

Beyond Graduation 2012

The report of the Beyond Graduation Survey



Acknowledgements

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1. Introduction

Welcome to *Beyond Graduation 2012*, the fourth annual report into the activities, outcomes and experiences of Australian higher education graduates in the years after the completion of their studies. This report is based on the 2012 Beyond Graduation Survey, conducted by Graduate Careers Australia (GCA) in association with Australian higher education institutions. In all, 39 institutions assisted GCA in recontacting their graduates three years after course completion (see Table A1). Graduates who completed a course of study at an Australian higher education institution in 2008 and provided a response to the 2009 Australian Graduate Survey (AGS) were invited by email to complete an online survey about their experiences since they completed their studies. A total of 12,815 usable responses to the BGS were received, which is an increase of 8.5 per cent over the 2011 survey. The secured responses were found to be representative of the broader graduate population in terms of sex ratio, age structure and broad field of education. As such, the survey data were analysed without corrective weighting.

The BGS questionnaire addressed graduates' employment and further study activities as at 30 April 2012, and gave them the opportunity to give a retrospective assessment of their higher education course experience. Data on graduates' personal characteristics and activities in 2009 were imputed into the data file from the 2009 AGS.

In addition to the three-year survey, this report presents some high-level findings from a survey of graduates who completed their studies in 2006, responded to both the 2007 AGS and 2010 BGS, and provided valid contact details when responding to the latter. This unique data set gives insights into the activities and outcomes of graduates five years after course completion. A total of 2,080 usable responses to the five-year BGS were received, with respondents representing 30 higher education institutions. These findings are presented in Section 6.

The focus of this report is on Australian domestic bachelor degree graduates, who represent the largest single group of respondents to the BGS. Summary figures for Australian postgraduates are presented in Section 5. Respondent characteristics for the three- and five-year surveys are presented in Table A2.

2. Graduate Destinations

At the time of the 2009 AGS, 77.5 per cent of male graduates and 72.3 per cent of female graduates in the BGS sample reported themselves as being available for full-time employment—that is, in or seeking full-time employment (see Table 1). By 2012, the percentage of male graduates available for full-time employment had increased to 84.8 per cent, which reflects a decrease in the proportions in full-time study and part-time work. The percentage of female graduates available for full-time employment increased to 75.2 per cent by 2012, which mainly reflects a substantial decrease in the proportion in further full-time study. Female graduates were notably more likely than males to be in part-time employment with no desire to secure full-time work, or to be unavailable for further study or any employment.

Table 1. Main activity of bachelor graduates, by sex, 2009 and 2012 (% , n)

	Available for full-time employment (see Table 2)	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 any employment	TOTAL	TOTAL n
Males							
2009	77.5	15.4	5.1	0.0	2.0	77.5	2,148
2012	84.8	10.0	3.5	0.4	1.4	84.8	2,184
Females							
2009	72.3	16.3	8.1	0.0	3.3	72.3	4,353
2012	75.2	11.7	8.9	0.4	3.9	75.2	4,418
Total							
2009	74.0	16.0	7.1	0.0	2.9	74.0	6,501
2012	78.3	11.1	7.1	0.4	3.1	78.3	6,602

Of the graduates who were available for full-time employment, the proportion who had secured full-time work increased considerably within three years of course completion (see Table 2). At the time of the 2009 AGS, 80.3 per cent of the male graduates and 78.8 per cent of the female graduates in our sample were in full-time employment. By 2012, this had increased to 92.4 per cent and 92.1 per cent respectively. This was necessarily accompanied by a general decline in the proportion of graduates in the full-time labour market who were in part-time employment or unemployed.

Table 2. Bachelor graduates available for full-time employment, by sex, 2009 and 2012 (% , n)

	In full-time employment	Seeking full-time employment, working part time or casual	Seeking full-time employment, not working	Total seeking full-time employment	TOTAL	TOTAL n
Males						
2009	80.3	12.0	7.7	19.7	100	1,664
2012	92.4	3.7	3.8	7.5	100	1,851
Females						
2009	78.8	13.9	7.2	21.1	100	3,149
2012	92.1	4.7	3.2	7.9	100	3,321
Total						
2009	79.3	13.3	7.4	20.7	100	4,813
2012	92.2	4.4	3.4	7.8	100	5,172

Full-time employment rates are presented by field of education in Table 3. Graduates from the fields of engineering and related technologies, and health enjoyed particularly strong employment rates immediately after course completion. The fields of natural and physical sciences, and creative arts recorded relatively low employment rates at the time of the 2009 AGS, but experienced strong growth in employment over the next three years. These, however, were the only two fields at the overall level to record sub-ninety per cent employment rates three years after course completion. It is important to note that these figures do not necessarily reflect the proportion of graduates in jobs that are related to their respective courses of study. This is addressed later in Figure 1.

Table 3. Bachelor graduates working full time as a proportion of those available for full-time employment, by sex and broad field of education, 2009 and 2012 (% , n)

	2009		2012	
	%	n	%	n
Males				
Natural and physical sciences	63.9	133	87.1	170
Information technology	82.7	133	93.2	147
Engineering and related technologies	88.1	260	97.7	264
Architecture and building	82.9	35	94.7	38
Agriculture and environmental studies	82.1	39	91.3	46
Health	93.3	165	94.4	179
Education	83.6	128	94.1	135
Management and commerce	83.9	360	94.1	391
Society and culture	76.5	302	90.4	363
Creative arts	53.2	109	83.1	118
TOTAL	80.3	1,664	92.4	1,851
Females				
Natural and physical sciences	63.0	235	85.6	263
Information technology	76.6	47	93.9	49
Engineering and related technologies	90.7	54	98.2	57
Architecture and building	72.7	44	91.5	47
Agriculture and environmental studies	76.1	71	94.3	88
Health	91.1	653	94.3	601
Education	81.1	460	92.8	461
Management and commerce	80.8	521	95.5	552
Society and culture	76.6	790	90.2	897
Creative arts	61.7	274	90.2	306
TOTAL	78.8	3,149	92.1	3,321
Total				
Natural and physical sciences	63.3	368	86.1	433
Information technology	81.1	180	93.4	196
Engineering and related technologies	88.5	314	97.8	321
Architecture and building	77.2	79	92.9	85
Agriculture and environmental studies	78.2	110	93.3	134
Health	91.6	818	94.4	780
Education	81.6	588	93.1	596
Management and commerce	82.1	881	94.9	943
Society and culture	76.6	1,092	90.2	1,260
Creative arts	59.3	383	88.2	424
TOTAL	79.3	4,813	92.2	5,172

2.1. Industries of employment

The industries employing recent bachelor degree graduates did not change markedly in the years after course completion (see Table 4). Full-time employed males were most likely to be employed in the professional, scientific and technical services industry, followed by the public administration and safety, education and training, and healthcare and social assistance industries. These same four industries were the most common destinations for full-time employed females, albeit in a different relative order. Female graduates were most likely to be employed in the healthcare and social assistance industry immediately after course completion; however the proportion employed in this industry fell from 26.3 per cent in 2009 to 21.4 per cent in 2012. Education and training was the most common employment industry for female graduates three years after course completion.

Table 4. Employing industries, bachelor graduates in full-time employment, by sex, 2009 and 2012 (% , n)

	Males		Females		Total	
	2009	2012	2009	2012	2009	2012
Agriculture, forestry and fishing	0.6	0.6	0.6	0.2	0.6	0.3
Mining	3.6	3.7	1.1	1.6	2.0	2.3
Manufacturing	4.0	4.4	1.9	2.5	2.6	3.2
Electricity, gas and water supply	2.3	2.5	0.6	0.8	1.2	1.4
Construction	3.2	2.5	1.0	0.8	1.8	1.4
Wholesale trade	0.6	0.8	0.3	0.4	0.4	0.5
Retail trade	3.1	2.0	4.3	2.8	3.9	2.5
Accommodation and food services	1.1	0.3	1.8	0.8	1.6	0.6
Transport, postal and warehousing	1.8	2.1	0.7	0.9	1.1	1.3
Information media and telecommunications	4.3	3.7	3.1	2.9	3.5	3.2
Financial and insurance services	7.2	7.8	4.5	3.9	5.4	5.3
Rental, hiring and real estate services	0.8	0.9	0.6	0.4	0.6	0.6
Professional, scientific and technical services	25.1	24.4	15.7	17.1	19.0	19.7
Administrative and support services	1.0	1.3	1.9	1.4	1.6	1.4
Public administration and safety	13.0	14.9	12.1	14.8	12.4	14.8
Education and training	12.2	13.2	20.2	23.3	17.4	19.7
Health care and social assistance	12.5	11.4	26.3	21.4	21.5	17.9
Arts and recreation services	2.1	1.3	2.1	1.8	2.1	1.6
Other services	1.7	2.2	1.1	2.2	1.3	2.2
TOTAL	100	100	100	100	100	100
TOTAL n	1,313	1,588	2,448	2,908	3,761	4,496

2.2. Occupations

While the industries employing graduates did not change greatly in the years immediately after course completion, the occupations held by graduates did tend to vary. As shown in Table 5, the proportion of graduates of both sexes employed in managerial roles increased notably, as did the proportion of female graduates employed in professional roles. This was necessarily accompanied by a general decline in the proportion of graduates in 'lower-skilled' occupations, and especially clerical and administrative roles. By 2012, male graduates were more likely than their female counterparts to be employed in a managerial capacity, while female graduates were more likely to be employed in professional roles. Females remained notably more likely than males to be employed in clerical or administrative roles three years after course completion; however only around one in ten female graduates were so employed by this stage.

2.3. Importance of qualification

Being in full-time employment, even if in a managerial or professional capacity, does not necessarily mean that a graduate is in a job related to his or her course of study. To investigate this potential gap between employment and *relevant* employment, graduates were asked to rate the importance of the qualification they completed in 2008 to their main paid job using a five-point response format with categories labelled 'formal requirement', 'important', 'somewhat important', 'not important' and 'don't know'. The relative proportions of graduates who considered the qualification they completed in 2008 to be a formal requirement or important to their main paid jobs in 2009 and 2012 are given in Figure 1, stratified by field of education. Graduates who were unsure (don't know) are excluded from the figures.

Table 5. Broad occupation types, bachelor graduates in full-time employment, by sex, 2009 and 2012 (% , n)

	Males		Females		Total	
	2009	2012	2009	2012	2009	2012
Managers	7.0	12.1	4.9	8.2	5.6	9.5
Professionals	70.2	72.8	69.7	75.6	69.9	74.7
Technicians and trades workers	4.7	2.9	3.0	1.6	3.6	2.1
Community and personal service workers	4.6	4.0	5.2	3.6	5.0	3.8
Clerical and administrative workers	11.1	6.4	14.5	9.7	13.3	8.5
Other occupations	2.5	1.8	2.8	1.3	2.6	1.5
TOTAL	100	100	100	100	100	100
TOTAL n	1,292	1,583	2,424	2,911	3,716	4,494

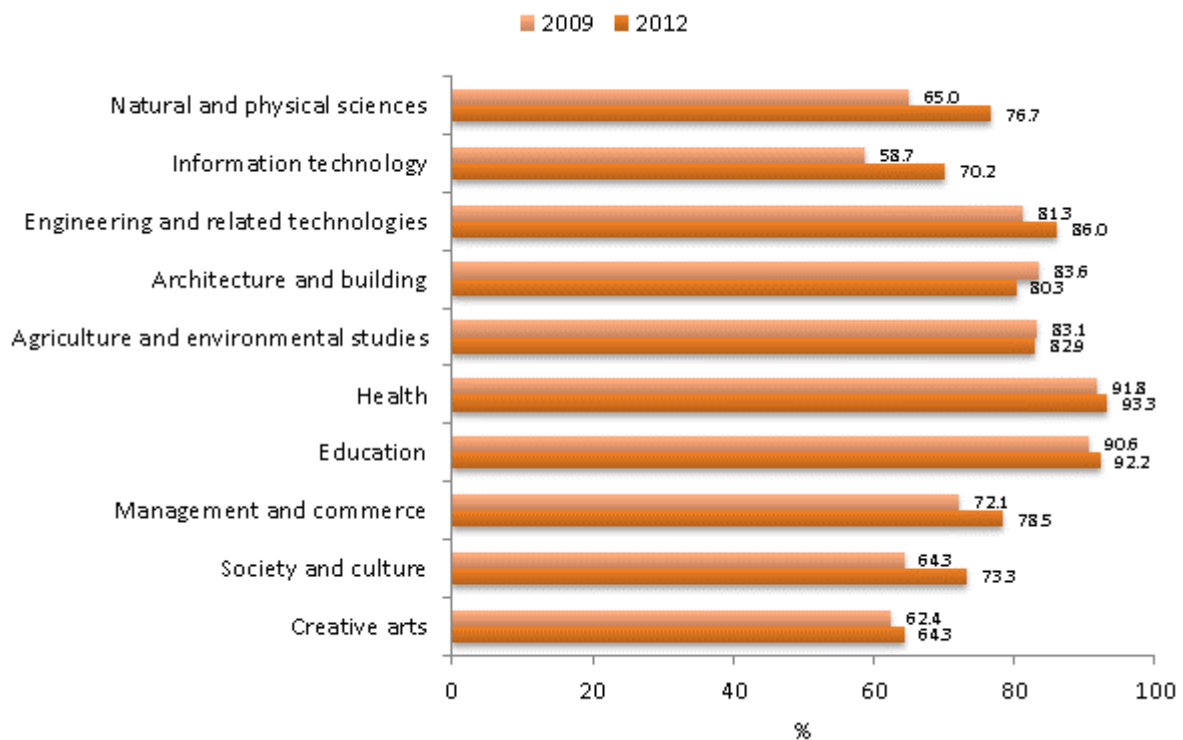


Figure 1. Qualification important to main paid job, bachelor graduates in full-time employment, by broad field of education, 2009 and 2012 (%)

There is considerable variation across fields of education in terms of the proportion of graduates who believed that their qualification was important to their main paid job. Graduates from the fields of health and education were consistently the most likely to be in a job for which their qualification is important. Information technology graduates were the least likely to be in a relevant job shortly after course completion, with creative arts graduates the least likely to be so employed three years later. The fields of natural and physical sciences, information technology, and society and culture saw the largest increase in graduates employed in relevant jobs between 2009 and 2012. The only fields that experienced negative growth in this regard were architecture and building, and agriculture and environmental studies.

It is important, however, to emphasise that graduates in non-relevant jobs (by the definition employed here) are not necessarily in unrewarding jobs or even jobs that are not in line with their

own career goals. It simply means that they are employed in jobs that are not closely related to the degree they completed in 2008. While some graduates may take longer than others to secure work in their chosen field, others may develop a career in a different, potentially unrelated field. The nature of these non-relevant jobs is examined in Table 6, in which broad occupation types are cross-tabulated with graduates' perceptions of the importance of their qualification to their main paid job. It is worthy of note that 41.2 per cent of graduates who indicated that their qualification was not important to their main paid employment in 2009 were employed in managerial or professional roles. By 2012, this figure had reached 55.4 per cent. This finding helps to dispel the myth that graduates working in jobs unrelated to their field of study must necessarily be trapped in unskilled jobs.

Table 6. Aggregated occupation type, by importance of qualification to main paid job, bachelor graduates in full-time employment, 2009 and 2012 (% , n)

	Important		Somewhat important		Not important		Total	
	2009	2012	2009	2012	2009	2012	2009	2012
Managerial/professional	84.1	89.2	56.8	69.9	41.2	55.4	75.6	84.2
Other	15.9	10.8	43.3	30.1	58.8	44.6	24.4	15.8
TOTAL	100	100	100	100	100	100	100	100
TOTAL n	2,806	3,577	400	522	473	354	3,679	4,453

2.4. Average weekly working hours

Average weekly working hours for full-time employed bachelor degree graduates in 2009 and 2012 are presented in Table 7, split by field of education and sex. At an overall level, males tended to work longer hours, although much variation in working hours was observed between different fields of education. Three years after course completion, male graduates from the fields of architecture and building, and management and commerce tended to work the longest hours, on average, out of any graduate cohort (45.1 hours). In spite of the general shift towards more highly-skilled occupations between 2009 and 2012 (see Table 5), average weekly working hours increased by just 1.9 hours for male graduates and 0.9 hours for female graduates over this period. The largest increase was observed for female architecture and building graduates, who saw their average weekly working hours increase by 3.6 hours between the two survey periods.

Table 7. Average weekly working hours for full-time employed bachelor graduates, by broad field of education and sex, 2009 and 2012 (hours)

	Males		Females		Total	
	2009	2012	2009	2012	2009	2012
Natural and physical sciences	40.5	42.5	39.8	40.9	40.0	41.6
Information technology	39.7	42.1	38.4	40.7	39.4	41.7
Engineering and related technologies	41.3	43.8	40.2	42.0	41.1	43.4
Architecture and building	44.2	45.1	38.5	42.1	41.2	43.4
Agriculture and environmental studies	41.9	44.5	39.6	39.9	40.5	41.5
Health	44.2	43.4	40.3	40.3	41.1	41.0
Education	41.7	41.9	40.6	41.1	40.9	41.3
Management and commerce	42.6	45.1	40.0	41.9	41.1	43.2
Society and culture	41.1	43.9	40.1	41.2	40.3	41.9
Creative arts	40.0	42.7	39.3	40.5	39.5	41.0
TOTAL	41.8	43.7	40.1	41.0	40.7	42.0
TOTAL n	1,311	1,546	2,432	2,826	3,743	4,372

2.5. Employment seeking behaviour

In addition to their current employment, full-time employed bachelor degree graduates were asked whether they were actively seeking other employment at the time of the survey (see Figure 2). As may be expected, these figures generally mirror those presented in Figure 1 concerning whether graduates felt that their qualification was important to their main paid job. The notable exception to this was agriculture and environmental studies graduates, who were among the most likely to be in relevant employment and also to be looking for a different job. The fields of architecture and building, and health were the only two in which a greater proportion of graduates were seeking other employment three years after course completion than immediately afterwards.

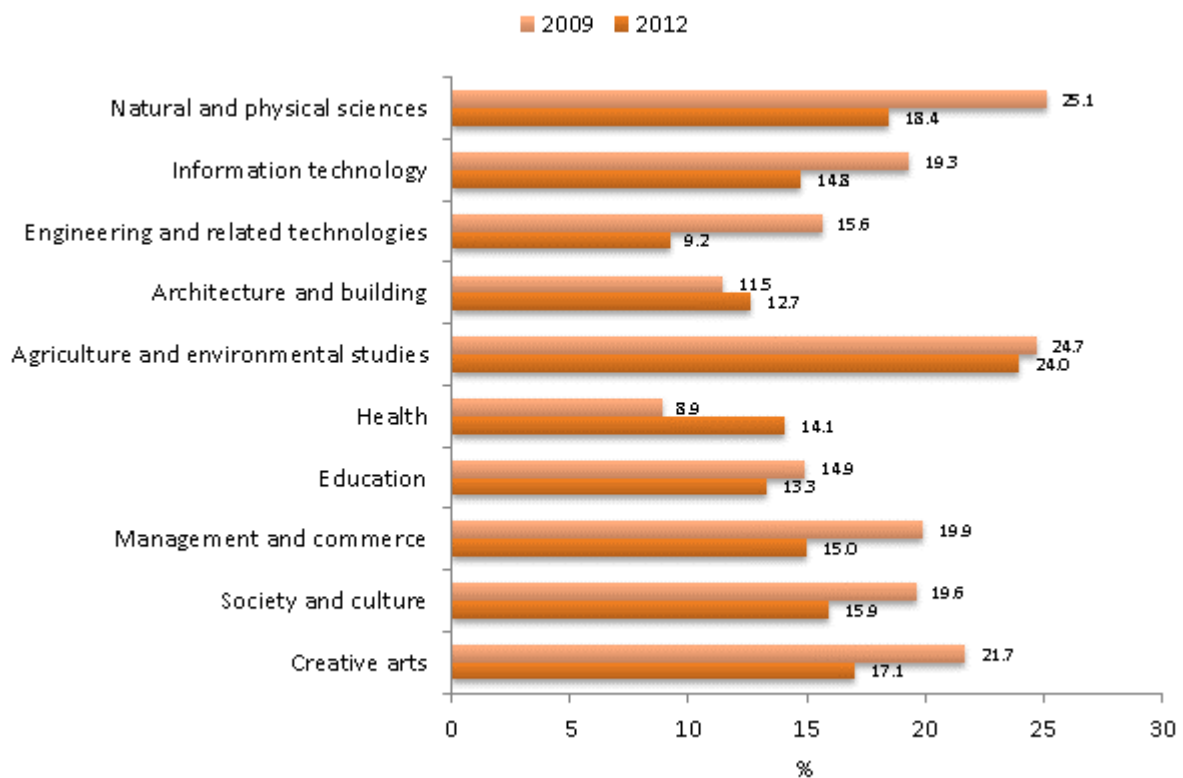


Figure 2. Graduates seeking alternative work, bachelor graduates in full-time employment, by broad field of education, 2009 and 2012 (%)

2.6. Interstate mobility

The interstate mobility of graduates in the full-time workforce is investigated in Table 8. The large percentage figures on the diagonal indicates that the majority of graduates are working in the same state or territory in 2012 as they were in 2009. Graduates who began their post-study careers in an Australian state tended to be less mobile than those who were initially employed in the Northern Territory or the Australian Capital Territory. Out of these, graduates who began their careers in the Northern Territory were the most likely to move interstate within three years of completing their studies, with almost one-third having done so by the time of the 2012 BGS.

Table 8. Interstate mobility of bachelor graduates in full-time employment, 2009 and 2012 (% , n)

State of 2009 job	State of 2012 job									TOTAL n
	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	TOTAL	
NSW	89.9	3.4	1.7	0.0	0.9	0.2	0.5	3.5	100	654
Vic.	2.0	92.2	1.4	0.6	1.9	0.4	0.8	0.6	100	782
Qld	3.0	3.2	91.1	0.0	0.8	0.2	0.2	1.5	100	528
SA	1.2	7.1	1.2	85.7	1.2	0.0	2.4	1.2	100	84
WA	2.7	2.7	0.0	0.3	93.2	0.0	0.0	1.0	100	295
Tas.	0.0	7.7	2.6	0.0	2.6	87.2	0.0	0.0	100	39
NT	9.4	6.3	6.3	0.0	3.1	0.0	68.8	6.3	100	32
ACT	7.2	5.9	3.9	2.0	3.3	1.3	0.0	76.3	100	152

2.7. Graduates in part-time employment

Because the vast majority of employed graduates were in full-time employment at the time of the survey, this report has thus far focused predominantly on full-time employed graduates. In order to present a comprehensive picture of graduate employment three years after course completion, the activities of part-time employed bachelor degree graduates are discussed in this section.

As shown in Table 9, graduates employed part time immediately after course completion were typically in 'lower-skilled' occupations, with only around four-in-ten employed in managerial or professional roles. By contrast, over three-quarters of full-time employed graduates were employed in managerial or professional roles immediately after course completion (see Table 5). Three years later, around two-thirds of part-time employed graduates were in professional roles (63.4 per cent of males and 65.4 per cent of females), although part-time employed graduates were still less likely than their full-time employed counterparts to hold a managerial position.

Table 9. Broad occupation types, by sex, bachelor graduates in part-time employment, 2009 and 2012 (% , n)

	Males		Females		Total	
	2009	2012	2009	2012	2009	2012
Managers	2.7	3.8	2.5	3.2	2.6	3.4
Professionals	36.2	63.4	37.4	65.4	37.1	65.0
Technicians and trades workers	6.4	2.3	2.5	3.2	3.6	3.1
Community and personal service workers	14.3	10.8	17.0	9.7	16.3	10.0
Clerical and administrative workers	10.8	10.3	17.4	11.2	15.6	11.0
Other occupations	29.6	9.5	23.0	7.1	24.9	7.6
TOTAL	100	100	100	100	100	100
TOTAL n	483	213	1,267	801	1,750	1,014

2.8. Graduates in further study

For many graduates, the completion of a course of study in 2008 did not represent the end of their learning journey. As shown in Figure 3, 28.1 per cent of male bachelor degree graduates and 26.4 per cent of female bachelor degree graduates were engaged in some type of further study at the time of the 2009 AGS. At this point in time, graduates were more likely to be undertaking full-time study, with 18.6 per cent of male graduates and 18.8 per cent of female graduates so engaged.¹ Three years later, the proportion of graduates in further study had increased slightly, with 29.5 per

¹ These figures may not reconcile with those presented in Table 1 due to different calculation methods.

cent of male graduates and 32.0 per cent of female graduates studying at the time of the 2012 BGS. Part-time study constituted a far greater share of further study enrolments three years after course completion.

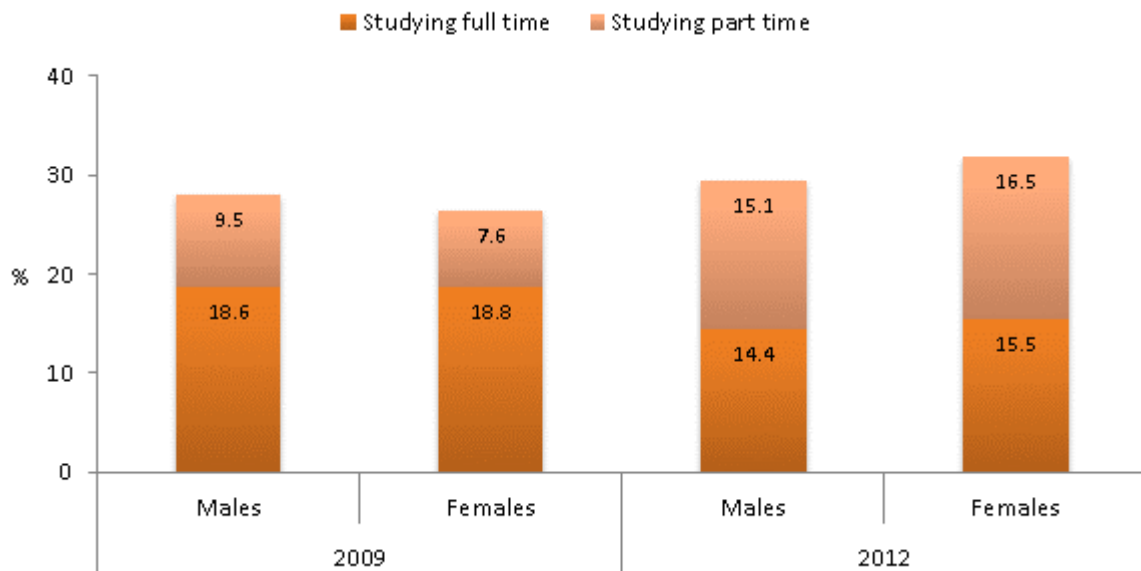


Figure 3. Graduates in further study, bachelor graduates, by sex, 2009 and 2012 (%)

Examining those bachelor degree graduates who were in further study three years after course completion in Figure 4, it can be seen that the majority of graduates from all fields of education were undertaking postgraduate study. Graduates originally from the fields of architecture and building, and natural and physical sciences were the most likely to be studying for another undergraduate degree at the time of the 2012 BGS. Graduates from the fields of engineering and related technologies, and agriculture and environmental studies were the most likely to be undertaking a postgraduate course of study. More than a quarter of management and commerce graduates were studying some other type of award course.

For the first time in 2012, the BGS investigated whether graduates had completed another course of study in the three years since course completion (see Table 10). Bachelor degree graduates from the society and culture field were the most likely to have done so, with 43.8 per cent indicating that they had completed another qualification since 2009. On the other hand, graduates from the fields of engineering and related technologies, and education were the least likely to have completed another qualification (15.1 per cent and 19.5 per cent, respectively). Considering those bachelor degree graduates who had completed another qualification, natural and physical sciences graduates were the most likely to have completed another undergraduate degree, architecture and building graduates were the most likely to have completed a postgraduate degree, with graduates from the fields of information technology and education the most likely to have completed some other type of award course.

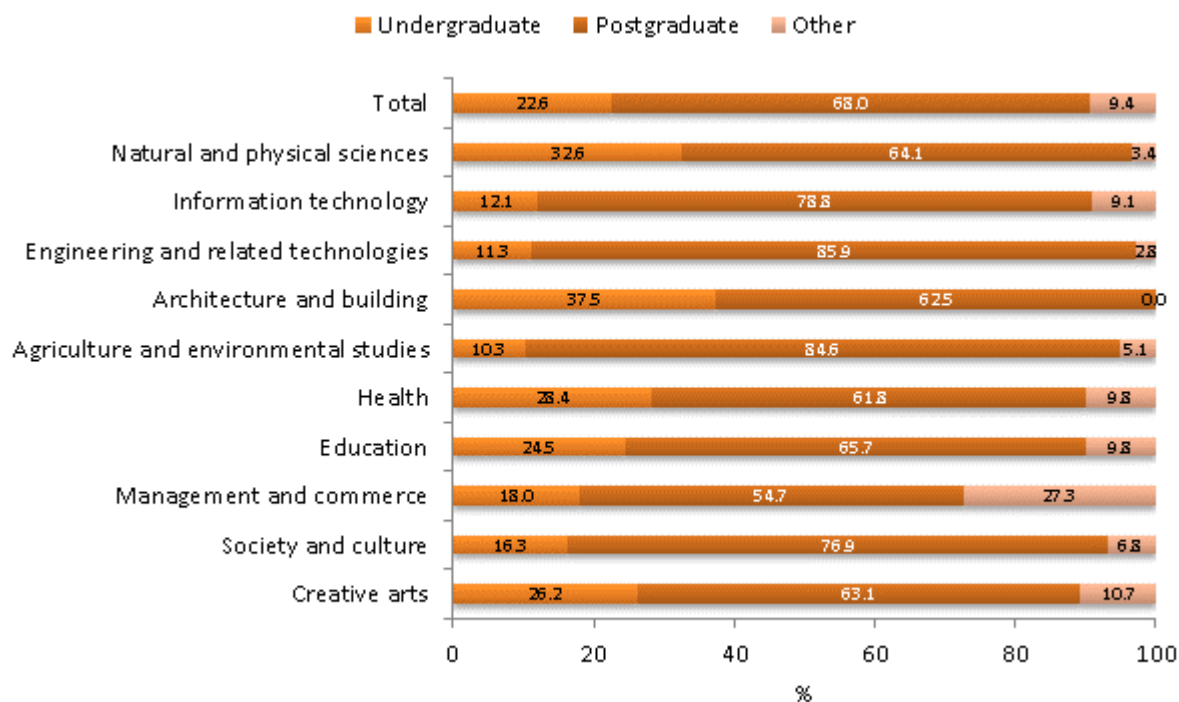


Figure 4. Level of further study, bachelor graduates, by broad field of education, 2012 (%)

Table 10. Completion of other qualification between 2009 and 2012, by degree level (% , n)

	Completed other qualification		Level of completed qualification				
	Yes	n	UG	PG	Other	TOTAL	TOTAL n
Natural and physical sciences	38.8	720	52.5	40.2	7.2	100	276
Information technology	25.3	198	25.0	41.7	33.3	100	48
Engineering and related tech.	15.1	332	34.0	44.0	22.0	100	50
Architecture and building	25.0	92	4.3	82.6	13.0	100	23
Agriculture and environ.	28.0	143	45.0	40.0	15.0	100	40
Health	28.8	942	17.9	66.4	15.7	100	268
Education	19.5	642	20.2	47.6	32.3	100	124
Management and commerce	33.5	942	22.8	52.4	24.8	100	311
Society and culture	43.8	1,606	27.7	60.6	11.7	100	698
Creative arts	33.3	504	30.5	49.7	19.8	100	167
Total	33.1	6,121	29.0	54.6	16.5	100	2,005

2.9. Other activities

Bachelor degree graduates who were unavailable for full-time study or any employment at the time of the 2012 BGS were asked to indicate the activities in which they were engaged (Figure 5). Graduates were permitted to indicate more than one activity. The most common activity for female graduates who were neither available for work nor full-time study was parenting, with 52.3 per cent listing this as an activity. Male graduates in the same situation were most likely to be travelling (33.3 per cent), which was also a relatively common activity for females (23.8 per cent).

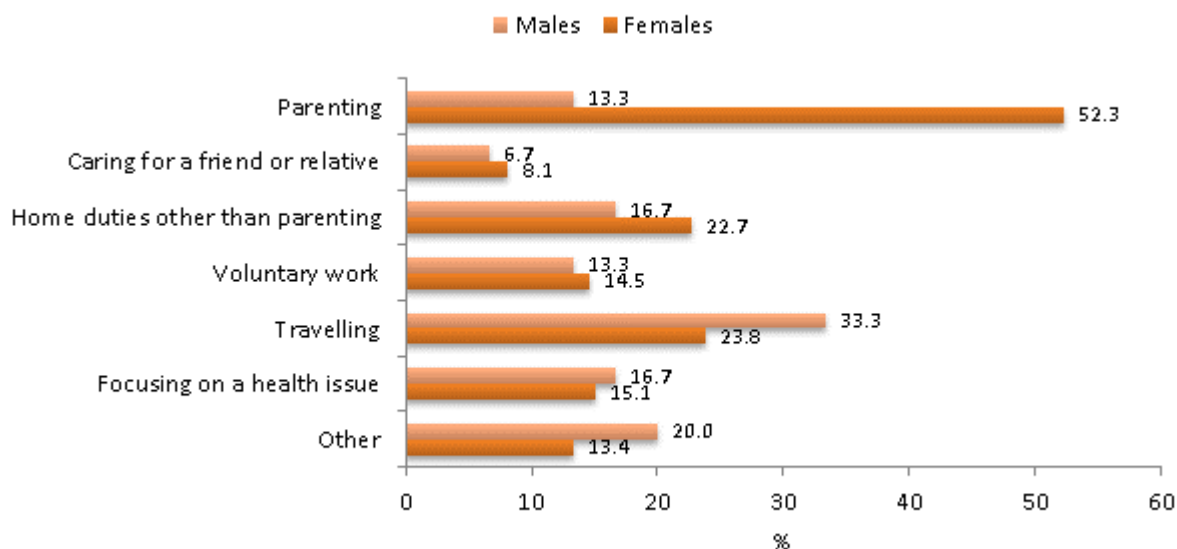


Figure 5. Activities of bachelor graduates unavailable for full-time study or any employment, by sex, 2012 (%)

3. Graduate Salaries

An overview of the median annual salaries of bachelor degree graduates in full-time employment is presented in Table 11. When interpreting these figures, it is important to bear in mind that graduate salary levels may potentially be influenced by myriad economic forces, and do not necessarily reflect the quality of graduates in terms of their academic results or employability skills. Following visual and statistical inspection of the survey data, salary figures below the 2nd percentile and above the 99th percentile were identified as outliers and excluded from the analysis.

At the overall level, full-time employed bachelor degree graduates earned a median salary of \$66,000 at the time of the 2012 BGS, representing an increase of 32 per cent since the 2009 AGS, at which point the median full-time graduate salary was \$50,000. By comparison, the level of consumer price inflation over this period was 8.2 per cent.² Graduates from the field of engineering and related technologies enjoyed the highest median salary for the period 2009 to 2012. Information technology graduates were also high earners. Creative arts graduates consistently earned the lowest median salary out of any field of education, but enjoyed relatively strong growth in the three years after the completion of their studies. Graduates from the health field enjoyed the strongest percentage growth in their median salary, while education graduates saw the lowest growth. Male graduates tended to out-earn female graduates three years after course completion, with the largest percentage wage gaps observed for graduates from the fields of agriculture and environmental studies (22.5 per cent), and health (21.2 per cent). The smallest such gap was observed for creative arts graduates (0.9 per cent). It should be noted that these aggregate results do not account for differences in occupational destinations between males and females, nor other factors that may affect earnings. As such, these figures do not necessarily imply unequal pay for equal work.

² Australian Bureau of Statistics (2012). *Consumer Price Index, Australia* (No. 6401.0). Canberra: Author.

Table 11. Median salary, bachelor graduates in full-time employment, by sex and broad field of education, 2009 and 2012 (\$'000, n, %)

	2009		2012		Growth	
	\$'000	n	\$'000	n	\$'000	%
Males						
Natural and physical sciences	50.0	73	65.0	117	15.0	30.0
Information technology	52.0	93	75.0	104	23.0	44.2
Engineering and related technologies	59.0	207	80.0	217	21.0	35.6
Architecture and building	50.0	25	70.0	30	20.0	40.0
Agriculture and environmental studies	50.0	29	73.5	35	23.5	47.0
Health	50.0	132	80.0	137	30.0	60.0
Education	52.0	87	65.0	100	13.0	25.0
Management and commerce	51.0	278	75.0	290	24.0	47.1
Society and culture	50.8	200	70.0	254	19.2	37.8
Creative arts	40.0	51	55.5	66	15.5	38.8
TOTAL	52.0	1,175	72.0	1,350	20.0	38.5
Females						
Natural and physical sciences	47.0	127	62.0	177	15.0	31.9
Information technology	55.0	31	67.0	41	12.0	21.8
Engineering and related technologies	56.3	44	75.0	48	18.7	33.2
Architecture and building	46.0	28	63.4	39	17.4	37.8
Agriculture and environmental studies	48.0	46	60.0	65	12.0	25.0
Health	47.2	536	66.0	461	18.8	39.8
Education	51.2	333	63.0	352	11.8	23.0
Management and commerce	48.0	375	65.4	418	17.4	36.3
Society and culture	49.0	530	65.0	668	16.0	32.7
Creative arts	40.0	142	55.0	214	15.0	37.5
TOTAL	48.8	2,192	64.0	2,483	15.2	31.1
Total						
Natural and physical sciences	48.0	200	62.9	294	14.9	31.0
Information technology	53.0	124	74.0	145	21.0	39.6
Engineering and related technologies	58.0	251	80.0	265	22.0	37.9
Architecture and building	48.0	53	68.0	69	20.0	41.7
Agriculture and environmental studies	48.0	75	62.0	100	14.0	29.2
Health	48.0	668	69.0	598	21.0	43.8
Education	52.0	420	63.6	452	11.6	22.3
Management and commerce	50.0	653	70.0	708	20.0	40.0
Society and culture	50.0	730	65.0	922	15.0	30.0
Creative arts	40.0	193	55.0	280	15.0	37.5
TOTAL	50.0	3,367	66.0	3,833	16.0	32.0

4. Course Review

As part of the 2012 BGS, bachelor degree graduates were invited to provide an indication of their likelihood of studying the same degree at the same institution if they were given the (hypothetical) opportunity to choose whether or not to repeat the course of study that led to the qualification they completed in 2008. The five-point response format consisted of categories labelled very unlikely, unlikely, neither unlikely nor likely, likely and very likely. As shown in Figure 6, graduates who were unemployed and seeking full-time employment at the time of the survey were the least likely to want to repeat the same degree at their graduating institution, with only 41.9 per cent indicating that they were either likely or very likely to do so given the opportunity. Graduates who were

working part-time whilst seeking full-time employment were similarly unlikely to want to repeat the same degree (45.9 per cent). Similar proportions of full-time employed graduates, graduates in full-time study and part-time employed graduates not seeking full-time employment indicated that they were either likely or very likely to repeat the same degree at the same institution. This result suggests that poor labour market outcomes can strongly influence graduates' perceptions of the utility of their higher education experience.

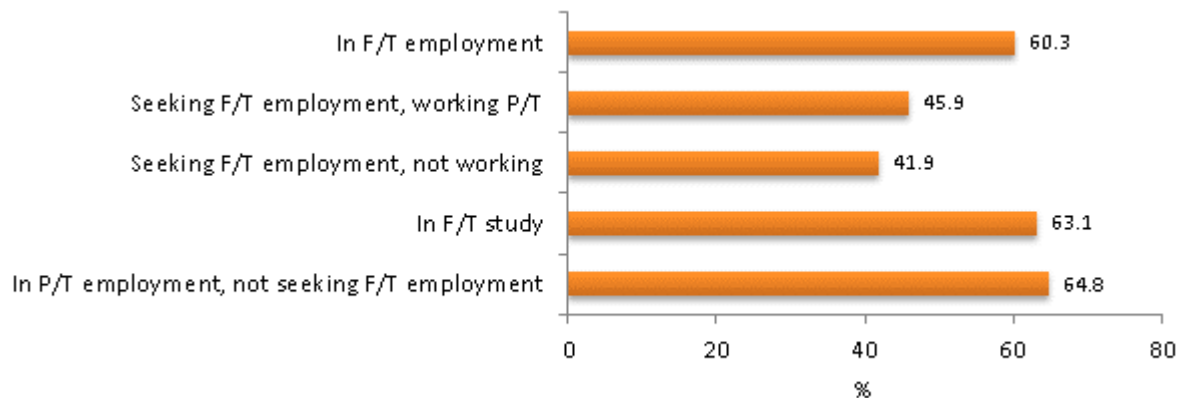


Figure 6. Likelihood of bachelor graduates studying the same degree at the same institution again if given the choice, likely/very likely, by labour market status, 2012 (%)

5. Postgraduate Outcomes

Up to this point, this report has focused exclusively on the destinations and salaries of domestic bachelor degree graduates. The following section gives a brief overview of the destinations and salaries of individuals who completed a postgraduate degree in 2008. Postgraduates constitute around 36 per cent of responses to the 2012 BGS (see Table A2 for details of this cohort).

From Table 12, it can be seen that 91.9 per cent of male postgraduates and 78.4 per cent of female postgraduates indicated that they were available for full-time employment at the time of the 2009 AGS. Unlike bachelor degree graduates, who tended to be more likely to be available for full-time employment three years after course completion (see Table 1), postgraduates were slightly less likely to be available for the full-time labour force three years after completing their degrees. This was especially true for female postgraduates and less so for males.

Of the postgraduates who were available for full-time employment, a considerable proportion had already secured full-time employment by the time of the 2009 AGS. As shown in Table 13, 89.4 per cent of male postgraduates and 88.0 per cent of female postgraduates were in full-time employment in 2009, which had increased to 95.0 per cent and 93.3 per cent respectively by 2012. Full-time employment rates tended to be higher for postgraduates than for bachelor degree graduates. It is important to note that postgraduates are typically older than bachelor degree graduates (see Table A2), and therefore tend to have more extensive work experience. This, along with their higher level of education, may contribute to their generally superior labour market outcomes.

Table 12. Main activity of postgraduates, by sex, 2009 and 2012 (% , n)

	Available for full-time employment (see Table 13)	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 any employment	TOTAL	TOTAL n
Males							
2009	91.9	2.7	3.3	0.0	2.1	100	1,459
2012	91.6	2.3	3.4	0.3	2.3	100	1,490
Females							
2009	78.4	3.5	14.2	0.0	4.0	100	2,172
2012	72.8	3.5	17.5	0.8	5.4	100	2,264
Total							
2009	83.8	3.2	9.8	0.0	3.2	100	3,631
2012	80.3	3.1	11.9	0.6	4.2	100	3,754

Table 13. Postgraduates available for full-time employment, by sex, 2009 and 2012 (% , n)

	In full-time employment	Seeking full-time employment, working part time or casual	Seeking full-time employment, not working	Total seeking full-time employment	TOTAL	TOTAL n
Males						
2009	89.4	5.1	5.5	10.6	100	1,341
2012	95.0	2.3	2.6	4.9	100	1,365
Females						
2009	88.0	7.5	4.5	12.0	100	1,703
2012	93.3	4.6	2.1	6.7	100	1,648
Total						
2009	88.6	6.4	4.9	11.3	100	3,044
2012	94.1	3.6	2.3	5.9	100	3,013

Full-time employed postgraduates were asked to rate the importance of the qualification they completed in 2008 to their main paid job (see Figure 7). Notably, when these figures are compared with those for bachelor degree graduates from corresponding fields in Figure 1, postgraduates were less likely than bachelor degree graduates to feel that their qualification was important to their main paid job. The one exception was postgraduates from the natural and physical sciences field. While postgraduates do enjoy strong full-time employment rates, these findings suggest that many do not believe themselves to be in jobs that fully utilise their specialised knowledge and skills. (The fact that 84.1 per cent of full-time employed postgraduates were not seeking other work at the time of the 2012 survey suggests that this situation is not necessarily seen as a negative one.) Postgraduates from the fields of natural and physical sciences, health and education were the most likely to be in relevant full-time employment three years after the completion of their studies.

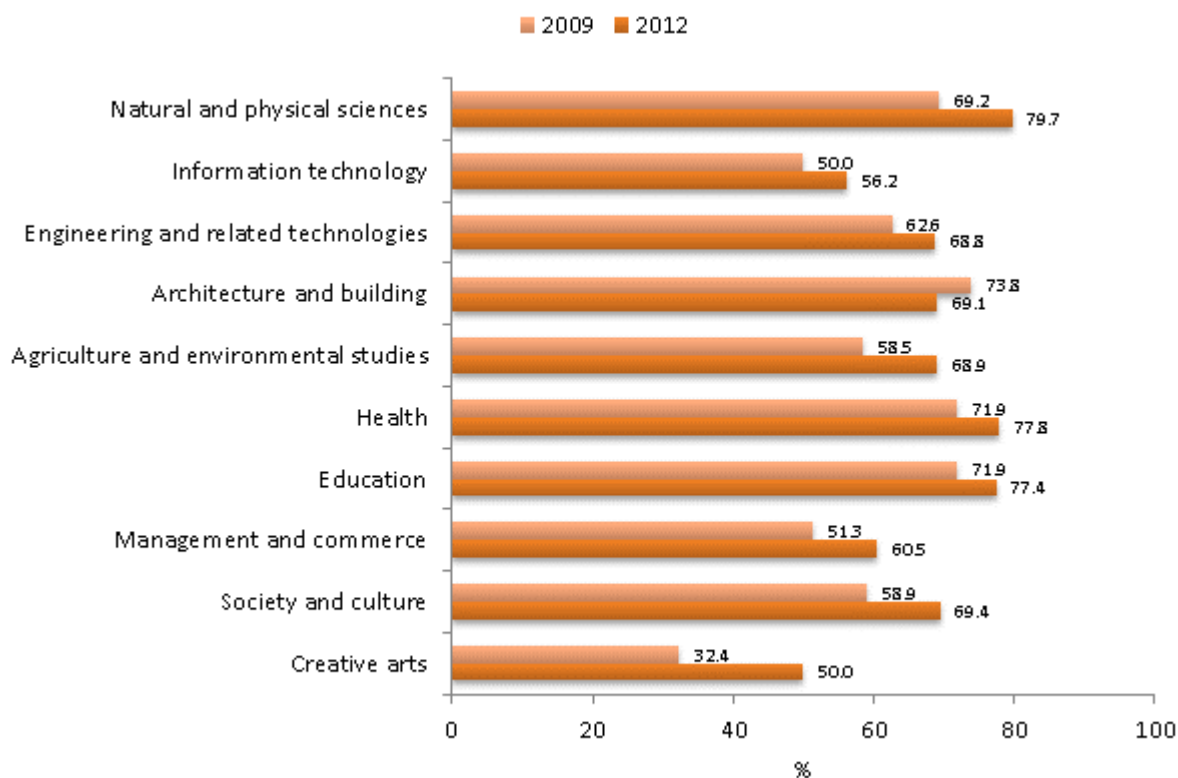


Figure 7. Qualification important to main paid job, postgraduates in full-time employment, by broad field of education, 2009 and 2012 (%)

Full-time employed postgraduates earned a median salary of \$85,000 at the time of the 2012 BGS, which represents an increase of 21.4 per cent in the three years following course completion (*cf.* 32.0 per cent for bachelor degree graduates), at which time their median salary was \$70,000 (see Table 14). Postgraduates from the field of management and commerce enjoyed the highest median salary in 2012, followed by postgraduates from the fields of engineering and related technologies, and information technology. Postgraduates from the architecture and building field earned the lowest median salary, but enjoyed relatively strong salary growth (37.5 per cent). Information technology postgraduates experienced the lowest median salary growth overall (7.7 per cent); this growth was negative for males (-4.7 per cent). The highest median salary earned by postgraduates of either sex in 2012 was observed for males from the management and commerce field (\$108,300), whereas the lowest was earned by females from the creative arts field (\$70,500). The widest gender pay gap in 2012 was observed for postgraduates from the engineering and related technologies field (23.1 per cent favouring males). Female postgraduates from the information technology field earned a higher median salary than their male counterparts in 2012.

Table 14. Median salary, postgraduates in full-time employment, by sex and broad field of education, 2009 and 2012 (\$'000, n, %)

	2009		2012		Growth	
	\$'000	n	\$'000	n	\$'000	%
Males						
Natural and physical sciences	62.0	42	89.5	42	27.5	44.4
Information technology	95.0	56	90.5	56	-4.5	-4.7
Engineering and related technologies	75.5	76	98.5	78	23.0	30.5
Architecture and building	56.5	32	73.0	32	16.5	29.2
Agriculture and environmental studies	63.0	23	90.0	16	27.0	42.9
Health	70.0	96	95.0	92	25.0	35.7
Education	66.0	113	80.5	116	14.5	22.0
Management and commerce	90.0	368	108.3	332	18.3	20.3
Society and culture	73.5	176	92.0	173	18.5	25.2
Creative arts	59.3	20	76.8	22	17.5	29.5
TOTAL	78.0	1,002	95.0	959	17.0	21.8
Females						
Natural and physical sciences	60.6	52	81.0	59	20.4	33.7
Information technology	66.5	18	94.0	11	27.5	41.4
Engineering and related technologies	80.0	23	80.0	22	0.0	0.0
Architecture and building	48.0	25	71.5	18	23.5	49.0
Agriculture and environmental studies	65.0	23	78.0	19	13.0	20.0
Health	65.0	237	80.0	205	15.0	23.1
Education	60.0	295	76.0	293	16.0	26.7
Management and commerce	72.2	278	92.3	260	20.1	27.8
Society and culture	65.0	289	80.0	289	15.0	23.1
Creative arts	60.0	41	70.5	44	10.5	17.5
TOTAL	65.0	1,281	80.0	1,220	15.0	23.1
Total						
Natural and physical sciences	61.0	94	83.0	101	22.0	36.1
Information technology	84.5	74	91.0	67	6.5	7.7
Engineering and related technologies	78.0	99	93.5	100	15.5	19.9
Architecture and building	52.0	57	71.5	50	19.5	37.5
Agriculture and environmental studies	64.5	46	82.0	35	17.5	27.1
Health	65.5	333	85.0	297	19.5	29.8
Education	62.0	408	80.0	409	18.0	29.0
Management and commerce	84.0	646	100.0	592	16.0	19.0
Society and culture	67.0	465	83.0	462	16.0	23.9
Creative arts	60.0	61	74.0	66	14.0	23.3
TOTAL	70.0	2,283	85.0	2,179	15.0	21.4

6. Graduate Outcomes Five-Years Out

At the time of the 2007 AGS, 83.9 per cent of male bachelor degree graduates and 73.2 per cent of female graduates reported that they were available for full-time employment (see Table 15). By 2012, 91.4 per cent of males were available for full-time work, as were 76.7 per cent of females. Although females were more likely than males to be in further full-time study, graduates of both sexes seemed to progress through their studies at a similar rate. Females were consistently more likely than males to be in part-time employment with no intention of seeking full-time work. The proportion of graduates in this category, males and females alike, increased notably in the years

after course completion. Female graduates were also more likely than males to be unavailable for further study or any employment, with this gap between the sexes increasing over time.

Table 15. Main activity of bachelor graduates, by sex, 2007, 2010 and 2012 (% , n)

	Available for full-time employment (see Table 16)	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 any employment	TOTAL	TOTAL n
Males							
2007	83.9	12.9	1.9	0.0	1.3	100	373
2010	89.2	8.9	0.8	0.3	0.8	100	380
2012	91.4	0.3	5.2	0.3	2.9	100	382
Females							
2007	73.2	16.5	8.2	0.0	2.1	100	818
2010	74.0	13.8	9.1	0.1	3.0	100	858
2012	76.7	3.8	11.6	0.7	7.1	100	859
Total							
2007	76.6	15.4	6.2	0.0	1.8	100	1,191
2010	78.7	12.3	6.5	0.2	2.3	100	1,238
2012	81.2	2.7	9.7	0.6	5.8	100	1,241

Of the graduates who were available for full-time employment, the proportion who had secured full-time employment increased strongly between 2007 and 2010, with more steady growth recorded between 2010 and 2012 (see Table 16). A highly similar trend was observed for graduates of both sexes. Similar proportions of males and females were seeking full-time employment in 2012, with females more likely to be working part-time and males more likely to be unemployed.

Table 16. Bachelor graduates available for full-time employment, by sex, 2007, 2010 and 2012 (% , n)

	In full-time employment	Seeking full-time employment, working part time or casual	Seeking full-time employment, not working	Total seeking full-time employment	TOTAL	TOTAL n
Males						
2007	85.9	8.3	5.8	14.1	100	313
2010	92.9	3.5	3.5	7.0	100	339
2012	94.3	2.0	3.7	5.7	100	349
Females						
2007	83.8	11.7	4.5	16.2	100	599
2010	92.4	3.9	3.6	7.5	100	635
2012	94.2	3.5	2.3	5.8	100	659
Total						
2007	84.5	10.5	4.9	15.4	100	912
2010	92.6	3.8	3.6	7.4	100	974
2012	94.2	3.0	2.8	5.8	100	1,008

A similar trend is observed for the proportion of full-time employed graduates in managerial roles. As seen in Table 17, the proportion of graduates so employed grew steeply between 2007 and 2010, and more gradually between 2010 and 2012. The proportion of graduates employed in professional roles trended downward over this five-year period, with many graduates likely making the transition to managerial positions once they had accumulated the necessary experience and skills.

Table 17. Broad occupation types, bachelor graduates in full-time employment, by sex, 2007, 2010 and 2012 (% , n)

	Males			Females			Total		
	2007	2010	2012	2007	2010	2012	2007	2010	2012
Managers	6.6	14.4	17.9	3.9	9.4	11.5	4.8	11.1	13.7
Professionals	72.9	71.9	68.7	73.4	75.2	73.8	73.2	74.0	72.0
<i>Total man. and prof.</i>	<i>79.5</i>	<i>86.3</i>	<i>86.6</i>	<i>77.3</i>	<i>84.6</i>	<i>85.3</i>	<i>78.0</i>	<i>85.1</i>	<i>85.7</i>
Technicians	3.9	3.2	3.3	2.3	2.7	1.6	2.8	2.9	2.2
Community workers	6.6	2.6	1.8	3.7	2.6	3.4	4.7	2.6	2.8
Clerical workers	5.8	5.8	6.7	14.4	9.6	9.2	11.4	8.2	8.3
Other occupations	4.2	2.2	1.5	2.3	0.5	0.5	3.0	1.1	0.8
TOTAL	100	100	100	100	100	100	100	100	100
TOTAL n	258	313	329	485	584	619	743	897	948

Full-time employed bachelor degree graduates earned a median salary of \$75,000 at the time of the 2012 BGS, representing a 66.7 per cent increase in the five years since 2007, at which point their median salary was \$45,000 (see Table 18). Graduates from the field of engineering and related technologies consistently earned the highest median salary for the period 2007 to 2012, echoing the results of the three-year survey. Although based on a relatively small number of observations, the field with the strongest salary growth over the five-year period under review was architecture and building (92.9 per cent). Relatively strong salary growth was also recorded for graduates from the fields of management and commerce, and engineering and related technologies. Graduates from the education field experienced the weakest median salary growth (57.6 per cent), in spite of being relatively well paid immediately after course completion. Graduates from the creative arts field consistently earned the lowest median salary and experienced relatively weak salary growth, being second only to education graduates in this regard. Males generally tend to out-earn females, both at the overall level and within specific fields of education.

Table 18. Median salary, bachelor graduates in full-time employment, by sex and broad field of education, 2007, 2010 and 2012 (\$'000, n, %)

	2007		2010		2012		Growth	
	\$'000	n	\$'000	n	\$'000	n	\$'000	%
Males								
Natural and physical sciences	48.5	21	65.0	23	72.8	36	24.3	50.1
Information technology	45.0	21	65.0	31	80.0	29	35.0	77.8
Engineering and related technologies	52.5	38	75.0	43	95.0	43	42.5	81.0
Architecture and building	†	7	†	7	†	6	†	†
Agriculture and environmental studies	†	3	†	3	†	5	†	†
Health	50.0	24	72.0	21	92.5	20	42.5	85.0
Education	48.0	22	62.5	24	76.0	23	28.0	58.3
Management and commerce	45.0	56	65.9	62	86.5	53	41.5	92.2
Society and culture	45.0	34	70.0	40	86.0	46	41.0	91.1
Creative arts	†	9	51.3	16	63.0	11	†	†
TOTAL	47.0	235	66.0	270	84.0	272	37.0	78.7
Females								
Natural and physical sciences	40.0	37	61.0	49	68.0	64	28.0	70.0
Information technology	†	9	84.0	11	†	7	†	†
Engineering and related technologies	51.5	14	70.5	12	87.0	15	35.5	68.9
Architecture and building	†	8	55.0	11	69.8	12	†	†
Agriculture and environmental studies	†	6	†	8	†	9	†	†
Health	44.0	102	60.0	83	75.0	91	31.0	70.5
Education	46.0	55	60.0	50	70.0	59	24.0	52.2
Management and commerce	44.0	94	60.3	104	75.0	106	31.0	70.5
Society and culture	42.7	92	58.4	130	70.0	143	27.3	63.9
Creative arts	36.0	23	52.0	41	59.0	44	23.0	63.9
TOTAL	43.9	440	60.0	499	71.0	550	27.1	61.7
Total								
Natural and physical sciences	42.8	58	62.0	72	69.5	100	26.7	62.4
Information technology	46.5	30	65.0	42	80.0	36	33.5	72.0
Engineering and related technologies	52.0	52	74.0	55	92.0	58	40.0	76.9
Architecture and building	42.5	15	66.5	18	82.0	18	39.5	92.9
Agriculture and environmental studies	†	9	60.0	11	65.0	14	†	†
Health	45.0	126	62.0	104	75.0	111	30.0	66.7
Education	46.0	77	60.5	74	72.5	82	26.5	57.6
Management and commerce	44.1	150	63.0	166	78.9	159	34.8	78.9
Society and culture	43.3	126	60.0	170	75.0	189	31.7	73.2
Creative arts	37.1	32	52.0	57	60.0	55	22.9	61.7
TOTAL	45.0	675	62.0	769	75.0	822	30.0	66.7

Table A1. Included higher education institutions, 2012

Three-year survey	Five-year survey
Australian Catholic University	Australian Catholic University
Australian College of Physical Education	Australian College of Theology
Australian College of Theology	Charles Darwin University
Australian National University	CQUniversity
Avondale College	Deakin University
Bond University	Edith Cowan University
Charles Darwin University	Flinders University
Charles Sturt University	James Cook University
CQUniversity	La Trobe University
Deakin University	Macquarie University
Edith Cowan University	Monash University
Flinders University of South Australia	Murdoch University
Griffith University	Queensland University of Technology
James Cook University	RMIT
La Trobe University	Southern Cross University
Macquarie University	Swinburne University
Melbourne College of Divinity	University of Ballarat
Monash University	University of New England
Murdoch University	University of New South Wales
Queensland University of Technology	University of Newcastle
RMIT	University of Notre Dame Australia
Southern Cross University	University of Queensland
Swinburne University of Technology	University of South Australia
University of Ballarat	University of Southern Queensland
University of Canberra	University of Sydney
University of Melbourne	University of Tasmania
University of New England	University of the Sunshine Coast
University of New South Wales	University of Western Australia
University of Newcastle	University of Western Sydney
University of Notre Dame, Australia	Victoria University
University of Queensland	
University of Southern Queensland	
University of Sydney	
University of Tasmania	
University of Technology, Sydney	
University of the Sunshine Coast	
University of Western Australia	
University of Western Sydney	
Victoria University	

Table A2. BGS respondent characteristics, 2012 (% , n)

	Three-year survey				Five-year survey	
	Bachelor degree		Postgraduate		Bachelor degree	
	%	n	%	n	%	n
Broad field of education						
Natural and physical sciences	11.6	786	4.6	177	11.3	141
Information technology	3.2	215	2.9	111	4.3	53
Engineering and related technologies	5.2	354	3.9	150	6.4	80
Architecture and building	1.5	99	2.4	93	1.9	24
Agriculture and environmental studies	2.3	156	1.6	63	1.5	19
Health	15.6	1,053	14.5	554	14.7	183
Education	10.6	714	18.9	723	10.0	125
Management and commerce	15.4	1,042	23.8	909	17.2	215
Society and culture	26.1	1,765	23.4	894	24.5	305
Creative arts	8.6	583	4.0	152	8.2	102
Means of financing study						
HECS paid upfront	21.3	1,438	12.3	467	33.0	406
HECS deferred some or all	72.5	4,893	29.5	1,123	63.0	776
International fee-paying student	1.3	87	3.2	120	0.8	10
Australian fee-paying student	4.9	333	44.1	1,679	3.2	40
APA or RTS research student	0.0	0	11.0	418	0.0	0
Main attendance type						
Mainly full time	81.4	5,500	36.4	1,391	81.2	1,003
Mainly part time	18.6	1,256	63.6	2,429	18.8	232
Main attendance mode						
Internal (on campus)	82.9	5,597	54.4	2,081	82.7	1,025
External (off campus)	9.2	622	34.2	1,306	8.5	106
Mixed mode (internal and external)	7.9	534	11.4	435	8.8	109
Sex						
Male	32.9	2,224	39.2	1,501	30.6	382
Female	67.0	4,536	60.6	2,320	68.9	859
Unknown	0.1	7	0.1	5	0.5	6
Age group						
Under 25	63.8	4,315	10.5	401	64.4	798
25 and over	36.2	2,449	89.5	3,419	35.6	442
Main language spoken at home						
English	90.0	6,076	86.4	3,293	91.9	1,141
Other	10.0	678	13.6	517	8.1	100
Disability identification						
Yes	2.9	193	2.6	100	3.3	41
No	97.1	6,556	97.4	3,714	96.7	1,203
Paid work during final year of study						
Yes	84.8	5,654	87.6	3,296	84.1	1,024
No	15.2	1,016	12.4	468	15.9	193



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