failed to complete. Less than 66% of students who began studies in engineering/architecture in 1992 graduated on time and almost 20% left without completing the course. Interesting links also showed up regarding level of entry requirements and successful completion. In the case of courses with high entry points, 81.7% graduated on time, and only 9.2% failed to complete. On the other hand, in courses with low entry points, only 60% of students graduated on time, while more than 20% did not complete (Morgan, Flanagan and Kellaghan, 2001, pp. 66-68).

According to *Education at a Glance: OECD Indicators 2002*, Ireland performs comparatively well on degree completion rates, and is ranked third for survival rates in tertiary A (degree) type programmes (OECD, 2003a, Chart A2.5, p. 48).

While it is recognised that issues involved in non-completion of study courses are complex and varied, there has been a pro-active response by all stakeholders to researching and remediating what can be put right. The loss to individuals and to society is seen to be too great to permit a policy of drift. The HEA in 2000 undertook a targeted initiative for institutions to take steps to address retention issues. The DES has supported institutes of technology to take appropriate measures in their institutions. Among the specific steps being taken by higher education institutions generally are better tracking mechanisms and records co-ordination regarding individual students; improved support mechanisms, particularly at first year; better provision of academic, career and personal counselling services; and the availability of mentor systems as a general support and communication channel for students. Indications to date are that the sharpening of awareness of the problem, the commandeering of staff support for the issues involved and the improved administrative and guidance frameworks in support of student retention are paying dividends.

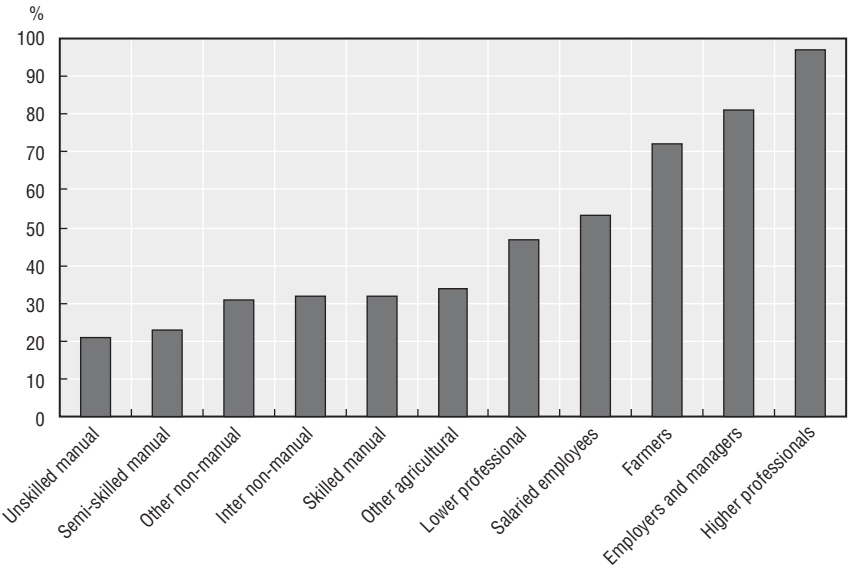
Participation by disadvantaged students

As in most countries, despite the expansion of places and student enrolments in higher education, significant inequalities exist in the participation in higher education by students from poorer socio-economic circumstances. A series of longitudinal studies on participation patterns in higher education has been conducted by Professor Patrick Clancy on behalf of the HEA. These studies have kept a revealing spotlight on this on-going problem.

Since the overall rate of admission to higher education in Ireland rose from 20% in 1980 to 44% in 1998, it is not surprising that most social groups experienced a progressive increase in the proportion going to higher education. The percentage increase for the poorer socio-economic groups showed significant improvement during this period. For instance, the Unskilled Manual Group which only had 3% participation in 1980 increased to 21% by 1998. Groups such as the Skilled Manual, other Non-Manual and Semi-Skilled Groups, each of whom had 9% participation in 1980, had increased to rates of 32%, 31% and 23%, respectively, by 1998. While this is encouraging, it needs also to be borne in mind that over the same period the Higher Professional Group had moved from 49% participation in 1980 close to saturation level by 1998. In line with this, the Employers and Managers Group went from 42% in 1980 to reach 84% by 1998 (Clancy, 2001, pp. 156-159 and Clancy and Wall, 2000, pp. 60-69).

Examining the situation of the 1998 student entry cohort, it was discovered that 58% of higher education entrants came from four socio-economic groups (Higher Professional, Lower Professional, Employers and Managers, and Farmers) although these groups constituted only 37% of the relevant population. In contrast, other socio-economic groups (Non-Manual, Manual

Figure 14.1. **Estimated percentage of age cohort entering higher education by socio-economic status, 1998**



Source: Patrick Clancy, *College Entry in Focus: A Fourth National Survey of Access to Higher Education*, HEA, 2001.

Skilled, Unskilled, Own Account Workers, and Agricultural Workers) were seriously under-represented with 40% of the entrants, although they constituted 63% of the relevant age cohort.

Another significant finding arising from Clancy's work is the extent to which selectivity in overall levels of participation in higher education is complemented by further selectivity by sector and field of study. The more prestigious the sector and field of study, the greater is the social inequality in participation levels. The higher social groups have the strongest representation within the university sector, while the three manual groups have their highest representation in the non-university sector. Within the university sector the Higher Professional Group was most strongly represented in Medicine, Law, Veterinary and Dentistry. In contrast, the Semi-Skilled and Unskilled groups had their lowest representation in Architecture, Veterinary, Medicine, Economics and Social Studies and Law (Clancy, 2001, pp. 156-157).

The government and the higher education institutions have been very exercised about the continuing extent of inequality with regard to access to higher education. A range of reports has been commissioned, many conferences held and a variety of initiatives undertaken to alleviate the problems. Among major reports focussing on the issue in recent years were *Access and Equity in*

Higher Education: An International Perspective (2000); *The Report of the Action Group on Access to Third Level Education* (2001); *Supporting Equity in Higher Education* (2003). The National Development Plan provided for a Third-Level Access Fund of EUR 95 million over the period 2000-06. The current Minister for Education and Science has made improvements on this and other areas of educational disadvantage a priority for policy.

The higher education institutions are also concerned about the situation and committed to taking pro-active measures to improve it. They have rallied to the call in the recent study on access and equity commissioned by the HEA, when it stated: "Higher education is challenged to continue advancing the equity cause, not as an add-on but as an integral element of its broader intellectual, cultural, social and economic purposes. Both system-wide and institutional strategies can be strengthened to build on achievements and to gain further ground" (Skilbeck and Connell, 2000, p. 3). To help progress on such an aim, higher education institutions have produced equality statements, have established access officers and initiated schemes with post-primary schools in disadvantaged areas. They have also strengthened the supports available for such students following entry to the colleges.

The advantages of the analysis and discussions which have taken place have increased public understanding and awareness of the problem and highlighted the complexities of the issues involved. It was also underlined that many of contributing causes are outside of the third-level institutions' remit, and some need to be addressed much earlier than at third-level entry age. It is recognised that it will take time and multi-faceted schemes to make serious indentations in the inequalities in participation.

Student exchanges

In an increasingly international higher educational environment, mobility of students has become a welcome feature of campus life. The number of international students coming to Ireland has been increasing significantly. While Irish postgraduate students have had a good tradition of enriching their academic experience by continuing their postgraduate studies abroad, it is only in recent times that undergraduate students have been going abroad as part of their undergraduate experience. Living on an island, which involves significant travel costs, and with inadequate financial support, students were deterred from going abroad during the academic year. Foreign language students did take on the visits abroad as part of building their language competence.

It was the Erasmus Scheme which really opened up avenues for larger numbers of students. While more foreign students come to Ireland on Erasmus Schemes, increasingly, Irish students are availing themselves of the opportunity to study in European countries. During the year 2001/02, a total of 1 709 Irish

students from 25 third-level institutions engaged in the Erasmus Scheme. They located in a total of 22 countries, with France, Germany, Spain and Italy as the most favoured countries. About 60% were in the age range 20-24 years. The most popular subject areas were business, languages and social sciences. Very interestingly, three-quarters of those on exchange were female students. Out of over sixteen subject areas involved, the only two in which there was a majority of males were engineering/technology and the natural sciences. About 60% of students were abroad for between 9 and 12 months.[1]

Student services

The higher education institutions are very conscious that rapidly expanding enrolments bring concomitant demands on current and capital expenditure for student services. In the more open-access faculties of universities, there are problems of over-crowding. High student-staff ratios (average 22:1) exist, and pressure on places in libraries makes life difficult for students. Nevertheless, the universities and institutes of technology have paid a good deal of attention to improving student services for their more heterogeneous clientele. Tutorial systems, mentors and counsellors have all been improved. In particular, career guidance offices have been extended and tend to play very proactive roles with students in relation to course information, job opportunities, career talks, preparation of CVs and interview planning. Student health services and facilities are generally well organised. Sports, leisure and cultural activities have been qualitatively improved on most campuses. A range of inter-institutional competitions in a variety of sports forms part of the college calendars.

Traditionally, Irish universities have had a vibrant extra-curricular experience, with many student clubs and societies – debating, drama, music, subject associated – in which students develop their competencies, interests and talents. This valuable dimension of college life continues to operate despite a more pressured academic study life than was the case for earlier generations. Student representation on university faculties, academic councils and governing bodies is now well established. Staff-student committees operate in most academic departments, which facilitates student input into the work of departments. Structures exist for student evaluation of courses, which helps academic staff to plan their work, and gives students the opportunity to express their reactions, which the great majority do in a mature manner. It is noteworthy that demonstrations of student disaffection with their experiences in higher education are a rare phenomenon. When displays of student dissatisfaction occur they are almost always related to financial support issues rather than academic matters. For instance, indications in 2002 and 2003 that the Minister for Education and Science was intending to reintroduce undergraduate fees for some categories of students drew a predictable student response. Currently, increases in student registration fees are being opposed by student unions.

In the various discussions on student affairs and services, the attention is predominantly focussed on undergraduate students. Postgraduate students are a category which has received only limited attention in the various reports and policy statements of recent years. At present, all types of postgraduate students combine to form about 20% of total enrolment. It would seem that in the concern to provide greater access to initial forms of higher education, insufficient attention has been given to the postgraduate sector. The support systems for postgraduate students, particularly in the humanities and social sciences, were very inadequate, but they have been improved in recent years. Irish society may lose out a great deal by the relative neglect of postgraduate studies and research, given that postgraduate students are at the cutting edge of developments in their subject areas. The depth of study and analysis involved, particularly at masters and doctorate level, should be of major benefit to participants and to society. Good quality understanding, analysis, communications, leadership and innovation are crucial in a knowledge-based society, and postgraduate study and research provide a training ground for their nurture. It seems important for the future well-being of society that postgraduate work gets greater priority in higher education policy.

Another category of students which has been very much under-represented in Irish higher education, in relation to many other countries, is mature students. In 1994, mature students (those over age 23) accounted for only 3.7% of the full-time students. In Clancy's study in 1998, he found that only 5% of new entrants were aged twenty-three or over (Clancy, 2001, p. 169). In 1995, the Steering Committee on the Future Development of Higher Education set a target of 16% mature student participation by 2010, but without changes of policy it is not likely that this target will be met.

Teaching and learning

Teaching and learning have always formed the central core of the work of a higher education institution. However, in the context of mass higher education, more specific attention is being given to promoting improved quality in teaching, which, hopefully, leads to improved learning on the part of students. This new emphasis on teaching quality has become very much in evidence in Irish institutions. In the first instance, stress is being laid on increasing the repertoire of teaching styles. Lectures continue to be a staple format, but are increasingly supplemented by a range of other teaching approaches. Thus seminars, tutorials, case studies, practicals, workshops, demonstrations, role-play and action research projects now more regularly feature in the teacher-student interaction within the university. The more extensive use of information and communication technologies is greatly enriching the teaching-learning engagement. Students also benefit from course handbooks/guidelines which set out objectives, course outlines, teaching approaches and modes of assessment.

Course handouts and source materials form a valuable accompaniment to many courses. Again, the availability of ICT, internet, and duplication facilities has been of great benefit to students' learning.

Course structures are being remodelled as Irish institutions change towards course semesterisation and modularisation. The universities have prepared carefully to ensure that the shift from the traditional course framework would be achieved satisfactory. Modularisation and credit transfer are seen as promoting student mobility within and between institutions at home and abroad, facilitating access, facilitating mature and second-chance students and enhancing continuing or recurrent education. Moves towards interdisciplinary and cross-faculty courses are also taking place. The fact that students now have a role in course evaluation allows for a sharpening of academic staffs' preparation for teaching. To match the greater variety of teaching styles, more varied modes of assessment are also being applied, which is of significant benefit to students. A range of procedures exist within the institutions for monitoring standards. These are capped by the utilisation of the external examiners procedure by all Irish universities, and by HETAC examiners for the institutes of technology sector.

Gradually, prowess in teaching is forming a meaningful part of staff promotion procedures. This can be a counterbalance to the traditional heavy emphasis on research, and encourages academic staff to give time and thought to their teaching. Since the early 1990s, all universities have engaged in staff development programmes, including many self-improvement courses in teaching and assessment. While it is not compulsory to have a qualification in teaching for appointment, care is put in at staff selection to explore the candidate's teaching record and the preparedness to engage in staff development courses. All universities have an internal unit specialising in staff development issues. Another incentive towards excellence in teaching is the competitive process for distinguished awards for teaching prowess, which has been instituted by many universities. Some universities have also devised teaching-learning charters which set out objectives and guarantees on teaching and learning, requiring commitments from both teachers and students. Staff development courses towards improved teaching and assessment have also become established in the institute of technology sector.

Ireland has a National Distance Education Centre (NDEC), *Oscail*, located at Dublin City University. Universities have co-operated in the provision of courses from this centre. The accelerated pace of development and the interpenetrative character of ICT are such as to potentially involve a revolution in creation of, access to and dissemination of knowledge. The new technologies provide a spectrum of pedagogical opportunities never before available. The Irish Government has taken important policy initiatives in support of ICT in the industrial and educational life of the state. As well as the NDEC, many other higher education institutes have taken some initiatives in the area of open and

distance learning (ODL). HEAnet, the national research and education network, was established in 1984 as a collaborative effort by the seven universities. It now includes up to 40 institutions. It was formally incorporated in 1997 as a not-for-profit company to serve the wide-area networking requirements of its members.

As yet, the provision of higher education through ODL has not had a large impact, nor has it caught the public imagination. However, policy makers are alert to its potential and are considering ways in which its potential might be harnessed in efficient and cost-effective ways. For instance, the HEA and *Oscail* convened a national symposium on ODL in March 2000, which brought many interested parties together and made recommendations for action on ODL (HEA, 2000). CHIU commissioned a report, submitted to it in July 2003, to examine the potential and opportunity value of a serious commitment to e-learning. The report stated, "It is recommended that the Universities, through an active collaborative programme of research, establish Ireland as a centre for expertise in eLearning pedagogy and technology" (CHIU, 2003, p. 5). It is not clear if this recommendation will be acted on. It would seem that current financial cutbacks in funding of universities will impede investment in such a scheme at this time. However, it is very likely, as the new century rolls out, that various forms of ODL, including e-learning, will become a more significant part of higher education provision in Ireland.

Higher education and the concept of lifelong learning

Irish universities are unusual in the extent to which their student bodies are concentrated within the limited age group of 18-23 years age. Mature students (defined as those over 23 years of age) only form about 5% of the full-time student body. Mature students feature more strongly among the part-time student body, but part-time students are not eligible for fee remission. The concept of lifelong learning has got renewed emphasis since the mid-1990s. The EU, through a sequence of reports over recent years, has highlighted its significance for future European Education policy. In their statement "Realising the European Higher Education Area" (2003), the EU Education Ministers stated:

> Ministers underline the important contribution of higher education in making lifelong learning a reality. They are taking steps to align their national policies to realise this goal and urge Higher Education institutions to enhance the possibilities for lifelong learning at higher education level, including the recognition of prior learning (EU Ministers, 2003).

However, in Ireland, the lifelong learning concept has not yet become a major issue within the higher education sector. Hitherto, the demographic profile and the educational aspirations of students and their parents have tended to keep the focus on providing sufficient places for school leavers. At present, only two-thirds of third-level applicants are accommodated in the

higher education institutions. With a pending decline in the usual age group for university it is possible that some opportunities may be developed to propel a more imaginative drive towards opening up the institutions to more mature students. In 1999, a conference was held on the theme "Higher Education: The Challenge of Lifelong Learning" (Fleming, Collins and Coolahan, 1999). However, apart from this, there has been little serious public attention focussed on the issue. It seems clear that this is an issue which needs to be engaged with by higher education institutions in a more thorough way. It is important for Irish society to evolve into a learning society, drawing on its full pool of talent. More scope for postgraduate studies by mature graduates is one area which would be beneficial. The target of achieving 16% of mature students within the student body by 2010 needs to be pursued with more energy and imagination than has been in evidence hitherto. The establishment of the National Qualifications Framework by the NQAI in 2003 opens up new possibilities in the promotion of access, flexibility and accreditation. The modularisation of courses also facilitates flexibility for learners.

A major area of potential development for the institutions is the greater provision of continuing professional development courses for professionals in a variety of career tracks. At present, once graduates in most professions leave the university, that is their last academic contact with it. It is now recognised that continuing in-career education is essential for all professions, but it is predominantly provided by the professional bodies, external to the university. If partnership arrangements were developed between these bodies, it would seem that many valuable outcomes would emerge both for the universities and the professions. At present, the teaching profession is the one that engages most in continuing professional development within the universities.

One of the great opportunities of our civilisation is the availability of technology which allows the university to "go to the people", rather than all students coming to the academy. The opportunities for outreach centres, for distance education and for e-learning initiatives to reach out to adults whose geographical location and economic circumstances prevent them from availing of university education could be drawn upon in ways which were hitherto impossible. However, it takes policy planning and political commitment to tap into this opportunity, which has the potential to make a real impact on lifelong learning.

Graduate placement

Each year the Higher Education Authority, in association with the Careers Offices of the higher education institutions, issues a report on the destinations of the previous year's graduates. Taking data for graduates of the year 2000, Table 14.13 gives an overview of the outcomes for those degree graduates in the first year of graduation:

Table 14.13. **Destination of degree graduates in 2000, a year following graduation**

Percentage

Faculty	In employment	In further study	Not available for work	Seeking employment
Arts and social science	45.2	22.3	6.4	2.3
Science	54.6	26.0	5.2	2.6
Commerce and business studies	68.7	18.3	5.3	2.2
Medicine, dentistry and paramedical studies	95.7	2.0	0.8	0.2
Engineering	79.7	11.0	4.7	1.8
Law	31.7	41.9	10.2	0.4
Agriculture	50.6	21.8	8.8	2.9
Veterinary medicine	96.8	1.6	1.6	0.0
Architecture	96.1	0.0	1.0	1.9
Food science and technology	42.6	26.9	7.0	7.0

Source: Compiled from HEA Statistical Tables.

An analysis of statistics over the past ten years does not show major variations from the percentages recorded for the degree graduates in 2000. Quite clearly, in some subject areas, particularly law, science, and food science and technology, further postgraduate study is a strong pattern of graduate engagement. It is particularly noteworthy that in all subject areas only very small percentages are recorded as "seeking employment".

When the figures for sub-degree graduates are examined, one key expected difference emerges. The numbers going on for further study are high in all listed categories. Table 14.14 sets out the destinations for sub-degree graduates of the year 2000.

Table 14.14. **Destination of sub-degree graduates in 2000, a year following graduation**

Percentage

Faculty	In employment	In further study	Not available for work	Seeking employment
Arts and social science	43.9	43.0	4.4	2.9
Science	33.1	62.1	1.3	2.9
Commerce and business studies	30.2	66.0	2.0	1.4
Engineering	38.4	57.8	1.9	1.0

Source: Compiled from HEA Statistical Tables.

It is clear that most graduates from sub-degree courses see further study as their priority concern. As was the case with degree graduates, it is quite striking that less than 3% of graduates from sub-degree courses were in the position of "seeking employment". The percentages "seeking employment" were higher in years prior to 1996.

These patterns confirm trends that tertiary qualifications not only lead to better salary levels, they also lead to better employment prospects for participants.

Expenditure on third-level student supports[2]

Of the EUR 1 401 million spent by the Exchequer on the provision of higher education in 2002, some EUR 836 million related to recurrent grants to institutions and a further EUR 183 million related to capital expenditure. The balance of EUR 382 million was spent on student supports (tuition fees/charges and maintenance grants), representing 27% of the total public expenditure on third-level education (DES, 2003).

The expenditure on third-level student supports provided by the department is detailed in Table 14.15.

Table 14.15. **Expenditure on third-level student supports in 2002**

Student supports	Expenditure in 2002	%
Non means-tested ("free") tuition fees	EUR 240 m	63
Means-tested Maintenance grants	EUR 94 m	24
Means-tested support for fees and registration charges	EUR 26 m	7
Targeted supports under the Third-Level Access Fund	EUR 22 m	6
Overall expenditure	EUR 382 m	100

Source: Department of Education and Science.

By far the greatest level of expenditure on student supports (almost two-thirds of available funding) is devoted to the provision of free tuition fees. Entitlement to this support is neither means-tested nor targeted and it is estimated that over 20% of the provision goes directly to subsidise students from households with incomes in excess of EUR 70 000 per annum.

The Exchequer already effectively subsidises tuition costs to a very substantial degree for all students through the provision of some EUR 836 million in recurrent grants to institutions. Given the disproportionately high representation of those from better-off backgrounds in third-level education, and within third-level education in certain courses, the untargeted spending of 63% of the student support provision on free fees means that this group is subsidised to an even greater degree by the taxpayer.

The tuition fee represents only a proportion of the unit cost of providing a particular course. Table 14.16 provides an estimate of the current average fees and their relationship to unit costs. Effectively, the difference between the level of tuition fees and unit costs represents the significant level of additional Exchequer subsidy provided by way of recurrent grants (the "block grant") to institutions.

Table 14.16. **Fees as a percentage of the unit cost by field of study**

Undergraduate programme	2002/03 average fee (EUR) including EUR 670 charge	Estimated full unit cost per annum (EUR)	Fee as a percentage of unit cost
University sector			
Arts/law	3 601	6 044	60
Business	3 782	5 820	65
Science	4 683	8 204	57
Engineering	4 669	9 270	50
Medicine	5 167	8 815	59
Dentistry	6 219	24 890	25
Veterinary	6 437	20 577	31
IoT Sector			
Certificate/diplomas	1 633-1 694	7 100-7 058	23-24

Source: Department of Education and Science.

Maintenance grants

The Department operates three means-tested grant schemes for students in higher education. The Higher Education Grants Scheme is administered by the local authorities, while the Vocational Education Committees administer the VEC Scholarship Scheme and the Third-Level Maintenance Grants Scheme for Trainees. The three schemes have been increasingly aligned in recent years and are now broadly similar – it is government policy to introduce a unified scheme.

Programmes funded by the ESF Third-Level Access Fund

Top-Up Grants: The payment of special increased rates of maintenance grants to disadvantaged students was introduced with retrospective effect from the 2000/01 academic year, based on recommendations and criteria drawn up by the Action Group on Access to Third-Level Education. The rates of these special grants are currently EUR 4 000 non-adjacent and EUR 1 600 adjacent, *i.e.* a top-up of EUR 1 490 and EUR 596 respectively on the standard rate of maintenance grant. To qualify for a top-up grant the grant-holder must be entitled to a full grant and the grant-holder's total reckonable income must not exceed EUR 12 419 per annum and must include a specified social welfare payment. The number of students qualifying for top-up grants in 2002/03 is 7 498 (provisional) having increased from 2 570 in 2000/01.

The Student Assistance Fund: The operation of the fund is devolved to the third-level institutions and allocations are based on total enrolments. The fund amounted to EUR 8.9 million in 2002, enabling colleges to assist disadvantaged students who require additional support to allow them to fully benefit from their third-level studies. Students can be assisted towards their rent, childcare costs, transport costs and additional tuition. Over 7 000 students were assisted during the 2001/02 academic year.

Millennium Partnership Fund for Disadvantage: This fund provides assistance to area partnerships and community groups to enable them to assist disadvantaged students in accessing and completing third-level education. A provision of EUR 2 million was allocated to Area Development Management (ADM) Ltd. in 2002 to support initiatives by some 50 partnerships and community groups in the 2002/03 academic year.

Special Fund for Students with Disabilities: This fund assists third-level students who have special needs. Grants are provided for the purchase of special equipment, special materials, technological aids, targeted transport services and sign language assistance/interpreters. There are standard amounts payable from the fund for specific services. The fund amounted to EUR 3.7 million in 2002 and over 1 000 students were approved for funding.

Other supports

The Revenue Commissioners provide for tax relief at the standard rate on "fees chargeable in respect of tuition" for approved undergraduate and postgraduate courses. The relief does not apply to the student registration charge. The cost of tuition fee relief in 2000/01 is estimated at EUR 2.9 million, involving 7 400 claimants.

The Department of Social and Family Affairs operates the Back to Education Allowance Scheme which allows people in receipt of certain social welfare payments to pursue approved courses.

The Department of Health and Children is funding the new four-year nursing degree programme on an interim basis. Costs for fees and maintenance grants are in the region of EUR 32 million and are due to be met by the Department of Education and Science through its student support schemes after the initial five-year period.

Notes

1. Figures drawn from Statistical Tables made available by the HEA.
2. This section is taken from the DES study, *Supporting Equity in Higher Education: A Report to the Minister for Education and Science*, pp. 19-21, which is the most up-to-date accurate data on funding patterns.

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ISBN 92-64-01431-4
Reviews of National Policies for Education
Higher Education in Ireland

PART II

Chapter 15

Some Contemporary Issues and Challenges

This chapter provides an overview of key policy issues facing Ireland's higher education sector. Six issues are highlighted: financing, research performance, framework and governance issues, lifelong learning, quality assurance and the international challenge.

Introduction

The OECD review of higher education in Ireland took place at a crucially important time for the development of the higher education sector, and for its relationships with Irish society. Previous chapters provide evidence of the growth and development in higher education which have taken place – improved infrastructure, new legislative frameworks, diversification of courses, new forms of teaching and learning, expansion of research, greater internationalism, new governing structures, quality assurance procedures and modernised accountability measures. There has been a general proactive dynamism which has transformed the profile of higher education in contemporary Ireland from that of a generation ago. It has been acknowledged by the government and the social partners that higher education has contributed very significantly to Ireland's economic, social and cultural success in the recent past. This has been achieved through a considerable degree of consensus, co-operative planning, good communications and the quality of inter-personal relationships.

One of the striking features of the stage that has now been reached is that instead of a possible sense of complacency prevailing, the opposite is the case. There is a realisation among most, if not all key agencies, that while good foundations have been achieved, they form but a springboard to position Irish higher education among the top echelon of OECD countries in the future.

The government has articulated ambitious aspirations for the sector. There is a realisation by all concerned agencies that there are great challenges involved if the aspirations are to be realised. Internationally, higher education is operating in a very fast changing socio-economic environment. The momentum of globalisation is highly pervasive; the knowledge base is accelerating at an unprecedented pace, propelled particularly by rapid development in science and technology, but also by advances in all disciplines. The ICT revolution advances apace with digitalisation of information opening new possibilities. The global village provides great opportunities for higher education, but it is a very competitive environment which calls for a "rolling reform" response, with change, adaptability and flexibility in-built as a way of life. It also requires higher education institutions to have productive relationships with a range of societal agencies. However, the institutions cannot just adopt Pavlovian responses to social change; they need to operate from defensible philosophies for their multifaceted roles, which are often wider and deeper than those of politicians and other social partners. In an era when

economic imperatives are often the driving force of public action, it would be a betrayal of their mission if higher education institutions allowed economic productivity to be an overriding concern to the detriment of their educational, social, cultural and democratic roles and responsibilities. While they contribute to the economic betterment of society in various ways, institutions must continue to be the custodians and promoters of much else that is central to civilisation's well-being. These roles and responsibilities and the manner in which they ought to be conducted in the new millennium were well articulated for the universities by the Glion Declaration (1998). At a time of transition, and confronted by varying pressures being brought to bear, Irish higher education institutions' adherence to such values could be a useful anchoring agent.

As might be expected, personnel in Irish higher education are alert to many of the challenges they face and have been seeking "to read the times", to identify and analyse key developments and trends with a view to strategic positioning. In addition to the international literature, a range of research and commentary reports over recent years bears testimony to this interest and concern. Many questions and issues need to be addressed in charting the way forward. Ireland's achievement of its higher education ambitions for the years ahead would be a leap forward of historic proportions. Such achievement would require vision, courage, understanding, resources, partnership and leadership and inter-personal skills of a high order. It is in this context of planning a new era in the history of Irish higher education that the input of the OECD review team with its expertise, experience and external perspectives is of such importance and value at this time.

This chapter selects for comment a number of issues and challenges which seem to be of particular importance for the future development of higher education in Ireland. These involve issues of finance, research, institutional governance and framework of the system, quality assurance, the lifelong learning dimension, and regional and international contexts. While these issues have been integrated as appropriate in earlier chapters of the Country Background Report, they are commented on here in a more targeted way and in relation to contemporary debate.

Financing issues

Pattern and method of financing

In the context of the historic era of mass higher education, the financing of such higher education is a major cause of concern in all developed countries. Good quality higher education is not a cheap commodity and when it becomes available to over half the age cohort, with increasing numbers continuing to postgraduate studies, then costs escalate. Up to the relatively recent past, Ireland had what might be termed an elite higher education system which was fee

paying. In 1996, the government took the initiative of abolishing student fees for full-time undergraduate students, taking them on as a state charge. The student fee, of course, only represents a proportion of the unit cost of courses which are financed by the state. A maintenance grants scheme also operates for undergraduate students and tuition and maintenance grants are available to eligible postgraduate students. In the year 2000/01, 37% of third-level students were in receipt of maintenance grants. Nowadays, Ireland has a massively expanded third-level education system. As an illustration of this, it is noteworthy that the ratio of full-time third-level entrants to the population of 18 year olds in 2002 was 58% (Statistics Branch of Department of Education and Science).

State funding of higher education has increased significantly with the current and capital state expenditure increasing from EUR 371 million in 1990 to EUR 565.5 million by 1994. Table 15.1 charts the steep rise in funding from 1995 to the estimated figure for 2004.

Table 15.1. **Gross expenditure on third-level education, 1995-2004 (est.)**

	1995	1996	1997	1998	1999	2000	2001	2002 prov.	2003 est.	2004 est.
Current	559.4	632.0	784.6	754.2	855.2	948.1	1 103.0	1 236.9	1 313.8	1 370
Capital	46.9	59.7	68.3	198.0	154.3	188.0	198.3	183.9	124.0	108.0
Total	**606.3**	**691.7**	**852.9**	**952.2**	**1 009.5**	**1 136.1**	**1 301.3**	**1 420.8**	**1 437.8**	**1 478**

Source: 1994-2000: Key Education Statistics. 2001-04: Finance Unit Estimates.

Over the ten year period, therefore, there was an increase of EUR 872 million, representing an increase of 127%.

According to the OECD, Ireland spent 1.5% of GDP on third-level education in 2000, ranking it 8th out of 29 countries (OECD, 2003a, Table B2, p. 209).[1] This report also provides other comparative data on aspects of Irish higher education expenditure in relation to other OECD countries.

One of the striking features of the financing of higher education institutions in Ireland is their heavy reliance on public expenditure. When income from free tuition fees is taken together with state recurrent grants, state funding as a percentage of total recurrent funding (except project research) accounts for approximately 80% of the total income for the universities and approximately 90% for the institutes of technology. The balance of institutional recurrent funding is derived from a student-paid registration service charge (EUR 670 in 2003/04), from postgraduate and other student-paid fees, and from "other income", including bank interest earnings. The heavy reliance by the higher education institutions on the state for recurrent funding and, of course, for capital funding, obviously involves pressures and tensions when a Minister for Education and Science has to work within budget allocation limitations

and has to balance other educational responsibilities with those relating to third-level education. Yet the Irish higher education situation is not unusual by comparative standards. The OECD's *Education at a Glance* (2003) places Ireland in 16th place out of 26 countries in relation to higher education's dependence on public funding (OECD, 2003a, Table B3.1, p. 212).Not surprisingly, therefore, the future funding of higher education, including funding for research, is one of the major issues facing higher education.

The fact that the government budget for 2004 included no increase in the recurrent budget for universities, together with continuing restrictions on capital expenditure, has highlighted the seriousness of the issue, particularly at a time when government aspirations for higher education have been pitched at a high level. Various approaches have been explored for alleviating the financing issue. The Minister for Education and Science considered the reintroduction of undergraduate fees to be paid by students in 2003, but this was not regarded as politically feasible at that time. Universities have been exploring ways to increase their income through a variety of initiatives, including seeking greater financial support from private philanthropy and alumni. Some significant donations have been won for capital projects, but apart from a welcome input for a number of years by Atlantic Philanthropies which is now due to cease, there has been very little input to recurrent expenditure from private sources. The small size of the country, its economic make-up and an earlier tradition of disinterest by business concerns have not favoured the private resourcing of higher education institutions in the way that can be found in some other countries, such as the United States.

Current methods of public funding

The Higher Education Authority (HEA) allocates core current funding through a system of block grants which cover both teaching and basic research. This core funding is based on a formula unit cost system, the main inputs to which are the universities' audited financial statements and certified student enrolments. In addition, a grant is paid in lieu of undergraduate tuition fees. Small amounts of money are made available for some incentive funding schemes, in line with national policy priorities. The core grant amounts to about 60% of the recurrent funding, grants for tuition fees 30%, with the remaining 10% for incentive schemes. The existing funding mechanism has been in operation since 1993, and is currently being reviewed by the HEA.

The recurrent budget mechanism for the institutes of technology operates on the basis of negotiations of programme budgets between individual institutes of technology and the Department of Education and Science. The system is an incremental one, with last year's budget used as the base, with adjustments for increases and income generated. In addition, a grant in lieu of student fees is made available. It is planned that the transfer of funding

responsibility for the institutes of technology from the Department of Education and Science to the HEA will, in time, involve the introduction of a formula-based funding system as part of a move towards greater autonomy for the institutes. The recurrent funding is driven mainly by student numbers, cost and policy requirements. The PRTLI and targeted funding initiatives are operated on a competitive basis, based on quality and merit. Institutions are free to allocate recurrent funding according to their budgetary needs and academic priorities.

Funding for capital projects for both sectors, with the exception of projects funded under the PRTLI scheme, is generally allocated on a case by case basis, by the HEA to the universities and by the Department of Education and Science to the institutes of technology. All capital projects are subject to ministerial approval. In 2002, the minister paused all capital funding for projects on which contracts had not yet been signed, pending a review of these projects by the Department of Education and Science and the HEA. At the time of writing, this review was in progress.

The HEA has provided support and guidance to the universities for the achievement of best practice in financial governance and accounting procedures. Institutes of technology are subject to public sector requirements on governance, strategic management and procurement. Universities are also required to follow government guidelines on procurement. The financial viability of institutions of higher education is monitored by the HEA in the case of the universities, and by the Department of Education and Science in respect of the institutes of technology, through audit of financial statements.

Improving financial control systems

In November 2000, the HEA and Conference of the Heads of Irish Universities (CHIU) jointly initiated a study on best practice procedures for the effective operation in the universities of internal financial control systems, internal audit functions and structures, and other financial controls. Drawing on international experience and the internal experience of the institutions themselves, a series of recommendations evolved and were agreed. These covered clarification of the role of governing authorities, internal controls, the use of audit committees, best practice monitoring of procedures, the role of independent external auditors and reportage to the HEA (HEA and CHIU, 2001, pp. 54-57). These procedures will operate in conjunction with the existing procedures of the state's agencies, the Comptroller and Auditor General's Office, and the Public Accounts Committee, to ensure financial safeguards and probity in the deployment of public monies in higher education.

Recognising that the financial sustainability of universities and other institutions of higher education has become a major issue for policy-makers and for those who govern and manage the institutions in contemporary

circumstances, the OECD's Programme on Institutional Management in Higher Education (IMHE) and the Higher Education Funding Council of England (HEFCE) have launched an international comparative study of financial management policies and systems in eight countries, in which Ireland has participated. In January 2004, an Irish case study report, covering both universities and institutes of technology "Financial Management in Irish Institutions of Higher Education" was presented by the HEA to a conference on this initiative in Paris. This included an evaluation of financial management activities by Irish institutions. Its overall conclusion stated:

> While the assessment of financial management practices has highlighted some weaknesses, the ongoing financial sustainability of universities and institutes of technology remains a fact. Irish institutions have remained financially viable while ensuring a world-class education for their students and producing a world class quality (HEA, 2003a, pp. 28-29).

The report also commends the universities' commitment to the best-practice financial governance procedures recently introduced, and referred to above. The report went on to draw attention to a range of strengths in relation to good financial management in Irish institutions. Among a smaller number of weaknesses identified was the following: "The setting of annual budgets is frequently hindered or altered by the lack of timely information regarding the final value of state funding to that institution. The lack of multi-annual budgeting also inhibits institutional planning." (HEA, 2003a, p. 33). National budgeting policy in 2003 and for 2004 has greatly underlined this problem for the Irish higher education institutions. The overall evaluative comment of the report on financial management concluded, "Thus, the system of financial management, checks and balances employed by the universities and institutes of technology, has proved effective in ensuring sustainability, quality graduates and value-for-money even through a turbulent period within higher education" (HEA, 2003a, p. 38).

The challenge of financing for the future

It is, of course, highly important to have effective and efficient financial management procedures in place. The challenging aspect for the future is to have sufficient finance to manage, so as to allow Irish higher education to match in qualitative terms the top performing systems in the OECD. As already noted, Irish institutions rely very heavily on the state for their funding. While there has been a very impressive expansion of state funding on higher education over the last decade, nevertheless, the resourcing of higher education is not benchmarked to the top echelon of OECD systems. The productivity of the system has compensated, to some extent, for the gap in funding, but in an increasingly competitive international context, satisfactory resourcing is a major issue now facing the institutions.

At only 0.3% of GDP, private funding of Irish higher education is very low. The institutions are clearly conscious of the desirability of increasing their income from sources other than state funding. All universities have established foundations which are tasked with raising private funds to support the development of the universities. Membership for the foundations is reflective of private and corporate interests. However, the potential resources available to Irish institutions from private sources are not as extensive as in larger and wealthier societies. Institutions draw income from the increasing number of postgraduate students, and from a gradually expanding number of international non-EU students. Income from research overheads, conferences, summer courses, renting of facilities, contributes a little to institutional budgets. Earnings from research and campus companies have become a more important source of revenue in recent years. The commercialisation of research outcomes and products is likely to become a more regular dimension for some discipline areas. Most institutions have also established alumni associations which, with the expansion in the number of graduates, may gradually establish a culture change involving moral and financial support by the alumni for their alma maters.

As for other countries, the maintenance of a qualitative mass higher education system is an unprecedented challenge for Ireland. It involves a historic breakthrough in societal development. To set the ambitious target of having one of the best higher education systems within the globalised world competitive context is indeed setting a nation's sights very high. To achieve this target will entail a significant cost, which may have to be viewed in a different way from traditional incremental expenditure conventions and patterns. If a society wishes to position its higher education system as a leader in the knowledge society, within the paradigm of lifelong learning, then it would seem that governmental decisions, in association with societal debate, may have to be of a strategic character which is prepared to accept the costs of the prioritisation involved. Quality is inextricably linked to resourcing and, while resourcing of itself will not necessarily produce quality, it is not conceivable that sustained quality in higher education can be achieved without adequate resources. It would seem that, to date, the debate on the issues involved has neither been deep enough nor wide enough in Irish society to match the strategic and historic significance of the decisions which need to be taken.

Research issues

Towards an innovative society

Traditionally, Irish higher education institutions were predominantly teaching institutions, with relatively limited attention devoted to research, doctoral and post doctoral studies. Following the restructuring of the institutions in the 1960s, research expanded in the universities and a creditable tradition was

established. However, it was not until the economic expansion of the 1990s that the case began to be accepted for the need for significant investment from public funds in research and development in all higher education institutions. The realisation that the production, dissemination and utilisation of knowledge were the key driving forces of the so-called knowledge society provided a momentum for such investment. A range of OECD studies highlighted the large return to society of investment in higher education and research in contemporary circumstances. The remarkable and sustained levels of economic growth in the Irish economy in the 1990s provided the resources for such investment. This was regarded as a benign cycle whereby investment in higher education and research helped to improve economic growth rates, which, in turn, allowed for a greater national resource pool from which further investment might be drawn.

In its report *Creating and Sustaining the Innovation Society* (2002) the HEA draws upon the *Global Competitiveness Report 2001-2002* as an aid to interpreting the stages of development of the Irish economy. It points out that the recent stage of the Irish economy had many of the characteristics of the phase identified as the "Investment-Driven Economy". It positioned Ireland now as moving towards the stage known as "The Innovation-Driven Economy" which involves "the transition from a technology-importing economy to a technology-generating economy, one that innovates in at least some sectors of the global technological frontier". This is regarded as a difficult transition which "requires a direct government role in fostering a high rate of innovation, through public as well as private investments in research and development, higher education, and improved capital markets and regulatory systems that support the start up of high technology enterprises". (HEA 2002, pp. 32-33). The HEA considers that what is required is a paradigm shift in public policy which puts innovation at the centre of the policy agenda. It views higher education and research as being central to achieving the paradigm shift, with state financial support as vital for the two domains of "Knowledge Production" and "Knowledge Transfer and Development". The HEA also emphasises that "there are inseparable and interdependent linkages between teaching, research and learning which must be maintained so as to enhance the quality of graduate and knowledge outputs" (HEA, 2002, p. 15).

While drawing particular attention to the economic returns from research, the HEA sees this as part of a more holistic outcome. It stresses that "importance of investment in the creation of a vibrant research community in the humanities and social sciences in helping us to understand and interpret our changing society… It preserves, widens and advances the intellectual, cultural and artistic accomplishments of society… It equips society with the skills and qualities necessary for economic growth and prosperity and the capacity to construct a society based on social justice and individual freedom" (HEA, 2002, pp. 25-26).

Creating an innovation society does not happen overnight. Rather, it involves a strategic decision to move in this direction, an orientation in all aspects of policy in higher education, in particular, towards creative thinking and investigatory approaches, resourcing a strong research community working at the knowledge frontier, which as well as developing new knowledge, can evaluate, exploit and develop new knowledge initiated elsewhere. It involves affirming the dynamic of inquiry and experimentation. Even at school-going ages, this emphasis on inquiry, which is central to good teaching and learning, needs to be promoted. The spirit of the Irish "Young Scientist Exhibition" needs to infuse more into our education system. The fostering of "human capital", involving the education of graduates with research training, with experience of exploring the frontiers of knowledge in any discipline, and linked to international "networks of knowledge" is the direction in which the culture of a society is oriented to innovation. The spirit of innovation can be productively applied to all aspects of human endeavour and achievement.

Pattern of research funding

Ireland has taken significant initial steps to achieve the paradigm shift involved, but it will require informed and sustained political will as well as the co-operative efforts of many stakeholders to establish it as an identifiable national characteristic of Ireland's way of life. In its National Development Plan, 2000-2006 (NDP), the government allocated EUR 2.5 billion to research, technology, innovation and development. The NDP supports the development of the institutional research capacity and strategically oriented basic research which seeks to place the Irish higher education research system on a new level. The resources provided were a welcome change, when viewed against the rather spartan provision which previously prevailed. As well as increased financing, new agencies were also established to support research activities, including the Irish Research Council for the Humanities and Social Sciences (IRCHSS), the Irish Research Council for Science Engineering and Technology (IRCSET), and Science Foundation Ireland (SFI). Table 15.2 gives an overview of the agencies supporting research in higher education and their levels of funding in the period 2000 to the end of June 2002:

The HEA administers the PRTLI scheme, as a component of the National Development Plan, and its first cycle got under way in 1999. So far, through its three cycles, the PRTLI scheme has made EUR 608 million available for higher education research. Operated on a competitive funding basis linked to institutional research strategy, it encourages transdisciplinary research teams and programmes, as well as inter-institutional co-operation. It is already funding 1 500 researchers in 60 research programmes in 33 new research centres. A further spin-off of the PRTLI funding is its requirement that the research should contribute to new courses leading to an enhancement in the quality of teaching

Table 15.2. **Research funding to the higher education sector, 2000-June 2002**

Agency	€ million
Department of Agriculture, Food and Rural Development	40.99
Department of Education and Science (DES)	18.45
Enterprise Ireland (EI)	113.93
Environmental Protection Agency	5.88
Higher Education Authority	701.04
Health Research Board (HRB)	32.61
Irish Research Council for the Humanities and Social Sciences (IRCHSS)	8.11
Irish Research Council for Science Engineering and Technology (IRCSET)	0.24
Marine Institute	1.94
Science Foundation Ireland (SFI)	67.00
Total	**990.19**

Source: HEA (2002), *Creating and Sustaining the Innovation Society*, p. 20.

and learning. As well as improving the infrastructure for research, the scheme has already led to a large expansion of research publications in Irish and international journals. The PRTLI has also helped Irish researchers to participate in competitive European research programmes (HEA, 2003b, pp. 8-12).

The IRCSET and IRCHSS provide valuable funding for talented individual researchers, students and postdoctoral fellows. SFI concentrates its research support for sectors identified by government as strategically important, *i.e.* biotechnology and information and communication technologies. Other agencies such as the Department of Agriculture, Food and Rural Development and the Health Research Board fund research in their areas of special concern. The wooing of major international researchers to Ireland has been a notable feature of the new research policy. Thus, it can be concluded that there are now well-established agencies, with appropriate procedures to support a wide spectrum of types of research operated in a variety of investigative modes. In 2003, against a background of general overall public expenditure restrictions, the government imposed a "pause" in capital research funding which caused a good deal of concern that a "stop-go", inconsistent pattern of research support was about to occur. The pause button was released for 2004, and the agencies involved hope that the international image which was being formed for Irish research as a serious sustained, strategic commitment will continue to be sustained.

Another major stimulus for research in higher education institutions has been the EU research framework schemes. As well as providing valuable financial resources for Irish researchers, the application procedures and conditions for entry to the competitive process have also sharpened the research planning of individual researchers and their institutions. Of particular value has been the international co-operative dimension involved which has encouraged close

collaboration in planning and execution of the research between Irish personnel and their international peers. The exchange of perspectives, experiences and expertise has been an enriching one, utilising the advantages of modern information and communication technologies. Irish researchers have been very pro-active in engaging in EU research projects and have benefited from the stimulation involved in such participation. Researchers have also been successful in winning research funding from various research foundations such as the Wellcome Foundation, from philanthropic organisations such as Atlantic Philanthropics and from business and industrial corporations. Of course, researchers in subject areas which are less attractive to public or corporation funding sources engage in research work as part of their academic roles. The annual reports of the university presidents bear testimony to the extent of this work, which is so significant for the broader well-being of society. This work tends to be funded from the annual core grant to the universities made available by the HEA, which subvents the research as well as the teaching role of academics. In 2002 it was estimated that this subvention amounted to almost EUR 100 million (HEA/*FORFÁS*, 2003, p. 15), on the basis that one-third of the pay bill for academics is assumed to go to research activities.

Thus, while it could be concluded that the research profile of Irish higher education is a healthy one, particularly when compared with the situation in Ireland a decade ago, it would be myopic if this were to yield to any complacency. When viewed in a comparative OECD perspective the position emerges as less favourable, as other countries continue to expand their R&D investment on a stronger initial base-line. For instance, the OECD's *Education at a Glance* indicates research and development expenditure on tertiary education in Ireland in 2000 as a percentage of GDP at 0.21%. This located Ireland at 16th place out of 31 OECD countries, well below the OECD country mean of 0.33% (OECD, 2003a, Table B6.1, p. 245). From the point of view of General Expenditure on Research and Development (GERD), as set out in Table 15.3, Ireland's comparative performance is weak and below that of other small European countries such as Denmark and Finland.

In its target for the Lisbon Objective, to which Ireland is committed, the EU has set 3% of GERD as the needed level of investment. This will require a very significant increase in the level of expenditure on R&D in higher education, as well as in other research initiatives.

Planning for research overheads

The greatly expanded programme of major project research which has been developed for higher education in Ireland over recent years, has given rise to concern that inadequate attention was given to indirect costs and particularly as to who should be liable for paying those costs. Indirect costs, or overheads, are those incurred in the course of a research project but which cannot be attributed

Table 15.3. **GERD as a % of GDP in Ireland and some other countries**

	Business	Higher education	Government	Total R&D
Ireland	0.95	0.30	0.13	1.38
US	2.04	0.37	0.20	2.70
Canada	1.08	0.63	0.20	1.80
Denmark	1.32	0.42	0.32	2.09
Finland	2.39	0.60	0.36	3.37
Netherlands	1.14	0.63	0.33	2.02
EU (mean)	1.21	0.39	0.26	1.88
OECD (mean)	1.56	0.38	0.23	2.24

Source: O'Driscoll, E. (19 November 2003), "External Pressures on Universities in Contemporary Society", Address to NUI Conference, Kilmainham, Dublin.

specifically to the project. Examples of such indirect costs are space, light, heat, maintenance, library and computing services, administrative support. The concern was rooted in the trend whereby the institutions carrying out research have had to meet much of the indirect costs by diverting some of their funds, originally provided for other purposes, including teaching, to research. In August 2001 the HEA and *Forfás* appointed a Steering Group to recommend a policy framework for the allocation of indirect costs in publicly-funded research contracts. The *Report of the Group on Research Overheads*, 2003, put forward a policy framework, which has been agreed in principle by all parties, to fund the direct and indirect costs of research that can be used by public funding agencies, the higher education institutions and public research bodies to give appropriate return for Exchequer research investment. The framework provides a method for calculating both the direct and indirect costs of research, enabling funding agencies to allocate these costs to projects and distributing overhead funds within the research organisations. The group recommended a standard overhead contribution rate of 30% for laboratory-based research and a 25% rate for desk-based research as well as a phasing-in and monitoring period for the framework between 2003 and 2006 (HEA/*Forfás*, 2003, pp. 64-65).

A central policy oversight agency?

Another significant concern which has arisen from the growth and expansion of investment in research is the need for an effective policy oversight and review agency, located at the centre of government, which would seek to ensure that the drive towards the innovation society would work efficiently and effectively. In particular, the HEA in its report *Creating and Sustaining the Innovation Society* (2002), stated, "The position regarding the provision of state support in the area of technology transfer and commercialisation is unclear and is causing confusion." (HEA, 2002, p. 99) While the support for Knowledge Production is structured, that for the domain of Knowledge Transfer is regarded

as weak. Knowledge Transfer and Development is regarded as crucially important, involving the transfer of research results, skills and knowledge into society and the economy. It encompasses activities such as applied research and development, technology transfer, the exploitation of intellectual property and the commercialisation of research. The aim is that Irish society can reap significant dividends from the increased levels of public expenditure on research in the knowledge production domain.

The question of establishing overarching structures for research policy has been under consideration by the government and a detailed consultation exercise was conducted in 2002 by an expert group nominated by the *Tanaiste* (Deputy Prime Minister) for this purpose. Proposals are expected to be brought to government in the very close future in this regard.

Research and the National Spatial Strategy

The National Development Plan 2000-2006 included the intention of producing a spatial strategy to plan, at national level, for the country's future spatial development, which would promote better balanced regional development. The National Spatial Strategy (NSS) 2002-2020, was published in 2002. This 20-year plan is designed to achieve a better balance of social, economic, physical development and population growth between the regions. To address the imbalance between the rapid development in the east of the country and other regions, the strategy identifies "gateways" and "hubs" that have the capacity to support the stronger urban-rural structure needed to drive the development of these other regions. While not concentrating on higher education *per se*, it is significant that a key characteristic for identifying a gateway is the availability of "national or regional third-level centres of learning". A key requirement for specification as a hub is "the option of third-level or outreach facilities" (Department of the Environment and Local Government [n.d.], p. 40).

With its seven universities, fourteen institutes of technology, and various outreach centres on a relatively small land mass, few urban areas are located at very remote regions from a third-level institution. It is well recognised that higher education and research are key contributors to the development of knowledge-based economic activity and their contribution to the achievement of the NSS strategy will be significant. The knowledge development and transfer domain will be particularly relevant and will call on the combined efforts of the institutions, development agencies, regional authorities and industrial sectors and investors. In the NSS design, a university and an institute of technology are located in three gateways: Cork, Limerick/Shannon and Galway. An institute of technology is located in five other gateways: Waterford, Sligo, Dundalk, the Athlone/Mullingar/Tullamore Gateway and the Letterkenny/Derry Gateway. Two hubs have institutes of technology: Tralee/Killarney and Castlebar/Ballina. A noteworthy feature of higher education

institutions in Ireland is that they attract very high proportions of their students from the local/regional hinterland. There is a strong loyalty to and identification with the local institutions. However, when it comes to the employment of graduates and postgraduates there is a brain-drain from regions to the Dublin area, particularly in the case of the South-East, the Midlands and the Border regions (McDonagh, 2003, p. 19). In a recent discussion document on "Higher Education and the National Spatial Strategy", Sean McDonagh states that "the location of postgraduate places is a measure of the location of research activity", pointing out that Dublin had 58.9% of the new postgraduate places in 2002. McDonagh argues the case for a strategy of inter-regional collaboration to ensure full national access to research and knowledge sources (McDonagh, 2003, p. 20). As yet, there has not been sufficient national debate on how higher education institutions can best contribute to research and innovation to the regions in which they are located. However, all regional development agencies are very conscious of the magnet pull of a higher education institution for industry, commerce and culture in a region. Universities are well positioned to support research activities in the urban and surrounding regions in which they are located. It is noteworthy that the directors of the institutes of technology seek a greater research role for the future. In the report on the future position and roles of the institutes, it is stated: "At regional level, support for the development of a research capability in specific areas by institutes should be provided, following consultation with the development agencies. The leading role that institutes play in knowledge and technology transfer at regional level should be recognised and supported" (CDIT, 2003, p. 8). There is great potential in the infrastructure which is likely to be harnessed in coming years by government, regional interests and business interests within the general policy framework of the National Spatial Strategy.

Framework and governance issues

The changing framework

As was noted in earlier sections, legislation in the 1990s for the institutes of technology and for the universities gave expression to the binary policy for the framework of higher education, which has been in operation since the 1960s. However, in recent years the institutes have been pressing for greater academic freedom and for equality of status with the university sector. This is linked to the expansion of degree work and, to a lesser degree, postgraduate studies in the institute of technology sector. As was indicated in Table 14.7, levels of study in this sector showed that 30% was at degree level and 2% at postgraduate. Furthermore, since the 1992 legislation, research, particularly of an applied character, has become a more active dimension of the institutes of technology. They have also engaged in European Framework research projects and PRTLI and

SFI projects in association with universities. Institutes of technology vary in size and in academic profile. For instance, of the full-time undergraduate students in the DIT, 65.8% are at degree level, and DIT had a total of 1 311 postgraduate students in the year 2002/03. The other institutes with the highest proportion of students engaged in degree and taught postgraduate level work are Athlone (37.3%), Waterford (36.0%), Limerick (28.0%) and Sligo (26.7%) (O'Hare, 2003, p. 11). As was noted in the OECD study, *Redefining Tertiary Education* (1998), such academic trends in the non-university sector have been experienced in many countries, with some moving towards "unified" systems, by combining previously separate university and non-university systems and others remaining firmly "binary" (OECD, 1998, p. 104). It is accepted within Ireland that there has been a "blurring" of the binary system, but no formal decisions have been made regarding changes in the future framework.

In a recent report published by the directors of the institutes of technology, *Institutes of Technology and the Knowledge Society: Their Future Position and Roles* (2003), it is pointed out that there is a developing differentiation within the sector which is tending to set apart those institutes adjacent to universities in Cork, Galway and Limerick, those which are the sole providers of higher education in their region, and those that form part of the higher education infrastructure in the greater Dublin area. The report goes on to state "What is clear is that a 'one solution fits all' will not provide a satisfactory response to the future positioning of the institutes of technology within the Irish higher education system" (CDIT, 2003, p. 7). The report also emphasises the regional role of the institutes in relation to the gateways and hubs of the National Spatial Strategy.

The viewpoint of regarding the institutes of technology as a cluster of varying categories also forms a central feature of a recent report prepared by Malcolm Skilbeck, *Towards an Integrated System of Tertiary Education: A Discussion Document* (2003). In Skilbeck's view, the binary system is not working in practice and he maintains that "It has become an unnecessary impediment" (Skilbeck, 2003, p. 19). In its place he proposes a "cascade" model, which would lead to a more integrated higher education system. In his sketch of a gradual reshaping of the institute sector, Skilbeck proposes that the DIT and Waterford Institute be established as cross-sectoral technological universities; the linking, through new organisational arrangements, of the institutes in Cork Galway and Limerick with the universities in those cities; and possible amalgamation of smaller institutes into larger institutes of technology.

A concern for the immediate future is planning to ensure a satisfactory transition for the institutes of technology to become designated institutions of the HEA, which has been a long-stated policy objective. Up to now, the Department of Education and Science retained detailed control in the operations of the institutes, which added to the multifarious operational roles

of the department. The Cromien Report on the operation of the Department of Education and Science (2000) urged that the department should extricate itself from the detailed operational work regarding the institutes, give greater independence and responsibility to the institutes to carry out these functions, and to devolve the operational work to the HEA. The institutes of technology are keen that the transfer to the authority of the HEA be expedited. However, the directors indicate that new legislative measures will be necessary for this. In particular, they emphasise that this should ensure that the institutes be allocated "the institutional autonomy at a level equivalent to that available to universities". The expectation is that within the new arrangements the Department of Education and Science will retain powers relating to national policy and planning and the institutes will have greater powers to manage their own affairs, with accompanying accountability measures. The HEA will undertake executive responsibilities for the allocation of funding to the institutes, certain review roles in relation to strategy and equality, and advise the minister on the development of the sector. This would have a significant impact on the character and mode of operation of the institutes of technology, and would involve a more distant relationship between the institutes and the Department of Education and Science.

Modes of governance

The provisions for academic freedom in the *Universities Act* of 1997 are particularly appealing to the institutes of technology, and the directors of the institutes have sought a replication of these statutory guarantees for their institutions. The guarantees are as follows:

A university, in performing its functions shall:

i) Have the right and responsibility to preserve and promote the traditional principles of academic freedom in the conduct of its internal and external affairs; and

ii) Be entitled to regulate its affairs in accordance with its independent ethos and traditions and the traditional principles of academic freedom, and in doing so it shall have regard to:

- the promotion and preservation of equality of opportunity and access;
- the efficient and effective use of resources; and
- its obligation as to public accountability.

This formulation was regarded at the time of the passing of the *Universities Act* in 1997 as a satisfactory statement of the balance between the traditional right of academic freedom of universities in Ireland, and the concern of the state as the major funding agency for the efficient use of resources and public accountability. The checks and balances of the accountability process are set out

elsewhere in this chapter. However, in times of financial difficulty tensions can emerge between the state, as major funder, and the institutions about the adequacy of transparency and full accountability regarding universities' financial resources. On the other hand, the universities point to their full compliance regarding the accountability processes in place within the institutions, in their relationship with the HEA and in their responsibilities to the Comptroller and Auditor General and the Public Accounts Committee. Furthermore, they point to their adherence to updated financial governance controls agreed with the HEA. This tension, occurring in conjunction with the impending designation of the institutes of technology as institutions under the remit of the HEA, raises interesting issues regarding the appropriate relationship of the Department of Education and Science with the state-funded higher education sector. In this context, it may be worth noting the trends revealed in a recent OECD survey (2003) of changing patterns of governance in higher education. It found that:

> Overall, the higher education reform agenda has involved governments in greater focus on strategy and priority setting and less involvement in the running of the system on a day-to-day basis… The broad trend has been for a reduction of direct state control of higher education in most OECD countries … yet at the same time introducing new forms of control and influence, based largely on holding institutions accountable for performance via powerful enforcement mechanisms including funding and quality recognition.
>
> The conclusion of the review was:
>
> The art of policy-making will in future involve ensuring that public goals are met in higher education through influence rather than direction (OECD, 2003c, pp. 59-78).

The directors of the institutes of technology also aspire to the internal governance structure of the *Universities Act* (1997) to replace those of the 1992 legislation. However, in the context of the evolution of the university within a fast-changing environment internationally, much new reflection has taken place on the most appropriate mode of internal governance and management of the institution, which may have implications for the institutional planning in the years ahead. The Glion Declaration II (2000) has drawn an insightful distinction between university governance and management with potential implications for the Irish situation, at this period of transition. It states:

> There is a world of difference between governance and management. Governance involves the responsibility of approving the mission and goals of the institution; the oversight of its resources; the approval of the policies and procedures; the appointment, review and support of its president; and an informed understanding of its programmes and activities. Management, in contrast, involves the responsibility for the effective operation of the

> institution and the achievement of its goals within the policies and procedures approved by the board; the effective use of its resources, the creative support and performance of teaching, research and service; and maintenance of the highest standards of scholarly integrity and professional performance. The responsibility of the board is to govern, not to manage (Association of Governing Boards of Universities and Colleges, 2000).

The Glion Declaration II goes on to state, "We urge the principle of subsidiarity to campus governance, in which decisions are made at the lowest appropriate levels of responsibility".

Because of the complexities of modern higher education institutions and of the challenges they face in being successful in a demanding and competitive environment, increased attention is being focussed on how best the institutions can operate to be successful. The interlocking elements are emphasised in a recent study by Michael Shattock on the management of successful universities. He states:

> … successful universities try to ensure that governance is kept in balance between an active lay contribution, strong corporate leadership, an effective central clearing core and an involved and participative senate/ academic board and academic community. Where any element is weak the institution is disadvantaged (Shattock, 2003, p. 97).

Shattock lays particular emphasis on the value of "a strengthened steering core" comprising of lay members of the governing body, the vice-chancellor, the governing core of the academic community and the senior administrators. It is seen as the hub of the committee structure, in close touch with other major committees. Shattock concludes that "successful university management is underpinned by belief in institutional autonomy and should be exercised not from the top down but through a continuous dialogue between the centre and the operating units" (Shattock, 2003, p. 175).

Reflections such as those outlined above seem to have relevance to current debate in Ireland on the governance of higher education institutions. As an instance, recent contributions of Dr. Don Thornhill, Chairman of the HEA, reflect similar thinking. In a recent address on external pressures on universities in contemporary society, he proposed as an informing principle that "National policy-makers should be persuaded to see academic freedom and institutional autonomy as necessary features of higher education systems and not as problematical constraints." (Thornhill, 2003). This, he argues, needs to be balanced by demonstrated evidence to the public of the effectiveness of governance. In another recent address he reflected on the composition of the governing authorities of Irish universities, and set out the figures in Table 15.4 to demonstrate the general character of their current composition.

Table 15.4. **Universities: composition of governing authority**

	Internal membership	External membership	Total
DCU	18	17	35
NUIG	18	20	38
NUIM	16	13	29
UCC	19	21	40
UCD	20	20	40
UL	17	17	34
TCD	25	2	27

Source: Thornhill, D. (2003), Response to address by Dr. Frank Rhodes in *Challenges Facing Irish Universities*, Workshop Proceedings, Royal Irish Academy, Dublin, p. 25 (Royal Irish Academy, 2003).

Bearing in mind the role of the governing authorities, the size of their membership, and the occasional character of their meetings, he put forward the idea of a small "board", appointed by the governing authority, on the recommendation of the chief officer. It would be composed of high-quality people, would meet more regularly than the governing authority, be proactive in relation to macro-university business, and among its key functions would be approving the strategic plans and budgets prior to their submission to the governing authority. It is the general concept that is being proposed rather than the detail of its functioning. This idea would seem to correspond fairly closely to Shattock's "strengthened steering core", and might have much to recommend it as a contribution to both improved governance and administration.

Of course, personnel in Irish higher education institutions are conscious of the challenges of providing efficient, effective and collegial governance for the demanding and complex role they now fulfil in contemporary society. They have been experimenting with various forms of internal management structures. These may take forms such as committees of vice-presidents, committees of deans, top management committees, and soon, as well as various *ad hoc* committee frameworks. There has also been increased provision of training for those exercising managerial and leadership roles. Those exercising leadership roles have also benefited from engagement in conferences and courses on governance and management provided by international agencies such as the OECD's IMHE and the European University Association. At present, there would seem to be a danger that, with the increasing pressure for efficient management, a "managerial ethos" may set in which has the effect of distancing the general academic community of the institution, or which encourages them to exclude themselves from engagement with the broad university-societal interface issues, at this period of major change and adjustment. This trend, coupled with the pressures on academic staff for specialisation and the production of peer-reviewed research for promotion purposes, may have the unfortunate effect of decreasing their interest in, and concern to be involved with governance and

management issues affecting the institution as a whole. As well as enhanced leadership qualities at the top levels of the institutions, skilled leadership is also at a premium at departmental and faculty levels. The older collegial modes of governance in higher education are no longer in harmony with modern requirements. The demands on those exercising leadership in third-level institutions today are greater than formerly, but a key one is the ability to harness the commitment of all staff through new forms of collegial engagement. Leadership in fostering the culture, ethos and morale of the institution is highly relevant to enhancement of its academic achievement and quality. Leadership must find time to take note of, and affirm the qualitative work of all members of the institution as they help to realise the institution's mission.

Lifelong learning and higher education

The emergence of the so-called "knowledge society" has greatly emphasised the importance of knowledge skills and know-how in the population at large. Apart from social justice or humanitarian concerns, an economic drive has helped to emphasise the significance of learning throughout life, as a way of life in modern society. The pace of acceleration of the knowledge base underlines the need for continual learning in the course of one's lifetime. The issue becomes more acute for those who, for whatever reasons, missed out on educational experience and achievement earlier in their lifespan. It also raises concerns for the learning needs of young people who traditionally tend to drop out of formal education early, and as a consequence are very disadvantaged in obtaining worthwhile job opportunities in modern society. Concern for human resource development in building up what economists term the human capital in society is a significant driving force in bringing lifelong learning to the fore as a political and educational concern. The mid-1990s saw major moves to highlight the issue with the publication in 1995 of the OECD report, *Lifelong Learning for All* and the designation by the EU of 1996 as the "Year of Lifelong Learning", which prompted many European governments to take initiatives with regard to lifelong learning. Ireland published its "Strategy for Lifelong Learning" in 1996, emphasising that it was a concept which affected all stages of the life-span, from the cradle to the grave.

To date in Ireland, most emphasis with regard to lifelong learning has been placed on hitherto neglected areas of educational provision – early childhood education and adult education. This resulted in a White Paper on early childhood education, *Learning to Learn*, published in 2000; a Green Paper, *Adult Education in an Era of Lifelong Learning* in 1998; and a White Paper, *Learning for Life* in 2000. Chapter 7 of this White Paper contained a range of policy proposals devoted to higher education. Higher education institutions have been relatively slow in taking up lifelong learning as a central policy concern.

This was not unique to Irish universities, as is noted in an OECD thematic study of tertiary education (1998) when it stated:

> There is little evidence, as yet, that strategy planning … has incorporated the values and goals or drawn upon experience of lifelong learning. Much more system-wide effort will be required in order to reshape tertiary educational procedures as if they were part of universal lifelong learning. The lifelong learning issue, on the evidence of the review, is still poorly articulated (OECD, 1998, p. 106).

It takes time for system-wide effort to develop regarding a new concept, *albeit* one that should be very congenial to higher education. As was noted earlier in this report, the great concentration in Irish higher education policy has been to accommodate the young age group of 18-23 years. It was also noted that mature students, regarded as those over 23 years of age, are under-represented in full-time higher education by comparative standards.

However, there is evidence of developing policy in relation to lifelong learning in Ireland, and the years ahead are likely to witness a changed configuration. The *Universities Act* of 1997 included provision for the universities to promote "lifelong learning through the provision of adult and continuing education". The Steering Committee on the Future of Higher Education set a target of 16% of mature students in the full-time student body by 2010. The White Paper on Adult Education (2000) and the Report of the Task Force on Lifelong Learning (2002) emphasised the need for much more expanded provision for lifelong learning, including higher education provision. The great imbalances in the pattern of participation of different social classes in Irish higher education, discussed earlier, act as further propulsion of the lifelong education agenda. The National Qualifications Authority of Ireland (NQAI), established in 2001, is regarded as of major importance in promoting the lifelong learning agenda. The need for a more flexible and integrated system of qualifications arose, in the main, from the national objective of moving towards a "lifelong learning society", in which learners would avail themselves of learning opportunities at various stages throughout their lives. The National Framework of Qualifications facilitates progression through different levels and forms of learning from schools to the workplace, and from further to higher education and training. The Framework includes awards made by FETAC, HETAC, and the Dublin Institute of Technology. It also includes awards made by the universities at Levels 7-10. In promoting its work, the NQAI is seeking to promote a culture change whereby the emphasis is placed on the outcomes of the programmes as achieved by the learner. The NQAI is also exploring the inclusion of professional awards with the relevant bodies. In its overall emphasis on access, transfer and progression for learners, the NQAI is likely to be regarded as a historic milestone in promoting lifelong learning within Ireland.

A range of recent reports have focussed on aspects of lifelong learning within higher education. These include the *Report of the Action Group on Access to Third-Level Education* (2000); *Access and Equity in Higher Education: An International Perspective on Issues and Strategies* (2000); *The University Challenged: A Review of International Trends and Issues with Particular Reference to Ireland* (2001); *College Entry in Focus* (2001); *Report on Symposium on Open and Distance Learning* (2000); *Higher Education and the Challenge of Lifelong Learning* (1999); *Policies, Action and Procedures for the Promotion and Facilitation of Access, Transfer and Progression* (2003). These have all helped to create greater public awareness of the issues involved and have helped propel initiatives to improve existing provision for non-traditional participants. The sequence of reports of the Expert Group on Future Skills Needs, under *Forfás,* highlights skill gaps in a range of occupations, and promotes up-skilling and lifelong learning through higher education and other education and training sectors. The *Annual Competitiveness Report* for 2003, points out that "Ireland currently performs quite poorly in terms of the percentage of 25-to-64-year-olds participating in continuing education and training, being ranked 9th out of 12 comparator countries." (National Competitiveness Council, 2003, p. 32-33). The report also recorded Ireland as 10th out of 16 countries in terms of on-going staff training.

Higher education institutions have been responding to the challenges which have been highlighted regarding lifelong learning. The universities have appointed access officers and have established link schemes with schools in disadvantaged areas in their hinterland. While admirable, research so far indicates that these schemes only make limited inroads to the problem without wider inter-sectoral support. The institutions have also been promoting support schemes for mature students, but, again, the progress made so far is limited in terms of impact. Some initiatives are being taken to promote more in-career professional development by the universities, but it is at early stages of development. The greater provision of higher education through part-time participation is likely to develop much more. In their proposal on new legislation for the institutes of technology, the Council of Directors has asked that the following be designated as one of the "objects" of the institutes:

> To educate, train and retrain technical, administrative and professional personnel, as well as addressing the continuing education and lifelong learning needs of the community, higher level professional, technical and managerial personnel (CDIT, 2003, p. 55).

This would involve a new direction and be in keeping with lifelong learning aspirations for higher education.

As reflective of its greater concern for promoting lifelong learning, the DIT has appointed a Head of Lifelong Learning and a Head of Distance Education, and has Mature Student Co-ordinators in each of its schools. Some

of the universities have expanded their adult education departments which are providing greatly expanded opportunities for adult learning ranging from certificate, to doctoral degree level. Institutions have also been bringing education closer to students through outreach centres and the use of distance education and online provision, although this latter is at the early stages. With a drop in Leaving Certificate students anticipated for the next five or seven years, an opportunity presents itself for the greater recruitment of more mature students and for in-career professionals without further capital expenditure. However, recent statistical studies indicate that commentators have greatly over-estimated the future decline in higher education numbers, due to demographic trends. Instead, there is likely to be a sustained need for the expansion of higher education places in the decades ahead.[2] Ireland, of course, is also a party to the EU's Lisbon Objectives Policy which aims to enhance the contribution of higher education institutions "in making lifelong learning a reality." The EU Ministers urge the higher education institutions "to enhance the possibilities for lifelong learning at higher education level, including the recognition of prior learning" (EU Ministers, 2003).

Overall, it can be concluded that while lifelong learning as enunciated by the OECD, the EU and national governments is a relatively new policy concept, it is taking root in Ireland. Increasingly, there is a greater awareness and consciousness of its relevance and import. A variety of steps are being taken to convert the policy rhetoric into reality. While the initiatives taken so far by Irish higher education institutions are not dramatic, they lay the foundations for future potentially significant advance. Apart from the societal benefits involved, a more committed engagement with the lifelong learning agenda would involve significant and beneficial changes to the clientele and practices of the higher education institutions.

Quality assurance and quality improvement issues

In the context of mass higher education, of the strategic role of higher education in society and of the greatly increased level of public expenditure on higher education, it is to be expected that a special emphasis would come to be placed on ensuring that quality be publicly demonstrated as a key feature of all aspects of higher education institutions. Over the last decade or so, all developed countries as well as international bodies such as the EU and OECD, have been laying great importance on quality assurance issues. Ireland is very much a part of this international trend. Of course, concern for quality is not an invention of the 1990s; it has been a traditional concern of the institutions. Among a variety of procedures for quality, employed over the decades by Irish universities, was a well established system of external examiners for monitoring primary and higher degrees, peer-review systems of research publications, the assessment of applications for research grants and for

external participation in promotion boards. The non-university sector, which came under the evaluative control of the National Council for Educational Awards (NCEA) and more recently of HETAC, had to meet the investigative requirements of these bodies, involving external academic personnel for institutional review, course approval and standards of qualifications.

During the 1990s, in line with international developments, more formal systematic and comprehensive modes of quality assurance have been introduced to Irish higher education, as in many other public institutions. Aware of such trends, in 1995, the Conference of the Heads of Irish Universities (CHIU) took the initiative of introducing such a system, initially on a pilot basis. The universities were keen to develop a common framework, allowing for some local adaptation to the culture of individual institutions. To help develop the framework, CHIU established the Inter-University Quality Steering Committee (IUQSC). The pilot scheme was quickly initiated involving the key elements of:

- A self assessment report, along agreed guidelines by the unit under review, with an emphasis on reflection, analysis and improvement, and including student evaluation.
- The evaluation of this report by a peer review group, involving external personnel, followed by a site visit to meet staff, students, stakeholders, and review facilities. The peer review group then prepares a report on its findings for submission to the governing authority of the university.
- The unit under review engages in follow-up activities towards implementing recommendations for improvement.

This process, first implemented in 1995/96, still forms the core of the quality assurance procedures in Irish universities. A stronger emphasis on public reportage of peer review reports has been introduced since, including publication on universities' websites.

The *Universities Act* (1997) was the first piece of legislation to set out specifically the responsibilities of the universities for quality assurance and quality improvement. Section 35 of the Act requires each university to "establish procedures for quality assurance aimed at improving the quality of education and related services provided by the university." The Act requires each university to review the quality of the work of all faculties, academic departments and service (including administrative) departments on a ten-year cycle. It is the university authorities who organise the review timetable and arrangements as well as the publication of the results. The fact that the process is conducted by the universities, rather than an external body, and that it was already in place before the Act, has helped to foster a sense of ownership of the process which, by now, is regarded as part of the way of life of the universities. The model employed by the Irish universities involved a continuous cycle of analysis, reflection and action, providing flexibility to design systems appropriate to the diverse needs of

universities. Quality review is now an important element in each university's commitment. Over the last nine years, many academic departments and other university units have undergone the quality assurance process, and it is generally regarded as a very worthwhile undertaking. The governing authorities are obliged to conduct a review of quality assurance procedures at least every 15 years. Section 49 of the Act allows for the HEA to conduct a review of such procedures and may, following consultation with the universities and the NQAI, publish a report on the outcome of any such review. At the time of writing, the HEA, in association with the Irish Universities Quality Board (see below), was in the process of organising such a review to be conducted by the European Universities Association (EUA) during 2004.

In 2003, as a further initiative to substantiate the quality assurance procedures of Irish universities, the governing authorities of the seven Irish universities established the Irish Universities Quality Board (IUQB). The board comprises the current, past and incoming chairs of CHIU, the registrars of the remaining four universities, and seven external members, two of whom are external to Ireland, and have appropriate experience in the area of quality assurance. The IUQB's aims are:

- To increase the level of inter-university co-operation in developing quality assurance processes.
- To represent the Irish universities nationally and internationally on issues related to quality assurance and quality improvement.
- To articulate, on behalf of the governing authorities of the universities, the resource implications of recommendations for quality improvement (CHIU, 2003).

While funds are made available for the conduct of quality assurance processes, no budget overhead exists to carry out improvements which may be recommended, and which call for extra resources. The remediation of observed weaknesses forms an important part of quality improvement. The Act only refers to the implementation of review findings "having regard to the resources available to the university".

Another aspect of provision for quality improvement has been the Training for Trainers scheme operated by the HEA since 1992, and some elements of the HEA's Targeted Initiatives funding. The Training for Trainers scheme has been a very significant and beneficial mechanism whereby, on a competitive basis, HEA-designated institutions apply for assistance for staff development programmes in the institutions. This has provided resources for staff training in the upgrading of teaching and learning skills, for management and leadership training and for the utilisation of new technologies. Each institution has a staff development strategy and the courses approved for funding form part of these strategies. Staff development officers and supporting staff have been employed

by all universities. Most have a Quality Promotion Unit or its equivalent in operation which leads and organises a great range of courses for all categories of staff each year. They also assist in the quality assurance exercises. The work of these personnel has greatly assisted in the cultivation of a self-development ethic among many staff. Participation in courses is voluntary for existing staff, but it is a requirement for new staff to agree to engage in appropriate development courses.

Quality assurance procedures for the institutes of technology emerged along a different track to that of universities. Under their original designation as regional technical colleges, the validation and certification of their courses came under the remit of the National Council for Educational Awards (NCEA). The NCEA put procedures in place, including panels of experts from the universities and elsewhere, to evaluate course proposals, to establish standards and to conduct institutional reviews. Panels of external examiners were appointed to monitor the standards of marking on course assignments and examinations. These processes were important in giving public assurance as to the quality of the work in these new institutions and helped to build their successful public profile.

With the establishment of the National Qualifications Authority of Ireland (NQAI), the NCEA was replaced by the Higher Education and Training Awards Council (HETAC). HETAC has issued its guidelines and criteria for quality assurance, drawing on the NCEA's experience. The procedures relate to "all aspects of the providers' functions and operations, which impact on the standard and quality of its higher education and training programmes", and, as such, provide a complete framework for quality assurance within the institutes of technology. The DIT was never linked to the NCEA for its awards or quality assurance. It fulfilled the requirements of external awarding bodies and some professional bodies. In the context of its association with Trinity College, its degree courses were subject to the university's quality criteria. Under the NQAI legislation, the DIT is obliged to establish and agree on procedures for quality assurance with the NQAI. The DIT has a wide range of course levels from apprenticeship to doctoral studies. Since 1998, the DIT is entitled to award its own degrees, and the issue of its being recognised as a university is a live one.

Of course, the institutes of technology and the DIT have long had an interest in quality improvement procedures. Staff development is well established within the institutions. Funding has been made available from the Department of Education and Science for staff development purposes. Staff have availed themselves of training opportunities provided within the institutions and externally available to improve their teaching and research skills. Staff development personnel have been employed by the institutions. The older view of these institutions saw them predominantly as teaching institutions with a strong applied focus to their studies. Staff were recruited

with these purposes in mind. The broader remit for the institutes which has developed in more recent times has altered the job profile. The heavy teaching loads require adjustment to facilitate a more active research role. The authorities of the institutes have also been encouraging and facilitating more staff to undertake postgraduate studies to strengthen their academic profile.

In developing their quality assurance and quality improvement procedures the Irish higher education institutions are very conscious of international trends and developments in this area. Ireland engaged in a European pilot project on quality assurance from 1994-96, and noted the EU Commissioner's report on this in 1996. Ireland was one of thirty-one states which signed the Bologna Declaration in 1999. This declared a commitment to the "promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies". With the so-called Lisbon Objectives (2000), the EU committed itself to the achievement of European co-operation in quality assurance, which has been further emphasised by communiqués agreed at meetings in Salamanca (2001), Prague (2001) and Berlin (2003). The Berlin communiqué (September 2003) stated: "Ministers commit themselves to supporting further development of quality assurance at institutional, national and European level. They stress the need to develop mutually shared criteria and methodologies in quality assurance" (EU Ministers, 2003). The momentum is being sustained. Ireland has taken a keen interest in the quality assurance work of the European University Association (EUA), the Confederation of EU Rectors' Conferences, of which CHIU was a member, and in the earlier work of the European Rectors' Conference (CRE). The EUA is working to support the development of common quality benchmarks for higher education institutions throughout Europe. The Irish institutions have also taken note of quality assurance and quality improvement processes within universities in the United States. International experts from different traditions have been invited to address seminars and conferences in Ireland on quality issues.

Against this framework of international awareness, the Irish authorities have sought to evolve a system which incorporated best practices from other systems, allied to the culture, traditions and aspirations of Irish institutions. While the work on quality assurance and improvement will be ongoing and challenges have still to be faced, it would seem that Ireland has evolved a model with many merits, and considerable success has been achieved in embedding it as an organic dimension of the life of the institutions.

The international challenge

One of the great glories of the universities as they emerged in medieval Europe was their international character, whereby scholars from many "nations" gathered at the *stadium generale* to engage in higher learning with distinguished

teachers. Through many historical vicissitudes over subsequent centuries, this international dimension has been an honoured and valued part of the university's contribution to society. From the western periphery of Europe, Irish students retained a tradition of linkage with the universities of continental Europe, sometimes in the context of political and religious persecution at home. In more recent centuries, Irish students and academics have established significant relationships with the universities of the New World and contributed to the development of higher education institutions in the Antipodes and in developing countries. The recent reconfiguration of the political landscape of Europe through the EU has fostered an unprecedented degree of engagement of Irish personnel and institutions with their counterparts in the EU. This is a process which is gathering further momentum. Furthermore, the revolution in communication technologies and modern transport creates opportunities for engagement with higher education internationally which were never available before. Globalisation affects higher education as well as other aspects of modern life, but with its long tradition of "wandering scholars" and emigration, Ireland welcomes the opportunities and challenges provided.

As one instance of greater co-operation between higher education systems, the greater interaction between systems in the politically divided island of Ireland should be noted. Following the *Irish Universities Act* of 1908 and the partition settlement of 1922, relationships became very tenuous between the higher education institutions as Queen's University Belfast tended to look to England for its linkages and political allegiances, and political tensions in general did not favour co-operation. This has changed considerably in recent years with many linkages and shared undertakings being established between institutions, North and South, that are vibrant, self-confident and outgoing. Symbolic of this relationship was the establishment of the Conference of University Rectors in Ireland (CRI) in 1992, in which the heads of the universities in Northern Ireland and the Irish Republic met and conferred on issues of mutual interest. While CRI no longer operates formally, the university heads continue to meet and, with the assistance of the Centre for Cross-Border Studies, located in Armagh, hold regular conferences and seminars on higher education issues.

Provision is made in the National Spatial Strategy for linkages with the Northern Ireland Regional Development Strategy and for co-operation between higher education institutions serving gateways and hubs in the general border areas. A significant step in improving co-operation was the earlier initiative of the Northern Ireland Economic Council and the National Economic and Social Council (of the South) when they commissioned a study, held a conference and published a report entitled *Higher Education in Ireland: Co-operation and Complementarity*. Nowadays, students from both sides of the border participate freely in courses which attract them in higher education

institutions in both parts of Ireland, and close relationships exist between academics who interact in a variety of capacities. Academics regularly act as extern examiners and on appointment panels in each other's jurisdiction. Joint participation by researchers on projects has become a normal feature. Many academic associations draw their membership from both sides of the border. Higher education is regarded as an area which can promote mutual understanding and tolerance between different politico-religious traditions on the island. Significant in this context is the Standing Conference on Teacher Education North and South (SCOTENS) which brings teacher educators together for discussion and joint research projects from both parts of Ireland.

In line with Ireland's stronger profile on the international stage, through EU membership and its role in other international political, academic and cultural bodies, the higher education sector has participated in a variety of arrangements with higher education institutions in many countries in recent years. The CHIU has played a prominent role in the Confederation of European Union Rectors' Conferences which has helped to keep Irish universities abreast of thinking within the EU on higher education issues and also to make inputs to the shaping of attitudes on university matters. The presidents of Irish universities participated on an individual basis in the European Rectors' Conference (CRE), a pan-European association of rectors which, in 2001 at Salamanca, was merged with the Confederation to form a single European Universities Association (EUA). Leaders in the extra-university sector have also been active in international engagements with their peers. Through sabbaticals and exchange programmes, Irish academics have been very proactive in benefiting from international experience. They have also been well to the fore in international conferences within their disciplines. Their research output and its quality are well regarded internationally. Irish academics have been drawn upon a good deal by international bodies, such as the OECD and the World Bank, on academic consultancy projects in many countries. Aligned to the strong tradition of emigration, considerable numbers of Irish scholars go abroad to work, sometimes on a permanent basis, sometimes to garner experience and return to a post in Ireland. A noteworthy development, over recent years, has been the establishment of joint academic programmes between Irish institutions and their counterparts in Far Eastern and some other countries, particularly in the areas of medicine and commerce. The scale of this international interaction is highly beneficial to individuals, to institutions and to society.

One of the major stimuli for international academic co-operation has been the various EU schemes for the promotion of research. A condition of approval and financial support in most schemes is the involvement of researchers from a number of member and associated countries. These schemes have brought Irish academics into productive working relationships with their European peers. The process of the planning and execution of joint

schemes has fostered close co-operation and encouraged the exchange of insights and expertise. Irish institutions also form part of a grouping of international institutions which offer joint courses. These have helped to bring students, as well as staff, into close working and learning relationships. On a wider level, Irish students have been availing of opportunities under the Erasmus and Socrates programmes, other EU exchange schemes, and Travelling Studentships and scholarships, to spend periods of their studies in foreign institutions, and foreign students have been coming in large numbers to Irish colleges. Mutual recognition of qualifications is progressing within the EU and the operation of the European Credit Transfer System (ECTS) facilitates student transfer between courses.

Moves by the EU to position European higher education as the major world centre for academic reference by 2010 pose challenging targets for all European universities. The Bologna Process is expected to be completed by 2010, bringing new comparability and harmonisation of qualifications. Changes involved include the structures of courses, the mutual acceptability of quality assurance procedures, the acceptance of parts of courses conducted in other institutions, and so on. Arising from the Bologna developments, there is likely to be much greater mobility of students for undergraduate and postgraduate studies, involving greater competitiveness between institutions for the highest calibre students. The issue is put succinctly in a recent paper by Rector Crochet of Louvain University when he stated:

> The pace in Europe is extremely fast, and it would be perilous to underestimate these pressures. Initiative, analysis, imagination: such are the key words for the moving university today. Over the past five years, our task has gained in intensity due to our own collective momentum: the Bologna Process requires a major commitment in untraditional matters. The emerging student and academic mobility, systematic evaluations, accreditation procedures will reveal our quality. While competing for the best students and the best professors, universities will need to co-operate and make difficult choices, convinced as we are that we cannot be good at everything (Crochet, 2003).

As well as the competition for high-quality students and staff between a much more mobile and inter-active global higher education system, competition for significant research funding will also be at a premium. This will emphasise the need for prioritisation regarding institutions' research strengths, for critical mass in the conduct of research and for inter-institutional partnerships for many research projects.

Ireland intends to be a player in the top league of this evolving international higher education context. This involves very demanding challenges, not just from the higher education institutions but from many key

stakeholders in society. The European Commission asserts that: "Given that they are situated at the crossroads of research, education and innovation, universities in many respects hold the key to the knowledge economy and society" (CEC, 2003, p. 5). If this is true, then it may well be in the interest of Irish society to give strategic priority to the continued promotion of a quality higher education system. There may also be a need for greater lines of contact between the diaspora of Irish academics who work in higher education institutions across the world. Internationalism in itself is not a problem for Irish higher education; its only insularity is its geographical location. The challenge at stake is to have the confidence, ability, resources and ingenuity to place Irish higher education as a small, but recognised quality entity, within the demanding new global era that is opening up for higher education.

Attracting larger numbers of overseas students to Irish higher education institutions has emerged as a policy concern. In recognition of this, the Minister for Education and Science established an inter-departmental committee in 2003 to develop a strategy for the internationalisation of Irish education services. The social demand for higher education and the greater mobility of students provide a market for good quality systems to recruit foreign students, which can enrich the academic environment but also provide needed financial resources. In an earlier recent (2003) HEA study on overseas students in Ireland, it was estimated that they currently constitute about 7% of the total third-level student population. The education of overseas students is now something of a "business" internationally. It is considered that Ireland has scope to increase its share of this pool of students. Of the 9 300 overseas third-level students in Ireland in 2001/02, excluding exchange students, about 40% were drawn from the EU and the balance of about 60% were fee-paying students from outside the EU. Of the non-EU students, about one-third is from North America, and many of the others from Far-Eastern countries. Of the non-EU (fee-paying) students, HEA-designated institutions account for 75%, with most of the balance going to the private third-level colleges. In terms of disciplines, "health and welfare" predominate, accounting for 43% of total overseas students, followed by "humanities and arts", which account for 31% (HEA, 2003c, pp. 12-13).

The satisfactory provision of higher education places for overseas students has many important aspects attached to it. The HEA recommends that "an agreed national policy framework is desirable to provide increased policy clarity and practical supports to Higher Education Institutions as the key players in the sector" (HEA, 2003c, p. 14). In particular, it recommends the appointment of a "Strategy Board for International Education", which would lead the way in coping with the challenges involved. If successful in the years ahead, such a policy would involve many adjustments to current practices, but could have many spin-off benefits for Irish higher education, and develop its international profile.

Drawing on international perspectives on higher education, Malcolm Skilbeck, in *The University Challenged: A Review of International Trends and Issues with Particular Reference to Ireland* (2001), emphasised the multifaceted demands being placed on higher education today:

> Individuals are seeking advancement while whole societies are looking to higher education and research to underpin economic growth, improve the quality of life and strengthen the social fabric. Universities have a vital role in helping to set new goals and directions for human development, while maintaining a rich and ancient cultural heritage (Skilbeck, 2001).

Irish higher education forms part of the world's assets in coping with such demands. The opening out of the Irish institutions to the wider intellectual and academic world through their international engagements has positioned them better to meet the challenges involved. While the challenges ahead will make many demands, the achievements in Irish higher education over recent decades give confidence for future advance, in a vital public service cause.

Notes

1. As a percentage of GNP it would have been 1.7%.
2. *Irish Independent*, 21 January 2004.

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ISBN 92-64-01431-4
Reviews of National Policies for Education
Higher Education in Ireland

ANNEX A

Terms of Reference

The context for the review is provided by Ireland's strategic objective of placing its higher education system in the top rank of the OECD in terms of both quality and levels of participation and by the priority to create a world class research, development and innovation capacity and infrastructure in Ireland as part of the wider EU objective for becoming the world's most competitive and dynamic knowledge-based economy and society, as agreed in Lisbon (2000). The challenges of maintaining quality, responsiveness and competitiveness in higher education are a major priority against the background of unprecedented levels of expansion, change and diversification in the sector in Ireland.

The OECD review will evaluate how well the Irish higher education sector is meeting these strategic objectives and will offer recommendations for making further progress. The review will examine the role of higher education institutions as centres of education, knowledge and research in respect of their public, social and economic responsibilities and will consider the interface between the higher and further education sectors in meeting these overall needs. The capacity of the higher education sector for promoting lifelong learning, the transition to the knowledge society, knowledge and technology transfer to the economy and society, supporting the spatial strategy, and in meeting the international challenges to learning and research institutions will be key aspects of the review. The comparative Irish performance will be examined by reference to other OECD countries.

More specifically, the review will examine policy issues and option in the following areas:

- **Role of higher education:** The need to ensure that the higher education sector can fulfil the transcending roles of developing students to their full potential and pursuing knowledge for its own sake while being open and flexible in meeting an increasing diversity of needs and demands associated with the knowledge society, lifelong learning, globalisation, meeting the needs of national and regional economies and of local communities, together with contributing to social cohesion and equity.

- **Strategic management and structure:** Structures and arrangements for dynamic overall strategic planning and management of the higher education sector having regard to the need:
  - for an integrated and cohesive approach to the development of the roles of different higher education institutions and between those institutions and further education providers;
  - to provide for systematic and sustained input to the formulation and review of the main areas of higher education and research policy and planning by the key agencies and interests in interconnected areas of economic, social and cultural developments;
  - for effective approaches to delivering on key strategies, including promotion of equity of access, enhancing the quality of teaching and learning, meeting future skills and research needs for economic and social development, and the development of greater procedural, systematic and institutional transparency in higher education.
- **Teaching and learning:** How institutions in the higher education sector might best respond to the needs of their students through the use of appropriate systems of quality assurance to support the highest quality of teaching and learning, facilitating greater levels of participation and completion and developing new and innovating approaches for a more learner-centred approach to the design and delivery of academic and other services.
- **Research and development:** Given the increasing importance of research, development and innovation for the knowledge society, examine how research and development in the higher education sector can best be supported and further developed to highest international standards and the outcomes of this knowledge be best applied in support of social, cultural and economic progress, having regard to the integral connection between research and teaching and the development of an appropriate balance between these in institutions.
- **Investment and financing:** Potential approaches to the future resourcing of the higher education sector and institutions that can best enable achievement of the strategic objectives established for the sector, having regard to the governance, accountability, efficiency and effectiveness requirements associated with the high level of public investment in the sector, broad public policy interests and principles of academic freedom and institutional autonomy.
- **International competitiveness:** In the context of growing internationalisation and mobility of students and the need to provide a diversified and world-class higher education system at both undergraduate and postgraduate levels, how a critical mass of consistently high quality and standards can be developed, having regard to the promotion of greater inter-institutional collaboration within a competitive national and international environment.

ANNEX B

Submissions to the OECD Review of Higher Education in Ireland

1. All Ireland Society for Higher Education (AISHE)
2. *An Chomhairle um Oideachas Gaeltachta agus Gaelscolaiochta*
3. Association of Higher Education Access and Disability (AHEAD)
4. Athlone Institute of Technology
5. Barrett, Dr. Sean D., FTCD Dept. of Economics Trinity College Dublin
6. Border Midland and Western Regional Assembly
7. Centre for Co-operative Studies, University College Cork
8. Combat Poverty Agency
9. *Comhdhail Naisiunta na Gaeilge* (Central Steering Council for Irish-language voluntary organisations)
10. Conference of Heads of Irish Universities
11. Cork City Partnership
12. Cork Institute of Technology
13. Council of Directors of Institutes of Technology
14. Deeny James, BA (Econ), M,Econ Sc., MIA, Former CEO, HSBC Ireland
15. Department of Adult and Community Education, National University of Ireland, Maynooth
16. Department of Biology, National University of Ireland, Maynooth
17. Department of Education and Science, Ireland (DES)
18. Department of Enterprise, Trade and Employment, Ireland
19. Department of Health and Children, Ireland
20. Development Education Unit, Department of Foreign Affairs, Ireland
21. Disability Federation of Ireland
22. Doyle, Dr. Sean, Senior Lecturer, National University of Ireland, Maynooth

23. Dublin Institute of Technology
24. Enterprise Ireland
25. Expert Group on Future Skills Needs
26. *Failte* Ireland (The National Tourism Development Authority, formerly CERT)
27. FÁS (Ireland's National Training and Employment Authority)
28. *Fiontar*, Dublin City University
29. *Forfás* (Ireland's National Policy and Advisory Board for Enterprise, Trade, Science, Technology and Innovation)
30. Further Education Training Awards Council (FETAC)
31. Galway-Mayo Institute of Technology
32. Grifith College, Dublin
33. Health Research Board
34. HEAnet (provides broadband Internet services to Ireland's universities, institutes of technology and researchers
35. Higher Education Authority (HEA)
36. Higher Education Training Awards Council (HETAC)
37. Hurley, Kevin, Retired Director, Adult Education, University College Dublin
38. Hussey, Matthew, PhD, Director, Faculty of Science, Dublin Institute of Technology, Kevin St.
39. Hyland, Professor Aine, Vice-President, University College Cork
40. IDA Ireland (Industrial Development Agency)
41. Inter-Universities Retention Network
42. Institute of Art Design and Technology, Dun Laoghaire
43. Institute of Technology, Tallaght
44. Institution of Engineers of Ireland
45. Irish Business and Employers Confederation (IBEC)
46. Irish Congress of Trade Unions (ICTU)
47. Irish Council for Science Technology and Innovation (ICSTI)
48. Irish Federation of University Teachers (IFUT)
49. Irish Research Council for the Humanities and Social Sciences (IRCHSS)
50. Irish Research Council for Science, Engineering and Technology (IRCSET)
51. Irish Universities Quality Board (IUQB)
52. Kelly, John, Professor Emeritus, University College Dublin
53. Kilkenny Industrial Development Company
54. Labour Party, Ireland
55. Letterkenny Institute of Technology

56. Limerick Institute of Technology
57. Lionra Higher Education Network
58. McGinley, John
59. MIS, *An Cheim* (Collaborative Higher Education Information Management)
60. Music Education in Ireland (Standing Committee of Heads of Performance-based Institutions)
61. National College of Art and Design
62. National College of Ireland
63. National Disability Authority
64. National Qualifications Authority of Ireland (NQAI)
65. O'Callaghan, Dr. Edward
66. O'Hare, Professor Daniel, President Emeritus, Dublin City University
67. O'Shea, Sean
68. Quinn, Dr. Brid, University of Limerick
69. Royal Irish Academy of Music
70. Ruane, Professor Frances, Dept. of Economics, Trinity College Dublin
71. St. Patrick's College, Drumcondra
72. Scannell, Professor Yvonne, Law School, Trinity College Dublin
73. Science Foundation Ireland (SFI)
74. Services Industrial Professional and Technical Union (SIPTU)
75. Society of St. Vincent de Paul
76. Teachers' Union of Ireland (TUI)
77. *Teagasc* (Irish Agriculture and Food Development Agency)
78. Trinity College School of Nursing and Midwifery Studies, Trinity Centre for Health Sciences
79. Tuffy, Senator Joanna, Spokesperson on Education and Science (Labour Party)
80. Union of Students in Ireland (USI)
81. Walsh, Dr. Edward, President Emeritus, University of Limerick
82. Walsh, John
83. Waterford Chamber of Commerce
84. Waterford Institute of Technology
85. Wexford County Enterprise Board
86. White, Dr. Tony
87. Wrigley, Professor Leonard
88. Young Fine Gael, Ireland

ANNEX C

Programme of Evidence Taking and Visits Undertaken by the Review Group

Oral evidence was given by the following:

- Amicus-MSF
- Catholic Secondary Parents Association
- Conference of Heads of Irish Universities
- Council of Directors of Institutes of Technology
- Cork City Partnership Ltd.
- Department of Education and Science
- Department of Enterprise, Trade and Employment
- Department of Finance
- Disability Federation of Ireland
- Enterprise Ireland
- Expert Group on Future Skills Needs
- *Fáilte* Ireland
- FÁS
- *Forfás*
- Further Education and Training Awards Council
- HEAnet
- Health Research Board
- Higher Education and Training Awards Council
- Higher Education Authority
- Industrial Development Authority Ireland
- Irish Business and Employers Federation
- Irish Congress of Trade Unions
- Irish Council for Science, Technology and Innovation

- Irish Federation of University Teachers
- Irish Research Council for Humanities and Social Sciences
- Irish Research Council for Science, Engineering and Technology
- Joint *Oireachtas* Committee on Education and Science
- National Office for Equity of Access to Higher Education
- National Parents Council – Post-Primary
- National Qualifications Authority of Ireland
- Science Foundation Ireland
- St. Vincent de Paul Society
- Teachers Union of Ireland
- Union of Students in Ireland

Visits were made to the following institutions:

- Cork Institute of Technology
- Higher Education Colleges Association
- National College of Ireland
- Tallacht Institute of Technology
- Tralee Institute of Technology
- University College, Cork
- University College, Dublin
- University of Limerick
- Waterford Institute of Technology

In addition the Group had informal meetings in Dublin with:

- Professor Bouchier-Hayes, Royal College of Surgeons
- Professor G. Boyle, Trinity College, Dublin
- Professor P. Clancy, University College, Dublin
- Professor J. Coolahan, NUIM
- Professor P. Drudy, Trinity College, Dublin
- Professor S. Drudy, University College, Dublin
- Dr. Garret Fitzgerald, Chancellor of the National University of Ireland
- Professor M. Fitzgerald, University College, Dublin
- Professor A. Hyland, University College, Cork
- Dr. Tom McCarthy, Dublin City University
- Professor M. O'Brien, Trinity College, Dublin
- Professor M. O'Moore, Trinity College, Dublin

ANNEX D

Documentation Supplied to the Review by the Department of Education and Science

A Framework for Quality in Irish Universities, Conference of Heads of Irish Universities, 2003.

Building Ireland's Innovation Society: An Action Plan for Raising R&D Intensity to 2010, ERA Steering Group, 2004.

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Europe's Search for Excellence in Business Research, Symposium Consensus, Dublin Castle, February 2004.

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Task Force on the Physical Sciences, Report and Recommendations, Department of Education and Science, 2002.

Technical Working group on the Review of Outreach Centres of Higher Education Institutions, Higher Education Authority, 1999.

Technology Foresight and the University Sector, Conference of Heads of Irish Universities, 2000.

Technology Foresight Overview, Irish Council Science Technology and Innovation, 1999.

The (2+1) and 3-year Structure of Courses, Draft Discussion Paper, Skills Initiative Unit, Department of Education and Science, 2003.

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The University Challenged: A Review of International Trends and Issues with Particular Reference to Ireland, Malcolm Skilbeck, Higher Education Authority and Conference of Heads of Irish Universities, 2001.

Towards a CHIU Sectoral Research Strategy: The Research Career developing the University Perspective, Discussion Document, Conference of Heads of Irish Universities, 2003.

Towards an Integrated System of Tertiary Education: A discussion paper, Malcolm Skilbeck, Dublin Institute of Technology, 2003.

Union of Students in Ireland, Costs of College Survey Results 2003, Union of Students in Ireland, 2004.

ANNEX E

List of Acronyms

AONTAS	The National Association of Adult Education
APEL	Accreditation of Prior Experiential Learning
BERD	Business Expenditure on R&D
BTEI	Back to Education Initiative
CAO	Central Applications Office
CDIT	Council of Directors of Institutes of Technology
CDVEC	City of Dublin Vocational Education Committee
CEC	Commission of the European Communities
CHIU	Conference of Heads of Irish Universities
CRE	European Rectors' Conference
CRI	Conference of University Rectors in Ireland
CSET	Centre for Science, Engineering and Technology
DBS	Dublin Business School
DCU	Dublin City University
DES	Department of Education and Science
DFI	Disability Federation of Ireland
DIT	Dublin Institute of Technology
ECTS	European Credit Transfer System
ERDF	European Regional Development Fund
ESF	European Social Fund
ESRI	Economic and Social Research Institute
EUA	European University Association
FAS	Training and Employment Authority (*Foras Áiseanna Saothair*)
FETAC	Further Education and Training Awards Council
GERD	General Expenditure on Research and Development
HEA	Higher Education Authority
HECA	Higher Education Colleges Association
HECS	Higher Education Contribution Scheme
HETAC	Higher Education and Training Awards Council
HEI	Higher Education Institutions

HRB	Health Research Board
IBEC	Irish Business and Employers Confederation
IMI	Irish Management Institute
IoTs	Institutes of Technology
IPA	Institute of Public Administration
IRCSET	Irish Research Council for Science, Engineering and Technology
IRCHSS	Irish Research Council for the Humanities and Social Sciences
IUQB	Irish Universities Quality Board
IUQSC	Inter-University Quality Steering Committee
NALA	National Adult Literacy Agency
NCAD	National College of Art and Design
NCCA	National Council for Curriculum and Assessment
NCEA	National Council for Educational Awards
NCI	National College of Ireland
NCVA	National Council for Vocational Awards
NDEC	National Distance Education Centre (*Oscail*)
NDP	National Development Plan
NCGE	National Centre for Guidance in Education
NIHE	National Institutes for Higher Education (Limerick, Dublin)
NQAI	National Qualifications Authority of Ireland
NSS	National Spatial Strategy
NUI	National University of Ireland
ODL	Open and Distance Learning
PLC	Post Leaving Certificate
PRTLI	Programme for Research in Third Level Institutions
RCPI	Royal College of Physicians of Ireland
RCSI	Royal College of Surgeons in Ireland
RIAM	Royal Irish Academy of Music
RTCs	Regional Technical Colleges
SCOTENS	Standing Conference on Teacher Education North and South
SFI	Science Foundation Ireland
STIAC	Science, Technology and Innovation Advisory Council
TCD	Trinity College Dublin
TD	*Teachta Dála* (member of parliament)
TEA	Tertiary Education Authority
TRBDI	Tipperary Rural and Business Development Institute
TUI	Teachers' Union of Ireland
UCC	University College Cork
UCD	University College Dublin
USI	Union of Students in Ireland
VEC	Vocational Education Committee
VTOS	Vocational Training Opportunities Scheme

OECD PUBLICATIONS, 2, rue André-Pascal, 75775 PARIS CEDEX 16
PRINTED IN FRANCE
(91 2006 02 1 P) ISBN 92-64-01431-4 – No. 55147 2006

Reviews of National Policies for Education

Higher Education in Ireland

Ireland was one of the first European countries to grasp the economic importance of education. But higher education in Ireland is now at a crossroads, with significant challenges to overcome. How can Ireland meet its stated objective of "placing its higher education system in the top ranks of OECD member countries in terms of both quality and levels of participation"? How can it create "a world class research, development and innovation capacity"?

High levels of investment are needed for a major expansion of postgraduate studies and capacity for research, development and innovation. Mechanisms should be established to achieve the right balance between different components of the tertiary education system, which includes universities, institutes of technology and colleges that provide post-secondary level instruction. Further, there is a need to meet the demands of specialisation, competition and complementarities within the system.

This report addresses the full range of higher education issues and offers recommendations for action within the framework of the government's ambitions for the sector. The examiners propose a new National Council for Tertiary Education, Research and Innovation and recommend significant modernisation and adaptation in the governance and management practices of tertiary education institutions. Finally, the examiners conclude that the government's ambitions for the higher education sector – especially its role in sustaining a highly innovative economy for Ireland – will require considerable further investment, and they suggest policy approaches to developing these additional sources of funding.

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91 2006 02 1 P

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