

The Gender Agenda

Gender Differences in Australian Higher Education

Gender is a key factor in outcomes of higher education in Australia.

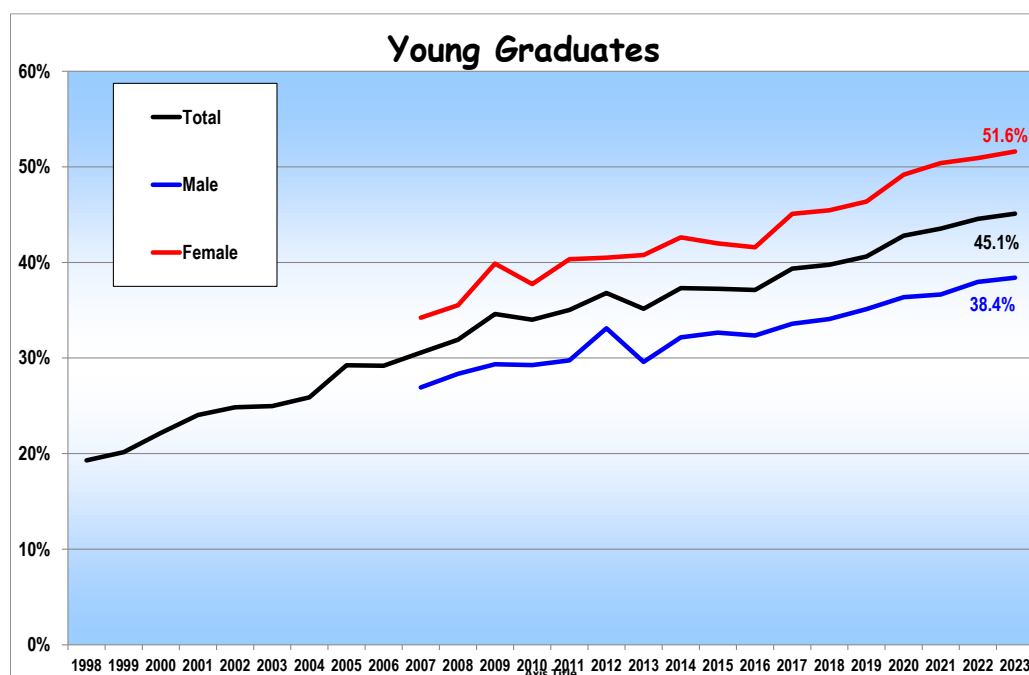
Attainment

The Australian Bureau of Statistics (ABS) collects data annually on education attainment, most recently in **Education and Work, Australia, May 2023**, released on 1 November 2023

<https://www.abs.gov.au/statistics/people/education/education-and-work-australia/may-2023>.

In 2023, 45.1% of 25 to 34 year olds have at least a bachelor degree because 51.6% of young women are graduates and 38.4% of young men are graduates.

Degree Qualifications and 25-34 Year Olds



The history of Australia setting, then scrapping, an attainment target, that, by 2025, 40% of all 25-34 year olds will have a qualification at bachelor level or above, is in **Attachment 1: Australian Government Policy**.

Attachment 2 Degree Qualifications and 25-34 Year Olds provides the detail. The proportion of 25-34 year old people reporting at least an undergraduate degree (undergraduate degree or postgraduate diploma or postgraduate degree) has increased from 19.3% in 1998 to 31.9% in 2008 (the 32% figure used by the then Education Minister in March 2009), to 37.3% in 2014, 39.8% in 2018, 40.6% in 2019, 42.8% in 2020, 43.5% in 2021, 44.5% in 2022 and 45.1% in 2023.

There are gender differences and, since 2007, ABS has collected data by gender. Attachment 2 also shows detail by gender.

Bachelor Degree Completions

There were 136,487 domestic Bachelor degree completions in 2022, on the basis of data from the Australian Department of Education and Training <https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2022-student-data>, released on 18 December 2023.

The gender agenda is in play here also.

Of 136,487 domestic Bachelor degree completions in 2022, 82,971 or 60.8% were women and 53,242 or 39.0% were men. This gender split means that 56% more women than men are completing Bachelor degrees.

Analysing by field of education, 78% of completing Australian undergraduates in Health and 77% of completing Australian undergraduates in Education in 2022 were women.

83% of completing Australian undergraduates in IT and 82% of completing Australian undergraduates in Engineering were men.

Australian Bachelor Degree Completions 2022

	Completions	Female %
Health (includes Medicine, Nursing)	32,602	78%
Society and Culture (includes Arts, Law)	29,169	69%
Business	20,610	47%
Science	15,664	56%
Creative Arts	10,672	62%
Education	9,940	77%
Engineering	7,632	18%
IT	4,300	17%
Architecture and Building	4,213	42%
Agriculture and Environment	1,682	56%
Total	136,487	61%

Compared with the overall figure that 61% of completing Australian undergraduates in 2022 were women, the table above lists, by field, the proportion of completing Australian undergraduates who are women.

In the table above, students undertaking double degrees are counted in both fields.

Research Higher Degree Completions

At the other end of the higher education experience, there were 6,544 research higher degree completions (PhD or Masters by Research) by Australian students in 2022, again from <https://www.education.gov.au/higher-education-statistics/student-data/selected-higher-education-statistics-2022-student-data>, released on 18 December 2023.

The gender agenda is in play here also. Of 6,544 domestic research higher degree completions in 2022, 3,610 or 55% were women and 2,922 or 45% were men. This gender split means that 24% more women than men are completing research higher degrees.

Analysing by field of education, 72% of Australian research higher degree completions in Education, 65% in Health, 63% in Society and Culture, 56% in Agriculture and Environment and 54% in Creative Arts were women.

70% of Australian research higher degree completions in Engineering, 63% in IT and 56% in Business were men.

Australian Research Higher Degree Completions 2022

	Completions	Female %
Society and Culture (includes Arts, Law)	1,570	63%
Science	1,569	50%
Health (includes Medicine, Nursing)	1,286	65%
Engineering	608	30%
Creative Arts	394	54%
Education	374	72%
Business	307	44%
Agriculture and Environment	200	56%
IT	149	37%
Architecture and Building	87	49%
Total	6,544	55%

Compared with the overall figure that 55% of Australian research higher degree completions in 2022 were women, the table above lists, by field, the proportion of research higher degree completions who are women.

NSW Higher School Certificate 2023

Choice of field of education can occur at a young age.

There were 76,839 candidates for the Higher School Certificate in NSW in 2023. 51.6% were female.

Detail on subject choices by gender for the NSW HSC in 2023 are at **Attachment 3: NSW Higher School Certificate 2023**.

Highlighted in the attachment is that 21% of HSC Physics candidates in 2023 are women. Only 4% of female HSC candidates in 2023 studied Physics.

Similarly, 34% of HSC Economics candidates in 2023 are women. Only 5% of female HSC candidates in 2023 studied Economics.

Are young female students turning away from the key subjects Physics and Economics at 15 or 16 years of age?

Conclusion

Gender is a key factor in outcomes of higher education in Australia. This is an important finding in its own right.

Now, 61% of Australian Bachelor degree graduates each year are women, 55% of new PhD and Masters by Research graduates are women.

45.1% of 25 to 34 year olds in Australia have at least a bachelor degree in 2023, because 51.6% of young women are graduates and 38.4 % of young men are graduates.

In any research on attainment targets for young men and women, field of education is important.

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9 January 2024

Australian Government Policy

Australia's then Deputy Prime Minister and Minister for Education, Employment and Workplace Relations, Julia Gillard, outlined on 4 March 2009 the Australian Government's response to the Bradley **Review of Australian Higher Education: Final Report**.

I announce today that our ambition is that by 2025, 40% of all 25-34 year olds will have a qualification at bachelor level or above. Not just to have enrolled in higher education, but to have completed an undergraduate degree. Today that figure stands at 32%.

Following change of government in Australia in September 2013, then Minister for Education Christopher Pyne in November 2013 appointed David Kemp and Andrew Norton to review the demand driven system.

In their **Report of the Review of the Demand Driven Funding System**

<https://www.education.gov.au/report-review-demand-driven-funding-system>, Kemp and Norton recommended dropping the 40% target: "The Department of Education estimates that the target of 40% of 25–34 year olds achieving at least bachelor-level education will be reached before 2025." Kemp and Norton noted: "Indeed, for women, the 40% attainment target had already been achieved by 2011. However, for men, attainment levels are around 30%."

Kemp and Norton recommended: "There should be no higher education attainment targets".

In 2023, 45.1% of 25-34 year olds have at least a bachelor degree.

Degree Qualifications and 25-34 Year Olds

The proportion of 25-34 year old people reporting at least an undergraduate degree (undergraduate degree or postgraduate diploma or postgraduate degree) has increased from 19.3% in 1998 to 31.9% in 2008 (the 32% figure used by the then Education Minister in March 2009), to 37.3% in 2014, 39.8% in 2018, 40.6% in 2019, 42.8% in 2020, 43.5% in 2021, 44.5% in 2022 and 45.1% in 2023.

Degree Qualifications and 25-34 Year Olds

2023	45.1%	2010	34.0%
2022	44.5%	2009	34.6%
2021	43.5%	2008	31.9%
2020	42.8%	2007	30.6%
2019	40.6%	2006	29.2%
2018	39.8%	2005	29.2%
2017	39.4%	2004	25.9%
2016	37.1%	2003	25.0%
2015	37.2%	2002	24.8%
2014	37.3%	2001	24.0%
2013	35.2%	2000	22.2%
2012	36.8%	1999	20.1%
2011	35.0%	1998	19.3%

There are gender differences and, since 2007, ABS has collected data by gender. In 2023, 45.1% of 25 to 34 year olds have at least a bachelor degree because 51.6% of young women are graduates and 38.4% of young men are graduates.

Degree Qualifications and 25-34 Year Olds

	Male	Female	Total
2023	38.4%	51.6%	45.1%
2022	38.0%	50.9%	44.5%
2021	36.6%	50.4%	43.5%
2020	36.4%	49.2%	42.8%
2019	35.1%	46.4%	40.6%
2018	34.1%	45.5%	39.8%
2017	33.6%	45.1%	39.4%
2016	32.4%	41.6%	37.1%
2015	32.7%	42.0%	37.2%
2014	32.2%	42.6%	37.3%
2013	29.6%	40.8%	35.2%
2012	33.1%	40.5%	36.8%
2011	29.8%	40.3%	35.0%
2010	29.3%	37.7%	34.0%
2009	29.3%	39.9%	34.6%
2008	28.3%	35.5%	31.9%
2007	26.9%	34.2%	30.6%

NSW Higher School Certificate 2023

Choice of field of education can occur at a young age.

There were 76,839 candidates for the Higher School Certificate in NSW in 2023. 39,681 (51.6%) were female, 37,108 (48.3%) were male, from the NSW Education Standards Authority at <https://educationstandards.nsw.edu.au/wps/portal/nesa/11-12/hsc/about-HSC/HSC-facts-figures/overview-HSC-students> .

The 20 most popular subjects are listed in the table. (The top 20 allows the inclusion of Physics and Economics).

NSW Higher School Certificate 2023: Top 21 Popular Subjects
% Female Candidates

Subject	Candidates	% Female
English Standard	32,026	50%
Mathematics Standard 2	31,394	52%
English Advanced	25,193	59%
Biology	19,601	64%
Business Studies	18,993	46%
Personal Development, Health and Physical Education	17,125	55%
Mathematics Advanced	16,615	47%
Modern History	10,600	49%
Legal Studies	10,407	65%
Chemistry	9,984	47%
Community and Family Studies	9,303	89%
English Studies	9,175	41%
Visual Arts	8,687	73%
Mathematics Extension I	8,533	40%
Studies of Religion 1	8,299	57 %
Physics	8,010	21%
Ancient History	6,793	56%
Industrial Technology	5,849	19%
Studies of Religion 2	5,776	63%
Economics	5,570	34%
Total	76,839	51.6%

Taking HSC Physics as a key concern from the table, 8,010 of 76,839 HSC candidates in 2023 (10.4%) studied Physics. These 8,010 Physics candidates included 6,292 (79%) males and 1,717 (21%) females. The 1,717 female candidates studying Physics were 4% of all 39,681 female candidates.

Similarly, 5,570 of 76,839 HSC candidates in 2023 (7.2%) studied Economics. These 5,570 Economics candidates included 3,657 (66%) males and 1,913 (34%) females. The 1,913 female candidates studying Economics were 5% of all 39,681 female candidates.

Are young female students turning away from the key subjects Physics and Economics at 15 or 16 years of age?