

Annex C

Survey participants

Anglia Polytechnic University

Aston University

University of Bath

Bath Spa University College

Birkbeck College

University of Birmingham

Bishop Grosseteste College

Bolton Institute of Higher Education

Arts Institute at Bournemouth

Bournemouth University

University of Bradford

University of Brighton

University of Bristol

Brunel University

Buckinghamshire Chilterns University College

University of Cambridge

Institute of Cancer Research

Canterbury Christ Church University College

University of Central England

University of Central Lancashire

Central School of Speech and Drama

Chester College of Higher Education

University College Chichester

City University

Coventry University

Cranfield University

Cumbria Institute of the Arts

Dartington College of Arts

De Montfort University

University of Derby

University of Durham

University of East Anglia

University of East London

Edge Hill College of Higher Education

Institute of Education

University of Essex

University of Exeter

Falmouth College of Arts

University of Gloucestershire

Goldsmiths College

University of Greenwich

Harper Adams University College

University of Hertfordshire

University of Huddersfield

University of Hull

Imperial College

Keele University

University of Kent at Canterbury

Kent Institute of Art and Design

King Alfred's College, Winchester

King's College London

Kingston University

Lancaster University

University of Leeds

Leeds Metropolitan University

University of Leicester

University of Lincoln

University of Liverpool

Liverpool Hope University College

Liverpool John Moores University

University of London

London Business School

London School of Economics & Political Science

London Guildhall University

The London Institute

London South Bank University

Loughborough University

University of Luton

University of Manchester	University of Salford
UMIST	University of Sheffield
Manchester Metropolitan University	Sheffield Hallam University
Middlesex University	University of Southampton
University of Newcastle	Southampton Institute
Newman College	Staffordshire University
University College Northampton	University of Sunderland
University of North London	The Surrey Institute of Art and Design
Northern School of Contemporary Dance	University of Surrey
University of Northumbria at Newcastle	University of Surrey Roehampton
Norwich School of Art and Design	University of Sussex
University of Nottingham	University of Teesside
Nottingham Trent University	Thames Valley University
Open University	Trinity and All Saints
University of Oxford	Trinity College of Music
Oxford Brookes University	University College London
School of Pharmacy	University of Warwick
University of Plymouth	University of West of England
University of Portsmouth	University of Westminster
Queen Mary, University of London	Wimbledon School of Art
Ravensbourne College	University of Wolverhampton
RCN Institute	University College Worcester
University of Reading	Writtle College
Rose Bruford College	University of York
Royal Agricultural College	York St John College
Royal College of Art	
Royal College of Music	University of Ulster
Royal Holloway	Queens University Belfast
Royal Northern College of Music	
Royal Veterinary College	University of Aberdeen
St George's Hospital Medical School	University of Abertay Dundee
College of St Mark and St John	Bell College of Technology
St Martin's College	University of Dundee
St Mary's College	University of Edinburgh

Edinburgh College of Art
University of Glasgow
Glasgow Caledonian University
Glasgow School of Art
Heriot-Watt University
Napier University
University of Paisley
Queen Margaret University College Edinburgh
Robert Gordon University
Royal Scottish Academy of Music and Drama
University of St Andrews
University of Stirling
University of Strathclyde

Cardiff University
University of Glamorgan
North East Wales Institute
Royal Welsh College of Music and Drama
Swansea Institute of Higher Education
Trinity College
University of Wales, Aberystwyth
University of Wales, Bangor
University of Wales, Lampeter
University of Wales, Swansea
University of Wales College of Medicine
University of Wales College, Newport
University of Wales Institute, Cardiff

Annex D

List of abbreviations

ASG	HEFCE's Analytical Services Group
AUTM	Association of University Technology Managers
CASE	Co-operative Awards in Science and Engineering (postgraduate studentships)
CBI	Confederation of British Industry
CIHE	Council for Industry and Higher Education
CURDS	Centre for Urban and Regional Development Studies, University of Newcastle upon Tyne
DfES	Department for Education and Skills
DTI	Department of Trade and Industry
ERDF	European Regional Development Fund
ESF	European Social Fund
ESRC	Economic and Social Research Council
FSR	Financial Statistics Return
FY	Financial year
HE	Higher education
HEACF	Higher Education Active Community Fund
HE-BI	Higher education-business interaction
HEED	Higher Education Economic Development Fund
HEFCE	Higher Education Funding Council for England
HEFCW	Higher Education Funding Council for Wales
HEI	Higher education institution
HEIF	Higher Education Innovation Fund
HEROBC	Higher Education Reach-out to Business and the Community Fund
HESA	Higher Education Statistics Agency
IP	Intellectual property
NUBS	Nottingham University Business School
OST	Office of Science and Technology
RI	Research intensive
RDA	Regional Development Agency
SCOP	Standing Conference of Principals
SHEFC	Scottish Higher Education Funding Council
SME	Small and medium enterprise
SPRU	Science and Technology Policy Research, University of Sussex
TCS	Teaching Company Scheme
UNICO	University Companies Association

Annex E

HE-BI Stakeholders group

Patricia Ambrose	Standing Conference of Principals
Catherine Benfield	Higher Education Statistics Agency
Tim Bradshaw	Confederation of British Industry
Roger Carter	Welsh Funding Council
Peter Clark	Department for Education & Skills
Robert Clay	Office of Science and Technology
Teresa Cooper	Welsh Funding Council
Richard Hancock	Scottish Higher Education Funding Council
Adrian Hill	Higher Education Funding Council for England
David Leech	Engineering & Physical Sciences Research Council
John McGuigan	Department for Employment & Learning in Northern Ireland
Michael McPartlin	Scottish Higher Education Funding Council
Gerhard Mors	Scottish Executive
Nick Munn	Department of Trade & Industry
Clive Rees	Welsh Assembly
Lynda Thrift	Universities UK
Glenys Timmons	Department of Trade & Industry
Harriet Wallace	HM Treasury

Annex F

International comparisons

1. In the table in Section E comparing UK HEIs with those in the US the total number of UK HE institution spin-off companies is taken from the 2002 HE-BI survey, including both those with some HEI ownership and those companies that use HE intellectual property as a basis for their operation.

2. The UK research expenditure is taken from the HESA FSR 2000-01, Table 6 Expenditure by Activity: Total research grants and contracts. This comprises aggregate research funding from OST Research Councils, UK charitable income, UK central government local, health and hospital authorities, UK industry, commerce, public corporations, EU sources and other overseas income. Not included in this table are the HE funding councils' block grant for research, which can be obtained from HESA FSR 2000-01 Table 5b. Institutions are free to use their total block grant funds for either teaching or research as they feel appropriate. As full expenditure details of the block grant are not collected it is assumed, for the purposes of this calculation, that all of the research block grant funds are spent on research.

3. The US and Canadian figures are available from the AUTM survey⁶. The number of start-up companies formed is divided by the total sponsored research expenditure. The start-up companies defined in this survey are those dependant on institutions' technology for initiation, and so are equivalent to those spin-off companies recorded in the HE-BI surveys. Research expenditure is taken over the 2000 fiscal year and includes all research support committed to an institution even if the funds are to be spent over several years. It should be noted that Canadian institutions do not generally return staff salaries as research expenditure, and as these data are unavailable it is not possible to provide a meaningful benchmark for these institutions.

4. The exchange rate used is the annual average for 2000 from the Bank of England and is 1.5151 US dollars to the £.

⁶ Association of University Technology Managers Licensing Survey: FY2000 & UNICO/NUBS University Commercialisation Activities Survey FY2001

Annex G

Survey methodology, process and robustness

Data collection

1. To allow the sector to prepare effectively for completing the survey, HEIs were given advance warning through Council Briefing and a letter sent to the heads of all HEIs in the UK. Advance copies of the questionnaire were sent by e-mail to allow data gathering to begin while the design of the electronic submission document was completed. All electronic correspondence was sent to the head of each institution and copied to the institution's nominated contact.

Progressing and validation

2. Almost 90 per cent of HEIs met the June 2002 deadline. Two institutions declined to participate and two more failed to return data. A lot of time and effort was invested on both sides on data collection, and there is a high level of confidence in the robustness of 2000-01 data as a result.

Analysis and publication

3. Analysis has been handled by HEFCE's Analytical Services Group (ASG). The electronic returns were loaded into a dedicated database written by ASG staff which quickly identified concerns, for example in comparison with the HESA FSR data, which could be followed up with institutions. The data were then disaggregated by nation and research intensity, and graphs and tables were produced for inclusion in this publication. No display is made for English regions as these were particularly likely to be affected by the increase reporting this year.

4. Throughout this process the stakeholders group was consulted regarding presentation of information, usefulness of forms of analysis and comparisons, and the structure of the report.

Robustness

5. The checking procedures were thorough and time-consuming. Apparent discrepancies were investigated with HEIs; this added considerably to the workload of the survey but was deemed essential, to give confidence in the robustness of data.

HESA Financial Statistics Return (FSR)

6. Where appropriate, data were compared with the HESA FSR and some discrepancies were found, all of which were resolved. In most of these cases differences in accounting methods between institutional departments and variation of understanding or definition between individuals returning data were apparent during collection. The HESA FSR is most commonly returned through each HEI's central finance office, whereas HE-BI returns came mainly from the senior third stream individual or office. In a number of cases it was found that the HE-BI figure was correct, indicating that the survey was helping to improve the reliability of data collection in institutions. This further supports the case for a single route of reporting for key third stream data.

Electronic validation

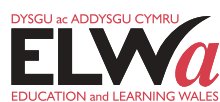
7. The Microsoft Excel format provided to HEIs for completion employed validation checks on some questions and provided a report of a range of simple errors for questions such as A1 (where three responses were required). Validation checks were also used on questions such as G1 and G2; where a positive answer to one question required a specific response to another question or field, the user was prompted to complete the second action. Fewer than 30 institutions returned invalid documents and in the majority of cases HEFCE was able to contact the HEI and readily complete the data.

8. In some cases the validation process revealed room for improvement in questions or permitted answer formats; this would lead to reduced ambiguity and greater reliability in any future survey.

'Sanity check'

9. Data were analysed to highlight any exceptional change between the two years' survey returns from an HEI. In many cases large differences in financial data were explained by figures being entered as £000s in one of the two years. Where dubious data were highlighted, HEIs were contacted to identify and agree

suggested changes. Some of the potentially most influential errors were simple mis-keyings and were detected by the validation and checking process. While many errors were rectified by consulting with the HEI in question it is likely that not all were detected, for example if the error was not captured by the HESA return, electronic validation or increase/decrease tests. Where it was found that the 1999-2000 data were inaccurate, the figures were updated for comparison in the 2000-01 publication.



Cyngor Cyllido Addysg Uwch Cymru
Higher Education Funding Council for Wales



Office of Science and Technology

Higher Education Funding Council for England
Northavon House
Coldharbour Lane
BRISTOL
BS16 1QD

tel 0117 931 7317
fax 0117 931 7203
www.hefce.ac.uk