GradStats

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Graduate Careers Australia

Graduate Careers Australia's (GCA) Graduate Destination Survey (GDS) is a study of the activities of new university graduates around four months after the completion of their qualifications. In the 2005 GDS, new graduates who completed the requirements for awards in the calendar year 2004 were surveyed regarding their major activities, including full-time study, full- or part-time employment, seeking employment, or their unavailability for work or study.

GradStats gives a summary of *preliminary data* concerning the destinations of Australian resident bachelor degree graduates (figures for overseas residents are discussed in the full GDS report, to be published in the first half of 2006). Overall, 61.5 per cent of the Australian resident graduates surveyed responded to the survey.

For further information on graduate employment, graduate destination statistics and GCA, visit www.graduatecareers.com.au.

Graduates in 2005:

Work, Study, Salaries and Course Satisfaction — Key Points

- Of bachelor degree graduates who were available for full-time employment in 2005, 80.9 per cent (79.7 per cent last year) were in full-time employment within four months of completing their degrees.
  - A further 12.3 per cent (12.9 per cent last year) were working on a part-time or casual basis while continuing to seek full-time employment.
  - An additional 6.9 per cent (7.4 per cent last year) were not working and still looking for full-time employment at the time of the survey.
  - These figures represent an improved level of demand for new graduates after figures levelled out between 2002 and 2004. Further, for two years running there has been a drop in the percentage of those not working while seeking full-time employment.
- Over one-fifth of respondents (22.5 per cent - down from 23.4 per cent last year) were undertaking further full-time study after completing their qualification.
- The median annual starting salary for bachelor degree graduates in their first full-time employment was $40,000 ($38,000 last year). This was 81.8 per cent of average earnings, up slightly from 81.6 per cent last year, and down from 82.0 per cent in 2003, and 82.7 per cent in 2002.
- Males earned a starting salary of $40,000 (up from $39,000 last year) and females earned $39,000 (up from $38,000 last year).
- Overall satisfaction with courses as measured by the Course Experience Questionnaire (CEQ) remains at a high level, with 89.8 per cent of graduates expressing broad satisfaction with their courses.

The results of the 2005 Graduate Destination Survey (GDS) show that, of bachelor degree graduates available for full-time employment, 80.9 per cent were in full-time employment at the time of the survey, with a further 12.3 per cent working on a part-time or casual basis while continuing to seek full-time employment (see Table GS1a).

An additional 6.9 per cent were not working and still looking for full-time employment four months after completing their qualifications.

These results represent an improved level of demand for new graduates after figures levelled out between 2002 and 2004. Further, for two years running there has been a drop in the percentage of those not working while seeking full-time employment.

Generally, between one-fifth and one-quarter of respondents elect to continue in further full-time study. In 2005, 22.5 per cent did so, down from 23.4 per cent in the previous year[1] (see Table GS1). A fall in this figure is often associated with a strengthening labour market, as evidenced here by the increase in the full-time employment figure above.

A further 6.4 per cent of respondents were in part-time or casual work and were not seeking full-time employment (6.1 per cent in 2004), while 0.6 per cent were not working and seeking part-time or casual employment only (0.6 per cent in 2004). These figures have remained stable over the last five years.

Of those graduates seeking full-time employment, females (80.5 per cent — see Table GS1a) were as likely as males (81.4 per cent) to have found it by the time of the survey.

Females were notably less likely than males (6.1 per cent compared with 8.2 per cent) to have been without any work while seeking full-time employment and they were more likely (13.4 per cent) to have been working on a part-time basis while seeking full-time employment than males (10.4 per cent). This difference (regularly seen in GDS figures) is likely to be a reflection of females' numerical dominance in fields of education such as teaching and nursing, in which there are strong opportunities for professional part-time employment.

Males (23.6 per cent) were slightly more likely than females (21.8 per cent) to have undertaken further full-time study in 2005 (see Table GS1).

[1] These figures include those proceeding to honours years, other awards, and higher degrees.

Table GS1: Activities of bachelor degree graduates, by sex, 2003-05 (%).

	Available for full-time employment (see Table GS1a)	In full-time study	In part-time or casual employment, not seeking full-time employment	Not working, seeking part-time or casual employment only	Unavailable for full-time study or full-time employment	Total cases	Total %†
Males							
2003	69.1	23.5	3.4	0.4	3.6	24,923	100
2004	68.3	24.6	3.5	0.4	3.2	24,267	100
2005	69.8	23.6	3.8	0.4	2.4	24,659	100
Females							
2003	65.8	22.3	7.1	0.8	4.0	39,838	100
2004	65.1	22.7	7.6	0.8	3.8	40,687	100
2005	66.1	21.8	8.0	0.8	3.4	41,056	100
Persons*							
2003	67.0	22.8	5.7	0.6	3.9	65,158	100
2004	66.4	23.4	6.1	0.6	3.5	64,965	100
2005	67.4	22.5	6.4	0.6	3.1	65,738	100

*Total persons might not equal males plus females as some respondents did not identify sex.
† Total % may not add to 100.0 due to rounding.

Table GS1a: Breakdown of bachelor degree graduates available for full-time employment, 2003-05 (%).

	In full-time employment	Seeking full-time employment, not working	Seeking full-time employment, working part-time or casual	Total seeking full-time employment	Total %†	Total cases	**Had full-time employment before May in final year of education and still with that employer at time of GDS
Males							
2003	79.8	9.6	10.6	20.2	100	17,226	17.7
2004	79.8	8.9	11.4	20.2	100	16,584	18.9
2005	81.4	8.2	10.4	18.6	100	17,214	17.9
Females							
2003	80.2	6.7	13.1	19.8	100	26,192	12.2
2004	79.7	6.4	13.9	20.3	100	26,510	12.2
2005	80.5	6.1	13.4	19.5	100	27,121	12.2
Persons*							
2003	80.1	7.8	12.1	19.9	100	43,689	14.5
2004	79.7	7.4	12.9	20.3	100	43,102	14.7
2005	80.9	6.9	12.3	19.1	100	44,347	14.4

*Total persons might not equal males plus females as some respondents did not identify sex.

† Total % may not add to 100.0 due to rounding.

** Base figure is that group in full-time employment.

Of those seeking full-time employment, Figure GS1 demonstrates that graduates were more likely to have been working on a part-time or casual basis than to have been without any work at all. This is a pattern that has been developing in recent years, with the lines graphing changes in Figure GS1 diverging notably since 2002.

Table GS1a indicates that 14.4 per cent of those in full-time employment at the time of the survey already had that full-time position before 1 May in their final year of study. Males employed full-time were more likely than females to have had their position before 1 May in their final year of study (17.9 per cent compared with 12.2 per cent).

Table GS2 shows a breakdown of bachelor degree graduates available for full-time employment by field of education. Labour market factors peculiar to some fields of education can affect the proportions in and seeking employment, especially in a survey such as this, which takes place around four months after the completion of degree requirements.

For example, medical graduates, of whom 98.3 per cent were in full-time employment, always have high proportions in this category due to the requirement that they serve an internship in a public hospital for a period after graduation.

Other fields with high proportions in full-time employment at the time of the survey were mining engineering (98.8 per cent), pre-registration pharmacy (98.7 per cent), initial nursing education (96.2 per cent), civil engineering (95.7 per cent), and surveying (95.4 per cent).

Respondents in visual and performing arts, social sciences, psychology, humanities, life sciences, mathematics, computer science, and languages were most likely to have been seeking full-time employment at the time of the GDS. It is worth noting that visual and performance arts graduates tend not to be looking for full-time employment in a professional capacity.

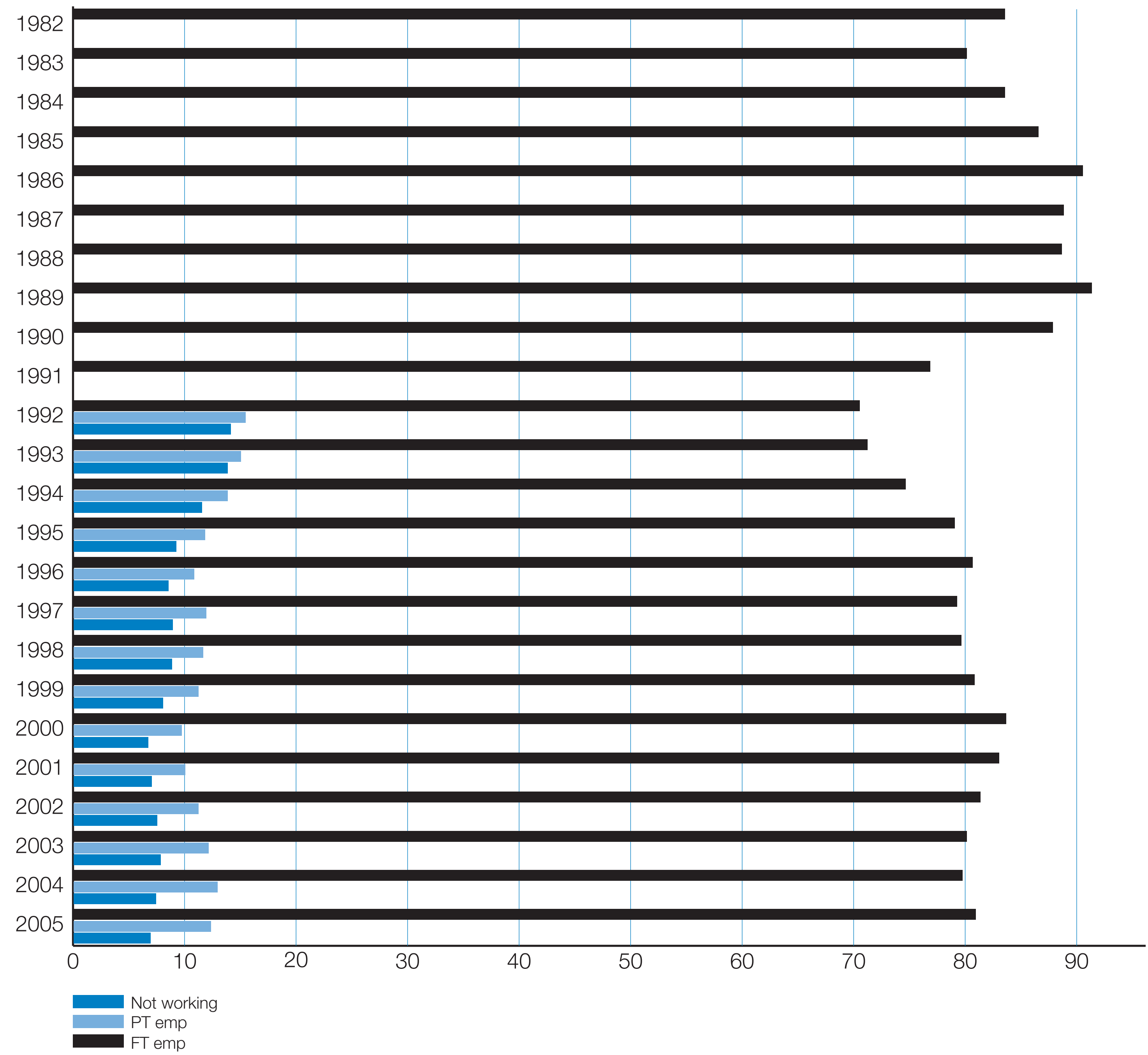

Figure GS1: Bachelor degree graduates available for full-time employment; percentage in full-time employment (1982-2005), percentage working part-time while seeking full-time employment (1992-2005), percentage not working while seeking full-time employment (1992-2005).

Table GS2: Breakdown of bachelor degree graduates available for full-time employment, by field of education, 2005 (%).

	In full-time employment	Seeking full-time employment, not working	Seeking full-time employment, working part-time or casual	Total seeking full-time employment	Total %†	Total cases	*Had full-time employment before May in final year of education and still with that employer at time of GDS
Agriculture	80.3	6.7	13.0	19.7	100	924	19.5
Architecture	86.7	6.5	6.7	13.3	100	475	9.7
Building	91.0	4.5	4.5	9.0	100	356	21.6
Urban & Regional Planning	91.0	3.0	6.0	9.0	100	166	19.2
Humanities	70.7	11.1	18.2	29.3	100	3,519	16.8
Languages	74.9	8.3	16.8	25.1	100	642	13.5
Visual & Performing Arts	60.3	13.2	26.5	39.7	100	1,498	6.3
Social Sciences	67.2	11.2	21.5	32.8	100	409	24.7
Psychology	70.5	10.8	18.7	29.5	100	1,097	14.1
Social Work	80.2	7.6	12.2	19.8	100	921	15.2
Business Studies	81.1	6.9	12.1	18.9	100	6,531	21.0
Accounting	86.9	6.7	6.4	13.1	100	2,942	27.2
Economics	86.1	7.3	6.6	13.9	100	438	13.3
Education, Initial	77.9	3.8	18.3	22.1	100	6,084	10.1
Education Post/Other	84.3	3.6	12.0	15.7	100	83	51.4
Aeronautical Engineering	89.1	5.8	5.1	10.9	100	156	15.8
Chemical Engineering	83.1	9.6	7.3	16.9	100	178	2.0
Civil Engineering	95.7	3.0	1.3	4.3	100	537	12.8
Electrical Engineering	87.3	8.6	4.0	12.7	100	371	13.9
Electron/Comp Engineering	78.3	11.7	10.0	21.7	100	631	10.1
Mechanical Engineering	89.5	4.8	5.8	10.5	100	504	13.5
Mining Engineering	98.8	1.2	0.0	1.2	100	82	3.7
Other Engineering	86.9	7.7	5.4	13.1	100	571	15.3
Surveying	95.4	2.0	2.6	4.6	100	153	21.2
Dentistry	95.0	0.8	4.1	5.0	100	121	0.9
Health, Other	81.9	4.3	13.8	18.1	100	1,820	14.2
Nursing, Initial	96.2	1.0	2.8	3.8	100	2,655	4.2
Nursing, Post-initial	94.0	1.3	4.6	6.0	100	302	2.5
Pharmacy (pre-reg)	98.7	0.9	0.4	1.3	100	460	1.1
Medicine	98.3	0.6	1.1	1.7	100	830	0.9
Rehabilitation	90.0	3.1	6.8	10.0	100	1,082	0.7
Law	88.4	6.2	5.4	11.6	100	1,368	18.5
Law, Other	84.6	6.1	9.3	15.4	100	643	30.5
Computer Science	73.7	13.6	12.7	26.3	100	2,724	19.0
Life Sciences	71.3	9.9	18.9	28.7	100	2,269	9.2
Mathematics	72.6	14.5	12.9	27.4	100	186	10.4
Chemistry	84.7	5.1	10.2	15.3	100	177	12.7
Physics	78.9	9.0	12.0	21.1	100	133	14.3
Geology	87.4	4.2	8.4	12.6	100	143	8.0
Veterinary Science	94.0	3.6	2.4	6.0	100	166	0.6
Total %	**80.9**	**6.9**	**12.3**	**19.1**	**100**		**14.4**
Total Number	**35,858**	**3,051**	**5,438**	**8,489**		**44,347**	

† Total % may not add to 100.0 due to rounding. * Base figure is group in full-time employment.

While the national employment figure rose by 1.2 percentage points (from 79.7 per cent to 80.9 per cent) between 2004 and 2005, some fields of education experienced more notable improvements, including aeronautical engineering (up by 12.8 percentage points), physics (up by 9.9 percentage points), mathematics (up 8.2 percentage points), and geology (up by 8.1 percentage points).

However, the percentage of respondents in full-time employment at the time of the GDS fell markedly in some fields between 2004 and 2005. Post-initial education[2] fell by 6.8 percentage points, architecture by 4.2 percentage points and veterinary science by 4.0 percentage points.

Respondents from visual and performing arts (26.5 per cent) were the most likely to have been working on a part-time or casual basis while seeking full-time employment.

Those from mathematics (14.5 per cent), computer science (13.6 per cent), and visual and performing arts (13.2 per cent) were the most likely to have been without work while seeking full-time employment.

Many graduates were already in their full-time employment while studying. Respondents from post-initial education (51.4 per cent), 'law, other'[3] (30.5 per cent) and accounting (27.2 per cent) were most likely to have been in full-time employment in their final year of study and still with that employer at the time of the survey.

Australian Bureau of Statistics (ABS) figures for May 2004 show that, in the population as a whole, 2.9 per cent of bachelor degree graduates were unemployed (3.1 per cent in 2003). GDS employment figures differ from ABS figures in that the GDS separates those in part-time employment from those in full-time employment while the ABS includes those with any work at all in the 'employed' category.

[2] Further training for previously qualified teaching graduates and extra-systemic teaching and training qualifications.
[3] Law-related courses beyond initial legal training.

Graduate Starting Salaries

In 2005, the median annual starting salary for new bachelor degree graduates in their first full-time employment was $40,000 (up from $38,000 last year). This was 81.8 per cent of an annual rate of average weekly earnings ($48,900 at the time), up slightly from 2004's 81.6 per cent and down markedly from 85.8 per cent in 2001.

Table GS4: Median starting salaries of bachelor degree graduates in first full-time employment and aged less than 25, 2005 ($,000). Figures shown below salary figures indicate related number of responses. *

	Aust. Govt	State Govt	Total Govt	Prof. Pract.	Ind./ Com.	Schools	Tert. Ed.	Total Ed.	Total	Males	Females
Humanities	40.3	38.0	39.0	40.0	33.0	42.7	36.7	42.0	35.0	36.0	35.0
	98	88	203	63	608	88	32	120	1,079	251	828
Psychology	40.0	40.1	40.0	40.0	35.0	43.0	39.0	43.0	38.5	40.0	38.0
	24	59	86	11	149	25	13	38	295	38	257
Social Work	43.0	40.2	40.5		37.0			40.0	40.0	40.0	40.0
	13	81	95		74			11	197	16	181
Social Sciences	39.8	41.0	40.0		32.8				35.4	35.6	35.0
	12	35	54		68				146	45	101
Accounting	42.0	38.0	41.2	35.0	35.0				35.5	36.0	35.0
	29	31	65	633	276				1,012	443	569
Economics, Business	41.9	40.0	41.0	36.0	36.0	43.2	38.0	39.4	37.0	40.0	36.0
	152	134	317	300	1,663	12	36	48	2,428	930	1,498
Law	42.0	40.0	41.0	40.0	38.0				40.0	41.0	40.0
	70	79	153	321	75				565	183	382
Education		41.0	40.0		34.1	43.0		43.0	43.0	43.0	43.0
		20	35		62	1,559		1,566	1,700	292	1,408
Physical Sci.	40.0		39.0	41.0	38.0				38.7	40.0	36.0
	10		15	10	69				108	61	47
Biological Sci.	40.0	39.0	39.4	36.0	35.0	42.0	40.0	41.0	38.0	38.0	38.0
	40	122	179	39	347	45	50	95	705	218	487
Mathematics			45.0		40.0				42.0	44.5	41.0
			13		30				59	34	25
Computer Sci.	45.0	40.0	43.0	38.0	38.0		40.0	42.0	39.9	40.0	39.0
	71	32	106	49	615		29	38	847	589	258
Agricultural Sci.	40.0	38.0	38.8		36.0				37.0	36.2	37.4
	12	55	77		191				297	135	162
Earth Sci.		40.0	40.0	40.0	40.0				40.0	40.5	39.9
		12	25	15	63				111	62	49
Veterinary Sci.				37.0					37.0	39.0	36.5
				63					67	16	51
Engineering	47.0	43.0	44.0	43.0	45.0		48.0	48.0	44.0	44.0	44.0
	59	122	213	364	735		15	15	1,359	1,067	292
Architecture & Building		40.5	42.0	30.3	38.0				35.5	40.0	34.0
		13	50	132	133				324	155	169
Medicine		50.0	50.0		42.0				50.0	50.0	48.8
		140	147		15				175	62	113
Paramedical Studies	40.0	40.0	40.0	39.0	39.0	41.0	41.6	41.0	40.0	40.0	40.0
	48	1,412	1,483	77	721	31	12	43	2,382	310	2,072
Dentistry		61.0	62.0	65.0					65.0	65.0	62.0
		20	23	12					40	19	21
Pharmacy (pre-reg)		39.6	40.0		30.0				30.0	30.1	30.0
		64	65		227				297	84	213
Optometry					53.5				52.0	58.0	52.0
					58				68	25	43
Art & Design	42.0		40.6		30.0	42.0		41.0	32.0	32.0	31.0
	12		20		246	31		37	358	117	241
All Fields	42.0	40.0	40.0	38.0	37.0	43.0	40.0	43.0	40.0	40.0	39.0
	677	2,537	3,425	2,125	6,431	1,827	237	2,064	14,619	5,152	9,467
Males	42.9	41.6	42.0	40.0	40.0	43.0	40.0	43.0	40.0		
	308	547	937	957	2,694	319	81	400	5,152		
Females	41.0	40.0	40.0	37.0	35.0	43.0	39.0	43.0	39.0		
	369	1,990	2,488	1,168	3,737	1,508	156	1,664	9,467		

* Salaries based on fewer than 10 cases not shown.
* 'Total Government', 'Total Education' and 'Total' columns include cases not shown in related constituent columns.

Graduate starting salaries as a percentage of average weekly earnings remain below levels experienced during the 1980s (see Table GS3 and Figure GS2).

New male graduates earned $40,000, which was 81.8 per cent of average earnings, down from 83.7 per cent last year, and 84.3 per cent in 2003. Salaries for females ($39,000) were 79.8 per cent of average earnings, down from 81.6 per cent in 2004, and 80.5 per cent in 2003. Because these figures are medians, there is no expectation that the figure for all graduates should fall between the figures for males and females.

In dollar terms, the starting salary for all graduates rose by $2,000 from $38,000 (or 5.3 per cent). Salaries for males rose by $1,000 from $39,000 (or 2.6 per cent) while for females they increased by $1,000 from $38,000 (or 2.6 per cent).

At $65,000, dentistry graduates earned the highest median starting salary, which was up markedly from $60,000 last year. They were followed by graduates from optometry ($52,000) and medicine ($50,000). Pre-registration pharmacy graduates earned the lowest starting salaries ($30,000) but salaries for these graduates grow very strongly upon registration.

The largest rises between 2004 and 2005 were for dentistry (up $5,000 from $60,000) and education and engineering (both up $3,000).

Continuing a trend, the overall salary for females was 97.5 per cent of males' earnings (97.4 per cent in 2004, 95.5 per cent in 2003, 94.6 per cent in 2002, 94.4 per cent in 2001, and 92.3 per cent in 2000 and 1999).

Females earned 103.3 per cent of males' salaries in the field of agricultural science, and their earnings were the equivalent of their male colleagues' salaries in engineering, education, paramedical studies, social work and biological sciences. They were virtually equivalent in pharmacy (99.7 per cent).

However, females earned markedly less than males in the fields of architecture and building (85.0 per cent of males' earnings), optometry (89.7 per cent), economics and business (90.0 per cent), physical sciences (90.0 per cent) and mathematics (92.1 per cent).

Over the years, GCA research has suggested that differences in starting salaries between males and females can be partly explained in terms of the differing enrolment profiles of male and female students. It used to be the case that male respondents tended to be in the more highly paying fields of education while females tended to come from the middle ranked fields.

Table GS3: Annual rate of average weekly earnings (AWE) and median graduate starting salaries (GSS), and relativity, 1977-2005 ($,000).

	AWE	GSS	GSS % AWE
1977	9.6	9.6	100.0
1979	11.3	10.9	96.5
1980	12.5	11.8	94.4
1981	14.1	13.2	93.6
1982	16.5	14.9	90.3
1983	17.8	15.9	89.3
1984	19.6	17.2	87.8
1985	20.5	18.2	88.8
1986	22.1	19.8	89.6
1987	23.3	20.9	89.7
1988	24.9	23.0	92.4
1989	26.8	24.0	89.6
1990	28.7	24.9	86.8
1991	30.0	25.3	84.3
1992	31.1	25.7	82.6
1993	31.8	25.5	80.2
1994	32.5	26.0	80.0
1995	33.9	27.0	79.6
1996	34.8	28.0	80.5
1997	35.7	29.0	81.2
1998	37.2	30.0	80.6
1999	38.0	31.0	81.6
2000	39.2	33.0	84.2
2001	40.8	35.0	85.8
2002	42.9	35.5	82.7
2003	45.1	37.0	82.0
2004	46.6	38.0	81.6
2005	48.9	40.0	81.8

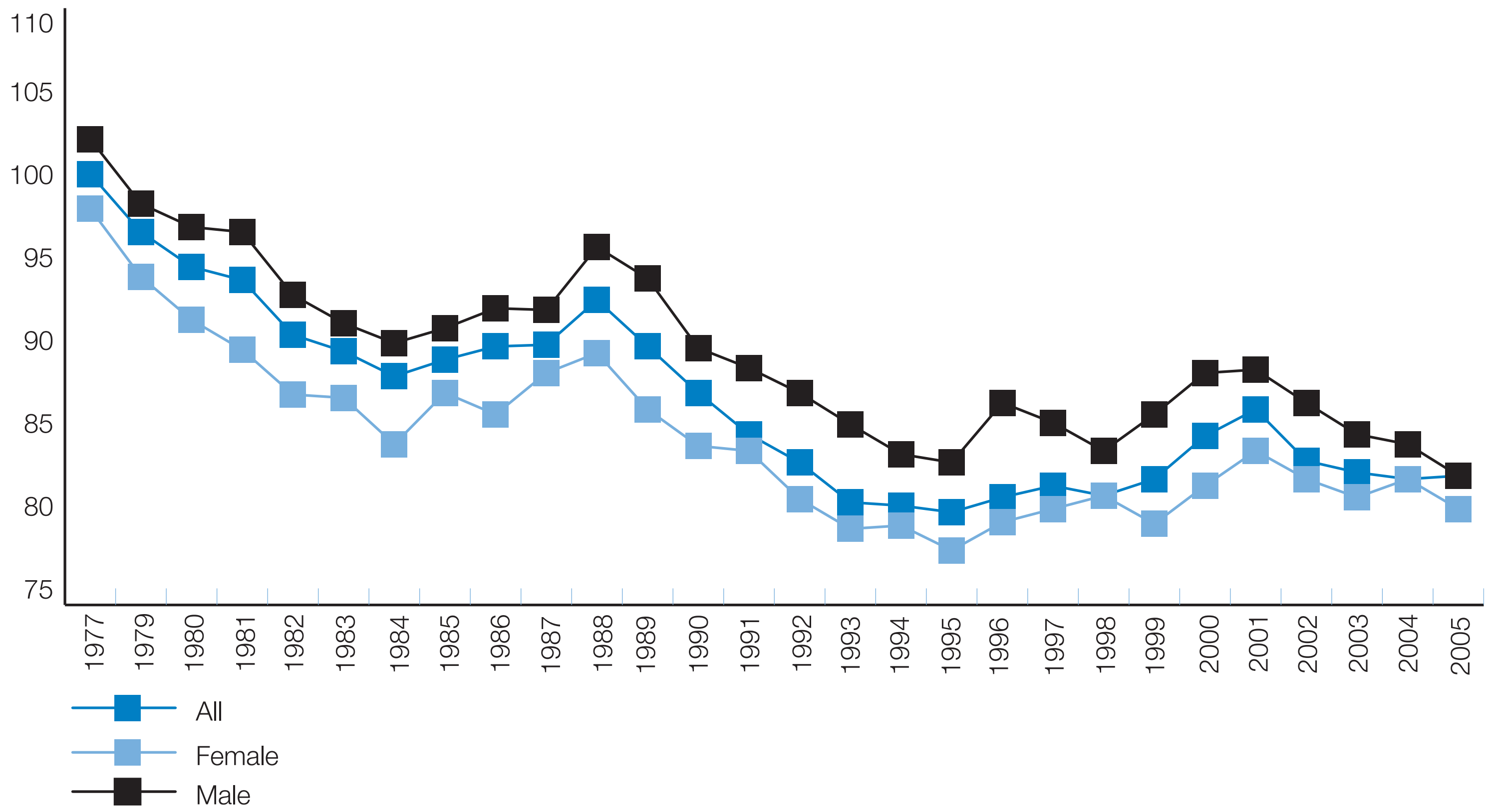

Figure GS2: Male, female and all graduates' median starting salaries relative to the annual rate of average weekly earnings, 1977-2005

Table GS5: Fields of education ranked according to level of starting salary, 2001-05 (= denotes equal ranking).

	2001	2002	2003	2004	2005
Dentistry	1	1	1	1	1
Optometry	3	3	2	=2	2
Medicine	2	2	3	=2	3
Engineering	=4	4	4	3	4
Education	=6	7	5	=4	5
Mathematics	5	=8	7	=4	6
Earth Sci.	7	9	=8	6	=7
Law	=6	=8	=8	5	=7
Paramedical Studies	11	=11	11	=7	=7
Social Work	=8	=11	10	8	=7
Computer Sci.	=4	5	9	=7	8
Physical Sci.	=8	10	6	=9	9
Psychology	=12	=14	=13	=9	10
Biological Sci.	=12	12	=13	=10	=11
Veterinary Sci.	9	13	12	=10	=11
Economics, Business	13	=14	=13	=11	12
Agricultural Sci.	=15	=15	16	=11	=13
Architecture & Building	=15	=15	=15	12	=13
Accounting	10	=14	=14	=11	14
Social Sciences	=12	6	=14	13	15
Humanities	14	=15	=15	=11	16
Art & Design	=15	16	17	14	17
Pharmacy (pre-reg)	16	17	18	15	18

However, this is no longer so clear cut. Reflecting the changes in females' salaries as a percentage of males' earnings, an examination of the top ranked fields in terms of starting salaries (listed in Tables GS4 and GS5; dentistry, optometry, medicine, engineering, education, mathematics, social work, paramedical studies, law and earth sciences) shows that they account for 48.4 per cent of female respondents and 40.2 per cent of males.

When males and females have studied in the same field, different choices in terms of employment, such as the type of employer or the hours worked, can also have an effect on earnings. Additionally, some fields of education used in this analysis are aggregations of smaller, related, but relatively heterogeneous fields, and this can lead to earnings differences within the aggregated field.

Most fields of education have shown a high degree of consistency over the years covered by GDS data. For example, when ranked in terms of starting salaries in 2005, dentistry, optometry, medicine, engineering, education and mathematics were the highest earning fields and have been so in recent years (see Table GS5).

There was $35,000 difference between the top and bottom ranked fields. The middle rankings were not so widely separated. For example there was only $7,500 difference between the fifth and 14th ranked fields.

Graduate Satisfaction

The Course Experience Questionnaire (CEQ) has been used to measure graduates' satisfaction with their study experiences since 1993. Broad satisfaction remained at a high level, 89.8 per cent, in 2004 (89.4 per cent last year – see Figure GS3). Dissatisfaction has been low over the same period.

The broad satisfaction figure represents the percentage of respondents answering '3', '4' and '5' on a five-point scale (with the 5th point indicating highest satisfaction). The dissatisfaction measure is made up of responses '1' and '2'.

The satisfaction figure represents the percentage of respondents answering '4' or '5' on the five-point scale. This measure rose from 67 per cent in 1999 to 68 per cent in 2000 and has reached 69.5 per cent in 2005

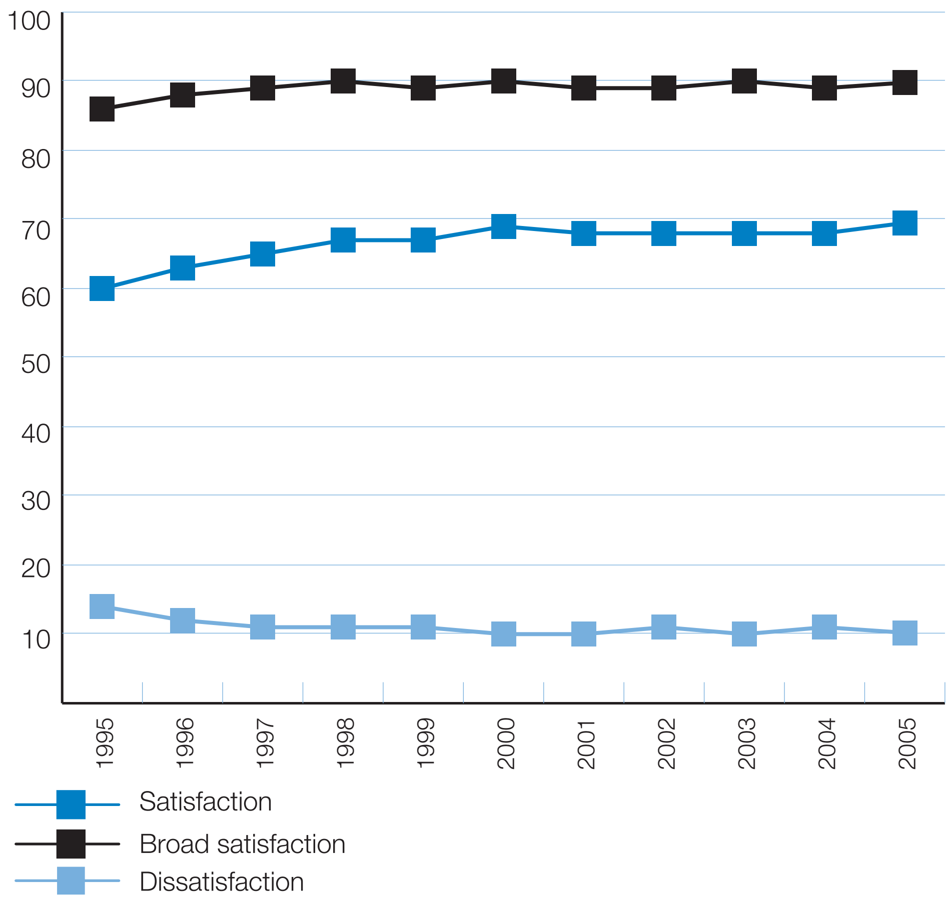

Figure GS3: Levels of satisfaction with course, bachelor degree graduates, 1995-2005 (preliminary).

Further details about graduate destinations, starting salaries and the CEQ can be found in the forthcoming reports *Graduate Destinations, 2005, Graduate Salaries, 2005, Postgraduate Destinations, 2005* and the reports *Graduate Course Experience, 2005* and *Postgraduate Research Experience, 2005.* To order copies, please call GCA on (03) 8344 9333 or visit our online shop at www.graduatecareers.com.au.