Annex 1

Overview of the Higher Education Sector in Wales

(Source: ELWa - HEFCW paper submitted to the committee during the policy review)

Section 1: The Sector

General Enrolments Quality Assessments of Education Research External Income The International Dimension Unit of Resource

Section 2: Review Topics

- a) Range of Disciplines and Activities
 - Range and Quality of Provision
 - Quota Driven Subjects;
 - Medicine
 - ITT
 - Developments in Learning and Teaching
 - Widening Access
 - Welsh Medium Provision
- b) Portfolio of Research Undertaken
 - Funding for Research
 - Research in the Welsh HE Sector
 - Balance of the Research Portfolio
- *c*) The Economic Mission
 - Training and Contract Research Work
 - Higher Education and the Welsh Economy
 - Student Employability and Wales's Skills Base
- *d)* Collaboration and Integration
 - Collaboration within Higher Education
 - Collaboration with other Education Providers
 - Mergers between HEIs

Section 3: The Funding Council

- Introduction
- Duties and Responsibilities
- Mode of Operation
- The Council's Mission

SECTION 1 : THE SECTOR

GENERAL

- 1. There are thirteen higher education institutions in Wales.
- 1
- Nine Further Education Colleges (FECs) are funded directly for specific higher education (HE) courses.
- Additional further education colleges are funded indirectly for HE courses through franchise relationships with higher education institutions (HEIs).
- The University of Wales receives specific funding for:
 - o the Board of Celtic Studies;
 - o the Centre for Advanced Welsh and Celtic Studies;
 - the publication of scholarly works by the University of Wales Press.
- 1.2 The income and expenditure of Welsh higher education institutions in 1998/99 was as follows:

	£m		£m
Total Income	570.0	Total Expenditure	565.6
Of which HEFCW	256.8	Of which pay expenditure	323.4
Grant			
HEFCW grant as a	45.1%		
percentage of total			
income			

Pay expenditure as a percentage of total income 56.7%

1.3 The following facts from the 1998/99 Higher Education Statistics Agency (HESA) records put HE in Wales in the context of HE in the UK.

	Wales	UK
Total income	£570.6m	£12.1bn
Academic Workforce	6,162	131,136
Students taking non-qualification		
professional and personal		
development courses	47,203	752,699
EU or other overseas students	12,717	219,285
	(12% of total)	(12% of total)
Academic staff engaged solely in		
research	24.3%	29.7%
First degree entrants 1998/99	19,838	355,012
Percentage aged 21 or over	28.2%	31.8%

ENROLMENTS

1.4 The following table sets out the growth in enrolments at Welsh HEIs between 1993/94 and 1999/2000:

Mode/Level	1999/2000 Enrolments	% Growth 1993/94 to 1999/2000
Full-time and sandwich Undergraduate of which Science, Engineering,	56,154	12.0
Maths and Computing <i>Postgraduate</i> Total	17,130 7,046 63,200	24.8 18.2 12.7
Part-time Undergraduate of which, franchised out Postgraduate Total	22,099 4,018 7,968 30,067	43.1 70.8 67.3 50.5
TOTAL	93,267	20.9

Source: Early HE Statistics 1999/2000

1.5 1999/2000 enrolment data for individual institutions.

ENROLMENT DATA BY INSTITUTION 1999/2000

Institutions	FT	SW	PT	Total
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All	62,131	1,069	30,067	93,267
Swansea College	7	0	38	45
Neath Port Talbot College	19	0	12	31
Coleg Gwent	0	0	38	38
Coleg Llandrillo	137	0	80	217
Carmarthenshire College	276	0	109	385
Welsh College of Music and Drama	501	0	50	551
Trinity College Carmarthen	1,209	0	946	2,155
Swansea Institute of Higher Education	2,751	38	1,334	4,123
North East Wales Institute	2,449	0	2,436	4,885
University of Wales College, Newport	2,611	0	4,577	7,188
University of Wales Institute, Cardiff	5,335	136	1,460	6,931
Medicine				
University of Wales College of	2,259	0	844	3,103
University of Wales Swansea	8,050	56	2,983	11,089
University of Wales, Lampeter	1,179	3	1,062	2,244
Cardiff University	13,560	308	3,577	17,445
University of Wales, Bangor	6,244	69	3,039	9,352
University of Wales, Aberystwyth	6,294	185	2,342	8,821
University of Glamorgan	9,250	274	5,140	14,664

Source: HESES survey 1999/2000

- Notes 1 Figures include continuing education students and enrolments under the first phase of HE in FE initiative.
 - 2 Part-time figures exclude PGT dissertation students.
 - 3 Figures include fundable, non-fundable, island and overseas students.

QUALITY ASSESSMENTS OF EDUCATION

- 1.6 Between 1993 and 1997 the Council conducted its own assessments of the quality of education provided at Welsh higher education institutions. 189 assessments were conducted across 53 broad subject areas, representing virtually all courses presented in the sector, with the exception of Initial Teacher Training. Of the 189 assessments, 69 (37%) were judged to be excellent.
- 1.7 Quality assessments will, in future, be conducted across the UK by the Quality Assurance Agency, which will act on behalf of the Council in Wales. The first assessments under the Agency's new arrangements are expected to commence in 2001, although Welsh institutions are not required to enter the process formally until January 2002.

RESEARCH

1.8 Four research assessment exercises (RAE) have been conducted in the United Kingdom - 1986, 1989, 1992 and 1996; the fifth is scheduled to

take place in 2001. Only the "old" universities participated in the 1986 and 1989 exercises (in Wales, these were the University of Wales's constituent institutions). The performance of Welsh institutions measured against the UK as a whole improved in 1992 and again in 1996:

 the number of departments achieving the highest ratings in 1996 was 60, almost double that in 1992 (32);

However, unlike the rest of the UK, the number of staff entered in the 1996 exercise fell slightly on the numbers entered in 1992, from 2428 to 2339.

- 1.9 HEIs can attract public research income from the research councils as well as from the Council. The two funding routes complement each other providing what is referred to as the dual support funding system. Under this, the research councils provide funds on a competitive basis for specific projects and programmes, whilst the funding councils fund the underpinning research infrastructure without specifying on what projects or programmes it is to be used.
- 1.10 Just as the performance of the higher education sector in Wales in successive research assessment exercises lags behind that of the UK as a whole, so the total value of grants attracted from the research councils is less than the 5% "standard" share factor assumed for Wales. Thus, research council income for 1998-99 amounts to £17.4m, some 3.1% of the total for the UK.

Research Council Incomes for Higher Education Institutions								
Year	England	Scotland	Wales	N Ireland	UK			
			£		£			
	£ million	£ million	million	£ million	million			
1995-96	445.8	65.9	15.3	4.9	531.9			
% UK TOTAL	83.8%	12.4%	2.9%	0.9%	100.0%			
1996/97	439.4	65.9	14.8	5.0	525.1			
% UK TOTAL	83.7%	12.5%	2.8%	1.0%	100.0%			
1997-98	445.4	66.8	15.4	6.1	533.7			
% UK TOTAL	83.5%	12.5%	2.9%	1.1%	100.0%			
1998-99	466.0	70.8	17.4	5.4	559.6m			
% UK TOTAL	83.3%	12.6%	3.1%	1.0%	100.0%			

In July 2001, ELWa / HEFCW published a progress report on the effectiveness of measures agreed to increase the level of research council income obtained by HEIs in Wales. This showed that for 1999-2000 there was a modest increase in the level for Wales to £19.3 million, which was 3.2% of the UK total.

EXTERNAL INCOME

1.11 As well as receiving funds via the Council, the research councils and charitable research grant giving bodies and by levying tuition fees, institutions also attract income through the provision of services to industry, commerce and the public sector. Such income in 1998-99 totalled some £38m (the total for the UK was £1.49bn).

RESEARCH INCOME	FOR HEIS FF THE PUBLI		•	OMMERC	E AND
	ENGLAN S			N	
YEAR	D	D	S	IRELAND	UK
	£m	£m	£m	£m	£m
1995/96	558.5	84.3	27.4		683.5 100.0
% UK TOTAL	81.7%	12.3%	4.0%	1.9%	%
1996/97	616.2	91.3	28.2	17.2	752.9
					100.0
% UK TOTAL	81.8%	12.1%	3.7%	2.3%	%
1997/98	647.8	99.3	34.9	18.5	800.5
					100.0
% UK TOTAL	80.9%	12.4%	4.4%	2.3%	%
1998/99	682.5	107.5	36.5	19.5	846.0
					100.0
% UK TOTAL	80.7%	12.7%	4.3%	2.3%	%

THE INTERNATIONAL DIMENSION

- 1.12 The Welsh higher education sector represents a crucial strand within the public sector infrastructure, which serves the needs of the country. However, it differs from other parts of the education service in that its outlook and the activities in which institutions are engaged extend beyond Wales, not only across the United Kingdom but worldwide. An appreciation of this aspect is vital in order fully to assess the ways in which the sector can best serve the needs of Wales. The following illustrate this international dimension:
 - Of the total full-time/sandwich students from the UK undertaking HE courses in Wales, almost half come from outside Wales.
 - The total number of full-time/sandwich UK domiciled students from outside Wales pursuing their studies in Wales is 27,842.
 - The number of Welsh students studying full-time/sandwich elsewhere in the UK is 20,888.

- There are some 5,500 EU students studying full-time, sandwich or part-time at Welsh HEIs, and a slightly smaller number from non-EU countries.
- The conduct of research extends beyond national boundaries. Research groups are in collaboration across the world. Effective partnerships depend more on compatibility of research interests and expertise than on geographical proximity. Research that does not feed on the free flow of information and on crossborder collaboration quickly stagnates.
- 55% of UK research papers involve collaborations between different institutions, with 20% involving international collaboration.
- Annual income gained by Welsh higher education institutions from EU sources amounts to some £12.5m.
- 1.13 Different institutions, in different measure, engage in research at an international level. The sector's international perspective serves both to secure its place in higher education worldwide and Wales's global position commercially and culturally.

UNIT OF RESOURCE

- 1.14 The unit of resource, measured in terms of overall public funding made available to the higher education sector in relation to the student numbers set by the Welsh Office, fell steadily throughout the 1990s. The extent of decline in real terms has been:
 - 24% between 1989-90 and 1993-94;
 - 17% between 1993-94 (the first year for which the Council was responsible for funding higher education in Wales), and 1998-99;
- 1.15 Such reductions were a source of major concern for the National Committee of Inquiry into Higher Education (NCIHE) which recommended in 1997 that year on year reductions in the unit of resource in real terms should be no greater than 1%. The Comprehensive Spending Review (CSR) outcome announced by the Welsh Office in 1998 resulted in recurrent grant-in-aid for higher education in Wales falling within the NCIHE limit over the three year period 1999-2000 to 2001-02, being of the order of 0.3% per year. When taking account of the capital grant allocations made over that three year period, the unit of resource has increased from the 1998-99 figure by some 4%.

1.16 During the mid to late 1990s the unit of resource gap between Wales and England steadily worsened but recent settlements have begun to close the gap:

	Wales	England	Difference
	£	£	%
1998-99	4549	4711	3.5
1999-00	4619	4747	2.8
2000-01	4739	4765	0.5
2001-02	4780	4798	0.4

1.17 Compared with Scotland, however, the unit of resource for Welsh higher education is significantly lower. Thus, taking the provisional figures for 2001-02, the difference between Wales and Scotland is 22%: £4,780 as against £6,135.

SECTION 2 : REVIEW TOPICS

2.1 The terms of reference for the review of higher education in Wales identify six topics for particular consideration. This section looks at four of them. It does not cover student financial support or the National Assembly's statutory powers, which are matters outside the Council's remit.

a) RANGE OF DISCIPLINES AND ACTIVITIES

RANGE AND QUALITY OF PROVISION

2.2 In terms of the broad academic subject categories (ASCs) adopted by the Council, the sector's course portfolio is comprehensive:

Enrolments by ASC and by mode of attendance in 1999/2000

ASC	Subject	Full-time Sa Ye	art-time	Total	
1	Clinical and Pre-Clinical Subjects Subjects & Professions Allied to	1439	0	565	2,004
2	Medicine	6,077	59	3,567	9,703
3	Science	10,779	286	1,545	12,610
4	Engineering & Technology	4,509	94	3,568	8,171
5	Built Environment	1,245	128	857	2,230
6	Mathematical Sciences, IT &	3,699	124	2,151	5,974

	Computing				
7	Business & Management	7,942	252	5,214	13,408
8	Social Sciences	7,715	17	3,224	10,956
9	Humanities	10,003	201	7,586	17,790
10	Art, Design & Performing Arts	4,939	2	1,168	6,109
11a	Education ITT	3,581	0	17	3,598
11b	Education Non-ITT	589	2	3,680	4,271
Total		62,514	1,165	33,142	96,821

Source End of Year Monitoring Survey 1999/2000

Note Figures include HE students funded under the first phase of the HE in FE Initiative Figures include all students: fundable, non-fundable, island and overseas. Part-time figures include Continuing Education students, but exclude students completing full-time Master's dissertation.

2.3 The only major discipline not taught in Wales is veterinary science. In addition, a number of minority subjects, such as East European languages, are found elsewhere in the United Kingdom, but are absent from the sector's portfolio. This is not surprising given the relatively small size of the sector compared with the UK as a whole. However, Welsh students do have, and take, the opportunity to study at institutions outside Wales, both elsewhere in the UK and via EU sponsored schemes (e.g. Socrates/Erasmus) in other EU countries. Thus, the Higher Education Funding Council for England (HEFCE) supports a number of subjects where recruitment across the UK is usually less than 100 students. In this way, opportunities to study minority subjects not taught in Wales exist for Welsh students.

QUOTA DRIVEN SUBJECTS

2.4 The Government undertakes workforce planning in respect of Medicine, Dentistry and Initial Teacher Training. The following comments are made concerning Medicine and Initial Teacher Training.

Medicine

2.5 Medical issues, including intake allocations, are considered by the UK Funding Councils' Joint Medical Advisory Committee (JMAC) which has traditionally offered advice and guidance to each of the Funding Councils on these matters. However, following the publication in December 1997 of the third report of the Medical Workforce Standing Advisory Committee (MWSAC: the Campbell Committee), which recommended significant increases in the supply of doctors in the UK, the Funding Councils have separately been considering the implications for each of their countries. In consequence, in 1998 the Council, following discussion with University of Wales College of Medicine (UWCM) and

Cardiff University (CU), made recommendations to the Welsh Office regarding a recruitment and funding programme to 2006 which would meet Welsh requirements by bringing the number of training places in Wales up to a level proportionate to that for the UK as a whole. In effect, this implied:

 an increase in the intake of trainee doctors in Wales of 100, the increase to be staged over a three year period 1999 to 2001.

The expansion was also predicated on the assumption that greater use would be made of training hospitals across Wales for clinical training.

2.6 The first part of the staged increase in intakes has been achieved, with an extra 35 places funded by the Council in 1999 and in 2000:

	1998/9 9	1999/0 0	2000/0 1	2001/0	2002/0 3	2003/0 4	2004/0 5	2005/0 6
	5	0						0
Intakes	190	225	225	290	290	290	290	290
Additional Enrolment s		34	67	163	258	352	412	471

2.7 The University of Wales Swansea (UWS), in conjunction with Morriston and Singleton hospitals, wishes to play a major part in increasing the number of doctors being trained. The Council understands that the proposals under consideration within the Assembly would retain the UWCM as the lead body in Wales for the provision of training for doctors, working in partnership with the University and hospitals in the Swansea area. The Council is supportive of partnerships being developed between UWCM and Swansea, and with other centres elsewhere in Wales, especially in Newport and Wrexham.

Initial Teacher Training

2.8 There are eight providers of Initial Teacher Training (ITT) in Wales. The number of places allocated by the Council for ITT in 2000/01 is:

Institution	Primary Phase		Secondar	y Phase
	Undergraduate Postgraduat		Undergraduat	Postgraduat
		е	е	е
UW		124		155
Aberystwyth				

UW Bangor	374	62	33	240
UW Swansea		102		325
UWIC	369	93	144	310
UWC Newport	291	39	98	20
NEWI	212			
SIHE	325		22	30
	377	75		30
Carmarthen				

- 2.9 Whilst quotas for intakes to ITT courses are based on England and Wales staffing, some two thirds of those completing their studies enter teaching in Wales. Together with their contribution towards in-service training and other services for schools, Welsh ITT providers are therefore a crucial strand in underpinning the primary and secondary school sectors in Wales.
- 2.10 Recruitment to primary training has remained buoyant against a background of a reduction in the intake targets set by the Welsh Office from 1455 in 1993/94 to 1150 in 1999/2000. However, institutions have faced increasing difficulty in attracting prospective trainees to Secondary phase courses, particularly in so-called shortage subject areas such as Science, Modern Languages, Welsh and Mathematics. This has been exacerbated because intake quotas for Secondary phase training have, in aggregate, increased in recent years.
- 2.11 The Council has worked with institutions to try to improve the position, particularly through its priority subject recruitment initiative (PSRI) which, over the five-year period up to and including 1999/2000, has involved a total allocation of £2,860,000.
- 2.12 The PSRI has been the subject of a recent review, which suggested possible improvements. However, to a certain extent, the review has been overtaken by the introduction by the National Assembly of training grants for students pursuing postgraduate Secondary phase training courses from 2000/01. It is likely to take some time before the full impact of this decision can be assessed. In any case, attracting prospective trainees is influenced as much by the overall perception held by the general public of the teaching profession as of the specific nature of the courses of training on offer.
- 2.13 The Council recently reviewed with institutions its method for funding teaching. A number of key issues arose:-
 - The adequacy of current funding levels for ITT, particularly taking into account the proposals in the Welsh Office green paper "The BEST for Teaching and Learning" regarding the direct funding of ITT-school partnerships;
 - The distribution of the provision of ITT: the location of providers and the nature of the services provided to their

respective catchment areas, over and above the initial training of teachers, in particular the extent to which a regional service is required;

- Linguistic dimensions to the training of teachers in Wales: maintenance and enhancement of Welsh medium provision
- **Critical mass**: is there a minimum size to maintain the financial and academic viability of ITT provision?
- 2.14 Since the last comprehensive review of ITT in Wales in the late 1980s, the pattern of recruitment has altered and the nature of the training programme has changed fundamentally. Schools have entered into full partnership with providers to offer training through the mentoring of trainees at each school, and a National Curriculum has been introduced to underpin institutions' training programmes. More recently, the introduction of grants for certain categories of teacher trainees is likely to influence patterns of recruitment, but it is too early to judge their impact.
- 2.15 These issues raise the question of whether there is a need for a general review of initial teacher training in Wales.

DEVELOPMENTS IN LEARNING AND TEACHING

- 2.16 Coping with the large increases in enrolments which occurred at the end of the 1980s and the beginning of the 1990s, meeting the emphasis placed on widening access to those who traditionally would not consider entering higher education, taking advantage of the opportunities presented by Information Technology (IT) and electronic networks have all made it necessary for institutions to develop new ways to provide teaching and learning opportunities. As a consequence, it has been necessary for institutions to develop institution-wide learning and teaching strategies.
- 2.17 The Council has been able, through the specific capital grant amounting in total to £19.2m made available by the National Assembly, to support institutional action in improving the resource infrastructure underpinning learning and teaching with particular emphasis on IT. It is also providing for the development of an FE/HE video services network and has set aside funds to provide for a broadband electronic Metropolitan Area Network (MAN) facility in North Wales to match the facilities currently available in South and Mid Wales. This is important because MANs are now regarded as the principal means of connecting to the Joint academic network (JANET) and, moreover, represent an excellent means of sharing and spreading expertise and experience.

WIDENING ACCESS

2.18 Wales has traditionally displayed greater egalitarianism than most parts of the UK in respect of the extent to which its people, across all social classes, have aspired to enter higher education. This remains the case and is demonstrated in the recent publication, prepared jointly by the funding bodies, of UK HE performance indicators. This records, inter alia, that Wales has more young students from low participation neighbourhoods (15%) than the UK as a whole (12%).

- 2.19 Building on this tradition, the Council:
 - has provided funding for specific initiatives in support of widening access, including partnership schemes between FECs and HEIs, of which the development of Community Universities is an important part;
 - has supported the enhancement of links between higher education institutions and schools based on the establishment of compacts;
 - expects to allocate some £3m in 2000/01 for widening access, and similar sums in subsequent years, partly through its formula funding method for supporting teaching and by means of allocations in support of institutions' strategies for widening access;
 - instituted arrangements in 1997 for funding all part-time taught provision on the basis of credits;
 - intends, by 2002, to extend this practice to all taught provision. By distributing funding in this way the Council provides encouragement for institutions to offer relatively small "units" or modules of learning, a feature which is particularly attractive to those who initially lack confidence in their ability to cope with higher education.
- 2.20 However, as the Council's publication *Participation Rates for Welsh Students in Higher Education within the UK during 1997/98* shows, there are very large differences in take up within Wales. Thus, the lowest participation rate recorded in that study was 45% of what would be expected based on the Welsh national participation figures (taking into account the different age and sex profiles of each area), a factor of 3 below the highest participation rate recorded.
- 2.21 In general, the data lend themselves to the conclusion that low participation rates go hand in hand with indicators of relative deprivation and of performance at school level. Accordingly, HE cannot answer the problem alone.
- 2.22 Strategies in support of widening access are expensive; more resources are required in attracting those from non-traditional backgrounds to consider higher education as a possibility and in making additional

support available to them when they enter an institution. The Council is aware of some preliminary work carried out by the University of Glamorgan on the additional costs involved in undertaking outreach work in disadvantaged communities which points to the need to double the per capita funding made available for such students.

- 2.23 The Council has encouraged the development of part-time franchised undergraduate provision at FECs. Since 1993/94:
 - the numbers of those enrolled on such courses has increased by some 70% (to just over 4000 enrolments);
 - more recently the Council has established a programme of directly funded HE courses at further education colleges.

WELSH-MEDIUM PROVISION

2.24 Despite the introduction of premium funding for enrolments on Welshmedium modules and of a Development Fund in support of new initiatives (£550k over 5 years), enrolments on Welsh medium courses have largely stagnated in recent years. In part this reflects the fact that almost half of the provision offered through the medium of Welsh is in initial teacher training, an area which has seen a steady fall in enrolments following reductions in the intake quotas set by the Welsh Office during the 1990s.

Welsh Medium Provision – Full Time Equivalents All Subject Categories

1995/96	1996/97	1997/98	1998/99
1061.57	1027.34	1036.90	961.08

Initial Teacher Training

1995/96	1996/97	1997/98	1998/99
600.75	567.41	583.88	457.96

2.25 Growth in other subject areas has been uneven. Nevertheless, some new Welsh medium provision has been established, helped by the Development Fund. For instance:-

- Social Work at UWIC;
- Modern Foreign Languages at UW Swansea;
- Drama at WCMD;
- Librarianship (distance learning) at UW Aberystwyth;
- courses to support the use of Welsh in the workplace at UW Bangor and Cardiff University.

- 2.26 The Council commissioned a review of its Welsh Medium Development Fund in 1999. Though focusing on the specific projects supported by the Fund, this did allow conclusions to be drawn on the development of Welsh medium provision generally. It revealed a number of shortcomings, the most significant of which were the absence of any overarching, strategic, approach on the part of institutions. The study underlined an endemic short-termism in relation to Welsh medium provision, with dependence on enthusiastic individuals. There was also insufficient action to identify potential markets or develop them.
- 2.27 On the grounds that the development of Welsh medium provision is likely to be an area which could benefit from effective collaboration between institutions, the Council has agreed to support the Welsh medium teaching Development Unit being established by the University of Wales (£50k p.a. for 2 years in the first instance). The Development Officer who will lead the Unit is expected to give priority to the development of collaborative schemes which will require the full cooperation of the institutions concerned. Accordingly, institutions will need to have strategies within which partnerships with other institutions can easily be accommodated. To complement the work of the Unit, the Council has required those institutions providing Welsh medium modules or courses to submit plans to the Council annually. It has worked closely with the Welsh Language Board to ensure that institutions' Welsh medium plans are aligned with the schemes which are to be prepared for the Board. £254k will be made available in 2000/01, with similar funds for subsequent years, to support these plans with a view to the establishment of a more strategic approach across Wales.

b) PORTFOLIO OF RESEARCH UNDERTAKEN

FUNDING OF RESEARCH

- 2.28 From the outset, the improvement of the quality of research conducted by the higher education sector in Wales has been a priority for the Council. This has reflected the need to maintain Wales, and the UK as a whole, at the forefront of research world-wide, particularly in view of the economic benefits of a robust research base. It has also been a response to the challenge of the research performance of the higher education sector in Wales lagging behind that of the rest of the UK.
- 2.29 The UK Government spearheaded the drive to improve and sustain the quality of the research effort through its policy of funding research selectively, a policy which began to take shape in the 1980s. This required that funding for teaching and for research should be identified separately. Accordingly, the Universities Funding Council (UFC) funding allocations to universities in the late 1980s and early 1990s incorporated, within the research funding stream, a factor reflecting research quality as determined by the research assessment exercise (RAE). The proportion of funds was determined using a quality factor that increased in size from

year to year. This culminated, in Wales as elsewhere, in the decision in 1993 that the bulk of research funding should be allocated solely on the basis of research quality as determined by the RAE. The resulting research funding allocation is known as QR, Q representing quality.

- 2.30 QR is the main means by which the Council supports research. Other, smaller streams of funding are provided in support of contract research work (CR); of specific initiatives and programmes within Wales, including grants to the University of Wales for the publication of scholarly work by the University of Wales Press and for the Board of Celtic Studies (including the Welsh Dictionary); and for programmes supported jointly with other funding bodies, including the Arts and Humanities Research Board and the Joint Research Equipment Initiative. In addition, as a result of the 1998 CSR settlement (see below) the Council has received specific capital grant to support research infrastructure.
- 2.31 Total research funding for 2000/01 is as follows

Funding Stream	£m
QR	44.751
CR	1.500
Initiatives, Wales	1.733
Joint Initiatives, UK	2.742
Other	0.494
Capital	8.162

- 2.32 QR corresponds to 4.4% of the total sum allocated by the UK funding bodies on the basis of the RAE.
- 2.33 Of particular concern in recent years has been the extent to which equipment and facilities within the higher education sector have failed to keep pace with technological developments. £22m of specific capital funding for research infrastructure was made available over a three year period as part of the CSR settlement in 1998 to provide an injection of cash towards reversing what has become a trend of equipment obsolescence. The equivalent sums in England and Scotland were £300m and £23m respectively. Competitive funding initiatives such as the Joint Infrastructure Fund, the University Challenge Fund and the Joint Research Equipment Initiative have also been instituted on a UKwide basis in order to address this problem. However, studies indicate that continued investment is required in order to maintain competitive edge. The £1bn Research Investment Fund announced by the Chancellor of the Exchequer in early July 2000, and reaffirmed in the Science and Innovation White Paper published later that month, acknowledges this fact. Wales stands to benefit from a share of the 70% of this fund that is intended for projects to implemented UK wide. The balance is reserved for projects in England with the expectation that the devolved administrations will contribute a proportionate amount for investment in projects in their respective territories. The amount in Wales is dependent upon decisions to be taken by the Assembly in

determining the Council's settlement for 2001-02 and the remainder of the CSR period.

2.34 The Council's research policy has been the subject of a review this year. This review was a prerequisite for a reappraisal of the method for allocating research funds which needs to be carried out before the outcomes of the 2001 RAE are announced. As a result of the policy review the Council has agreed statements of the purpose of its research funding and of its research policy objectives.

RESEARCH IN THE WELSH HIGHER EDUCATION SECTOR

- 2.35 Research in Wales has been largely located within the constituent institutions of the University of Wales. This reflects the fact that grant-inaid for the former public sector institutions, up to the transfer of responsibility to the Council, did not include any funding directed specifically towards the support of research. Since the Council's inception there has been some growth, in selected areas, in the research conducted by the former public sector institutions. However, the bulk of the sector's research remains within the constituent institutions of the University of Wales.
- 2.36 The quality of research conducted in the UK has been measured by means of successive RAEs. The outcome of the 1996 RAE demonstrated an improvement in research quality in Wales, both in absolute terms and relative to performance in the rest of the UK. This is shown by comparing the average score for 1996 and 1992 for Wales and the UK respectively, weighted to take account of the number of staff put forward for assessment.

COUNTRY	WEIGHTED AVERAGE SCORE		
	1996	1992	
Wales	3.6	3.1	
UK	3.7	3.4	

- 2.37 The proportionate improvement achieved by the Welsh sector was greater than that for the UK as a whole, whilst the differential between the weighted average score for Wales and that for the UK as a whole, narrowed from 0.3 in 1992 to 0.1 in 1996.
- 2.38 This improvement reflected a significant increase in the number of departments in Wales achieving ratings at the top end of the scale 4, 5 and 5*. The number of departments rated at these levels, increased from 32 in 1992 to 60 in 1996, an increase of 88%. The table below shows the pattern of ratings in these two Research Assessment Exercises:

Number of	RAE Rating					
Departments	1	2	3a/3b	4	5/5*	Total
1996 RAE	13	23	61	39	21	157

Note: In the 1992 RAE, there was no 5* rating and the 3 rating was not differentiated into 3a and 3b

- 2.39 Alongside these improvements, lay one area of particular concern: the decrease in the number of research active staff put forward by Welsh institutions. The number decreased from 2428 in 1992 to 2339 in 1996, a fall of 3.7%. This corresponded to a fall in Wales' proportion of UK research active staff from 5.5% in 1992 to 4.9% in 1996. In response, the Council established a new funding programme over the period 1999 to 2002 the Research Volume Initiative designed to bring numbers up. Indications on the basis of targets set by HEIs are that the volume of staff in departments at the top end of the rating scale (4 and above) is set to rise by 41% and across the top and mid points of the scale (3a and 3b) taken together by 4%.
- 2.40 A complementary view of research activity is provided by information on income from other sources. Information for the period 1992-93 to 1998-99 is provided in the following table. (The data for 1992-93 and 1993-94 relates only to the "old" university (UFC) sector since no information on research activity was collected from the former public sector institutions prior to1994-95).

Year		Total £m	Resear ch Counci Is £m	UK- based Charita ble Bodies £m	UK Centra I Govt. Bodie s £m	UK industry Commer ce £m	EU Sourc es £m	Other Overse as Source s	Othe Sour es
1998- 99	Wales UK	63.2 1834.8	17.4 559.6	9.3 429.2	14.9 316.4	9.7 221.2	6.8 183.7	1.9 91.1	33 33
	Wales Share (%)	3.4	3.1	2.2	4.7	4.4	3.7	2.2	g
1997- 98	Wales UK	58.2 1733.2	15.4 533.6	7.9 399.2	14.9 306.3	9.6 207.0	5.3 169.5	1.8 78.7	ु 38
	Wales Share (%)	3.3	2.9	2.0	4.9	4.7	3.1	2.3	8
1996- 97	Wales UK	51.1 1642.4	14.8 525.1	8.1 364.4	12.9 296.7	6.5 188.1	5.4 157.7	1.5 68.6	1 41
	Wales Share (%)	3.1	2.8	2.2	4.3	3.5	3.4	2.2	4
1995- 96	Wales UK	50.2 1553.2	15.3 531.8	7.5 338.1	11.5 269.3	6.2 169.7	5.6 147.6	1.6 58.5	2 38
	Wales Share (%)	3.2	2.9	2.2	4.3	3.7	3.8	2.7	6
[Wales	48.1	14.6	7.1	11.2	5.6	5.9	1.4	2

1994- 95	UK	1453.2	496.8	313.2	244.1	157.5	145.2	56.1	40
	Wales	3.3	2.9	2.3	4.6	3.6	4.1	2.5	5
	Share (%)								
*	Wales	43.2	13.0	6.3	9.3	5.4	4.8	1.8	2
1993-	UK	1240.8	436.4	293.6	183.1	131.4	101.9	55.6	38
94			10011	20010	10011	10111		0010	00
	Wales	3.4	3.0	2.1	5.1	4.1	4.7	3.2	6
	Share (%)								
*	Wales	40.6	10.7	5.5	10.5	5.1	4.4	2.0	2
92-93	UK	1106.2	385.7	248.9	171.2	122.5	80.4	54.1	43
	Wales	3.7	2.8	2.2	6.1	4.2	5.5	3.7	5
	Share (%)								

Source: HESA Finance Record * UFC-funded institutions only

- 2.41 In total, the Welsh sector has attracted significantly less income in proportionate terms compared with that expected on the basis of its standard share factor of 5%. Particular concern has focused on the low proportion of grants attracted from the research councils. This was the subject of a study commissioned by the Council in 1999. Its main conclusion was the problem was due in large part to the low volume of proposals submitted to the research councils rather than to the quality of the proposals that were being submitted. As a consequence, the main recommendation of the report was that institutions should focus on strategies designed to increase the number of proposals submitted. Other recommendations were that institutions should:
 - corporately, and research staff individually, network more extensively with the research councils in order to increase mutual awareness of policies, capabilities and opportunities,
 - review the arrangements for planning and managing the research process, particularly to ensure that they have a well-promulgated strategy for their research activities and adequate supporting structures to help researchers secure external funding,
 - examine the potential for improving levels of research council income by increasing the numbers of research active staff in areas of strength,
 - continue to consider collaboration with other research groups as a means of gaining advantage in securing additional research funding.
- 2.42 The Council accepted these recommendations and, following discussion with institutions, sought statements of strategy from the five research-led institutions in the sector – UW Aberystwyth, UW Bangor, Cardiff University, UW Swansea and UWCM – on which the study had been

based. The strategies received demonstrate that the sector has responded positively to the conclusions of the study and is setting ambitious targets over the period to 2002-03. The sector is aiming for:

- a 54% increase in the number of applications made; and
- a 76% increase in income from the research councils.
- 2.43 Initial monitoring of the sector's performance is encouraging, with growth in research councils income on target.
- 2.44 The Council has set ambitious targets for the outcomes of the 2001 RAE:
 - An overall staff weighted average rating equal to or above the equivalent rating for the UK in that Exercise
 - The proportion of all academic staff in Welsh higher education institutions who are research active and in departments rated 3b and above to be equal to, or greater than, the equivalent proportion for the UK; and, within that, the top level ratings (4 and above) to increase by one-third over those achieved in the 1996 exercise.
- 2.45 These targets seek an improvement in the performance of Welsh higher education institutions compared with the rest of the UK; accordingly, they are dependent on the overall shift in performance UK-wide as measured in the 2001 RAE compared with that in 1996. The outcome will not be known until the end of 2001.

BALANCE OF THE RESEARCH PORTFOLIO

- 2.46 The Council is committed to funding research of high quality. As a corollary, it is committed to allocating funding selectively.
- 2.47 As indicated previously, RAEs are the means by which it does this. Each of the exercises undertaken subsequent to the first has built on the experience gained previously, with assessment tools and methods being refined progressively. However, the exercises have been subjected to criticisms, for instance because they are perceived to be retrospective and to exercise undue influence over the conduct of research in HEIs. Acknowledging the criticisms, the funding bodies have agreed to conduct a joint review of research assessment post 2001. In preparation, each of the funding bodies has conducted a review of its research policy and these reviews (reference was made earlier to the Council's review) will contribute to the joint review of research assessment which is expected to commence in late 2000/early 2001.
- 2.48 Whilst selectivity is seen as a means of protecting and enhancing quality, there remains a question of the degree to which selectivity should be applied. In Wales, the degree of selectivity adopted utilising the 1996 RAE outcomes (the ratings) has been less than that applied in England, Scotland and Northern Ireland. This has meant that departments with

mid-ranked ratings have been funded at a higher level than equivalent departments in other parts of the UK. For 2000/01, departments at Welsh HEIs rated below 5 receive some £7m more than they would under the HEFCE formula.

- 2.49 The Council adopted this approach so as to support a research base of adequate breadth in Wales which might be developed for the future. If it had not done so:
 - funding would have been focused on less than 25% of all assessment areas;
 - opportunities for research training across a broad range of disciplines existing in Wales would have been diminished;
 - the research base would have been narrowed to the point at which it would be unlikely to serve the Welsh economy and the quality of life in Wales;
 - Wales's ability to respond positively in the global economy would have been impaired.

c) THE ECONOMIC MISSION

2.50 A study commissioned by the Heads of Higher Education (HHEW) in 1997 measured the impact of the higher education sector on the Welsh economy. That study concluded that the higher education sector provided an estimated total spending effect of more than £1bn, directly or indirectly responsible for over 23,000 jobs in Wales. The HHEW study, however, found that, with some notable exceptions, there was little interaction between the sector and Welsh industry and made recommendations on how this might be changed.

TRAINING AND CONTRACT RESEARCH WORK

- 2.51 Successive Secretaries of State for Wales, and now the National Assembly, have made clear the expectation that higher education would play an important role in supporting the Welsh economy. Accordingly, the Council has sought to ensure that institutions add this so-called service role (sometimes referred to as the third mission) to the traditional twin missions of teaching and research. In so doing it is necessary to recognise that service in this sense is not confined to economic matters. The enhancement of the quality of life is equally important, an aim towards which higher education institutions already make an important contribution, whether in relation to health, social or cultural matters. The following paragraphs focus on actions in support of the economy.
- 2.52 The Council inherited funding associated with the Government's PICKUP initiative and, from that initiative, developed its own Training and Consultancy Services (TACS) initiative in 1993/94. TACS is intended to support the provision and continued development of HEIs' training and consultancy services for industry, commerce, the professions and the

public sector. TACS funds were originally provided on a competitive basis but, in 1998, the Council introduced a new method for distributing TACS funding whereby allocations are made pro rata to the average income received by institutions in the previous two years (and subject to an appropriate business plan). TACS allocations and income are shown in the following table:

Year	Total HEFCW TACS Allocation to institutions	HE sector's Total TACS Income	% increase in income on previous year
	£K	£m	year
1995/96	644	23.948	-
1996/97	662	26.602	11.08
1997/98	662	27.845	4.67
1998/99	662	30.617	9.95
1999/00	778	N/a	-
2000/01	820	N/a	-

2.53 The Council has also sought to reward institutions for their success in obtaining income for research and development work (Contract Research, or CR). The sum available for CR is allocated pro rata to institutions' average contract income over the previous two years. From 2000/01, CR funding is conditional on the submission of business plans to the Council. CR allocations and income are as follows:

Year	Total HEFCW CR Allocation to institutions £m	HE sector research grants and contracts (CR) income £m	% increase in income on previous year
1996/97	1.269	51.031	-
1997/98	1.270	58.248	14.14
1998/99	1.370	63.202	8.51
1999/00	1.500	N/a	-
2000/01	1.500	N/a	-

- 2.54 It is very difficult to draw direct comparisons with either England or Scotland in terms of TACS/CR activity as they define and measure them in different ways. However, SHEFC has made £2m available (which includes £1m from the Scottish Executive) for its Professionalisation of Commercialisation initiative since 1999/2000. Close to £200m was earned by Scottish HEIs last year from all external research.
- 2.55 In England, HEFCE announce its Higher Education Reach-Out to Business and the Community Fund (HEROBiC) in 1999 to increase

HEIs' capacity to respond to the needs of business. £60m was allocated in 1999/2000, and a further £23m will be allocated over the next 4 years.

YEAR		TOTAL £m	%
1995-96	Wales	30.9	
	UK	524.6	
	Wales Share (%)		5.9
1996-97	Wales	36.7	
	UK	612.8	
	Wales Share (%)		6.0
1997-98	Wales	36.6	
	UK	633.7	
	Wales Share (%)		5.8
1998-99	Wales	38.4	
	UK	640.7	
	Wales Share (%)		6.0

2.56 The table below sets out the income gained by institutions for services other than contract research work:

Source: HESA Finance Record

2.57 In comparison with research grant and contract income, the Welsh sector performs well against the UK as a whole, achieving a percentage of some 5.9%, well above the standard share for Wales. In particular, Welsh institutions' income from Teaching Company Schemes has increased significantly in recent years and now stands at over 6% of the UK total. These schemes, which involve the establishment of partnerships between institutions and individual companies whereby institution staff or students work with the company in question to tackle a particular problem, are particularly effective means of developing relationships between institutions and industry.

HIGHER EDUCATION AND THE WELSH ECONOMY

- 2.58 Welsh HEIs are generally no less active in establishing and maintaining links and partnerships with industry and commerce than are their counterparts elsewhere in the UK.
- 2.59 The relationship between higher education and industry/commerce has often focused on the research capabilities of the higher education sector. For instance, in relation to the role higher education can play, Foresight the UK Government programme to secure sustained competitive advantage and enhanced quality of life focuses particularly on the harnessing of new knowledge to maintain the UK's competitiveness in the face of globalisation. However, the expertise available within higher education is much wider than this. Thus, the 1998 Competitiveness White Paper noted that the generation and exploitation of knowledge "is not simply about pushing back the frontiers of knowledge; it is also about the more effective use and exploitation of all types of knowledge in all

manner of activity, not just those sometimes classified as high-tech or knowledge intensive".

- 2.60 This is of particular significance in relation to the Welsh economy. Whilst Government encouragement to higher education institutions to pay greater attention to translating new ideas into commercial propositions is well placed, in Wales there is no major industrial research and development base. In other words, a key constraint on good technology transfer within Wales is the lack of "industry pull" to match the "technology push" which is so much in evidence. Getting these elements in better balance is crucial if Welsh higher education is to fulfil its full potential for the Welsh economy.
- 2.61 The emphasis on tapping knowledge existing within higher education for commercial purposes has led to an emphasis on the establishment of centres within institutions which focus on the commercialisation of new ideas, including so-called incubator centres. The Council has supported and encouraged such developments. In particular, it has entered into partnership with the WDA in launching the Wales Spin-out Programme (WSP), which concentrates on the development of arrangements designed to create high quality businesses from the higher education sector. £500k is being provided by the Council in 2000/01 in support of a £3.8m allocation by the Agency targeted on five institutional clusters.
- 2.62 Underpinning the Spin-out Programme is the aim of bringing about cultural change by encouraging students, researchers and staff, as well as previous graduates, to start their own businesses supported by academic and commercial help in the development of their product or service. Developing a culture whereby the creative and entrepreneurial instincts of students are stimulated and developed can make an effective, wide-ranging and long-term contribution. This does not simply mean the provision of incubating facilities; it also involves the inclusion, within the academic curriculum, of entrepreneurial creativity as an aim. WSP activity has recently begun in HEIs and the Council will review its initiative towards the end of 2000/01 before deciding on funding for future years.
- 2.63 Part of any strategy to harness fully the expertise residing within higher education institutions is making that expertise known. In Scotland, steps are being taken by the Scottish Higher Education Funding Council (SHEFC) and the Committee of Scottish Higher Education Principals (COSHEP) to establish a Scottish Research Information System (SRIS) a web based facility providing detailed information on the research expertise of individual members of staff within the Scottish higher education sector. SRIS is seen as an effective tool for promoting the commercialisation of research and knowledge transfer work generally and, as such, central to the development of a knowledge based economy and society in Scotland.

STUDENT EMPLOYABILITY AND WALES' SKILLS BASE

- 2.64 Equally important is the preparation of individuals for the world of work. Increasing emphasis is being given to work experience, developing key graduate-level skills, encouraging entrepreneurial motivation and identifying ways of minimising graduate unemployment. The Council has encouraged such actions and this year has required institutions to prepare work experience and employability plans. It is working with the other funding bodies to develop and refine performance indicators to provide a robust means of measuring institutions' success in securing high graduate employment rates. It is also in partnership with the WDA in funding a raft of programmes at higher education institutions designed to improve the employment prospects of their students.
 - the Council is contributing half of a £350,000 budget each year for three years to this joint initiative; and
 - the initiative is currently producing around 1,500 graduate jobs and around 1,000 student jobs a year.
- 2.65 The Council supports the Future Skills Wales project and, following the publication of the project reports, has urged institutions to make full use of the information made available in reviewing their learning and teaching strategies and course portfolios. It expects to work closely on this with the National Council for Education and Training Wales (CETW). More generally the Council has consistently given priority to making places available on science and technology courses and on two year diploma courses in line with Government priority and to meet the needs of manufacturing and technology based industries in Wales. Thus:
 - Enrolments on science and technology undergraduate courses have increased by 25% since 1993/94 compared with an overall growth in undergraduate numbers of 12% over the same period.

d) COLLABORATION AND INTEGRATION

COLLABORATION WITHIN HIGHER EDUCATION

- 2.66 Duplication of activity between institutions is wasteful. For this reason greater collaboration is generally advocated. Within and between institutions there are many instances of collaborative actions at individual staff level. The rest of this section looks at larger-scale partnerships.
- 2.67 There are a number of examples of major collaborative ventures in Wales. The Council has provided funding to support several of them. They include:
 - Cardiff University and the Welsh College of Music and Drama have pooled their music library resources.
 - the UWCM/Cardiff University Partnership Board provides a mechanism for the two institutions jointly to operate schemes of medical and dental

education and promote common research programmes in these disciplines.

- the Cardiff Quartet provides a vehicle for marketing the opportunities that are provided by the four HEIs located in the city.
- under the umbrella of the University of Wales, the Institute of Non-Newtonian Fluid Mechanics brings together the research activities of the Aberystwyth, Bangor and Swansea fluid mechanics groups.
- the Education Departments at UW Aberystwyth, UW Bangor, UW Swansea and UWIC, jointly support HATT (Hyfforddi Athrawon/Teacher Training), a programme designed to develop parttime and full-time routes for students to achieve a Post Graduate Certificate in Education by means of open and distance learning.
- 2.68 However, such action is bounded by the need to ensure that the autonomy of the individual institution or department is not jeopardised. This imperative to protect autonomy can and does place limits, or barriers, on the extent to which successful collaboration can take place, barriers which are not simply due to the competition for students or for research funding. For this reason it is extremely difficult successfully to impose collaboration top-down through funding incentives. The dependence on outside funding, which is generally short-term, and the enthusiasm of one or two individuals, means that, generally, the initiative does not become embedded within institutions' core activities with the result that long-term change is the exception rather than the rule.
- 2.69 Nevertheless, there are examples of developments that have the potential for achieving effective, long lasting, partnerships between institutions. These include:
 - the development of joint schemes for teaching Welsh medium modules possibly incorporating electronic based delivery mechanisms;
 - joint preparation and delivery of e-learning programmes through the proposed pan UK e-University;

COLLABORATION WITH OTHER EDUCATION PROVIDERS

2.70 There are also important and productive partnerships with other sectors, of which the chief is further education. The Council has supported those institutions which have established strong and lasting franchise partnerships with FECs and brought about the large growth in enrolments on franchised courses which has taken place over the last decade (see paragraph 3.23). In the case of the University of Glamorgan, this has resulted in the development of an associate college network involving some six colleges. This arrangement, together with extensive franchise partnerships and involvement in Community University developments,

has provided the means for the University to extend its campus to all part of Wales.

- 2.71 More recently, the Council's policy of increasing the number of higher education courses funded directly at FECs has been based on the establishment, in each instance, of a compact between the college and a HEI. To date, approximately 100 compacts have been established by this means.
- 2.72 Through its Partnership Fund, the Council has funded a range of joint initiatives between HEIs and FECs. In particular, it has provided support for the establishment of the Community University of North Wales and an investigation into the viability of a similar exercise in West Wales. The former, involving two HEIs and eight FECs is now recruiting students onto its courses. It expects to make a major impact on the provision of access opportunities in North Wales, as well as providing a focus for the University for Industry (UfI) in the region.
- 2.73 Perhaps the most significant development for the long-term is the establishment, jointly by the further and higher education representative bodies (Fforwm and HEW), with financial support from the Council, of a strategic working group charged with developing a single Post-16 credit and qualification framework. This framework will support the lifelong learning agenda by providing increased flexibility for study towards a qualification while maintaining control of standards.
- 3.74 In view of the extent and breadth of relationships between the two sectors that have developed in recent years, the Council intends to commission a wide-ranging study of further-higher education partnerships. It is expected that the study will begin in late Autumn 2000 and it is hoped that its outcomes will be available in early 2001. The Council is already minded to relax its earlier stance on HE/FE mergers.
- 2.75 The study *From Elitism To Inclusion* published by the CVCP in 1998, which the Council and the other funding bodies helped to fund, drew attention to the need to establish and develop partnerships between schools and higher education institutions in order to combat the marked differences in access to higher education by young people from different social groups. The establishment of compacts between HEIs and schools in areas of economic deprivation is seen as a particularly effective way of reducing the disparity. There are over a hundred such compacts currently in existence in Wales, and it is the Council's aim to see this number increased. For this purpose, it has established an initiative designed to support the establishment and maintenance of links between schools and HEIs. A total of £500,000 has been allocated over the two year period 1999-2001 to support projects at several HEIs. Examples of the sort of programmes being supported are:
 - HEIs building upon their existing compact programmes with schools, offering extra activities or focusing on children at a younger age;

- The College of Medicine is broadening the social base of applicants for medical training on an all-Wales basis; and
- Two HEIs are running a joint Access summer school to motivate and help students gain entry to HE.
- 2.76 Increasing the participation rate in areas of economic deprivation represents a huge challenge, well beyond the capacity of the higher education sector alone. HE's most effective contribution is with other local agencies. The work being undertaken with schools in areas of economic deprivation represents one of the most fruitful channels for higher education to make that contribution.

MERGERS BETWEEN HIGHER EDUCATION INSTITUTIONS

2.77 In 1999 the Welsh Office asked the Council to identify the scope for institutional mergers at HE level. The Council responded by submitting a report to the National Assembly in September 1999. That report concluded that the Welsh higher education sector has a relatively large number of small institutions and that, in order to meet the challenges now facing higher education, both within Wales and beyond, there was a case for reducing the number of institutions. The smallest institutions were seen as facing particular difficulties except where they have a distinct mission addressing a well-defined niche market. Examples in Wales are UWCM and WCMD.

2.78 The report stated that mergers were likely to:

- achieve more economies of scale in overhead functions
- reduce the risk of financial instability or insolvency
- secure a more comprehensive coverage of specialisms (both subject based and more generally) in research and teaching
- deliver the best return on expensive facilities
- introduce greater institutional versatility and responsiveness to new challenges.

SECTION 3: THE FUNDING COUNCIL

INTRODUCTION

- 3.1 The Higher Education Funding Council for Wales (HEFCW) came in to being in May 1992 as a result of the Further and Higher Education Act 1992. The Act was the result of the Government's decision to replace the binary system of higher education then existing with a unitary system based on the national territories of the United Kingdom (UK). This meant that the agencies with responsibility for allocating public funds for higher education, which hitherto had reflected the binary system, were now replaced with territorial agencies: specifically higher education funding councils for each of England, Scotland and Wales. In Northern Ireland higher education (DENI); it is now the responsibility of the Northern Ireland Assembly.
- 3.2 In Wales this meant that for the first time responsibility for all higher education provided in Wales, with the exception of the Open University, became the responsibility of the Welsh Office. Hitherto, the University of Wales and its constituent institutions had been funded across Great Britain (GB) by the UFC. Of the remaining institutions, Trinity College, Carmarthen had been funded directly by the Welsh Office, whilst the others were owned by individual local authorities but with recurrent funding determined on an all-Wales basis by the Wales Advisory Body for Local Authority Higher Education (WAB). All these institutions, bar two, gained independence from their respective local authorities in 1992.
- 3.3 The HEFCW took up its funding responsibilities for all higher education institutions in Wales on 1 April 1993. In establishing a unitary system of higher education with responsibility, for the first time, residing within Wales, the Council's administration was provided by a single Executive shared with the Further Education Funding Council for Wales (FEFCW). This was an arrangement that remained unique within the UK until the establishment in Scotland of a Joint Executive for the Scottish Funding Councils (Further and Higher Education) in 1999. This arrangement is to continue when the new CETW replaces FEFCW on 1 April 2001.

DUTIES AND RESPONSIBILITIES

- 3.4 Council's duties and responsibilities derive from the statutory responsibilities placed upon it by the Further and Higher Education Act 1992 and, in respect of Initial Teacher Training (ITT), the Education Act 1994. The main ones are to:-
 - administer funds made available to the Council for the purposes of:

- providing financial support for the provision of education;
- the undertaking of research and activities associated with this purpose in higher education institution in Wales;
- the provision of prescribed courses of higher education in further education institution in Wales.
- consult relevant bodies with respect to the terms and condition to be imposed in relation to grants, loans and other payments;
- provide the National Assembly (formerly the Secretary of State) with such information and advice as it may require or which the Council thinks fit;
- secure provision for assessing the quality of education provided in institutions for whose activities the Council provides financial support.
- accredit providers of initial training for school teachers;
- commission research to improve the standards of teaching and teacher training;

In addition the Council may:

- with other HE Councils, exercise jointly any function where it appears that to do so would be more efficient or effective.
- 3.5 The UK-wide NCIHE led by Lord Dearing reported to the Government in July 1997. It identified five functions in which funding bodies were currently engaged and which should continue. They were to:
 - contribute to the funding of teaching activities;
 - influence the overall levels of supply and demand for higher education, possibly exerting influence in particular programme areas or disciplines;
 - promote and ensure the good use of public funds;
 - act in support of government policies;
 - fund research under the dual support arrangements (see paragraph 1.9)

MODE OF OPERATION

3.6 First and foremost, the Council has responsibility for allocating the grantin-aid made available to it by the National Assembly. Most is distributed to institutions annually by formula as a block grant. Thus, for 2000/01, out of a total recurrent grant of £285m, some £260m (just over 90%) has been allocated in this way in support of teaching and research.

- 3.7 The Council has given consideration on a number of occasions to the funding methods that it adopts. It has concluded, consistently, that the bulk of funding in support of teaching and research is best distributed by formula. This ensures that the decisions of the Council are transparent and provide a measure of predictability for institutions so enabling them to engage in longer term planning. Beyond this, the Council's formula based allocations for teaching and research are made available as block grants. This means that institutions are not required to provide a detailed account of the way in which funding in expended; instead, they are required to deliver specific outcomes for the funding made available, including the number of students to be recruited and the quality of the research carried out.
- 3.8 The formula approach allows the Council to advance the Assembly's policy priorities, for instance:
 - promoting Science and Technology provision
 - promoting part-time franchised courses
 - providing additional funding support for widening access
 - expanding Welsh-medium provision
 - improving the quality of research.
- 3.9 Policy priorities are also pursued through specific funding initiatives, sometimes by means of competitive funding or, more recently, by proposals against pre-allocated funding. The Council has made selective use of initiatives, for example where it believes that there is a need to encourage institutions to pursue particular outcomes, eg:
 - establishing partnerships with further education colleges
 - developing research which helps wealth creation.
- 3.10 The Council expects institutions to be clear about their missions and strategic direction. To this end, it has, from the outset, sought strategic plans from them. More recently, in order to encourage the development of long term, institution-wide, planning in areas of particular priority, the Council has sought strategies for specific areas and allocated additional sums of money for them which are allocated to institutions provided satisfactory plans are received:-
 - the development of learning and teaching, including employability skills (£0.5m annually)
 - widening access (£1.5m annually)
 - Welsh medium provision (£254k)
 - support for students with disabilities (£0.5m annually)
 - training, consultancy and contract research work (£2.3m)

The plans allow the Council to monitor these areas, and to encourage institutions to engage in their further development.

- 3.11 HE is a UK-wide and international activity. There is significant advantage for Wales in the Council working in collaboration with other UK funding bodies on substantial infrastructure and other programmes. Such programmes include:-
 - Joint Information Systems Committee (which administers, *inter alia*, the Joint Academic (electronic, broadband) Network)
 - Institute of Learning and Teaching
 - Learning and Teaching Support Network
 - Arts and Humanities Research Board
 - Quality Assurance Agency
 - the Joint Research Equipment Initiative.

THE COUNCIL'S MISSION

3.12 A statement of the Council's current responsibilities, aims and vision is set out in its Corporate Plan.

Appendix A

ENROLMENT DATA BY INSTITUTION 1999/2000

Institutions	FT	SW	PT	Total
University of Glamorgan	9,250	274	5,140	14,664
University of Wales, Aberystwyth	6,294	185	2,342	8,821
University of Wales, Bangor	6,244	69	3,039	9,352
Cardiff University	13,560	308	3,577	17,445
University of Wales, Lampeter	1,179	3	1,062	2,244
University of Wales Swansea	8,050	56	2,983	11,089
University of Wales College of	2,259	0	844	3,103
Medicine				
University of Wales Institute, Cardiff	5,335	136	1,460	6,931
University of Wales College, Newport	2,611	0	4,577	7,188
North East Wales Institute	2,449	0	2,436	4,885
Swansea Institute of Higher Education	2,751	38	1,334	4,123
Trinity College Carmarthen	1,209	0	946	2,155
Welsh College of Music and Drama	501	0	50	551
Carmarthenshire College	276	0	109	385
Coleg Llandrillo	137	0	80	217

Coleg Gwent	0	0	38	38
Neath Port Talbot College	19	0	12	31
Swansea College	7	0	38	45
All	62,131	1,069	30,067	93,267

Source: HESES survey 1999/2000

- Notes 1 Figures include continuing education students and enrolments under the first phase of HE in FE initiative.
 - 4 Part-time figures exclude PGT dissertation students.
 - 5 Figures include fundable, non-fundable, island and overseas students.

Annex 2

Consultation

Introduction

The consultation letter was issued on 22 September 2000 and responses were required by 30 November 2000. The questionnaire and covering letter are reproduced below.

The committee invited some 200 organisations to participate in the consultation and 86 responses were received. These are listed in Annex 3.

The expert adviser produced an initial summary of the responses received and the committee discussed this paper - ELL 02-01(p.3) - at its meeting on 31 January 2001. Subsequently, the expert adviser produced a more detailed analysis of the responses - February 2001 and both these documents are available from the Assembly's website - <u>www.wales.gov.uk</u> - under committees/ Education and Lifelong Learning Committee / policy reviews / higher education.

EDUCATION AND LIFELONG LEARNING COMMITTEE



Cynulliad Cenedlaethol Cymru The National Assembly for Wales

Bae Caerdydd / Cardiff Bay Caerdydd / Cardiff CF99 1NA

22 September 2000

DEAR COLLEAGUE

The National Assembly is firmly of the view that a first class higher education sector is very important for Wales. It attracts scholars and students. It attracts research funding and development funding from industry and commerce. It provides an important element in attracting investors to Wales. But more than that, there is a long tradition of higher education institutions playing a major part in the cultural and social affairs of Wales, thus promoting accessibility to the education and expertise which they are able to provide. More recently institutions have become increasingly involved in the economic, industrial and commercial life of Wales in a very important way so that the sector is seen as a major player in a Welsh economic powerhouse.

However, for all the achievements of the sector, there has never been a national strategy to truly optimise its contribution to Welsh life. The Committee aims to redress this by undertaking a review of the sector during the period October 2000 – April 2001.

In undertaking this policy study, the Committee has been charged with identifying opportunities for strategic development, make recommendations for action and set targets for achievement, having due regard to competing priorities and constraints on resources.

During the policy study, the Committee will receive expert advice from Professor Leslie Hobson.

In the first instance, the Committee wishes to consult with stakeholders to identify the range of topics and issues that should be addressed during the policy study. Attached at Annex A are the Terms of Reference for this review and at Annex B there is a list of topics and issues that the Committee has drawn up. You are asked to submit comments in writing on these by no later than **Thursday 30, November 2000** to:

Holly Pembridge Deputy Clerk, Education and Lifelong Learning Committee The National Assembly for Wales CARDIFF BAY CF99 1NA

Or by e-mail to <u>holly.pembridge@wales.gsi.gov.uk</u>

As part of the National Assembly's commitment to openness, responses to consultation exercises will normally be made available to the public on request. Please indicate if you wish your response, or any part of it, not to be made publicly available.

	Section 1 Size and Shape of Higher Education			
1.1	 Within the context of the growing globalisation of HE, is diversity of mission still a desirable feature? Issues might include: explaining what constitutes diversity and assessing under what circumstances it should be maintained/enhanced developing policies, strategies and funding mechanisms that support and encourage rather than impede and erode diversity identifying and promoting those areas where consistency of policy and practice, or centralisation of services, may be more important than diversity 			
1.2	 What is the role of partnerships, collaboration and mergers in the implementation of any vision of the future of HE in Wales? What are the various models for a future HE sector in Wales and the advantages and disadvantages of each model? Issues might include: providing support for collaboration in both teaching and research assessing the benefits of confederated systems identifying the economies of scale that may be achieved through collaboration feasibility of institutional co-operation in the provision of programmes so that all Welsh needs are covered 			
1.3	 How can HE demonstrate it is 'dynamic' and responsive to change? Issues might include: identifying the internal and external pressures for change and their impact, such as expansion, ICT and the challenge of globalisation developing change management strategies for the sector to enable it to take full advantage of new opportunities and technological developments 			
1.4	 How can HE in Wales be made more attractive to Welsh students? Issues might include: promoting greater collaboration between the HE, FE and secondary schools' sectors raising awareness of the range of provision available in Wales marketing Welsh HE as an entity, e.g. internet portal 			
Section 2				
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	Learning and Teaching			
2.1	 What new approaches to learning and teaching should be exploited? Issues might include: supporting academic staff to exploit new approaches to learning and teaching in order to complement the best of the more traditional approaches promoting a cultural change in staff and student attitudes to HE provision embedding the use of communications and information technology into the design of programmes of study maintaining and enhancing communications infrastructure responding to international competition from other communications and information technology providers 			
2.2	How can HE both ensure and demonstrate that the quality and standards of its teaching provision are globally competitive?			
	 Issues might include: developing appropriate systems for assessing and demonstrating quality providing adequate student support throughout programmes of study enabling prospective students and employers to make informed choices about programmes of study relevant to their needs attracting, retaining and developing high quality staff 			
 2.3 What mechanisms should the HE sector be adopting in order to respond to the market for lifelong, distance and flexible learning? Issues might include: enabling flexible entry to, and exit from, courses accrediting prior study, work and experience providing flexible modes of study at times and locations convenient to learners responding to opportunities and threats of growing distance learning markets and new players in HE provision providing adequate guidance and support to students in diverse modes of study 				

2.4 How can the sector develop and adapt its range of vocationally relevant programmes in order to provide better opportunities in the world of work?
Issues might include:

providing an appropriate mix of subjects and qualification levels to meet future demand and the changing needs of the economy
supporting students to develop relevant skills, knowledge and experience
maintaining and enhancing relationships with employers to help ensure relevance of programmes to their needs
maintaining a balance between developing students' specific skills and their capacity for lifelong learning that will enable them to remain innovative and adaptable

Section 3 Economic, Social and Cultural Regeneration		
3.1	 How can we demonstrate the economic benefits that an internationally competitive higher education sector brings to Wales? Issues might include: establishing an appropriate relationship with the National Assembly for Wales and with national and regional economic agencies identifying the economic impact of the higher education sector, for example, in terms of employment and income ensuring and demonstrating that the economic benefits of higher education are spread widely across society 	
3.2	 How best can the sector respond effectively to the diverse needs of public, private and voluntary sectors for innovation and knowledge at local and regional levels? Issues might include: strengthening local and regional engagement of HE, especially through funding and other conditions, to enable universities to play a full part in the economic and social regeneration of Wales identifying the specific 'knowledge' requirements of public, private and voluntary sectors promoting links with business and encouraging knowledge transfer, reachout activity, enterprise and innovation 	
3.3	 What measures should HE be taking to help combat social exclusion and meet the needs of the economy by widening access to higher education? Issues might include: identifying barriers to access and participation developing more effective partnerships with schools, further education and local communities to improve progression routes to HE, focusing in particular on areas of deprivation promoting equality of opportunity in access to, participation in and progression through programmes of study and careers in higher education (Are there any other equal opportunities issues eg: staffing issues which should be considered?) providing information and guidance to prospective and new students 	
 3.4 To what extent should HE institutions act as local, regional and national cultural centres? Issues might include: maintaining and enhancing relationships with local communities developing, preserving and transmitting knowledge about local, regional and national cultural identities helping to maintain and communicate the values necessary in a pluralistic and civilised society developing a Welsh "brand" to help promote Welsh HE overseas whilst retaining the diversity of provision 		

3.5 In what ways can HE contribute to the development of bilingual capacity within Wales?

Issues might include:

- developing robust mechanisms to support the expansion of Welsh medium provision within the sector
- identifying the needs of public, private and voluntary sectors for Welsh medium provision within the sector

Section 4 Research 4.1 What are the barriers to developing a robust, high quality research base in Wales? Issues might include: • attracting and retaining high quality researchers maintaining and developing an adequate research infrastructure • making best use of limited resources for research • striking a balance between promoting excellence and developing potential • 4.2 Should there be differentiation of research missions between institutions? Issues might include: • striking a balance between basic, strategic and applied research anticipating and responding to emerging needs for research • building on strengths and addressing weaknesses • achieving 'critical mass' in areas of niche strength promoting collaboration to enable gifted individuals to participate in • research areas where their own institutions are not major players To what extent should institutions become involved in commercialising the 4.3 outcomes of research activity? Issues might include: developing robust mechanisms for protecting and exploiting intellectual • property rights developing relationships with potential users, backers of commercialised research and economic development agencies providing support for exploring commercialisation opportunities • maintaining a balance between the traditional, primary activities of HE and • involvement in the commercial exploitation of innovation

	Section 5 Funding		
5.1	 How can we ensure that institutions offer a high quality service within budgets that are affordable and acceptable to government? Issues might include: identifying the range of future funding options for learning and teaching, research and economic development related-work and, their impact on institutions making best use of staff, infrastructure and other key resources achieving a more equitable funding treatment of full-time and part-time students extending funding cycles generating income 		
5.2	How can we ensure that no student is deterred from taking up or completing his/her studies due to financial hardship?		
	 Issues might include: assessing whether students should contribute financially towards tuition identifying an appropriate student finance system that will best promote access to HE 		

	Section 6 Accountability		
6.1	 Is the current system of public accountability 'fit for the purpose' of modern HE? Issues may include: addressing concerns that the demands of accountability are too burdensome for the sector ensuring accountability arrangements meet the levels of assurance and confidence required by stakeholders maintaining an appropriate balance autonomy and accountability 		
6.2	 How can we ensure satisfactory institutional financial health? Issues may include: promoting greater transparency in the use of public money made available to HE developing good practice and guidance on financial management and value for money 		
6.3	 How can we ensure effective governance within the sector? Issues may include: evaluating decision-making processes developing good practice and guidance to assist institutions in developing appropriate systems of governance and management 		

If there are any other topics or issues that you believe the Committee should consider as part of the policy study, please outline them below.

Annex 3 Respondents

	Organisation/Individual Consulted	Response
1	Cardiff University	\checkmark
2	North Wales Institute of Higher Education	✓
3	Open University Wales	✓
4	Swansea Institute of Higher Education	✓
5	Trinity College, Carmarthen	✓
6	University of Glamorgan	1
7	University of Wales	✓
8	University of Wales College of Medicine	✓
9	University of Wales College, Newport	✓
10	University of Wales, Aberystwyth	✓
11	University of Wales, Bangor	✓
12	University of Wales, Lampeter	1
13	University of Wales, Swansea	1
14	University of Wales Institute, Cardiff	1
15	Welsh College of Music and Drama	1
16	Director-General of the Research Councils	
17	Biotechnology and Biological Sciences	1
	Research Council	
18	Engineering and Physical Sciences	1
	Research Council	
19	Economic and Social Research Council	1
20	Medical Research Council	
21	Natural Environment Research Council	
22	Particle Physics and Astronomy Research	
	Council	
23	Association of Graduate Careers Advisory	
	Services	
24	Association of Graduate Recruiters	
25	Association of Teachers and Lecturers	✓
26	Association of University Administrators	✓
27	Association of University Teachers (Wales)	✓
28	Association for University Research and	
	Industry Links	
29	Committee of Vice Chancellors and	\checkmark
	Principals	
30	Higher Education Funding Council for	✓
	Wales	
31	Higher Education Wales	✓
32	Institute for Learning and Teaching	
33	Joint Information Systems Committee	✓
34	Joint Procurement Policy and Strategy	
	Group	
35	National Association of Teachers in Further	\checkmark
	and Higher Education (Wales)	
36	National Union of Students (Wales)	✓
37	Quality Assurance Agency for Higher	\checkmark
	Education	

38	Society for Research into Higher Education	
39	UKCOSA: The Council for International	
	Education	
40	Universities Association for Continuing	✓
	Education	
41	Universities & Colleges Admissions Service	
42	Universities & Colleges Employment	
	Association	
43	Universities & Colleges Staff Development	
	Agency	
44	Fforwm	1
45	Further Education Development Agency	√
46	Aberdare College	
47	Barry College	
48	Bridgend College	
49	Carmarthenshire College of Technology	-
	and Art	
50	Coleg Ceredigion	
51	Coleg Glan Hafren	
52	Coleg Gwent	
53	Coleg Harlech	✓ ✓
54	Coleg Llysfasi	
55	Coleg Meirion-Dwyfor	
56	Coleg Menai	✓
57	Coleg Powys	
58	Coleg Llandrillo	
59	Deeside College	✓
60	Gorseinon College	
61	Merthyr Tydfil College	
62	Neath Port Talbot College	
63	Pembrokeshire College	
64	Pontypridd College	
65	Saint David's RC Sixth Form College	✓
66	Swansea Tertiary College	
67	Welsh College of Horticulture	
68	Yale College	
69	Ystrad Mynach College	✓
70	Association of Directors of Education in	
74	Wales	
71	General Teaching Council for Wales	×
72	National Association of Careers and Guidance Teachers	•
73	National Institute of Adult Continuing Education	
74	Qualifications, Curriculum and Assessment	
	Authority	
75	Teacher Training Agency	<u> </u>
76	University for Industry	
77	Welsh Joint Education Committee	
78	Welsh Secondary Schools Association	

79	Cardiff Chamber of Commerce and	
10	Industry	
80	Confederation of British Industry (Wales)	
81	Council of Welsh TEC's	
82	Education Business Partnership	
83	Federation of Small Businesses (Wales)	
84	Mid Wales Partnership	
85 Newport and Gwent Chamber of		
	Commerce and Industry	
86	North Wales Chamber of Commerce and	
	Industry	
87	North Wales Economic Forum	
88	South East Wales Economic Forum	
89	South West Wales Economic Forum	
90	Welsh Development Agency	✓ ✓
91	West Wales Chamber of Commerce	
92	Arts Council of Wales	
93	Countryside Council for Wales	✓
94	Environment Agency Wales	✓
95	Equal Opportunities Commission (Wales)	✓
96	NHS Confederation in Wales	
97	Sgrin, Media Agency for Wales	
98	The Sports Council for Wales	
99	Wales Tourist Board	✓
100	Welsh Language Board	✓
101	The National Library for Wales	✓ ✓
102	The National Museums and Galleries of Wales	\checkmark
103	Welsh Local Government Association	
103	Anatomical Society of Great Britain and	
104	Ireland	
105	Biochemical Society	
106	Biomedial Engineering Society	
107	British Academy	
108	British Association for the Advancement of	
	Science	
109	British Computer Society	
110	British Dental Association	✓
111	British Institute of Management	
112	British Medical Association	
113	British Pharmacological Society	✓
114	British Psychological Society	
115	Chartered Institute of Bankers	
116	Chartered Institute of Building	
117	Chartered Institute of Management	
	Accountants	
118	Chartered Institute of Marketing	
119	Chartered Institute of Personnel &	
100	Development	
120	Chartered Institute of Purchasing & Supply	

121	Engineering Council	
122	Institute of Biology	
123	Institute of Chartered Accountants in	
120	England & Wales	
124	Institute of Chemical Engineers	✓ ✓
125	Institute of Civil Engineers	
126	Institute of Electrical and Electronics	
	Engineers	
127	Institute of Logistics and Transport	
128	Institute of Management	
129	Institute of Mathematics and its	
	Applications	
130	Institute of Mechanical Engineers	
131	Institute of Physics	✓
132	Institute of Structural Engineers	
133	Law Society	
134	Library Association	\checkmark
135	Mathematical Association	
136	Royal College of Nursing	✓ ✓
137	Royal College of Veterinary Surgeons	
138	Royal Institute of Brutish Architects	
139	Royal Institute of Chartered Surveyors	
140	Royal Society	
141	Royal Society of Arts	
142	Royal Society of Chemistry	
143	Royal Statistical Society	
144	Royal Town Planning Institute	
145	Textile Institute	
146	Arts and Business Cymru	
147	Eisteddfod Genedlaethol Frenhinol Cymru	
148	British Council Wales	<i>✓</i>
149	Church in Wales	
150	Educational Broadcasting Council for	
	Wales	
151	Estyn	<i></i>
152	Joseph Rowntree Federation	<i>✓</i>
153	Institute of Welsh Affairs	
154	Roman Catholic Archdiocese of Cardiff	<u> </u>
155	Wales Millenium Centre	√
156	Welsh National Board for Nursing,	
	Midwifery and Health Visiting	
157	Wales Council for Voluntary Action	
158	Wales TUC Cymru	
159	Welcome Trust	
160	UNISON	✓
161	Urdd Gobaith Cymru	
162	Royal Geographical Society	
163	BERA (British Education Research	
	Association)	/
164	SCASS	J

165	Arts and Humanities Research Board	
166	Council of University Deans of Arts and	
	Humanities	
167	Social Research Association	
168	Social Policy Association	
169	Royal Anthropological Institute of Great	
	Britain and Ireland	
170	Royal Economic Society	
171	British Sociological Association	
172	SKILL	<i>↓</i>
173	Academy of Learned Societies	✓ ✓
174	Cardiff Quartet	1
175	Carol Rakodi	✓ ✓
176	Committee of Welsh Colleges of Higher	1
	Education	
177	Chairmen of HEIs in Wales Group	<u> </u>
178	Dafydd Wigley	<u> </u>
179	Disability Rights Commission	<u> </u>
180	Heads of Departments of Sociology Council	<u> </u>
181	Heads of University Departments of	1
	Chemistry (Wales)	
182	London Mathematical Society	
183	National Committee for Philosophy	
184	Professor Mike Scott (personal response)	<u> </u>
185	NIACE Dysgu Cymru	<u> </u>
186	Royal National Institute for the Blind (RNIB	✓
	Cymru)	
187	Swansea City Council	<u> </u>
188	UKERNA	<u> </u>
189	Professor Keith Smith (personal response)	<u> </u>
190	University of Wales Swansea - Chemical	✓
	Engineering Department	
191	WNB for Nursing, Midwifery and Health	✓
	Visiting	

ANNEX 4

Papers presented to the committee

All these papers can be found on the National Assembly's website at <u>www.wales.gov.uk</u> in the committees section.

Title	Reference	Date
Remit and timetable	ELL 03-00(p.1)	29 November 2000
Paper submitted by HEFCW & FEFCW	ELL 04-00(p.3)	13 December 2000
Excellence and Relevance an Initial Statement by HEW	ELL 04-00(p.4)	13 December 2000
Expert Adviser's Summary Report of the outcome of the consultation exercise	ELL 02-01(p.3)	31 January 2001
Welsh College of Music and Drama Presentation Paper	ELL 02-01(p.4)	31 January 2001
University of Wales College of Medicine Presentation Paper	ELL 02-01(p.5)	31 January 2001
University of Wales, Bangor Presentation Paper	ELL 02-01(p.6)	31 January 2001
Trinity College Carmarthen Presentation Paper	ELL 02-01(p.7)	31 January 2001
University of Wales College, Newport Presentation Paper	ELL 02-01(p.8)	31 January 2001
Cardiff University Presentation Paper	ELL 02-01(p.9)	31 January 2001
University of Glamorgan Presentation Paper	ELL 03-01(p.1)	8 February 2001
Swansea Institute of Higher Education Presentation Paper	ELL 03-01(p.2)	8 February 2001
North East Wales Institute of Higher Education Presentation Paper	ELL 03-01(p.3)	8 February 2001
University of Wales, Aberystwyth Presentation Paper	ELL 03-01(p.4)	8 February 2001
University of Wales, Lampeter Presentation	ELL 03-01(p.5)	8 February 2001

Paper		
University of Wales,	ELL 03-01(p.6)	8 February 2001
Swansea Presentation	==== == = = (p:=)	
Paper		
The Open University in	ELL 03-01(p.7)	8 February 2001
Wales Presentation	00 01(p11)	
Paper		
University of Wales	ELL 03-01(p.8)	8 February 2001
Institute Cardiff		
Presentation Paper		
University of Wales	ELL 03-01(p.9)	8 February 2001
Presentation Paper	EEE 05-01(p.3)	or ebidary 2001
NUS Wales	ELL 04-01(p.8)	14 February 2001
Presentation Paper	LLL 04-01(p.8)	141 ebidaly 2001
Fforwm Presentation		14 February 2001
	ELL 04-01(p.9)	14 February 2001
Paper		7 March 2004
Expert Adviser's	ELL 05-01(mins) Annex	7 March 2001
Analysis of position to	A	
Date		7 March 2004
Learning and Teaching	ELL 05-01(mins) Annex	7 March 2001
Theme	В	
Presentation Paper -		
Professor Allan		
Cochrane		7.14
HEW Presentation	ELL 05-01(p.1)	7 March 2001
Paper - Learning and		
Teaching		
Funding Theme	ELL 06-01(p.2)	21 March 2001
Presentation Paper - Sir		
William Taylor		
Funding Theme	ELL 06-01(p.3)	21 March 2001
Presentation Paper -		
HEW		
Size and Shape Theme	ELL 07-01(p.1)	4 April 2001
Presentation Paper -		
Professor Maxwell Irvine		
Size and Shape Theme	ELL 07-01(p.2)	4 April 2001
Presentation Paper -		
HEW		
Economic and Cultural	ELL 07-01(p.3)	4 April 2001
Development Theme		
Presentation Paper -		
WDA		
Economic and Cultural	ELL 07-01(p.4)	4 April 2001
Development Theme		
Presentation Paper -		
HEW		
Governance Theme	ELL 08-01(p.2)	9 May 2001
Presentation Paper -		
Professor Mike Shattock		
Governance Theme	ELL 08-01(p.3)	9 May 2001

Presentation Paper -		
HEW		
Lifelong Learning and Widening Access Theme Presentation Paper - Lord Dearing	ELL 09-01(p.1)	17 May 2001
Quality Theme Presentation Paper - John Randall	ELL 09-01(p.2)	17 May 2001
Quality Theme Presentation Paper - HEW	ELL 09-01(p.3)	17 May 2001
Welsh Medium Teaching Theme Presentation Paper - University Board for Welsh Medium Teaching	ELL 09-01(p.4)	17 May 2001
Welsh Medium Teaching Theme Presentation Paper - Dafydd Glyn Jones	ELL 09-01(p.5)	17 May 2001
Trade Union Presentation Paper - AUT	ELL 10-01(p.3)	23 May 2001
Trade Union Presentation Paper - NAFTHE Wales	ELL 10-01(p.4)	23 May 2001
Trade Union Presentation Paper - UCAC	ELL 10-01(p.5)	23 May 2001
Trade Union Presentation Paper - UNISON Wales	ELL 10-01(p.6)	23 May 2001
RNIB Cymru Presentation Paper	ELL 11-01(p.3)	13 June 2001
Disability Rights Commission Presentation Paper	ELL 11-01(p.4)	13 June 2001
Paper to Note - A New University Concept - Professor Mike Scott	ELL 11-01(p.7)	13 June 2001
Paper to Note - a letter from the Economic Development Minister	ELL 11-01(p.8)	13 June 2001
Report of the Investigation Group into Student Hardship	ELL 13-01(mins)Annex A	11 July 2001

Annex 5

Collaboration between higher education institutions

Background

In the course of its review of Higher Education in Wales, the Education and Lifelong Learning Committee has received both written and oral submissions from all HEIs in Wales. Many of these responses have referred to collaboration with other institutions. The Committee welcomes the willingness of HEIs to work together, seeing it as a means of making the best use of resources, of avoiding unnecessary duplication and of encouraging staff development. The Committee wished to try to quantify the extent of such collaborations and HEIs were asked to provide more detailed information on the nature and size of their collaborative activities, the duration of such co-operation and an estimate of the income generated.

Responses

Responses were received in March from all the HEIs in Wales and the analysis in this annex is based on the information given at this time. Although the Committee's primary interest was in analysing the extent of co-operation between HEIs in Wales, the information provided on collaboration with organisations outside Wales has also been useful as the Committee is aware of the extent to which Higher Education must operate in a global setting. Collaborations with industry or with HEIs outside Wales are not included in this summary document but details can be found in the documentation submitted by each HEI. There was detailed evidence of collaboration in research between individuals or units in Welsh institutions and HEIs in the UK and overseas.

Areas of collaboration

Collaborative activity in Higher Education covers a range of areas:

- Teaching including franchising arrangements;
- Research;
- Technology Transfer;
- Economic and social regeneration;
- Community education; and
- Membership of regional, national and international committees.

The latter might more properly be categorised as networking rather than collaboration. Nevertheless, it is a valuable activity in terms of spreading best practice, providing discussion fora, influencing policy etc.

Some collaborative activities involve virtually all HEIs in Wales and they have therefore not been listed under the individual responses. These include:

- Cymru Prosper Wales involving 11 out of the 13 HEIs in Wales offering subsidised student and graduate work placements to SMEs
- Graduate Wales assisting graduates to find employment in Wales.
- □ HELP Wales providing consultancy services to SMEs.
- Wales Spinout programme assisting academics to establish new commercial ventures
- Provision of library and information services eg Welsh Video Services Network, Wales Higher Education Libraries Forum, Higher Education Wales Information Technology Forum
- Teaching Company Schemes –subsidising the employment of graduates in companies to work on significant innovative projects

Individual responses

a) Cardiff University

Specific collaborative - initiatives include membership of the Cardiff Quartet and the Cardiff Partnership. The former promotes HE provision in Cardiff and a detailed table of its activities was provided. The latter collaboration is on medical and dental education including a sharing of facilities/support services and research activities. Three research themes which are currently being followed under this initiative are society, health and the environment Neuroscience, Biosciences and Medical Molecular Biology. New joint research awards for 1999/2000 in these areas amounted to K£859.

Research – The University has 128 on-going collaborative research projects (38 with Welsh partners) including partnerships with UWCM (the major partner involved in 28 projects), Glamorgan, Bangor, Aberystwyth, Swansea. These include Social Science (UWCM); Computing Science (Glamorgan); Biosciences (Bangor); Welsh Economy Research Unit (Glamorgan); Engineering (Aberystwyth); Earth Sciences (Swansea)

Technology Transfer - activities under this heading cover over 50 ERDF contracts (£18m) including support for SMEs; the Cardiff University Innovation Network (a monthly "business club"); Western Arc Bioscience Platform (UWCM); the Cardiff

Partnership Fund (under the University Challenge Science Fund) and a number of Centres of Expertise under the WDA programme (Aberystwyth, UWCM, Trinity).

Teaching collaboration – principally this is with UWCM (345+ students in the current year). Other teaching collaborations are with Aberystwyth and Swansea (Physics); Aberystwyth, Lampeter, Swansea (Ancient History); Aberystwyth(Computing); Swansea (Engineering – Integrated Graduate Development Scheme); Music (WCMD); Widening Access to Dentistry, Medicine and Science (UWCM and FE institutions)

Collaborative Centres - the Welsh American Centre and the Institute of Classical and Ancient History are the result of collaboration with Swansea and Lampeter/Swansea respectively.

Services – computing services are provided to UWCM; library facilities (UWCM, UWIC, WCMD); student services (UWIC, WCMD); staff development (UWCM, UWIC); Graduating to Enterprise (UWIC, UWCN and Glamorgan) to provide final year graduates with skills to start a business.

Community activities – Various activities including LEARN – delivering courses at 180 venues. Collaboration is mostly with the various community organisations and some FE partners.

b) North East Wales Institute of Higher Education

NEWI's main collaborative activity is with Bangor with whom it is currently negotiating a Strategic Alliance. Examples of this collaboration include a Centre for Advanced and Renewable Materials under WDA Centres of Excellence programme; research projects in Chemistry (52 students, £95k) and teaching (40 students); the Community University of North Wales (500 additional learners targeted in 2000/2001) – NEWI and Bangor are the joint leaders together with the 8 FE providers in North Wales; a collaborative library automation system.

Other collaborative activities are the EPSRC Engineering Doctorate Centre for Wales (with Swansea and Cardiff) – 115 doctoral students since 1994; Pre-registration

nursing to support the Fitness for Practice project (with Bangor and the three NHS Trusts in North Wales- 984 students);

Research – joint bid with UWIC and SIHE to develop postgraduate diploma in professional development

c) Swansea Institute of Higher Education

Collaboration is primarily between the Institute and the University of Wales, Swansea. This includes the Technium project – a complex of innovation and incubator units to be opened in the autumn 2001; the Swansea Intellectual Property Initiative; Objective One bids; Swansea Bay On-Line Learning Partnership providing ICT training for school staff.

d) Trinity College, Carmarthen

Curriculum Development – Trinity's collaborative projects include the development and promotion of Welsh medium teaching materials (Bangor, Aberystwyth, Glamorgan); projects to develop materials and reference materials for school based work (partners not named); development of a secondary PGCW course in Mathematics and Science (Glamorgan); preparation of Business and Management modules in Welsh (for Glamorgan). Trinity is also a partner in the University of Glamorgan's e-college network. The University of Glamorgan validates three of Trinity's MA courses, and a BA in Humanities subjects and an undergraduate diploma (community/ecclesiastical development).

Services – Trinity will become a member of a new company - Networking Wales which is being set up to develop IT provision (with University of Wales institutions in South and Mid Wales and the University of Glamorgan). It also collaborates on library services (Swansea) and the Careers Department (Swansea).

Teaching – Trinity collaborates in Health and Nursing courses (the University of Swansea Health School is located on Trinity's campus); Geography, Humanities and Environmental courses through the medium of Welsh (Aberystwyth).

Research – Trinity is collaborating on research relating to the development of the Welsh medium curriculum with Aberystwyth.

FE links – Trinity is collaborating Coleg Sir Gâr' on the West Wales School of Art and Performing. Trinity has a formal memorandum of collaboration with Coleg Sir Gâr and with Coleg Penfro.

Trinity also has a number of proposals in the pipeline including that for a Lifelong Learning School (Aberystwyth) and a feasibility study into opportunities for collaboration in HE with Glamorgan, Coleg Sir Gâr and Coleg Penfro.

e) University of Glamorgan

FE collaboration – the University is involved in a number of feasibility studies for HE development with Llandrillo, Trinity College, Coleg Sir Gâr, Bridgend, Pembrokeshire, Merthyr Tydfil College and Ystrad Mynach. It has appointed a Heads of Valleys coordinator to progress latter two collaborations. It has a network of 19 franchise partners (3,630 students in current year) and strategic alliances with its Associate and Community Colleges bringing them into planning cycle. Glamorgan's e-college project to develop entrepreneurial skills using on-line learning involves Bridgend, Coleg Sir Gâr, Coleg Gwent, Llandrillo, Pembrokeshire, Pontypridd, Trinity, BBC Wales Education and Learning and Young Enterprise Wales. The University is collaborating in staff development activities in partner colleges such as the introduction of Recognised Teacher Status for staff teaching on HE courses.

Teaching – Glamorgan is collaborating on Design Awards (Pontypridd College); Initial Teacher Training in Secondary Mathematics and Science (Trinity College); Theatre and Media Drama (WCMD) plus franchised courses to 19 partners.

Research –The University has established the Wales Transport Research Centre (Cardiff, UWCN) and is collaborating on Health/Medical related projects (UWCM; Swansea, Cardiff).

Technology Transfer – activities include OpportunitE Wales (Bangor, Cardiff), Wales Spin Out Programme, Best Network (with 9 FE colleges).

Community activities – Community University of the Valleys (Swansea, UWCN, OU); Merthyr Technium (Merthyr Tydfil College, RCT and Swansea).

Services – collaboration with UWIC on joint initiatives in student finance, employability, Virtual Learning Experience.

f) University of Wales, Aberystwyth

Research – Aberystwyth's collaboration includes projects in Rural Studies (Bangor); Tourism (UWIC, Cardiff, SIHE, Swansea, Bangor, Glamorgan, Trinity); English (Bangor); Geography and Earth Sciences (Bangor, Swansea, Lampeter, Cardiff); Politics (Cardiff, Bangor, Swansea); Mathematics (Swansea).

Teaching – Rural Studies (Bangor) 5-20 students pa; Education (Bangor, Swansea, UWIC, UWCN, Trinity, OU) 90 students plus distance learning material production; English (Coleg Harlech) – 8/10 students pa; Geography – teaching cover leave (Swansea); Geography postgraduate colloquium (all Geography departments in Wales);

Other collaborative initiatives include the creation of the Institute of Physics in Wales involving Bangor, NEWI, Cardiff, Swansea and Aberystwyth.

g) University of Wales, Bangor

Research – projects involve Aberystwyth, Swansea, Cardiff, NEWI, Lampeter, UWCM, Glamorgan; UWCN – amounting over £800,000 in 2000/2001.

Teaching –Collaborative activities include Welsh writing in English (all HEIs); Early Modern Studies (Aberystwyth, Swansea, Cardiff, Lampeter, Trinity); Welsh medium and Welsh history (Aberyswyth); Social work (HE & FE in N Wales) – 50 students p.a.; Ocean Sciences (Cardiff) – 28 students p.a.; Chemistry (Cardiff, Swansea) 35-40 students p.a.; Certificate in Translation – 12 students p.a.

Policy & Planning - Teacher Training (all TT institutions in Wales); Nurse Education (NEWI, UWCM, Swansea, Glamorgan) – over £400,000 in current year.

h) University of Wales College of Medicine

Teaching – Collaborative teaching initiatives include Dental & Medical education (Cardiff) – 345+ students currently; Pharmacology (Cardiff) 20 students p.a.; Physics (Cardiff), Bioscience (Cardiff) – 120 students; Orthopaedic Engineering (Cardiff) – 55 students p.a.; Clinical Engineering (Cardiff) – 7 students p.a.; franchise of MSc Nursing (Swansea Institute) – 14 students; Occupational Therapy (UWIC) 40-50 students; Chiropractic (Glamorgan) – 70 students; Physiotherapy and Radiography (Cardiff) – 120 students; Part-time schemes to access Dentistry, Medicine (Cardiff and FE colleges); MSc in Sports Medicine (UWIC) – 15 students annually; Public Health (UWIC); Medical Sciences and Humanities (Swansea)

Research – Projects include Medical Molecular Biology, Neurosciences, Health and Environment (Cardiff); Bangor, Genetics and Society (Lampeter); Genetics (Swansea); Public Health (UWIC); Engineering (Glamorgan).

Other initiatives - UWCM is a member of the Cardiff Quarter – for details see the entry for Cardiff University.

i) University of Wales College, Newport

Franchise - UWCN is the second largest franchise provider in Wales. It has provided a comprehensive list of its current franchises to Bridgend, CCTA, Coleg Ceredigion, Deeside, Coleg Gwent, Llandrillo, Coleg Meirion Dwyfor, Coleg Menai, Coleg Powys, Pembrokeshire, Swansea College and Ystrad Mynach College.

Research - projects involve Cardiff, Swansea, Aberyswyth, Bangor (Archaeology and History); Bangor (DVD Pilot on theory of film practice); Cardiff (Young people and new technologies); UWIC (Art, Media and Design)

Teaching – International Film School Wales – under development – main collaboration UWCN but almost all other HEIs have some involvement; Short Film Production Training Scheme (WCMD); ESCALATE project with Bangor, Aberystwyth, Trinity and UWIC; with Swansea on a local authority staff development programme; NIACE project on issues on FE/HE divide (Cardiff, Swansea, Glamorgan).

Technology Transfer – UWCN is collaborating on Diversity (a Wales Information Society Initiative) with Cardiff University (£133.000); with Glamorgan on the Centres of Excellence programme.

Community collaboration – Community University of Valleys (5000 students) – with Glamorgan, OU and Swansea. ; Coherent Youth Work Training (NEWI, UWIC) – 1000 students; Centre for Regeneration (Cardiff, community organisations and other HEIs); community development work (Glamorgan).

j) University of Wales Institute, Cardiff

Teaching – Collaborative teaching initiatives include Dental Technology (UWCM), 22 students currently; workshops in social work/occupational therapy (UWCM) – 100 students; Biomedical Science (UWCM) 3FT, 12 PT students; Communication (Cardiff, UWCM) – 31 students; Welsh medium ITT (Bangor, UWCN, Aberystwyth); MSc Public Health (UWCM); Centre of Excellence for Cricket (Glamorgan)

Research – collaboration on various research projects in Biochemistry (Cardiff) Medical related projects (UWCM); Sports Psychology (UWCM) Health and Social Sciences (Cardiff); peer observation of teaching (NEWI)

Support services/facilities - collaborative ventures with Cardiff, UWCM, WCMD (widening access, library, health & safety, student services); chaplaincy (WCMD); student services (Cardiff, Glamorgan); graduate employability (Glamorgan); e-learning (Glamorgan)

Curriculum development - on-line PGCE courses (Cardiff, Bangor, Aberystwyth, and Swansea); QTS standards project (Cardiff, Newport, Swansea)

k) University of Wales, Lampeter

The only formal collaboration is the MA in Ancient History via the University of Wales Institute of Classical Studies and Ancient History (Cardiff, Swansea) – 12 students per annum.

I) University of Wales, Swansea

Research – Swansea has provided details of various research/technology transfer projects on which it is collaborating with HEIs in Wales including information on numbers of students and grant income. These include:

- i) Glamorgan, Aberystwyth, SIHE, UWCN, Bangor, Cardiff and the Open University (Projects in Adult Continuing Education).
- ii) UWCM , Bangor, National Botanic Garden of Wales (Biological Sciences).
- iii) Founding partner of University of Wales Institute on NonNewtonian Fluid Mechanics (with Aberystwyth, Bangor and Swansea).

- iv) Aberystwyth (Economics)
- v) Swansea has set up the Engineering Doctorate Centre in Steel Technology (with Cardiff and NEWI).
- vi) Glamorgan (European Business Management)
- vii) Cardiff, Aberystwyth (Geography)
- viii) Lampeter (Archaeology)
- ix) UWCM (Health Science)
- x) Glamorgan, Aberystwyth, Bangor, Cardiff, University of Wales Board of Celtic Studies, UWCN (History)
- xi) Aberystwyth (Mechanical Engineering)
- xii) Cardiff, Aberystwyth, UWCN, Glamorgan (Public Policy)
- xiii) Cardiff (Politics)
- xiv) Cardiff, Bangor, Glamorgan, UWIC, UWCN, Bangor (Social Sciences)

Teaching – BA in Music Technology (SIHE) to start in September 2001; Chemistry (Bangor) – 30 students; MA in Ancient History (Cardiff, Lampeter); Computing (SIHE) – 16 students; Clinical Supervision project (Glamorgan) starting Sept 2001; Public Policy and Management (Cardiff, UWCN; Physics (Aberystwyth, Cardiff) – 95 students; Social Work (Cardiff, Bangor, Glamorgan) – 380 students (280 postgraduates), Medical and Health Care (UWCM); Development Studies (Bangor). Swansea, Lampeter and Cardiff together run the University of Wales Institute of Classics and Ancient History. Discussions are underway regarding a taught MA in Early Modern History (University of Wales institutions).

Services – developing Strategic Information Technology Services (Trinity, Lampeter) – a student records system.

Technology Transfer collaboration involves SIHE, Trinity, Cardiff.

m) Welsh College of Music and Drama

Teaching – Theatre and Media Drama (Glamorgan) 97 students – to end in 2003; franchising HND Performing Arts to Neath/Port Talbot College; A level music to local colleges.

Support services – The WCMD shares good practice Health & Safety, marketing, support services with other members of the Cardiff Quartet; in health and safety, library & information services with Cardiff University

Conclusion

Institutions have provided detailed responses. Although these demonstrate there are many examples of collaboration, the size of the collaborative activity is not especially significant, particularly for collaboration in teaching. With the notable exception of the Cardiff Partnership's provision of medical and dental education (345 students), NEWI/Bangor's nursing programme (984 students) and the Community University of North Wales (target - 500 additional students), most of the teaching collaboration involves relatively small numbers of students – typically around 30.

Research collaboration naturally involves small numbers of students but this is counterbalanced by the substantial amount of income generated by this activity.

Cardiff, for example, cites 38 on-going research projects with Welsh partners totalling some M£4.1.

An important area for collaboration is in technology transfer/support for SMEs. This is as the result of co-operation between several HEIs and also collaborations promoted by the WDA.

Some institutions have provided evidence of their *intent* to collaborate with other HEIs but as this is in the planning stages, it cannot, of course, be quantified. However, it does point to a growing willingness to engage in collaborative activity and further details can be obtained from the individual submissions.

Leaving aside these embryo activities and those that may be termed networking, there is evidence of a will to co-operate and a good basis for developing collaborative activity within the Welsh HE sector. However, this may need some encouragement (for example through changes to funding mechanisms) and more formal mechanisms to encourage meaningful collaboration. There is a need for HE in Wales to think strategically about what can be achieved via collaboration. We need to achieve more permanent and substantial partnerships which can build on the individual partners' strengths and enable Welsh HE to take a more substantial share of the global market.

In terms of HE responding to the Assembly's agenda, the following should be noted:

- Franchising including HE in FE is a major success in meeting widening access objectives and the links between HE and FE should be strengthened. Activities are dominated by University of Wales College Newport and the University of Glamorgan.
- HE has achieved much through its wealth creation activities with the support of the WDA. However, Sir David Rowe-Beddoe stressed the need for HE to enter into more collaboration and deplored the fragmentary and competitive nature of much third stream activity
- Research collaboration is predominantly based on partnerships of like-minded individuals. HE needs to take a more strategic approach to enable it to analyse where resources should be focused in order to build a world class reputation for Wales. This would include developing new areas as well as building on existing strengths.

Annex 6

Case Studies of other Higher Education Systems

Introduction

"It is generally agreed that Welsh Higher Education is part of a huge global market which is changing rapidly"

Comment by a respondent to the NAfW Higher Education Review questionnaire — January 2001

When the 'Dearing Committee' undertook the Inquiry into Higher Education in 1997, it felt that it was important to be well informed about current practices and developments in higher education across the world. This it did by investigating:

- those countries which were major international competitors to the UK (e.g. Japan, the USA, several EU countries)
- those countries which were likely to become major competitors over the next twenty years (e.g. the Asian 'tiger economies')
- Those countries which had made interesting reforms in their higher education systems in recent years which might be relevant to UK developments (e.g. Australia, New Zealand, the Netherlands)

This work¹ is still topical and therefore this report does not cover these countries.

The objective of this report is to provide case studies on lesser known but relevant higher education systems in relation to the review of higher education in Wales. These include:

- Wisconsin, USA
- Ireland (Eire)
- Northern Ireland
- Scotland
- Basque Country, Spain
- Norway
- Canada

The following information was sourced by way of desk research, primarily via the use of the internet. Although not comprehensive in nature, the case studies provide useful information on the various systems. The following points are notable:

¹ National Committee of Inquiry into Higher Education (1997) Higher Education in the Learning Society – Appendix 5: Higher Education in Other Countries, HMSO

- The Wisconsin system is one of the largest merged systems in the USA providing programmes ranging from doctorates to adult outreach via a hierarchical structure of 'autonomous' organisations;
- The Irish system has introduced a collaborative dimension to research which has opened up considerable opportunities for stronger critical mass and more cost effective use of research resources in the system as a whole;
- The University of Ulster is a good example of a modern multi-campus institution;
- In Scotland, a permanent third funding stream Knowledge Transfer Grant has been introduced to promote and professionalise the knowledge transfer activities of higher education institutions;
- The Universities of the Basque Region and Navarra are good examples of how bilingualism can be accommodated within higher education.
- The establishment of "Network Norway" has increased the overall quality of higher education by strengthening individual disciplines through better utilisation of resources, and by establishing a network of national centres of competence. In addition, it facilitated not only closer co-operation, but also a better division of labour between the institutions.
- In Canada, research is widely recognised as a necessary complement to university teaching. Scholarly research - from discoveries in the laboratory, to providing new insights into human behaviour, the arts, history and the world around us - is the driving force behind teaching and learning.

WISCONSIN, USA

The University of Wisconsin system is one of the largest merged systems in the USA, enrolling approximately 155,000 students. It comprises two doctoral universities, eleven comprehensive universities, thirteen "two-year" universities and state-wide <u>UW-Extension</u>.



History and Organisation of the University of Wisconsin System

Merger of Two Systems of Higher Education

The University of Wisconsin System was created on October 11, 1971, by Chapter 100, Laws of 1971, which combined the two public university systems of the state - University of Wisconsin and Wisconsin State Universities - under a single board of regents.

Former University of Wisconsin

The pre-merger University of Wisconsin was created by the state constitution and state law in 1848. At the time of merger in 1971, it consisted of the original land-grant university at Madison (1849); the University of Wisconsin - Milwaukee (merged in 1956); UW-Green Bay (1968) and UW-Parkside (1968) plus 10 freshman-sophomore centres (now colleges) and state-wide Extension. Total 1971 enrolment was 69,554. Governance was by The Regents of the University of Wisconsin, a board of 10 members, nine appointed by the governor and confirmed by the senate for nine-year terms, the tenth being the state superintendent of public instruction who served exofficio on both the UW and WSU boards.

Former Wisconsin State Universities

The Wisconsin State Universities system had its origins in an 1857 state law creating the Board of Regents of Normal Schools. The first of nine such institutions was opened at Platteville in 1866 and the last at Eau Claire in 1916. In 1927, the normal schools received authority to grant baccalaureate degrees in education and were renamed State Teachers Colleges. With the addition of liberal arts programs in 1951, they became Wisconsin State Colleges and in 1964 were designated Wisconsin State Universities. At the time of merger in 1971, the board had 14 members, including the state superintendent of public instruction and 13 citizens appointed by the governor and confirmed by the senate for five-year terms. The WSU system, then governed by the board, consisted of the nine universities and four freshman-sophomore branch campuses (now colleges) and had a total enrolment of 64,148.

The Board of Regents of the University of Wisconsin System

The Board of Regents of the University of Wisconsin System consists of 17 members, 14 having seven-year staggered terms and one student member with a two-year term. All are appointed by the governor subject to confirmation by the senate. Two are exofficio members: the state superintendent of public instruction and the president or a designee of the Wisconsin Technical College System Board.

Mission

Each institution of the University of Wisconsin System shares in the mission of the system. The mission of this system is to develop human resources, to discover and disseminate knowledge, to extend knowledge and its application beyond the boundaries of its campuses, and to serve and stimulate society by developing in students heightened intellectual, cultural, and humane sensitivities; scientific, professional, and technological expertise; and a sense of purpose. Inherent in this mission are methods of instruction, research, extended education, and public service designed to educate people and improve the human condition. Basic to every purpose of the system is the search for truth.

Administration

The president and chancellors of the UW system are charged with implementing Board of Regent policies and with administration of the institutions. The system administration is responsible to the president of the system and assists the Board of Regents in establishing policies, reviewing the administration of such policies and planning the programmatic, financial and physical development of the system.

As executive heads of their respective faculties and institutions, the chancellors are responsible for the administration of their units, including curriculum design; degree requirements; academic standards; grading systems; faculty appointments, evaluation, promotion and recommendations for tenure; and auxiliary services and budget management.

Role of the Faculty

The merger law specifically provides that the faculty of each institution, "subject to the responsibilities and powers of the board, the president and chancellor of such institution, shall be vested with responsibility for the immediate governance of such institution and shall actively participate in institutional policy development. As such, faculty shall have the primary responsibility for academic and educational activities and faculty personnel matters. The faculty of each institution shall have the right to

determine their own faculty organisational structure and to select representatives to participate in institutional governance."

Doctoral and Comprehensive Universities

Doctoral universities offer baccalaureate, master's, doctoral and advanced professional degrees and conduct organised programmes of research. Two institutions are included in this category; UW-Madison (40,045 undergraduate and graduate students) and UW-Milwaukee (22,964 undergraduate and graduate students).

Comprehensive universities offer associate, baccalaureate and selected graduate programs (non-doctoral); emphasise teaching excellence; provide a base of liberal studies as a foundation for its degrees; offer programmes of preprofessional curricular offerings; engage in outreach and continuing education for citizens in each service region; and engage in scholarly activity integral to, and supportive of, instructional programs and teaching excellence. Eleven institutions are included in this category:

- UW-Superior = 2,741 undergraduate and graduate students
- UW-River Falls = 5,711 undergraduate and graduate students
- *UW-Stout* = 7,517 *undergraduate* and *graduate students*
- UW-Eau Claire =10,402 undergraduate and graduate students
- UW-Stevens Point = 8,544 undergraduate and graduate students
- UW-Green Bay = 5,442 undergraduate and graduate students
- UW-Oshkosh = 10,783 undergraduate and graduate students
- UW-La Crosse = 9,295 undergraduate and graduate students
- UW-Platteville = 5,340 undergraduate and graduate students
- UW-Whitewater = 10,653 undergraduate and graduate students
- UW-Parkside = 4,951 undergraduate and graduate students.

Select Missions

The select mission of each institution define the particular purposes and focus of each campus. These statements are different in format as well as in content for each institution: some are defined in terms of specific client populations to be served, some by specific subject matter to be taught, and others in terms of educational approach.

The mission of Green Bay to foster an academic plan characterised by interdisciplinary, problem-focused liberal education exemplifies missions defined by educational approach. The select mission of Milwaukee reflects its status as a major urban doctoral university designed to meet the diverse needs of Wisconsin's largest metropolitan area.

The missions of several of the comprehensive campuses are based in areas of emphasise in certain academic fields. These include middle school education,

engineering, technology management, agriculture and criminal justice at Platteville; communicative disorders, natural resources, and visual and performing arts at Stevens Point; and agricultural science, agribusiness and agricultural teacher education at River Falls.

Ireland (Eire)

Higher Education in Ireland is provided mainly by universities, institutes of technology and colleges of education. A number of other institutions provide specialised training in such fields as art, design, medicine, theology, music and law. Most higher education is provided in institutions that are supported by the State (e.g. universities and institutes of technology receive more than 90% of their income from the State). Tuition fees for EU nationals attending full-time undergraduate courses in state funded higher education institutions in Ireland were abolished in 1996.

At third level, the Government has pursued a policy of providing easier access for more students through a strategy of simplifying the process of entry and of providing for additional places for students. In addition, the Government has received support for major capital development initiatives from the European Structural Fund and has stressed the importance of higher education in all agreements with the social partners. Over the past twenty years additional third level places and courses have been provided by the opening of the new universities in Limerick and Dublin and the expansion of the Institutes of Technology. During the same period considerable growth has occurred in the established university sector in particular in the areas of business and technology, but also in the arts and social sciences.

The significant increase in participation rates in post-compulsory education has resulted in a fourfold increase in full-time enrolments in higher education, rising from 21,000 in 1965 to nearly 97,000 in 1997 (53,500 of these are currently at University). The Report of the Steering Committee on the Future Development of Higher Education (1995) projected a total enrolment in higher education of 120,000 by the year 2005. While consideration of economic growth and technological development have been the main forces behind the unprecedented expansion of higher education in recent decades, social justice considerations have also been very important in legitimating this expansion.

Educational Institutions, Administration, Management

There are eight universities in Ireland: National University of Ireland Dublin; National University of Ireland, Cork; National University of Ireland, Galway; National University of Ireland, Maynooth; the University of Dublin (Trinity College), Dublin City University, University of Limerick and the Pontifical University. Just over 56% of all higher-education students are in the universities. The normal administration structure in the

higher education institutions is a governing body with a president or a director who is responsible for day to day administration.

Other higher education providers include:

- INSTITUTES OF TECHNOLOGY REPRESENT A MAJOR DEVELOPMENT IN THE PROVISION OF HIGHER TECHNICAL / TECHNOLOGICAL EDUCATION IN IRELAND OVER THE PAST TWENTY-FIVE YEARS. THESE PROVIDE A COMPREHENSIVE RANGE OF COURSES RANGING FROM SECOND LEVEL CRAFT APPRENTICESHIP PROGRAMMES RIGHT THROUGH TO TWO YEAR NATIONAL CERTIFICATE, THREE YEAR NATIONAL DIPLOMA AND FOUR YEAR DEGREE PROGRAMMES IN THE APPLIED FIELDS OF ENGINEERING, SCIENCE (INCLUDING COMPUTER SCIENCE), BUSINESS STUDIES AND HUMANITIES. IN ADDITION, THEY PLAY AN IMPORTANT ROLE AT REGIONAL LEVEL IN PROVIDING FOR RECURRENT EDUCATIONAL NEEDS BY WAY OF PART-TIME DAY AND EVENING PROGRAMMES.
 - THERE ARE EIGHT COLLEGES OF EDUCATION LOCATED THROUGHOUT THE COUNTRY; THREE OF WHICH OFFER DEGREE COURSES LEADING TO A QUALIFICATION AS TEACHERS OF SPECIALISED SUBJECTS AT SECONDARY SCHOOL LEVEL:
- NATIONAL COLLEGE OF IRELAND IS AN INDEPENDENT INSTITUTION THAT SPECIALISES IN INDUSTRIAL RELATIONS, MANAGEMENT, AND RELATED AREAS.
- National College of Art and Design (NCAD) offers a range of sub-degree, primary degree and graduate programmes. It is a recognised college of the National University of Ireland.
- MILLTOWN INSTITUTE IS A PONTIFICAL ATHENAEUM WITH FACULTIES OF THEOLOGY AND PHILOSOPHY. IT WAS ESTABLISHED BY A GROUP OF RELIGIOUS INSTITUTES IN 1968. THE INSTITUTE GRANTS PONTIFICAL DEGREES, DIPLOMAS AND CERTIFICATES IN PHILOSOPHY, THEOLOGY, SPIRITUALITY AND PASTORAL STUDIES, AS WELL AS AN ADULT EDUCATION DIPLOMA IN THEOLOGY.
- Dublin Institute of Technology (DIT) was formally established under the Dublin Institute of Technology Act 1992. It was constituted from the College of Technology, Bolton Street; the College of Technology, Kevin Street; the College of Commerce, Rathmines; the College of Marketing and Design; Mountjoy Square; the College of Catering, Cathal Brugha Street; the College of Music, Adelaide Road. Until the end of 1992, these institutions operated under the aegis of the 1930 Vocational Education Act. Since 1 January 1993, the institute has operated as a separate legal entity, with its own governing body constituted in accordance with the provisions of its legislation. The DIT offers a broad range of courses

covering Certificate, Diploma, Degree and Professional awards. The provision of third-level part-time evening courses is a very important function of the institution.

Research Collaboration

A collaborative dimension to Irish higher education research was introduced as part of Cycle 2 of the Programme for Research in Third Level Institutions 1999-2001, an initiative designed to make Ireland a world-leader in research. This has produced new and quite innovative collaborations, based on interdisciplinary and inter-institutional alliances, for example:

- University College Dublin (UCD) and Trinity College Dublin established the Dublin Molecular Medicine Centre
- UCD and the Dublin Institute of Technology Health Informatics
- University College Cork (UCC) joined forces with eight other institutions to support and integrate a programme of environmental, marine and coastal research through the construction of a centre for excellence the *Environmental Research Institute*.
- The National University of Ireland, Galway (NUIG) is being funded to lead a collaborative programme the *Environmental Change Institute*.
- The UCC and NUIG institutes are part of a wider framework of co-operation, the *Atlantic University Alliance*, which also includes the University of Limerick.
- The Institute of Technology, Sligo was joined by six institutions for research work in the field of Sustainable Treatment, Recycling and Reuse of Biosolids.

The initiative has encouraged a 'systems perspective' on research in the university sector, which has opened up considerable opportunities for stronger critical mass and more cost effective use of research resources in the system as a whole. It is designed to help counteract the disadvantages of the relatively small scale of the individual institutions themselves in research.

Northern Ireland

Higher education in Northern Ireland is provided by two universities – University of Ulster and The Queen's University of Belfast, two colleges of education - St Mary's College of Education and Stranmillis College of Education and, to varying degrees, by the region's seventeen further education institutes. Programmes in the latter are predominantly vocational e.g. HND/HNC and NVQ4, and cover a wide range of subject areas from Business and Related Studies, Health and Social Care to Engineering and Technology. Northern Ireland also constitutes a region of the Open University.

Some 85 per cent of students enrolled at the two universities come from Northern Ireland. Like the rest of the UK, Northern Ireland operates a policy of consolidation of student numbers through the setting of control totals.

The universities are directly funded by the Department of Education Northern Ireland (DENI) on the recommendations of the Northern Ireland Higher Education Council (NIHEC). Funding is in the main based on the methodologies of the Higher Education Funding Council for England (HEFCE). The colleges of education are resourced on the basis of historical funding rather than on a student-based formula.

There were 65,917 Northern Ireland domiciled students enrolled on higher education courses in 1998/99. The age participation index (API) has climbed since the start of the decade. It was 45.8 in 1997/98 compared with 24.6 in 1989/90. The API expresses the proportion of young entrants to higher education as a proportion of 18-year-olds in Northern Ireland.

The Queen's University of Belfast

Queen's has almost 17,000 full-time and part-time students; around three-quarters are undergraduates. Each year around 4,500 undergraduates are admitted. Queen's staff number around 3,000, including over 1,300 academic staff.

Apart from the main site, the University has teaching and research premises at Newforge Lane, the Royal Victoria Hospital, Belfast City Hospital, the Marine Biology Station in Portaferry, and Armagh City. In total, Queen's owns over 230 buildings.

In their last assessment, a number of subject areas at Queen's were assessed highly for their teaching, all receiving a score of at least 75% of the total marks available in the national assessment. It also did well in the 1996 national Research Assessment Exercise: 50% of the staff taking part achieved at least a Grade 4, indicating research quality of national excellence. A number of subject areas achieved a Grade 5, marking research of international quality, and a Grade 5* was awarded to Mechanical, Aeronautical and Manufacturing Engineering.

Its mission statement underlines that the University 'is dedicated to the highest international standards of teaching, scholarship and research and to the advancement of knowledge, in an environment of equality, tolerance and mutual respect for all its staff and students, thus contributing to the economic, social and cultural development of Northern Ireland.'

University of Ulster

The University was established in 1984 following the merger of the New University of Ulster and the Ulster Polytechnic. It is a unitary institution with four campuses, at Colraine (the headquarters), Jordanstown, Belfast and Magee College in Londonderry. A fifth, outreach campus in West Belfast, the Springvale Educational Village, is being developed jointly with the Belfast Institute of Further and Higher Education.


Key characteristics include:

- Since 1984, the University's student population has increased by 87% and in 1999/2000 it had nearly 21,000 students; in addition over 3,5000 students are enrolled on more than 100 of its approved courses in other institutions mainly in the FE sector in Northern Ireland.
- The University's course provision is the largest in Ireland covering Arts, Business and Management, Engineering, Information Technology, Life and Health Sciences and Social Sciences. Courses have a strong vocational element and the majority include a period of industrial or professional placement.
- In the 1996 RAE, the University entered 495 FTE staff. Of these, over 70% were in groups rated as 'of national excellence' or better.
- The University has a major direct and indirect impact on the economy and community in Northern Ireland. It employs over 3500 staff, has an annual turnover in excess of £120 million and has embarked on a development programme of £200 million over the next 10 years.
- Technology and knowledge transfer and commercial exploitation of ideas are promoted through a range of initiatives including the establishment of high technology campus incubators, its <u>Science Research Parks</u>, the <u>Teaching</u> <u>Company Scheme</u> and ongoing research and consultancy with business and industry.
- The University is a major contributor to the R&D capacity within Northern Ireland in support of local business and industry. Its research base has strengthened and expanded rapidly in terms of funding and quality
- The University through its Institute of Lifelong Learning makes a leading contribution to lifelong (including e-based) learning, access to education and enhancement of the region's knowledge base.

• Strong and expanding partnerships have been forged with other educational providers locally nationally and internationally. The University has a network of strategic partnerships throughout the world.

Scotland

There are fourteen universities in Scotland, two art schools, one conservatoire, one college of higher education, one university college and a teacher training college.

Funding and Income

- Scottish higher education institutions have a total annual income of over £1.27 billion and earn upwards of £365m from the rest of the UK and abroad for the Scottish economy each year.
- Scottish higher education represents 9% of Scotland's service sector exports, the second largest apart from tourism and finance.
- The Scottish higher education sector employs directly over 36,000 people. It is estimated that a further 38,000 jobs are created in the Scottish economy because of the higher education sector.
- A permanent third funding stream -- Knowledge Transfer Grant has been introduced to promote and professionalise the knowledge transfer activities of higher education institutions.

Students

- Over 170,000 students are enrolled on courses leading to qualification or credit at Scottish higher Education institutions, of which, over 62,000 of these students are aged 25 or over.
- 47% of Scots now go into higher education. The UK average is only 35 per cent and in England it is only 32%.
- Scotland graduates a higher proportion of its population than any other European country.
- Scotland is a net importer of students.
- Over 27,000 students from the rest of the UK study in Scottish higher education institutions. There are around 20,000 students from over 100 countries studying in Scottish higher education institutions.
- 17% of all Students in Scotland come from low participation neighbourhoods compared with a UK average of 12%. Scotland's performance on social inclusion is improving at a faster rate than the rest of the UK. The last year in Scotland has seen a 0.7% rise in young students from low participation neighbourhoods

compared to a 0.2% rise in the rest of the UK. The sector is addressing social inclusion through flexible learning such as part time courses, modular courses, open and distance learning provision; by providing a path through learning; and by running access initiatives such as summer schools, collaboration with schools and further education and outreach programs.

Teaching and Learning

- More than 80% of all Teaching Quality Assessment carried out in Scotland is rated either highly satisfactory or "Excellent". None were rated unsatisfactory. Approximately 25% of teaching in Scottish higher education is assessed by the Council as "Excellent".
- The percentage of students who successfully complete their course in Scotland is 84%, exactly the same percentage as the UK average despite higher participation and greater social inclusion.
- Internationally, only Japan matches the UK in more than 80 per cent of students successfully getting a first degree. Apart from Japan, which has a very small elite higher education system, Scotland has the lowest non-completion rate in the world. Countries like Australia, the USA and France have double the percentage of noncompletion and Italy has more than three times the percentage. Scotland now graduates a higher percentage of its population than any other country in Europe.

Research

- With just 9% of the UK population, Scotland wins 12% of the total UK funding council resources for research.
- Scotland has 13% of all the UK academic departments rated 4, 5 or 5* in the 1996 Research Assessment Exercise.
- Scotland has the highest concentration of biotechnology provision in Europe. 18% of all UK biotechnology-related PhDs are awarded in Scotland. Other Scottish research strengths include computer science: social work; opto-electronics; and electrical and electronic engineering.

Basque Country (Spain)

The Basque Country is 20,864 sq. km in size and has a population of approximately 2.9 million people (Spain and France). Approximately 650,000 of them speak Basque, mostly in the Spanish side (only 70,000 in the French side).

The Basque Country (Spain) has four universities with 28 faculties, 3 higher technical colleges and 11 university colleges, where more than 4,000 professors give classes to more than 91,000 students:

- On 25th February 1980, the University of Bilbao became the University of the Basque Country, forming the public university system of the new Autonomous Community of the Basque Country. The university comprises the official university centres already in existence in the three provinces, as well as an important number of university colleges which were established as attached centres. It provides higher education in many fields ranging from medicine and the sciences, to fine arts, law, economics and business science and industrial engineering. The institution has over 54,000 students and over 3,200 staff (FTE).
- <u>The University of Navarra</u> has two centres on the San Sebastián campus. The Escuela Superior de Ingenieros Industriales (Higher College of Industrial Engineering) which went into operation in 1961 and the Instituto Superior de Secretariado y Administración (Higher School of Secretarial and Clerical Studies).
- Deusto University, a private (and prestigious) institution, run by the Jesuits for over a hundred years, also has centres in the three Basque territories. Deusto's reputation has grown over the years, mainly due to its faculties of Law and Business Science - the latter known in Spain and beyond as "La Comercial" where many of Spain's most respected businessmen and managers of the biggest private companies studied. The institution has over 16,500 full time students and over 4,600 part-time students in post-graduate programmes.
- In September 1997, the first private university approved by the Basque Parliament since the end of Franco's regime, the <u>Universidad de Mondragón</u>, made its appearance.

The Basque Language

The two public universities both refer to the use of Basque in their statues:

The statues of the University of the Basque Country contain a title that refers to the regulation of the use of official languages. The most relevant aspects of the title are the following:

- The official languages of the University of the Basque Country are Basque and Spanish.
- University students have a series of linguistic rights including, the right to receive and give classes in either of the two official languages, the right to write reports, take tests or exams in either of the official languages and the right to carry out and publish research work in either of the official languages.

- The University guarantees the translation into the official language of all the documents, written texts, reports, texts or exams that may be necessary.
- The University will plan with a view to normalising Basque in teaching and research work and will take the necessary measures to both increase the language ability of existing teaching staff and recruit bilingual teaching staff.

The University of Navarra has declared both Spanish and Basque as university languages and the right of all university students to know them and use them is recognised. A list of linguistic rights of students is recognised including, amongst others, the right to present and publish pieces of research in any of the languages recognised by the University and the right to receive and give lessons and carry out pieces of work, exams or tests in Basque in those subjects which the University offer in Basque, in accordance with the terms laid down by the law. The University is also committed to adopting measures to promote the normalisation of Basque in its activities including, developing a policy of training and contracting teaching and administrative and service staff so as to introduce teaching in Basque and to guarantee Basque use in administrative and labour relations, within the framework stipulated by the law.

<u>Norway</u>

Knowledge is one of the strongest forces of change in the Norwegian society. In 1950, only 3% of the population had obtained a university level degree. By 1990, this figure had increased to 15%. Today, 40% of the students who have completed upper secondary school embark on a higher education.

The Norwegian system of higher education is different from both the British and the American systems of higher education. Institutions offering higher education are divided into two major sectors: the university sector and the college sector. The two sectors are regulated under the same structure and legislation, effective from January 1996.

The university sector includes the universities and the university colleges with an estimated total of 83,000 students in 1999. These institutions carry out research and offer university-level instruction at undergraduate and graduate levels, leading to academic degrees. There are four universities in Norway in Oslo, Bergen, Trondheim and Tromsø. There are six university colleges each offering specialised professional degree programmes at university-level. These are the Agricultural University of Norway, the Norwegian College of Veterinary Medicine, the Norwegian School of Economics and Business Administration, the Norwegian University of Sport and Physical Education, the Norwegian State Academy of Music, and the Oslo School of Architecture.

After a reorganisation finalised in August 1994, there are 26 state colleges with an estimated total of 72,000 students in 1999. The institutions offer programs lasting from 1 to 4 years. Most programs are profession-specific, their graduates becoming professionals in areas such as teaching at pre-school or compulsory school level,

engineering, social work, health services, administration, economics, librarianship, journalism. In addition there are about 13,000 students in private colleges. Studies at the state colleges may be combined with educational programs at other institutions of higher education. They can also provide the basis for fulfilling the entrance requirements for graduate studies (master programs) at the universities and/or university colleges.

In order to promote co-operation between universities and colleges, an organisation known as "<u>Network Norway</u>" was set up in the mid-1990's. In the short time that it has been in operation, it has increased the overall quality of higher education by strengthening individual disciplines through better utilisation of resources, and by establishing a network of national centres of competence. In addition, it has facilitated not only closer co-operation, but also a better division of labour between the institutions.

Canada

The 91 institutions of higher learning that make up the Canadian University community offer a wide variety of educational settings. Some universities are large, providing a full spectrum of undergraduate and graduate degree programs and undertaking research of national and international importance. Others offer the intimacy and personalised attention of small, undergraduate liberal arts colleges. Still others offer specialised professional education in fields such as engineering, art and design or agriculture. In 1998, over 700,000 undergraduates and nearly 120,000 postgraduates attended these institutions.

With some exceptions, universities in Canada are largely publicly funded. Their programmes, particularly at the undergraduate level, are uniform in quality. And while Canadian universities design their own missions and pursue their own futures, they consistently demonstrate an ability to co-operate with one another and work collectively.

Much of the Canadian university effort is in basic research. But there are also economic spin-offs. Information collected by the Natural Sciences and Engineering Research Council and the National Research Council indicates that companies set up by a university or university researchers to commercialise inventions resulting from university research funded by these councils, employ between 8,000 and 10,000 people directly. The combined sales of these spin-off companies are estimated at more than \$1 billion annually.

Research is widely recognised as a necessary complement to university teaching in Canada. Scholarly research - from discoveries in the laboratory, to providing new insights into human behaviour, the arts, history and the world around us - is the driving force behind teaching and learning. Canadian researchers rank highly compared to others around the world. Canada contributes 4% of the world's academic literature, and a review of the Citation Index reveals that Canada ranked seventh of 107 nations in the number of citations per paper.

The Government funds the majority of Canadian university-based research, seeing it as a key contribution to Canada's competitiveness and quality of life.

In recent years a number of initiatives have sought to strengthen the ties between Canadian university researchers and industry. University research is also increasingly becoming focused on strategic areas required for Canada's social and economic health. More and more universities are setting up research parks and commercialisation offices to foster university-industry partnerships and transfer university research findings to the private sector.

Universities also play a vital role in Canadian community life. They operate day-care centres and medical clinics, provide advice to small businesses and individual taxpayers, maintain art galleries and museums, produce television programs and theatre. Across the country, a network of campus-based community radio stations offer an alternative to commercial and publicly-owned radio.

In Canada, universities are the educational institutions attended after secondary school for studies leading to a degree. Community colleges are non-degree granting post-secondary institutions offering technical or vocational courses or courses for transfer to a university. The distinction between studying at university and studying at the community college level is far less pronounced today than it was a decade ago. A number of universities across Canada are entering into joint ventures with neighbouring community colleges, allowing students to combine their academic studies with the more applied learning opportunities that are generally found within the community college. In British Columbia, students are able to begin their studies at college and later transfer their credits toward a university degree.

Undergraduate programs leading to a bachelor's degree generally require three or four years of full-time study, depending on the province. In provinces that offer three-year bachelor's degrees, an additional year of study is usually required for an honours degrees. Elsewhere, an honours degree generally involves a higher level of concentration and achievement within the honours subject, but not necessarily a further year of study. An honours degree is generally considered a prerequisite for study at the graduate level.

Degree requirements are set by each institution. At the undergraduate level, they usually involve a concentration in a particular subject - a major - and they often require attaining a particular grade point average for graduation. At some universities, first-year students are often required to take mandatory courses.

First professional degrees, also at the bachelor's level, can either involve four years of full-time study after secondary school, or an additional year or two after the completion of an undergraduate degree in arts. In the case of law, three years of full-time study are typically required to complete the degree.

Many universities also offer a range of certificate and diploma courses, both at the undergraduate and graduate levels. Master's degrees generally require at least one year of full-time studies including a thesis, practical or research paper. Doctoral programs, usually leading to a PhD, require a minimum of three years of full-time study, at least one of which must be spent on campus. While a master's degree is generally required for admission to doctoral studies, some universities allow students to gain admission directly from an undergraduate honours program.

Admission standards vary from university to university and from program to program within the same institution. For undergraduate programs in the arts and sciences, successful completion of a secondary school academic program is the normal prerequisite for admission. A high level of academic achievement is often required for admission to professional degree programs such as engineering, business administration, education and journalism.

Annex 7

The powers of the National Assembly regarding higher education

1. General

The direct powers of the National Assembly to intervene in the provision of higher education are very limited. Although the institutions in the higher education sector are diverse in origin, size and organisation, all of them are legally independent corporate institutions that are accountable through a governing body, which carries ultimate responsibility for all aspects of the institution.

2. Funding

Under section 65 of the Further and Higher Education Act 1992, the Higher Education Funding Council for Wales (HEFCW) is responsible for administering funds made available to the Council by the Assembly under section 68 of the 1992 Act. Thus it is the responsibility of HEFCW to determine how funding is to be allocated to individual institutions in Wales, subject to terms and conditions imposed by the Assembly (set out in the Council's annual funding and remit letters) on such matters as:

- Assumptions about the total number of students in the sector; and
- Policy priorities (for example access and participation, improving quality, contributing to economic development).

In making grant available to HEFCW, the Assembly can impose conditions that must be met by all institutions, or by all institutions of a particular class or description. The Assembly cannot, however, impose conditions on an individual institution or institutions. Nor can it frame terms and conditions by reference to particular courses or programmes of research (including the contents of such courses or programmes and the manner in which they are taught, supervised or assessed) or to the criteria for the selection and appointment of academic staff and the admission of students.

The Assembly may by order (made by statutory instrument) give directions to HEFCW as to the exercise of their functions. It may also (without making an order) give general directions.

The Assembly may also give specific directions to HEFCW about the provision of financial support to an individual institution, if the Assembly considers that the financial

affairs of the institution have been or are being mismanaged. Both the Council and the institution have to be consulted before any such action is taken.

The Assembly may also by order designate a voluntary institution (section 129 of the Education Reform Act 1988) as eligible to receive support from funds administered by HEFCW if the institution meets certain conditions regarding the number of students pursuing higher education courses.

3. QUALITY ASSESSMENT

The Assembly has no statutory powers in respect of teaching quality assessment or institutional review. Under section 70 of the FHE Act 1992, HEFCW has a duty to secure that provision is made for assessing the quality of education provided in institutions which it funds or is considering funding. It is for HEFCW to determine the assessment approach to be adopted, in consultation with institutions.

The Quality Assurance Agency (QAA) was established in 1997. The QAA is an independent body, funded by subscriptions from the HE institutions, and contracts with the relevant funding councils to undertake quality assessments throughout the UK.

Although it has no statutory powers, the Assembly may make its views known to HEFCW through the Assembly Minister's annual remit letter. For example, the current remit letter asks the HEFCW to continue to work with the QAA to reduce the bureaucratic burden of quality reviews on institutions whilst maintaining standards. The May 2000 remit letter emphasised the need for effective, rigorous external scrutiny of the quality and standards of the higher education sector. Also, that it recognised achievement and provided assurance that monies invested through HEFCW were being well used, and ensured that potential students and the wider public were given clear information about the performance of all departments.

4. Governance and Management

The structure of governance for each institution is laid down in the instruments of its incorporation - the royal charter and associated statutes in the case of the pre-1992 institutions, and the instrument and articles of government of the post-1992 institutions. Any changes to the instruments of governance have to be approved by the Privy Council. Before making a decision, the Privy Council will consult the Assembly.

The Assembly expects high standards of governance and management in higher education institutions in Wales. HEFCW remains responsible for ensuring that sound financial control systems are in place across the sector, and provides the Assembly with an annual assurance statement on the state of controls within the sector. If necessary, however, the Assembly may impose general conditions on its grant to HEFCW to ensure that institutions have effective systems in place.

5. AUDIT

HEFCW's audit service has issued an Audit Code of Practice that sets out the audit arrangements for the sector. Institutions are required to establish an audit committee and engage internal and external auditors. HEFCW's audit service monitors the outcomes from these audit arrangements on an annual basis and this provides the Council with assurance that funds allocated to institutions have been properly applied, and that institutions have adequate controls in place to safeguard the funds allocated to them. In addition to this, HEFCW's audit service undertakes a three-year cycle of audit visits to institutions with the aim of providing assurance that each institution has established an appropriate framework of control to safeguard public funding. HEFCW may also undertake a special audit review, or bring forward a planned visit, if it receives information that indicates particular difficulties have arisen at an institution and the latter is unable to provide a satisfactory response.

Any allegations received by the Assembly Minister about mismanagement at an institution are passed to HEFCW for advice and to take into account in the Council's monitoring of institutions. Exceptionally, the Assembly Minister may ask the Council to conduct an investigation if, after careful consideration, it considers for example that such action would avoid a prolonged dispute, which could threaten the reputation of the sector.

6. Institutional Titles

The Assembly has no statutory powers in respect of changes to the titles of higher education institutions but would be consulted by the Privy Council before the latter took any decision on a proposed change in respect of an institution in Wales.

7. Degree Awarding Powers

The Privy Council decides upon applications for degree awarding powers. Before taking a decision, the Council would consult the Quality Assurance Agency and the Assembly, if the application were from an institution in Wales.

8. Tuition Fees

Under the Teaching and Higher Education Act 1998, the Assembly can (and has) imposed a condition on its grant to HEFCW requiring the Council to place a condition on the funding it allocates to institutions, that they should not charge 'top up' fees.

9. Student Support

Policy responsibility for mandatory awards, student loans and tuition fees remains with the Department for Education and Skills (DfES) to determine on an England and Wales basis. These functions have not been devolved to the Assembly. However, the Assembly does make available Student Hardship Funds to provide assistance to students who face particular financial difficulties. The Funds are administered and allocated to institutions by HEFCW. The criteria for awarding Hardship Funds to individual students are a matter for individual institutions to determine, within broad

guidance issued by the Assembly Minister, setting out the purpose of Student Hardship Funds and the priorities to be taken into account.

ANNEX 8

Motions in Committee

During the deliberations of the report, the committee agreed to vote on amendments to the text where a consensus could not be found amongst the members. These are set out below, with the outcome of each vote.

Chapter 3 (paragraph 3.23)

Original Text

Dafydd Glyn Jones (Reader in Welsh Literature at University of Wales, Bangor) advocated setting up a virtual federal college, based at existing HEIs within Wales, to promote teaching and learning through the medium of Welsh. In order to provide the critical mass to ensure the viability of this proposal, he suggested that there should be a substantial increase in the recruitment of Welsh-medium lecturers within a short period - 200 lecturers and 1,500 students within five years. The committee carefully considered this proposal but felt that such a rate of expansion was unrealistic.

1. Gareth Jones A.M proposed the following amendments (in bold) to this section:

Dafydd Glyn Jones (Reader in Welsh Literature at University of Wales, Bangor) **and others** advocated setting up a virtual federal college, based at existing HEIs within Wales, to promote teaching and learning through the medium of Welsh. In order to provide the critical mass to ensure the viability of this proposal, it was suggested that there should be a substantial increase in the recruitment of Welsh-medium lecturers within a short period - 200 lecturers and 1,500 students within five years. The committee carefully considered this proposal but felt that such a rate of expansion was unrealistic.

The committee recognises that the call for a Welsh-medium federal college is based on a sound and valid principle: that Welsh-medium provision would be strengthened and made more secure through having its own institutional framework. However, some members of the committee felt that the rate of expansion mentioned by Dafydd Glyn Jones is probably unrealistic. The committee would like to see HEFCW and the Board for Welsh-Medium Teaching conduct a study of the practical implications of establishing a Welsh-medium federal college, and publish a report within a year.

Outcome of vote:

In favour -

Gareth Jones Cynog Dafis Mick Bates

Against -Lorraine Barrett Jane Davidson Jonathan Morgan Alun Pugh Ann Jones (substitute for Janice Gregory) Val Lloyd (substitute for Huw Lewis)

Result: For 3; Abstain 0; Against 6; Total 9 The amendment was not carried

2. Lorraine Barrett A.M proposed the following amendment to this section:

To replace paragraph starting with: 'Dafydd Glyn Jones... ', and ending with '... rate of expansion was unrealistic.

And replace with:

A proposal to establish a virtual federal college based at existing HEIs within Wales, to promote teaching and learning through the medium of WeIsh was not supported by the committee at this time.

Outcome of vote:

In favour -

Lorraine Barrett Jane Davidson Alun Pugh Ann Jones (substitute for Janice Gregory) Val Lloyd (substitute for Huw Lewis)

Against -

Mick Bates Cynog Dafis Jonathan Morgan Gareth Jones

Result: For 5; Abstain 0; Against 4; Total 9 **The amendment was carried**

Chapter 5 (paragraph 5.6)

Original Text

We recognise the great benefits that arise from cross-border movement by students and the importance to the higher education sector in Wales of attracting significant numbers of students from the rest of the UK and abroad. We want to see more students in higher education. We also want to see more students from Wales in higher education.

Pauline Jarman A.M proposed the following amendment; delete the original text

and replace with:

The Committee notes the relatively low level of Welsh-domiciled students who pursue their Higher Education studies in Wales. Whilst recognising the great benefits that arise from cross-border movement by students, and the importance to Welsh HE of attracting significant numbers of students from the rest of the UK and abroad, we are concerned at the current level of outflow of Welsh students. We see it as part of a wider malaise – the chronic outmigration of the young, the highly-skilled and the economically active – which has been, and continues to be, detrimental to the cultural, social and economic life of Wales.

We recommend that HEFCW undertake an analysis of the situation; and on the basis of that analysis, to prepare a strategy with a view to ensuring that a higher proportion of Welsh-domiciled students would both wish and be enabled to pursue their Higher Education in Wales.

Outcome of vote:

In favour -

Cynog Dafis Pauline Jarman Owen John Thomas (substitute for Gareth Jones)

AGAINST -

Lorraine Barrett Jane Davidson Jonathan Morgan Alun Pugh Janice Gregory Huw Lewis Mick Bates

Result:

For 3; Abstain 0; Against 7; Total 10

The amendment was not carried

Chapter 10 (paragraphs 10.53 and 10.54)

Jonathan Morgan A.M on behalf of the Welsh Conservative group proposed the following amendments:

Original Text

The committee broadly endorses the recommendations of the Group and is pleased that the Assembly Minister has given a commitment to pursue them.

Amendment

"The committee endorses the recommendations of the Group", **add** "except those relating to the introduction of end loaded income contingent fees, and further more calls on the total abolition of student fees." **Delete** "and". Start new sentence: "The committee is pleased that the Assembly Minister..."

Original Text

Pursue all the recommendations (of the Rees Report) relevant to the UK central government, particularly those on the future of tuition fees, with the relevant Ministerial teams;

Amendment

After "UK central government", **insert** "except for the proposed introduction of end loaded income contingent fees, which along with up-front tuition fees, the committee rejects." **Delete** the rest of the sentence.

The committee agreed to one vote on both amendments

Outcome of vote:

In favour -Jonathan Morgan Gareth Jones Cynog Dafis

Against -Lorraine Barrett Mick Bates Jane Davidson Alun Pugh Ann Jones (substitute for Janice Gregory) Val Lloyd (substitute for Huw Lewis)

Result:

For 3; Abstain 0; Against 6; Total 9

The amendment was not carried

Annex 9

GLOSSARY OF TERMS

ACRONYM	Definition
ACE	Aiming for a college education
AHRB	Arts and Humanities Research Board
AUT	Association of University Teachers
CBI	Confederation of Business Industry
CUC	Committee of University Chairmen
CUNW	Community University of North Wales
CUV	Community University of the Valleys
CVCP	Committee of Vice Chancellors and Principals (now Universities UK)
EDC	Economic Development Committee
ELL	Education and Lifelong Learning Committee
ELWa	The joint brand name of the National Council for Education and
	Training for Wales and the Higher Education Funding Council
	for Wales
FE	Further Education
FEIs	Further Education Institutions
FSB	Federation of Small Businesses
FTE	Full-time Equivalent
HE	Higher Education
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
HEI	Higher Education Institution
HESA	Higher Education Statistics Agency
HEW	Higher Education Wales
HNC	Higher National Certificate
HND	Higher National Diploma
ICT	Information and Communication Technologies
IPR	Intellectual Property Rights
ITT	Initial Teacher Training
JISC	Joint Information Systems Committee
KEF	Knowledge Exploitation Fund
NATFHE	National Association for Teachers in Further and Higher
	Education

NAfW	National Assembly for Wales
NEWI	North East Wales Institute of Higher Education
NUS	National Union of Students
OECD	Organisation for Economic Co-operation and Development
OU	Open University
QA	Quality Assurance
QAA	Quality Assurance Agency
RAE	Research Assessment Exercise
SHEFC	Scottish Higher Education Funding Council
SIHE	Swansea Institute of Higher Education
SME	Small to Medium-Sized Enterprise
SRIF	Science Research Investment Fund
TACS	Training and Consulting Services
TT	Teacher Training
TTA	Teacher Training Agency
UCAC	Undeb Cenedlaethol Athrawon Cymru (National Association of
	Teachers of Wales)
UKCOSA	Council for International Education
UoG	University of Glamorgan
UoW	University of Wales
UWIC	University of Wales Institute, Cardiff
UWCM	University of Wales College of Medicine
UWCN	University of Wales College, Newport
WCMD	Welsh College of Music and Drama
WDA	Welsh Development Agency
WHEILA	Wales Higher Education International Liaison Association