

Review of Australian Higher Education

**Submission by the Office for Women, Department of Families,
Housing, Community Services and Indigenous Affairs**

July 2008

The Office for Women welcomes the opportunity to contribute to the Review of Australian Higher Education. In making this submission the Office for Women refrains from advocating, defending or canvassing the merits of government policies or from promoting a particular policy viewpoint. The submission discusses trends and facts in Australian Higher Education.

Participation patterns and gender in higher education

In Australia, in 2006, women accounted for 54.8 per cent of all higher education students¹ and Indigenous women represented 65.8 per cent of all Indigenous students.² Despite the higher representation of women in higher education, women continue to be under-represented in higher degrees and post-graduate courses.³

Women's higher education study is traditionally concentrated in Health, Education and Society and Culture courses and there continues to be a wide gap between women and men enrolled in these fields of study. In 2006, nearly twice as many women as men were enrolled in Society and Culture courses. Women's enrolments in Health and Education courses outnumbered men's by just over 2.5:1 with the majority of women undertaking Nursing and Teaching courses.⁴ Conversely, in 2006, men outnumbered women in Information Technology and Engineering courses by over 4:1 and 5.5:1 respectively.⁵

Tertiary applications for 2008 indicate that the top ranking choices for female school leavers (with a Tertiary Entrance Rank of above 90) were Society, Culture and Creative Arts courses (27.0 per cent), Law (14.2 per cent) and Health (13.1 per cent). The highest proportion of their male counterparts favoured Engineering (21 per cent), Management and Commerce (17.2 per cent) and Society, Culture and Creative Arts (12.8 per cent).⁶

Outcomes from higher education – workforce participation, economic wellbeing and the Australian economy

The Organisation for Economic Co-operation and Development (OECD) recognises education as a major driving factor in increasing workforce participation of women in all membership countries, including Australia. Countries with a high representation of educated women have high female labour force participation rates.⁷

In Australia, higher educational attainment is positively associated with lower unemployment⁸ and women and men with lower educational attainment are more vulnerable to tough labour market conditions.⁹ Economic modelling research in Australia shows that education interacts with gender to predict workforce participation and subsequent economic wellbeing.

Specifically, women's labour force participation is more dependent upon higher education than men's and women with a degree or higher increase their probability of workforce participation by 20 percentage points.¹⁰ These results are consistent with those obtained from other research,^{11,12,13} which also highlight the greater impact of educational attainment on women's workforce participation than men's.

In Australia, seven out of every 10 new jobs created in the years 1990 to 2006 went to tertiary educated applicants and in 2006, nearly one in four working women held a university degree.¹⁴ Education is closing the gender gap in labour force participation and between 1990 and 2003, 590,800 (42.9 per cent) of all new jobs went to female graduates and 373,300 (27.3 per cent) went to male graduates.¹⁵

In 2007, of all Bachelor graduates looking for full time employment, 85.6 per cent of men and 83.9 per cent of women were in full time employment. A further 11.6 per cent of female graduates looking for full-time work were employed either on a part-time or casual basis and the remaining 4.6 per cent were not working.¹⁶ Overall, the full-time employment prospects were least favourable for graduates in the fields of study where there is a high concentration of female graduates. Exceptions to this are Nursing and Education graduates. Ninety seven per cent of all Nursing graduates and 80.2 per cent of education graduates were employed full-time.¹⁷

The impact of higher education on lifetime earnings is also greater for women than men in Australia and overall, the economic return from education is lower for women than men.¹⁸ Female graduates tend to work fewer hours and earn less than the equivalent for men, and educated women and men in Australia do not experience similar levels of economic wellbeing.¹⁹ There are differences in salaries between female and male graduates. In 2007, the median average starting salary for female graduates was 93.3 per cent of that for male graduates.²⁰ This trend has been consistent over the past decade with the greatest disparity observed in private industry.²¹

In 2005, across all levels and fields of study, men's average full-time weekly earnings were substantially higher than women's.²² While newly graduating women with qualifications in Education, and employed full-time, experienced the second highest average weekly earnings, graduates of Creative Arts, Health and Society and Culture courses - traditionally female dominated - experienced relatively low average full-time weekly earnings.²³

The trend continues through career paths and overall predominantly female occupations such as Nursing and Teaching have lower average weekly earnings (\$1,000 and \$1,096 respectively) than traditional male occupations such as Civil Engineering and Architecture (\$1,342 and \$1,227 respectively).²⁴

OECD research indicates that educational attainment explains a negligible portion of the gender pay gap experienced in most OECD countries, including Australia, and suggests that factors such as occupational segmentation play a larger role.²⁵ Therefore, gender pay inequity experienced by female graduates may be reflective, to some extent, of occupational segmentation as the majority of women graduates continue to be employed in traditionally female occupations.

Women's workforce participation and economic wellbeing are important to the Australian economy and this is highlighted in a 2006 report to the House of Representatives Standing Committee on Family and Human Services. The report, *The Importance of Women's Workforce Participation*,²⁶ describes how economic modelling predicts both short and long term boosts to the Australian economy as women's workforce participation increases. Conversely, the social and economic cost of reduced workforce participation or early withdrawal from the labour force is detrimental to the economy, particularly in terms of lost superannuation and subsequent income support payments.²⁷

Implications of gender segmentation in higher education and workforce participation on the Australian economy

There are currently several areas of recognised skills shortages listed in the Australian Government Skills in Demand List. These include Accounting, Architecture, Surveying, Information Technology, Allied Health, Nursing and Trades.²⁸ Most of the occupations listed are highly gendered and with the exception of Nursing, most are male dominated occupations. While it remains unclear to what extent the gendered segmentation of higher education and the labour force contribute to the current skills shortage in Australia (in respect to hindering labour market flexibility), it is evident that higher education plays a critical role in addressing skills shortages.²⁹

A number of strategies have been developed to increase the number of women in the Information Technology industry following the release of the paper *Women in IT-what are the barriers?* These strategies include sponsorship for the establishment of the Success Retention Training Initiative, which aimed to address retention of women in the Information Technology sector, and sponsorship for the 10th Australian Women in Information Technology conference in 2006.³⁰ Between 2003 and 2006, the number of Information Technology students has decreased, but enrolments by women have fallen even faster (44 per cent) than enrolments by men (31 Per cent).³¹

Information Technology related occupations continue to be highly gender segregated and statistics indicate that higher education in Information Technology is male dominated.³²

Equity programs for non-traditional courses

The Australian Government previously recognised women as educationally disadvantaged in non-traditional areas of study and designated them as an equity group with funding for the strategy provided under the Higher Education Equity Program (HEEP). Targets had been set at 40 per cent participation in non-traditional fields of study, with the exception of Engineering which had a target of 15 per cent.³³

With the exception of Information Technology courses, the targets were met or exceeded and in 2006, women accounted for:

- 15.4 per cent of Engineering enrolments;
- 52.4 per cent of Natural and Physical Science enrolments;
- 41.1 per cent of Architecture and Building enrolments;
- 50.0 per cent of Agricultural, Environmental and related studies enrolments, and
- 48.6 per cent of Management and Commerce enrolments.

In 2004, a report on the status of equity groups concluded that women in the fields of Engineering and Information Technology should be retained as an equity group, with targets of 40 per cent participation.³⁴ However, following a full review of the Higher Education Equity Support Program as part of the *Backing Australia's Future* reforms, women in non-traditional areas of study were no longer considered an equity group.

Under the current Higher Education Equity Support Program (HEESP), universities may use program funding to assist in overcoming educational disadvantage associated with gender. This may include women in non-traditional areas of study.³⁵ Despite this, the number of commencing female students in non-traditional areas of study decreased by 4.6 per cent from 46,788 in 2003 to 44,657 in 2006. The total number of female students in non-traditional areas of study decreased from 139,827 students in 2003 to 134,024 students in 2006.³⁶

Equity groups and higher education

Five equity groups continue to be targeted by for equity planning on the basis of their history of relative disadvantage in their access to education.³⁷

- Students with a disability;
- Students from a non-English speaking background;
- Students from regional and remote areas;
- Students from low socio-economic backgrounds; and
- Indigenous students.

Between 2003 and 2006, student commencements have increased for three equity groups - women with a disability, from regional areas and those from low socioeconomic backgrounds. The largest increase was for women with disability, an increase of 17.7 per cent.³⁸ However, over the same period, numbers of commencing female students from non-English speaking backgrounds and from remote areas decreased.

The Department of Education, Employment, and Workplace Relations (DEEWR) calculates performance indicators for higher education across all equity groups. An examination of participation ratios for all equity groups indicates that most equity groups are underrepresented in higher education (See Table 1). The exception is students from non-English speaking backgrounds and in this group women are not well represented.³⁹ As shown in Table 1, equity in participation of women from low socio-economic backgrounds and from regional or remote areas has worsened over time.

Table 1: Participation ratios, domestic higher education students by equity group, 2003-2006 (Ratios of < 1 indicate inequity, ratios of = 1 indicate equity)

Year	Low SES		Non-English Speaking Background		Disability		Regional		Remote	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
2003	0.34	0.41	0.85	0.70	0.42	0.47	0.70	0.81	0.51	0.62
2004	0.33	0.40	1.18	0.94	0.44	0.48	0.69	0.80	0.49	0.60
2005	0.32	0.40	1.15	0.91	0.46	0.52	0.67	0.79	0.46	0.58
2006	0.32	0.41	1.10	0.86	0.47	0.52	0.67	0.79	0.44	0.56

Source: Students, Selected Higher Education Statistics, Department of Education, Employment and Workplace Relations, unpublished data.

Statistics for participation of Indigenous men and women in higher education indicate that participation rates are slightly higher for women than for men.⁴⁰ Just over two per cent of Indigenous women have attained higher education to degree level and 1.8 per cent attained diplomas.⁴¹ Overall, the number of Indigenous students in higher education would need to double for equity to be achieved between Indigenous and non-Indigenous students.⁴²

Patterns of higher education segmentation are similar for Indigenous students when compared to non-Indigenous enrolments. In 2000, 65.3 per cent of all Indigenous students were female with main fields of study being Education, Health and Social Science courses (83.5 per cent, 73.7 per cent and 64.2 per cent respectively) while men dominated in Science courses (65.51 per cent).⁴³

Conclusion

Higher education plays an important role in the economic wellbeing of individuals and the Australian economy. Gender segmentation in higher education courses reflects, and contributes to, occupational segmentation in the Australian workforce and contributes to gender pay inequity. Many areas of recognised skills shortage in Australia are in traditionally male orientated professions.

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