THE CHANGING LANDSCAPE OF POSTGRADUATE EDUCATION

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UK Council *for* Graduate Education

H.E. Student Growth in the Last Decade

	Undergraduate			Postgraduate		
	1997-98	2008-09	% change	1997-98	2008-09	% change
Total	1,412,545	1,795,650	27%	347,005	472,415	36%
UK	1,281,240	1,606,525	25%	277,350	315,335	14%
EU	69,010	80,015	16%	23,840	40,255	69%
Non-EU	62,300	109,110	75%	45,815	116,825	155%
Full-time	1,022,605	1,266,500	24%	143,520	236,800	65%
Part-time	389,940	529,150	36%	203,485	235,615	16%

Source: Higher Education Statistics Agency (HESA)

Change in Origins of UK Full-Time Postgraduate Population 2001-2006

Year	1995	1997	1999	2001	2003	2005	2007	2008
Populations								
UK	88,900	91,700	90,800	101,600	110,300	112,800	117,800	115,300
EU	12,200	16,700	20,300	24,800	25,100	27,600	28,900	29,400
Non EU	28,500	32,500	35,300	45,900	71,400	85,600	96,400	103,700
Total	129,700	140,900	146,400	172,300	206,800	226,100	243,100	248,400
Shares								
UK	68.6%	65.1%	62.0%	58.9%	53.3%	49.9%	48.5%	46.4%
EU	9.4%	11.8%	13.8%	14.4%	12.1%	12.2%	11.9%	11.8%
Non EU	22.0%	23.1%	24.1%	26.7%	34.5%	37.9%	39.6%	41.7%

Machin, S. and Murphy, R Sutton Trust 2010

Change in Student Origins for Major Types of Postgraduate Study 2001-06

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	% change between 2000/01 and 2005/06
Doctorate degree mainly by research							
UK domiciled	53196	52606	52283	53150	52945	53675	0.9%
Other EU	9276	9369	9534	9896	11071	11705	26.2%
Non-EU	20307	21142	22642	24443	25376	26438	30.2%
Total	82779	83117	84459	87489	89392	91818	10.9%
Doctorate degree not mainly by research							
UK domiciled	1242	1444	1547	1695	1988	2058	65.7%
Other EU	61	74	84	93	136	162	165.6%
Non-EU	79	133	116	101	91	142	79.7%
Total	1382	1651	1747	1889	2215	2362	70.9%
Masters degree mainly by research							
UK domiciled	16354	15804	15433	14491	13597	13331	-18.5%
Other EU	2613	2457	2598	2451	2730	2659	1.8%
Non-EU	5312	5594	6057	6401	6263	5985	12.7%
Total	24279	23855	24088	23343	22590	21975	-9.5%
Masters degree not mainly by research							
UK domiciled	135859	142237	147481	160376	161268	166143	22.3%
Other EU	22327	22208	23438	23758	26424	27244	22.0%
Non-EU	39976	47890	62989	75895	80019	83575	109.1%
Total	198162	212335	233908	260029	267711	276962	39.8%

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Origins of Non UK Postgrads 2001-06

2000/01		2001/02		2002/03		2003/04		2004/05		2005/06	
Greece	14419	Greece	14655	China (People's Republic of)	17923	China (People's Republic of)	25521	China (People's Republic of)	28171	China (People's Republic of)	27666
China (People's Republic of)	6885	China (People's Republic of)	11086	Greece	14776	Greece	14083	India	12773	India	14306
US	5323	US	5863	India	9579	India	11389	Greece	12732	Greece	11758
Germany	4765	India	5571	US	7116	US	7924	US	8453	US	8934
Irish Republic	4056	Germany	4550	Irish Republic	4954	Irish Republic	5712	Irish Republic	6435	Irish Republic	6603
France	3917	Irish Republic	4435	Germany	4898	Germany	5204	Germany	5471	Germany	5713
India	3389	France	3930	Malaysia	4375	Taiwan	4520	Taiwan	4685	Nigeria	5664
Taiwan	3345	Malaysia	3709	Taiwan	4233	Malaysia	4296	Nigeria	4563	Pakistan	5161
Malaysia	3284	Taiwan	3694	France	4018	France	4210	France	4405	Taiwan	5050

Distribution of Postgraduates by Type of Institution 2001-2006

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	Change in number 2000/01 - 2005/06	% change 2000/01 - 2005/06
UK domiciled								
Russell Group	81763	84352	86267	87462	88921	89742	7979	9.8%
Pre-92	88940	93559	93315	94273	92391	94736	5796	6.5%
Others	147456	154386	160679	167258	167174	171889	24433	16.6%
Open University	19174	17127	17073	18280	18350	17419	-1755	-9.2%
Total	337333	349424	357334	367273	366836	373786	36453	10.8%
Other EU								
Russell Group	14102	13581	14113	13950	16095	16713	2611	18.5%
Pre-92	13784	13895	15218	14759	15534	16146	2362	17.1%
Others	10793	11161	11518	12627	14180	14178	3385	31.4%
Open University	0	0	33	51	3	0	0	_
Total	38679	38637	40882	41387	45812	47037	8358	21.6%
Non-EU								
Russell Group	29898	32008	37503	41049	41641	42351	12453	41.7%
Pre-92	23544	26107	30574	35959	36622	38332	14788	62.8%
Others	19242	23674	31184	38101	41716	43819	24577	127.7%
Open University	0	0	25	58	4	44	44	_
Total	72684	81789	99286	115167	119983	124546	51862	71.4%
All postgraduates								
Russell Group	125763	129941	137883	142461	146657	148806	23043	18.3%
Pre-92	126268	133561	139107	144991	144547	149214	22946	18.2%
Others	177491	189221	203381	217986	223070	229886	52395	29.5%
Open University	19174	17127	17131	18389	18357	17463	-1711	-8.9%
Total	448696	469850	497502	523827	532631	545369	96673	21.5%

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Change in Mode of Study for Different Types of Postgraduate Qualification 2001-2006

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	% change 2000/01 - 2005/06
Doctorate degree mainly by research							
FT	40806	41912	42800	44391	46002	48848	19.7%
PT	22494	22646	22891	22952	22550	20576	-8.5%
Total	63300	64558	65691	67343	68552	69424	9.7%
Doctorate degree not mainly by research							
FT	636	625	642	818	977	1010	58.8%
PT	723	994	1042	1007	1127	1326	83.4%
Total	1359	1619	1684	1825	2104	2336	71.9%
Masters degree mainly by research							
FT	11997	11972	12441	12239	12060	12182	1.5%
PT	8971	8700	8361	7752	7010	6792	-24.3%
Total	20968	20672	20802	19991	19070	18974	-9.5%
Masters degree not mainly by research							
FT	77623	87856	106188	115433	119364	123430	59.0%
PT	103576	106176	109143	124339	124913	129209	24.7%
Total	181199	194032	215331	239772	244277	252639	39.4%
Overall % PT	**51**					**46**	

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Changes in Subject of Study of Postgraduates 2001-06

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	% change 2002/03 - 2005/06
Medicine and Dentistry	15860	16073	15509	16630	17517	18546	19.6%
Subjects allied to Medicine	27971	31122	34694	38827	43690	46856	35.1%
Biological Sciences	21408	21777	28443	31310	31968	32653	14.8%
Veterinary Sciences, Agriculture and related subjects	4432	4255	4294	4064	4046	3845	-10.5%
Physical Sciences	18964	18396	19161	20596	20363	20990	9.5%
Mathematical and Computer Sciences	28864	32064	32757	34725	33871	32531	-0.7%
Engineering and technologies	33179	34736	36477	38826	40203	39350	7.9%
Architecture, Building and Planning	12182	12765	12780	13750	14217	15241	19.3%
Social studies	30040	30718	39335	43927	44980	46591	18.4%
Law	28486	30853	23949	24110	24212	24117	0.7%
Business and Administrative studies	78051	83208	94654	100545	101240	103380	9.2%
Mass Communications and Documentation	7869	8394	8915	9605	9533	10145	13.8%
Langauges, literature, linguistics and classics	20924	21855	21198	22377	21875	22312	5.3%
Historical and Philosophical studies	17682	18200	18748	20357	19868	20379	8.7%
Creative Arts and Design	14928	15643	17275	18540	18691	19156	10.9%
Education	62327	66574	72320	82603	83507	86547	19.7%
Combined	25529	23217	16993	3035	2850	2730	-83.9%
Total	**448696**	**469850**	**497502**	**523827**	**532631**	**545369**	**9.6%**

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Evolution of 'Doctoral Studies' I

- **Traditional UK PhD - German 'Humboldt Model'**
  - 3 year Study period
  - No formal taught component
  - Single Component Thesis
  - Apprenticeship for Academia

- **Evolving Traditional Model**
  - 4 year Study
  - Formal Taught element involving discipline based and generic skills usually not assessed
  - Process innovations: Electronic submission, Performance based thesis, Video based examination etc

Evolution of 'Doctoral Studies' II

- **'New Route' Phd**
  - Govrnmt driven Quasi-US model adopted by~20% of UK HEIs but take-up slowed recently
  - Formal taught and Assessed component
  - Masters level exit usually possible
  - Popular with non UK sponsor organisations
- **Professional Doctorates**
  - Based in specific disciplines eg: Education (EdD), Engineering (EngD)
  - Formal Taught and Assessed component
  - Masters level exit possible
  - Research component often work based leading to 'portfolio' thesis
  - Popular as part of work based CPD

Evolution of 'Doctoral Studies' III

- **'Split' Phds**
  - Requires agreement between UK HEI and usually Non UK/EU partner. Not popular with Elite HEIs
  - Dual student registration, often two awards made
  - Study period split between two sites often 1 yr UK followed by 2 yrs in non UK partner
  - Popular with non UK sponsor organisations

- **Under development - Eurodocs**
  - Driven by European 'Bologna' discussions
  - Primary aim to harmonise tertiary education into 3 cycles
  - Should allow simpler international employment in the public sector
  - Unlikely to appear for 5-10 years and probably limited in discipline spread

Issues for Postgraduate Study

- Broad Sustainability of PGR Programmes
- Non EU Immigration Policy
- Clarification of Postgraduate Qualifications
- Integration of UK Postgraduate study in the Bologna Process

Institutional Cost of PGR Programmes

£ per FTE student 2003/04	Band A	Band B	Band C
Total programme cost	87,317	71,446	52,383
As a percentage of band C	167 per cent	136 per cent	100 per cent

Source: JM Consulting: Costs of training and supervising postgraduate research students

Band A = High Cost Lab and Clinical Subjects
Band B = Intermediate Cost Subjects (Part Lab Based)
Band C = Library Based Subjects

Typical Costing Scenarios for Lab-based PGR

	Non EU full fee paid	HEFCE funded and Research Council grant	HEFCE funded no grant, fees waived	No HEFCE or other external funding
Fees	36	9		9
Bench fees	3			
Research training support grant		3		
HEFCE supervision payment		21	21	
Assumed future SRIF income @25 per cent of HEFCE income		5	5	
Total	39	38	26	9
Costs	87	87	87	87
Shortfall	48	49	61	78

Source: Sastry HEPI report on PGR

Typical Costing Scenarios for Library Based PGR

	Non EU full fee paid	HEFCE funded and Research Council grant	HEFCE funded no grant, fees waived	No HEFCE or other external funding
Fees	27	9		9
Bench fees				
Research training support grant		3		
HEFCE supervision payment		13	13	
Assumed future SRIF income @25 per cent of HEFCE income		3	3	
Total	27	28	16	9
Costs	52	52	52	52
Shortfall	25	24	36	43

Source: Sastry HEPI report on PGR

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