

Using Workplace Gender Equality Agency Statistics for Universities

The [Workplace Gender Equality Agency \(WGEA\)](#)¹ collects nation-wide data every year from organisations with more than 100 employees. Organisations must report on the total number of employees by gender, employment category (managers and non-managers differentiated across the eight ANZSCO major occupational categories: professionals, technicians and trades, community and personal service, clerical and administrative, sales, machinery operators and drivers, labourers), mode of employment (permanent, fixed-term or casual), working-time arrangement (full-time, part-time or casual) and salary. [Data for 2017](#)² covered 11,000 employers and 4 million employees across Australia. Individual employee reports are collated and published as part of the WGEA's [industry profiles](#).³ These industry profiles cover the [19 ANZSIC industry divisions](#)⁴ with multiple sub-divisions in each category. University employees are grouped under the '[Tertiary-Education](#)'⁵ dataset which is a sub-category of 'Education and Training'. In 2017, the 'Tertiary Education' sub-division comprised 85 organisations, both university and non-university providers, with a total 232,792 employees.

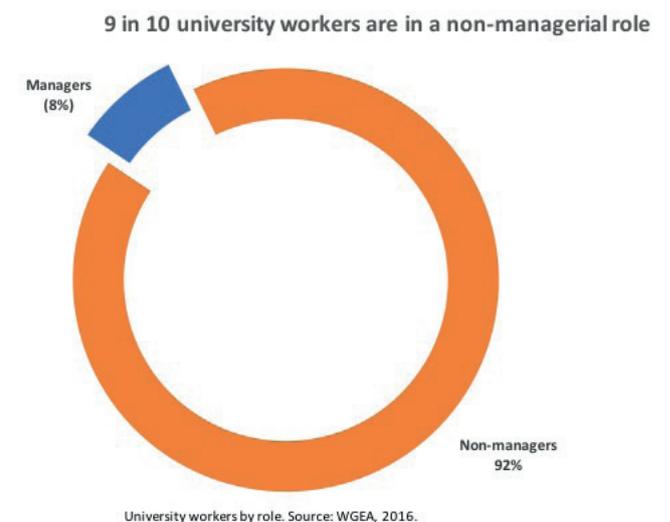
One of the obvious difficulties of using the WGEA industry profiles for studying employment precarity and job insecurity for university employees is that more than half of the organisations included in the dataset are non-university providers. As part of our project studying the development and implementation of the Scholarly Teaching Fellows (STFs) as a new category of academic employment, we made a special data request to the WGEA to access data for universities. Once our request was approved, we were able to analyse the university sector data from the WGEA's collated non-salary public dataset of reporting organisations. This is the same as the public data that can be accessed by anyone directly from the WGEA's website, but presented in a form that makes it easier to perform statistical analysis across organizational categories and industry sub-divisions.

Our analysis is based on this university-specific subset of the WGEA public data. The dataset on which our

analysis is based is for the financial year 2015–2016 and comprises 42 universities that reported to the WGEA for that year. The full list of reporting universities included in the dataset can be found in the Appendix.

Observations and trends from WGEA data on universities

University employees by gender and occupational category



◇ 91% of employees in 'Tertiary Education' worked at universities in 2016

There were 205,727 university employees in 2016. This was from a total of 226,885 'Tertiary Education' employees across 91 organisations for that year.

◇ Women made up 58% of the university workforce.

The ratio of women employed at universities was higher than the workforce average of 50.6% in 2016 recorded by the Australian Bureau of Statistics (ABS). ([ABS Survey 6306.0, 2016](#)⁶).

◇ 8.3% of the university workforce were in managerial roles

Within the university workforce 17,101 employees were in managerial roles (including CEOs).

◇ **91.7% of the university workforce were in non-managerial roles.**

Within the university workforce, 188,626 employees, were in non-managerial occupational categories.

◇ **Women made up 54% of non-managerial employees, but only 45% of university managers.**

◇ Within the non-managerial categories, **Professionals made up three-fifths of the workforce (59.7%)** while **Clerical & Administrative staff were the next largest occupational category making up more than quarter of the workforce (27.4%)**. Together, these two non-managerial occupational categories account for the largest portion of university staff (87% combined).

Casualisation

◇ **Employees in casual employment were the largest group among the three reported categories (permanent, fixed-term and casual).**

In 2016, 36% of university employees were in permanent employment, 21% were on fixed-term contracts and 43% were on casual contracts.

◇ **43% of all university employees work on casual contracts**

There were 87,805 casual employees across all occupational categories in 2016.

◇ **47% of non-managerial university employees work on casual contracts**

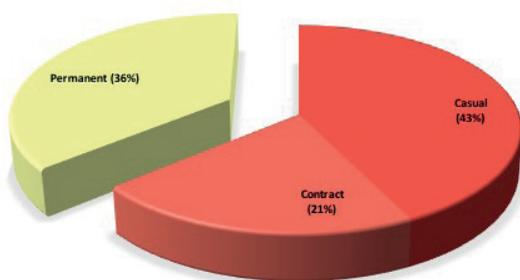
Of the total 87,805 casual employees, the vast majority—87,734—were in non-managerial occupational categories. The proportion of casual employees across all managerial occupational categories was 0.42%.

◇ **Almost three-fifths (59%) of all casual employees were women.**

By occupational category, the highest ratios of casual employees were amongst Professionals (45% casual), Community and Personal Service workers (61% casual), and Clerical & Administrative staff (51% casual).

Insecure work

Almost 2 in 3 university workers are in insecure work



Insecure workers at Australian universities by contract. Source: WGEA, 2016.

◇ **Almost 2 in 3 university workers are in insecure work.** The proportion of university workers in inse-

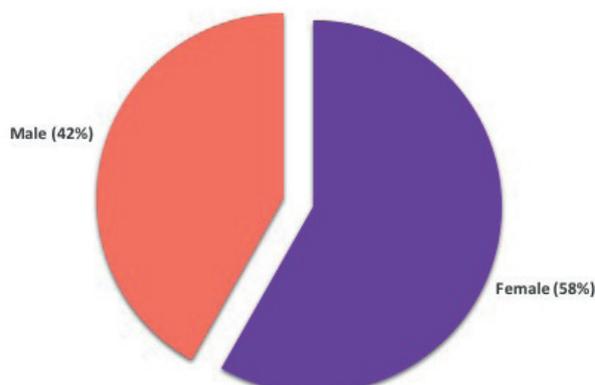
ecure work was calculated by adding employment data for casual and contract staff together.

◇ **64% of all university employees are in insecure work arrangements.**

◇ **66% of non-managerial university employees are in insecure work arrangements of all employees.**

◇ **Women were around three-fifths (58%) of all employees in insecure work.**

Women are 1.5 times more likely to be in insecure work



Insecure workers at Australian universities by gender. Source: WGEA, 2016.

Discussion: using the WGEA's data for universities

Filtering the WGEA Tertiary Education data for universities confirms that university employees comprise the majority of the Tertiary Education sector's workforce. Even though universities constitute less than half of all providers in the Tertiary Education sector, almost 92% of all employees in the sector work at a university. While many reporting agencies note that non-university providers (NUHEPs) have a higher proportion of casual staff, the size of the university workforce within the tertiary education sector demonstrates the significant influence of universities on statistics about the sector.

The statistical detail of the WGEA data is also significant. Figures for casual staff count each individual employee (headcount) as opposed to the equivalencies used by other government agencies. The use of the WGEA data to assess the extent of casualization among academic staff, however, is not straightforward. The WGEA organizes the employment data across the eight major occupational categories used by ANZSCO. This makes it difficult to isolate the exact number of academic staff in each mode of employment.

Comparing the WGEA and DET data

The Department of Education and Training (DET) publishes the most comprehensive collection of statistics about university employees,⁷ but it does not collect or publish data on the actual number of casual employees in the sector. While universities provide DET with numbers of

permanent staff and fixed-term staff, the published figures for casual staff are an aggregated number in the form of 'Full-time Equivalence' (FTE). The calculation of FTE for casuals differs to the calculation of FTE for fixed-term staff in that it is not based on the proportion of a full-time workload undertaken by the casual staff member, but on a set of formulas that differ according to the activity undertaken. (See the [DET formulas used to calculate FTE](#).⁸) The complexity of aggregating and calculating FTE data for casual staff means that not only is it extremely difficult to accurately estimate the actual number of people doing the work, but the actual hours of work that casuals do is neatly hidden within a set of formulas.

The headcount of casual university employees collected by the WGEA fills a gap in the data collected by the DET. In [2016, DET data](#)⁹ for casual FTE was 22,699. This does mean 22,699 people, but 22,699 aggregated equivalencies that could each comprise any number of casual staff above one. A comparison of the two sets of data (WGEA and DET) for 2016 shows that for each FTE recorded by the DET (22,699), there were at least 4 casual employees recorded in the WGEA headcount figure of casual staff (87,805). This indicates that the FTE figure for casual staff is a significant underestimation of the actual number of casual employees in the sector.



This issue has been addressed by the National Tertiary Education Union (NTEU) in numerous submissions. A [Briefing Note on the rise of insecure work](#)¹⁰ published in 2016 looked specifically at the WGEA data and estimated (based on the figures for 2015), that 'WGEA data means that there are approximately 4.2 casual employees per FTE'. This ratio was used to calculate an estimate of casual staff for each of the years from 2000 to 2015 by multiplying the DET's figure for casual FTE by a factor of 4. The

estimates for casual employee numbers were visualized in a graph alongside the published data for permanent and fixed-term staff to show university workforce movement by employment contract. The graph shows that while the estimated number (headcount not FTE) of casual staff was roughly the same as that for permanent staff in 2000 (51,040 and 51,480 respectively), by 2015, there were around 10,000 more casual staff than permanent staff (81,684 and 72,667 respectively). Over that same period, the number of fixed-term employees almost doubled (from 25,150 in 2000 to 45,825 in 2015).

The estimates given by the NTEU show that by 2015, casuals were the single largest group of university employees, around 40%, with permanent staff accounting for 35% and fixed-term staff 25%. These ratios for permanent, fixed-term and casual staff correspond closely to the ratios that we calculated for each mode of employment in our analysis of the 2016 WGEA data above.

Counting casual academics

The WGEA data is collected and organised across [ANZSCO's eight major occupational categories](#).¹¹ While the first occupational group 'Managers' is differentiated across the sub-major groups in that category, this is not the case for any of the other non-managerial occupations. The major ANZSCO occupational categories used by WGEA are listed below:

1. Managers
2. Professionals
3. Technicians and Trades Workers
4. Community and Personal Service Workers
5. Clerical and Administrative workers
6. Sales Workers
7. Machinery Operators and Drivers
8. Labourers

Academic staff are four levels down from the ANZSCO major occupational group 'Professionals' in the unit group '[2421 University Lecturers and Tutors](#)'.¹² While we can assume that academic staff would constitute the majority of university employees in the sub-major group 'Education Professionals', not all employees counted in this category would be academic staff. In addition other sub-major groups potentially counted in the 'Professionals' category include Business, Human Resources and Marketing Professionals, ICT Professionals, and Legal, Social and Welfare Professionals. This makes it difficult to predict with any degree of accuracy how closely the number of casual staff in the 'Professionals' category corresponds to the number of casual academics.

Appendix: List of universities included in the dataset

The following is a complete list of the universities that reported workforce data to the WGEA for 2015–2016 and included in the dataset used for this analysis.

- ◇ Australian Catholic University Limited
- ◇ Australian National University
- ◇ Avondale College Limited
- ◇ Bond University Limited
- ◇ Central Queensland University
- ◇ Charles Darwin University
- ◇ Charles Sturt University
- ◇ Curtin University of Technology
- ◇ Deakin University
- ◇ Edith Cowan University
- ◇ Federation University Australia
- ◇ Flinders University
- ◇ Griffith University
- ◇ James Cook University
- ◇ La Trobe University
- ◇ Macquarie University
- ◇ Monash University
- ◇ Murdoch University
- ◇ Queensland University of Technology
- ◇ Royal Melbourne Institute of Technology
- ◇ Southern Cross University
- ◇ Swinburne University of Technology
- ◇ The University of Adelaide
- ◇ The University of New England
- ◇ The University of New South Wales
- ◇ The University of Newcastle
- ◇ The University Of Notre Dame Australia
- ◇ The University of Queensland
- ◇ Torrens University Australia Limited
- ◇ University Of Canberra
- ◇ University Of Melbourne
- ◇ University of South Australia
- ◇ 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 Wollongong
- ◇ Victoria University
- ◇ Western Sydney University
- ◇ Batchelor Institute Of Indigenous Tertiary Education

Endnotes

- 1 <https://www.wgea.gov.au/>
- 2 <https://www.wgea.gov.au/media-releases/australia%E2%80%99s-latest-gender-equality-scorecard-released-1>
- 3 <http://data.wgea.gov.au/industries/1>
- 4 [http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1292.0Main+Features12006%20\(Revision%202.0\)?OpenDocument](http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/1292.0Main+Features12006%20(Revision%202.0)?OpenDocument)
- 5 <http://data.wgea.gov.au/industries/203>
- 6 <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Lookup/6306.0Main+Features1May%202016?OpenDocument>
- 7 <https://www.education.gov.au/higher-education-statistics>
- 8 <http://heimshelp.education.gov.au/sites/heimshelp/resources/glossary/pages/glossaryterm?title=Full-Time%20Equivalence%20FTE%20for%20a%20Full%20Year>
- 9 <https://docs.education.gov.au/node/46156>
- 10 <https://www.nteu.org.au/women/article/The-rising-tide-of-insecure-employment-at-Australian-universities-18365>
- 11 <http://www.abs.gov.au/ANZSCO>
- 12 <http://www.abs.gov.au/AUSSTATS/abs@.nsf/Latestproducts/1220.0Contents02013,%20Version%201.2?opendocument&tabname=Summary&prodno=1220.0&issue=2013,%20Version%201.2&num=&view=>