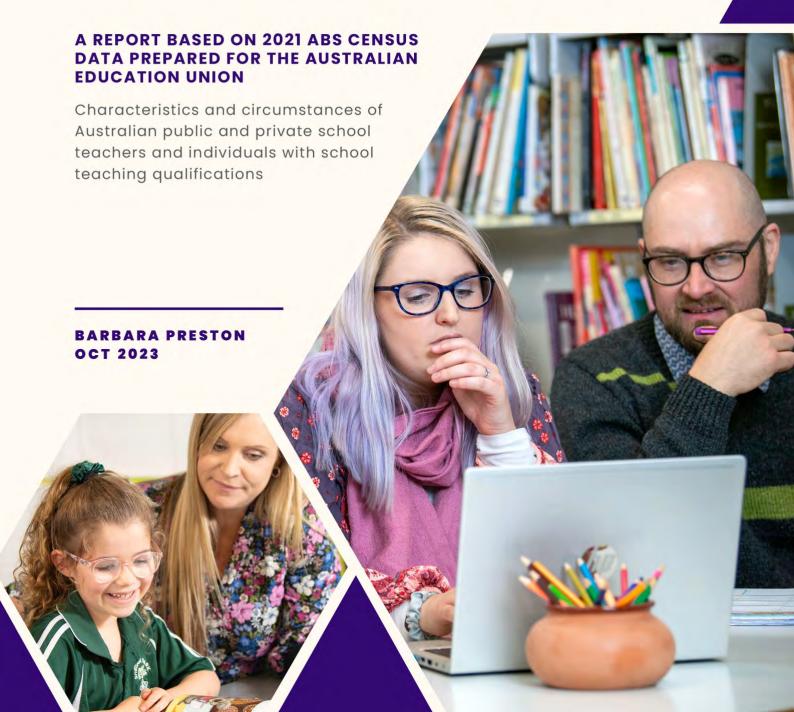
THE AUSTRALIAN SCHOOL TEACHING WORKFORE



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Barbara Preston Research

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Introduction

Data from the ABS Census can illuminate many aspects of the school teaching workforce that are obscure in the common collections of administrative data. The data and analyses in this report highlight a number of issues that are important for policy in areas such as teachers' conditions and salaries, workforce planning, and school funding. Some of the data and analyses are summarised below. In addition, an Appendix: Technical Notes outlines the nature of the data and discusses shortcomings in Census data arising from classifications and coding, providing responses that are applied in the report. The responses include the creation of custom classifications (especially for the profession of school teachers and the qualification of initial school teacher education) and adjustments of data to account for miscoding by ABS (the differentiation of public and private school teachers).

Summary of findings

Part A is concerned with Australian school teachers and their characteristics. Analyses include: comparisons with the managerial and professional workforce and the Australian workforce as a whole; age profiles by sex, sector, labour force status and over time; and Indigenous (and non-Indigenous) teachers by sector, age and remoteness (with reference to data on Indigenous students). Highlights from this part include:

- Compared with the age profile of the Australian workforce as a whole, and most other
 professions, the age profile of the teaching profession has had major peaks and troughs, which
 have changed over the decades since the 1960s. This has had major implications for the
 demand for new teachers and other aspects of teacher policy (taken up in Part C. Workforce
 planning for new teachers).
- The labour force status (whether working full-time, part-time or away from work on leave) of female teachers forms a distinctive profile by age, with substantial troughs and peaks. In contrast, the labour force status of male teachers changes little through the age ranges from recruitment to retirement. This data contributes to the evidence that female teachers' disproportionate child-rearing responsibilities need to be compensated for in a range of policy areas, including the encouragement of greater male participation in childrearing as well as compensation for female loss of income and professional experience. Relevant policy fields for school authorities and the Commonwealth Government include leave, renumeration, promotions, childcare and superannuation.
- Indigenous teachers made up a larger proportion of the public sector teaching workforce than the private sector workforce in 2021 (1.8% and 1.0% respectively). Younger teachers were more likely to be Indigenous than older teachers, and Indigenous teachers were a much larger percentage of both the public and private sectors in remote and very remote regions. Indigenous students are a much smaller percentage in the private sector, there are fewer Indigenous students for every Indigenous teacher in the private sector relative to the public sector.

Part B is concerned with teachers' working and living conditions. The analyses are limited to hours of work; income (salaries); teachers in localities defined by remoteness and socio-economic status; and

housing tenure (home-ownership status) of Indigenous and non-Indigenous teachers. Highlights from this part include:

- Teachers employed full time in 2021 worked very long hours on average. Those who worked the longest hours were aged from their mid-40s to 60s. Female classroom teachers worked longer hours than males at all ages. Principals worked much longer hours than classroom teachers, though more than half of all full-time classroom teachers aged from their mid-40s to 60s averaged 45 hours or more a week. Teachers in remote and very remote regions tended to work the longest hours, teachers in major cities the shortest (but still very long). Teachers in public and private schools tended to work similar hours, as did primary and secondary teachers.
 - School teachers worked extraordinarily long hours compared with workers in comparable occupations. They worked particularly longer hours than individuals with school teaching qualifications working full-time in other occupations. Similarly, full-time school teachers with highest qualifications in selected fields of study worked much longer hours than individuals in other occupations with highest qualifications in the same fields of study.
- The incomes of public sector classroom teachers were on average lower than their counterparts in the private sector, especially in the peak career age range 45 to 49. Public school classroom teachers begin their careers earning less on average than those in the comparable occupations of accountants, information and communications technology professionals, engineering professionals and solicitors, and the gap increases with age. The 2021 estimated average annual salaries of public school principals are substantially lower than those of private school principals and finance, ICT and engineering managers.
- Teachers in remote and very remote localities were much more likely to be very young (aged under 30, especially under 28), and much less likely to be mid-career (aged 40 to 54) than teachers in any other locality type defined by remoteness from services. Teachers in major cities were also more likely to be early career, and fewer mid-career, but the pattern is not as pronounced as for teachers in remote and very remote localities.
- Public school teachers and younger teachers were much more likely to live in low socioeconomic localities, and private school teachers, especially teachers in private secondary schools were much more likely to live in the most advantaged socio-economic localities (this pattern would reflect, in part, the location of private schools).
- Around 80% of all school teachers own their own homes. Younger teachers, unsurprisingly, were less likely to own their own homes than older teachers. Teachers in major cities were slightly more likely to own their own homes than those in other localities except for remote and very remote localities. Home ownership by Indigenous teachers was generally slightly less likely at all ages and regions except remote and very remote, where the difference was much greater and only a small percentage of Indigenous teachers at each age range owned their own home. (Private school teachers are slightly more likely to own their own homes, especially at the 25-29 year old age range, however the percentages of home ownership by Indigenous status and remoteness are very similar for public and private school teachers.)

Part C is concerned with workforce planning. The issues and analyses are complex and are only touched on here. Two particularly important policy areas are investigated. The first is forecasting for workforce planning, and the second, labour market segmentation, especially the private sector's competitive advantage in the teaching labour market.

Forecasting for workforce planning has historically been difficult and controversial. However, Census data can provide crucial data that can be used to develop reasonable estimates of current (and future) requirements for replacement teachers – the most difficult and usually important component in any teacher workforce supply and demand forecast. With careful analysis and development of a custom classification, it is possible to make reasonable estimates of the age profiles of those with school teaching qualifications, whether working as teachers, in other occupations or not in the workforce. These age profiles have remained similar over previous censuses, and thus can be used to estimate a major component of separation rates from one year to the next for each one year of age. How this is done is described and can be applied to age profiles in specific years¹ to obtain an estimate of this major component of net separation rates for the teaching workforce as a whole.

In addition to this measure of net separation from the teaching workforce, the data on the percentage qualified, whether or not working as teachers at an early age, can provide an estimate of the percentage who do not ever enter the teaching workforce, which adds substantially to the requirements for qualified graduates (not just requirements for new recruits).

The other component of net separation rates arises from the need for teachers to be employed when other teachers reduce their working hours or go on leave, and, alternatively, for the opposite (reduced need for new teachers) when teachers increase hours or return from leave. This is usually a low net rate, but can be more substantial in some periods. For example when there is a large percentage of teachers aged around their late 20s (when larger percentages are taking leave and reducing formal hours), and thus demand for new recruits increases. Alternatively, if there is a large percentage aged in their late 30s to mid 40s, the ages when teachers tend to return from extended leave and increase formal hours, then fewer new teachers are required, and it might be necessary to redeploy redundant teachers (this occurred around the mid- to late-1990s, combined with funding cutbacks and other variables, to create a substantial, but temporary, over-supply).

• In addition to estimating future demand for graduates, workforce planning requires estimates of graduate supply with which to compare requirements. The Census does not provide relevant data, but in this report data from the Australian Government Department of Education on initial teacher education commencements and completions is reported and discussed. Not all of those who are reported in the data as initial teacher education students are initial *school* teacher education students, and the percentage that are is estimated and applied in this report for the recent period. The data indicates that between 2011 and 2020 initial teacher education completions declined by 15% (an annual average of -1%), while preregistration nurse and midwifery education completions increased by 75% (an annual average of 6%). This follows a decade in which the increase in initial teacher education completions

¹In this report, it is applied to two specific age ranges in 2021 as an example.

- was just 33%, compared with the pre-registration nurse and midwifery increase of 81%. Given the similarities between the professions, teacher shortages in the 2020s are unsurprising.
- The teaching labour market is segmented in a number of ways. It is well recognised that there is segmentation by locality and specialisation shortages or surpluses more likely in some localities or with some specialisations. Less well-recognised is the overall segmentation by sector, with private sector school authorities substantially advantaged in the teaching labour market relative to public sector school authorities. The Census provides data on the age profiles of teachers in the two sectors, showing a much larger percentage of public school teachers in the younger age ranges. This indicates that the public sector has a disproportionate responsibility for the employment of graduates and their induction into the profession. This is costly for the public sector, and allows the private sector to select successful early career teachers without putting resources into their initial development. Resourcing for schools should take this into account. This finding corroborates the position of leading education administrator and policy advisor, Gregor Ramey, more than two decades ago. He argued that the public sector should be recompensed for its disproportionate share of the costly induction and development of early career teachers.

Part D is concerned with Census data on early childhood teachers and early childhood teaching qualifications. The data is very problematic, but does indicate that the highest proportions of early childhood teachers begin their careers working in childcare and preschools. These proportions sharply decline through 20s and 30s age ranges as employment in schools and all other industries increases. The proportion working in childcare continues to fall through older age ranges to retirement, while the proportion working in preschools increases slightly in the early 40s age range before levelling then declining to retirement. This data has implications for wages and conditions in the non-school early childhood sectors. The pattern of early childhood teachers not working follows the usual female pattern of being greatest through the 30s age range.

The *Appendix: Technical Notes* provides an introduction to the Census data on teachers and those with teaching qualifications in the 2021 Census, including how the variables are derived and presented by ABS. It then provides detailed explanations of problems with ABS classifications and how appropriate custom classifications or adjustments are made in the variables of the occupation of school teaching, the differentiation of public and private school teachers, and the qualification of initial school teacher education.

The Statistical Annex provides 22 tables of data supporting the analyses in the report. References are included at the end.

Data sources and presentation

All data referred to in this report, unless otherwise specified, are from the 2021 Australian Bureau of Statistics Census of Population and Housing, accessed via the online tool, TableBuilder (Australian Bureau of Statistics, 2023a). Similarly, unless otherwise specified, 'school teachers' refer to those in the occupation of school teacher, using a customised variable that includes school principals and excludes teachers in non-school early childhood settings. All those, including teachers, in an occupation are assumed in Census data to be employed, whether working full-time, part-time or away from work (on leave). Definitions, how the data are coded from Census responses to the database in TableBuilder, and the customised variables developed for this report are discussed in *Appendix: Technical notes*.

This report is primarily concerned with school teachers, though there is reference to teachers in non-school early childhood settings, and to those with school teaching qualifications not working as school teachers.

The 2021 Census occurred during the COVID-19 pandemic with the reference date of Tuesday 10 August 2021 and most questions relevant to this report sought information for that night or 'last week', which would usually be interpreted as 1 to 7 of August 2021, but could be interpreted as the week immediately preceding Census night (Australian Bureau of Statistics, 2021b). This was during term time in all states and territories, but many teachers were working remotely (notably those in New South Wales and Victoria). Some significant findings from the 2021 Census were compared with findings from the 2016 and 2011 censuses and there appeared to be little impact of COVID-19 on key matters such as hours of work or the quality of the data.

School teacher numbers in the Census are very similar overall from those in the annual National Schools Statistics Collection (NSSC) data in ABS *Schools* for 2021 (2023b), though there is some variation among the states and territories (see Table A1 in Appendix: Technical Notes). However, the number of public school teachers appears substantially undercounted and private school teachers substantially overcounted in the Census. The method for adjusting Census data to account for miscoding that is applied in this report is described in Technical Notes, Section A3.

Many (but not all) of the figures in the text of the report are based on data set out in the Statistical Annex. The relevant table is noted first as a source under the figure, then the detail of original sources/es, the Census classifications, and any notes.

PART A. Australian teachers and their characteristics

1. Teachers in the Australian labour force

The ABS Census reported that in August 2021 there were 384,807 school teachers², making up 3.2% of the total Australian workforce of 12,049,410, and 8.5% of the workforce in managerial and professional occupations. Seventy four percent of all school teachers were female, a slightly larger percentage in the public sector than the private sector. Sixty six percent of teachers were working full-time (defined as working 35 hours or more), 28% working part-time (defined as working fewer than 35 hours) and 6% were away from work (defined as working zero hours). The public and private school workforces had similar proportions working full-time, part-time and away from work³. Unsurprisingly, male teachers were more likely than females to be working full-time and female teachers were more likely to be working part-time and away from work.

School teachers were more likely to be female than those working in the total Australian managerial and professional workforce and all Australian workers (74% compared with 43% and 49% respectively). The labour force status of male and female teachers is similar to those of males and females in the total managerial and professional workforce (though male teachers a little less likely and females a little more likely to be working full-time), but both male and female teachers are much more likely to be working full-time than workers in the total Australian workforce. Details are provided in Tables 1 and 2 in the Statistical Annex.

2. School teachers by age and sector

The age profiles of the Australian teaching workforce in 2021 had a number of interesting features (Figure 1). A peak around age 30 is consistent across the decades, and reflects the recruitment of new teachers through the 20s age range, followed by increasing resignations for other employment or out of the workforce of family responsibilities. A trough around age 45 and a peak around age 49 probably reflects low rates of recruitment though the 1990s after the 1991 recession and other interacting factors. The age profile of the Australian workforce as a whole was much flatter than that for school teachers, but also had trough in the mid 40s and a peak in the late 40s. The age profile of private school teachers had a flatter profile than that of public school teachers and a much smaller proportion of early career teachers. There is additional information about these differences between the sectors, and discussion of explanations and implications in Part C: Workforce Planning.

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Australian school teachers

² 367,972 in the School Education Industry (INDP).

³ The Census classification for public (government) and private (non-government) employers (GNGP) is flawed. An adjustment can be made to more accurately differentiate public and private school teachers because of the existence of the quality National Schools Statics Collection in ABS *Schools* publications (Australian Bureau of Statistics, 2023b) – see Appendix: Technical Notes, Section A3. The adjustment has been made when comparative data on teachers in the public and private school sectors are referred to in this report.

7

12,000

8,000

6,000

4,000

2,000

22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 60 62 64

Figure 1. Number of public, private and all school teachers at each year of age, 22 to 65, 2021

Source: ABS 2021 Census (2023a). Census classifications: Age AGEP; OCCP Occupation (custom classification for School Teachers); GNGP Public or private sector employer (adjusted to take account of ABS erroneous coding – see Appendix 1 for discussion of the GNGP coding issue and the necessary adjustments)

The age profile of the school teaching profession has changed since the 1950s, and most importantly since the 1970s. In that decade a very large number of new teachers were recruited as school student enrolments burgeoned, retention to year 12 substantially increased, and student-to-teacher ratios improved with increased funding. That very large 1970s-recruited cohort can be tracked over subsequent decades (highlighted in Figure 2). They were the largest cohort in the profession at every Census until 2021. In 1981 they were mostly aged in their 20s, in 1991 in their 30s, in 2001 in their 40s, and in 2011 in their 50s. In the 2021 Census they were mostly aged in their 60s, their numbers dwindling as they move into retirement. They were still a large cohort of more than 44,000, much larger than the over-60s cohort at any previous Census.

The age profile in 2021 has implications for workforce planning and for a range of aspects of the teaching workforce and for policies to support quality teaching, which are discussed in Part C. The different age profiles of previous decades also had their own implications for workforce planning and the teaching profession.

8

120,000 100,000 80,000 **<**30 **30-39** 60,000 **40-49** 50-59 40,000 **>59** 20,000 1954 1961 1971 1981 1991 2001 2011 2021

Figure 2. Number of school teachers in each ten year age range, each decade,1954 to 2021

Source: Table 3. Australian Bureau of Statistics (2005-2011, 2023a).

Note: The very large 1970s-recruited cohort outlined in red.

3. School teachers by sex, age and labour force status

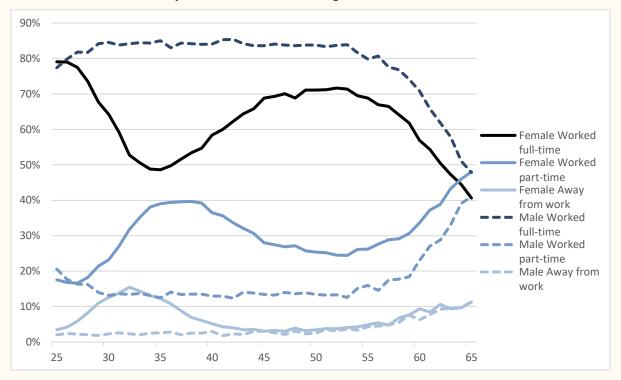
Female and male school teachers had very different labour force status age profiles in 2021, reflecting women's much greater responsibilities for child-rearing as well as child-bearing. The percentages of female teachers working part-time or away from work (on leave) fluctuated greatly by age. A large percentage of female teachers were away from work from their late 20s to late thirties, with the peak of 15% at age 32.4 The larger and longer peak for female teachers working part-time lagged the peak of those away from work, and the peak at almost 40% of the workforce at each age extended from age 34 to age 39. In contrast, the percentages of male teachers working part-time or away from work (on leave) was lower and relatively constant throughout the age range from 25 to 55 (around 13% and 3% respectively).

The percentages working full-time mirrored those working part-time and away from work. Around 80% of both male and female teachers are working full-time as they commence their careers. Then the percentage of female teachers working full-time dropped to below 50% by age 34, before increasing to around 70% from age 45 to 53, before falling as increasing percentages worked part-time. By age 65 a greater percentage worked part-time (48%) than worked full-time (41%). In contrast, the percentage of males working full-time stabilises at around 84% until age 53, after which an increasing percentage worked part-time. Figure 3 shows these *percentages*, while Figure 4 shows the *number* of teachers, which indicates fewer male teachers at each age.

-

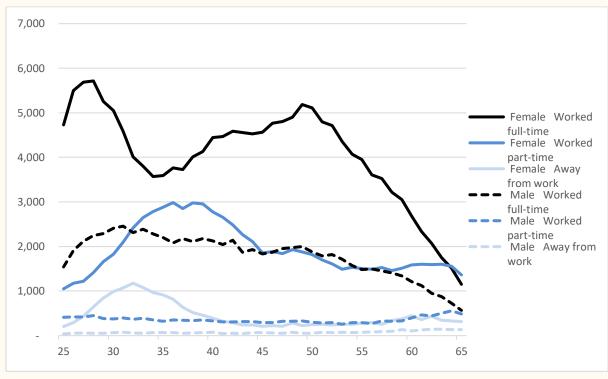
⁴ The average maternal age in Australia was 31 in 2021 (Australian Institute of Health and Welfare, 2023).

Figure 3. Percentage of female and male teachers who worked full-time, part-time or were away from work, at each age, 25 to 65, 2021



Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); Sex SEXP; Age AGEP; LFSP Labour Force Status

Figure 4. Number of female and male teachers who worked full-time, part-time or were away from work, at each age, 25 to 65, 2021



Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); SEXP Sex; AGEP Age; LFSP Labour Force Status

4. Indigenous teachers by sector, age and remoteness

Based on responses to the 2021 ABS Census, Indigenous teachers made up 1.5% of the Australian teaching workforce – 1.8% of public sector teachers and 1.0% of private sector teachers. Younger teachers were more likely to be Indigenous than older teachers - 1.8% of all teachers aged 25 to 29, 2.0% of public sector teachers in that age range, and 1.3% of private sector teachers in that age range. Figure 5 illustrates these patterns, and Table 4 provides details..

2.5% 2.0% 1.5% Public sector 1.0% Private sector 0.5% All teachers 0.0% 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69

Figure 5. Indigenous teachers as a percentage of all public sector, private sector and teachers in all sectors, by five year age range, 2021

Source: Table 4. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); INGP Indigenous status; GNGP Public or private sector employer (adjusted); AGEP Age

Not surprisingly, Indigenous teachers were a much higher percentage of all teachers in remote and very remote Australia than in major cities. Just 1.1% of all teachers in major cities were Indigenous (1.3% of public school teachers and 0.7% of private school teachers), while 7.8% of all teachers in remote and very remote regions were Indigenous (6.7% of public school teachers and 10.5% of private school teachers). Figure 6 illustrates these patterns, and Table 4 provides details.

11

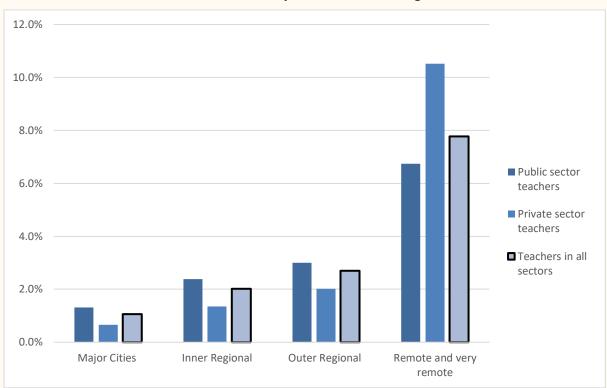


Figure 6. Indigenous teachers as a percentage of all public sector, private sector and teachers in all sectors, by remoteness of regions, 2021

Source: Table 4. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); INGP Indigenous status; GNGP Public or private sector employer (adjusted); Remoteness Areas (National)

While just 63% of all teachers are in the public sector (37% in the private sector), 74% of Indigenous teachers are in the public sector (26% in the private sector). In remote and very remote regions the public sector's share is less, 63% (37% in the private sector).

Indigenous teachers are under-represented in the Australian teaching workforce relative to Indigenous students in Australian schools. The ratio of Indigenous students to Indigenous teachers is nearly four times the ratio of all students to all teachers. There are 37 Indigenous students to every Indigenous teacher in Australia, compared with a ten to one ratio for all Australian students to all teachers.

The ratios of Indigenous students to Indigenous teachers are generally lower (and thus better) in the private sector than the public sector, and in major cities than remote and very remote regions. Nationally there is an Indigenous teacher for every 29 Indigenous students in the private sector, while in the public sector there is an Indigenous teacher for every 40 Indigenous students. The difference between the sectors is most pronounced in remote and very remote regions, where there is an Indigenous teacher for every 19 Indigenous students in the private sector, while in the public sector there is an Indigenous teacher for every 54 Indigenous students – see Figure 7 and Table 5. This reflects, in part, the concentration in of Indigenous students in public schools (80% of Indigenous students attend public schools, while 64% of all students attend public schools), and better overall staffing levels in the private sector (a consequence of higher overall levels of recurrent funding than the public sector), and the number of Catholic and independent Indigenous schools in very remote regions.

60 50 40 ■ Major Cities ■ Inner Regional 30 Outer Regional 20 ■ Remote and very remote 10 0 Public Private All sectors Public Indigenous students to Indigenous teachers All students to all teachers

Figure 7. Ratios of Indigenous students to Indigenous teachers and all students to all teachers, public, private and all sectors by remoteness of regions,2021

Source: Table 5. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); INGP Indigenous status; GNGP Public or private sector employer (adjusted); Remoteness Areas (National) (EN).

PART B. Teachers' working and living conditions

This section covers Census data on the hours of work reported by individual teachers, their incomes (which can include income in addition to salaries), geographic locations by age and sector, and home ownership by Indigenous and non-Indigenous teachers by age, sector and remoteness.

The data indicates that Australian school teachers, on average, worked very long hours, especially when at peak career age. Female teachers worked longer hours than males at all ages, and principals worked longer hours than classroom teachers on average. Teachers worked very long hours compared with those in comparable occupations.

The incomes of teachers tended to be lower than those in comparable occupations, especially after the early career stage. Public school classroom teachers tended to earn less on average than private school teachers, especially in the age ranges of experienced teachers. Public school principals tended to earn less on average than private school principals.

Younger teachers, and public school teachers tended to predominate in more remote and lower socio-economic status regions.

Around 80% of all school teachers owned their own homes. Private school teachers were slightly more likely to own their own homes, especially at the 25-29 year old age range. Indigenous teachers less likely to own their own homes, especially in remote and very remote regions.

5. Hours of work

That Australian school teachers work inordinately long hours has been widely documented, with some of the available national and international data reported by the Productivity Commission in the report of its Review of the National School Reform Agreement (2022, pp. 226-230). The Commission noted that 'high teacher workloads can reduce the quality of teaching, affect teacher wellbeing, and exacerbate teacher shortages' (2022, p. 201). There is very little difference between the hours worked by public and private school teachers.

In this section Census data on the hours worked by teachers (and others) working 'full-time' is reported. Note, however, that the Census classifies workers as working full-time if they work more than 35 hours a week. Therefore, many teachers (and others) who are employed part-time but actually work more than 35 hours a week are included in the data. This would tend to inflate the percentages of purportedly full-time workers working relatively fewer hours, and understate the percentages working very long hours. This would particularly affect females in their thirties – see section 3. School teachers by sex, age and labour force status.

Because of the COVID-19 pandemic, many workers (notably in NSW and Victoria) were working remotely in the reference week for the 2021 Census, and many full-time workers worked fewer hours than reported in the 2016 Census. The reduction in reported hours worked between 2016 and 2021 was less for teachers than for workers in comparable occupations, and less for mid and late career teachers than early career teachers. See Table 6 in the Statistical Annex for details.

Teachers: hours worked by characteristics and location of teacher

The hours teachers worked in 2021 varied substantially by age. Increasing percentages worked longer hours as teachers got older. This was especially the case for teachers working 50 to 69 hours a week. In the age range 50-54, 26% were working 50-59 hours, and 11% working 60 to 69 hours – at total of 37%. Figure 8 illustrates the percentages working various hours by age.

40% 35% 30% 35-39 hours 25% 40-44 hours - 45-49 hours 20% - 50-59 hours 15% 60-69 hours 70 hours + 10% 5% 0% 25-29 30-34 35-39 40-44 55-59 60-64 65-69 45-49 50-54

Figure 8. Percentage working 35-39, 40-44, 45-49, 50-59, 60-69, and 70 hours or more a week: full-time school teachers at each five year age range, 2021

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); AGE5P Age (5 year ranges) HRWRP Hours Worked (ranges)

In the rest of this section the focus is on the percentages of those working full-time who worked 45 hours or more a week.

At all ages, a higher percentage of full-time female teachers than male teachers worked 45 hours or more a week. This is surprising because the data would include many part-time teachers (who are disproportionately female) who were working 35 hours or more a week and thus were classified as full-time. The inclusion of part-time (mostly female) teachers in the data and/or full-time female teachers slightly reducing their workloads relative to men in the main years of care for young children (age range 30 to 45) could explain the relative closeness of the female and male curves through the age range 30 to 45. The peak in the percentages working 45 hours or more a week occurred in the age range 55 to 59. At that age, 55% of all teachers, 57% of female teachers and 53% of male teachers worked 45 hours a week or more. At younger (under 35) and older (over 55) age ranges substantially smaller percentages of male teachers relative to females worked 45 hours or more a week. Figure 9 illustrates these patterns. Teachers in public and private schools tend to work similar hours, as do primary and secondary teachers – see Tables 8 and 9.

60% 55% 50% Female teachers 45% Male teachers 40% All teachers 35% 30% 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64 65-69

Figure 9. Percentage working 45 hours or more a week: full-time female, male and all school teachers at each five year age range, 2021

Source: Table 7. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); AGE5P Age (5 year ranges); SEXP Sex; HRWRP Hours Worked (ranges).

The data above on school teachers includes both principals and classroom teachers. Principals worked extraordinarily long hours. Over 80% of principals over age 45 worked 45 hours or more a week, while over 50% of female classroom teachers over age 45 worked 45 hours or more a week. Figure 10 illustrates this.

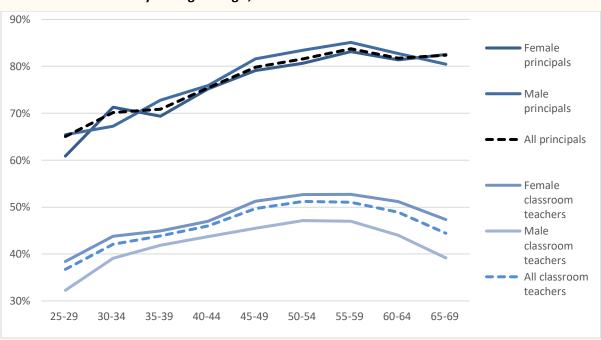


Figure 10. Percentage working 45 hours or more a week: full-time female, male and all principals, and full-time female, male and all classroom teachers at each five year age range, 2021

Source: Table 7. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (School Principals and custom classifications for Classroom Teachers and all School Teachers); AGE5P Age (5 year ranges); SEXP Sex; HRWRP Hours Worked (ranges).

Teachers outside major cities and in remote and very remote areas tended to work longer hours. More than 60% of teachers living in remote and very remote areas aged 55 to 59 worked more than 45 hours a week, while 54% of those that age in major cities were working 45 hours or more. Figure 11 and Table 10 provide details.

65% 60% 55% 50% **Major Cities** Inner Regional 45% Outer Regional 40% Remote and 35% Very Remote 30% 25-29 30-34 35-39 40-44 45-49 50-54 55-59 60-64

Figure 11. Percentage working 45 hours or more a week: full-time school teachers by remoteness, by five year age range, 2021

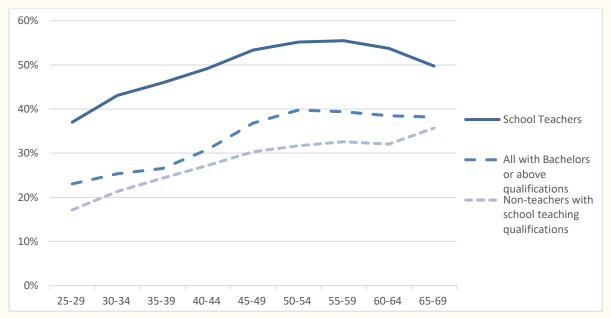
Source: Table 10. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); AGE5P Age (5 year ranges); HRWRP Hours Worked (ranges); Remoteness Areas National.

Teachers compared with others in hours worked

Their very long hours differentiate teachers from others in comparable professional and managerial occupations, and those with comparable qualifications.

Teachers worked longer hours than all full-time workers with a Bachelor degrees or above, and, especially, those with school teaching qualifications who were working full-time in occupations other than school teaching. On average, 48% of full-time school teachers, 31% of others working full-time with a Bachelor or above qualifications, and 28% of those with school teaching qualifications working full-time in occupations other than school teaching worked 45 or more hours a week. See Figure 12 and Table 6.

Figure 12. Percentage working 45 hours or more a week: full-time school teachers, full-time workers with bachelor degree or above, and full-time workers with school teaching qualifications who are not working as school teachers, by five year age range, 2021

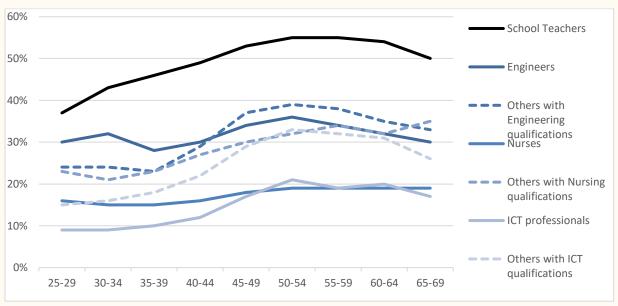


Source: Table 6. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); AGE5P Age (5 year ranges); QALLP Qualification Level of Study; QALFP Qualification Field of Study (custom school teaching qualification); HRWRP Hours Worked (ranges).

Teachers worked much longer hours than full-time workers in comparable professions, and those qualified to work in those other professions but working full-time in other occupations. Working 45 hours or more a week is more unusual for those with working hours organised by shifts (such as nurses and midwives) and attending work places with reasonable times to begin and end attendance (many engineers and IT professionals). It is notable that those with nursing qualifications who were not working as nurses or midwives were generally working longer hours than those in the home occupation. The different patterns (by age and whether working in home occupation) in these data may have many possible explanations, but it is clear that generally school teachers worked longer hours than workers in these other occupations or those qualified to work in them. See Figure 13 and Table 11.

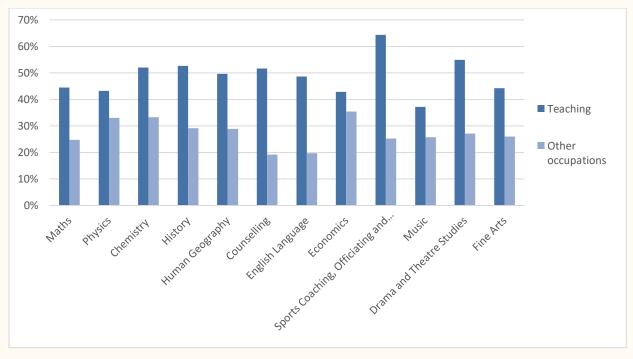
Teachers with a highest qualification in a specialist subject also worked much longer hours than others with the same specialist subject qualification as their highest qualification – see Figure 14.

Figure 13. Percentage working 45 hours or more a week: full-time school teachers, Engineers, Nurses & Midwives and ICT Professionals, and full-time workers with engineering, nursing & midwifery and ICT qualifications not working in those occupations, by five year age range, 2021



Source: Table 11. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); QALFP Qualification Field of Study; AGE5P Age (5 year ranges); HRWRP Hours Worked (ranges).

Figure 14. Percentage working 45 hours or more a week: full-time school teachers with highest qualifications in selected fields of study and individuals in other occupations with highest qualifications in the same fields of study, working full-time, 2021



Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); QALFP Qualification Field of Study; HRWRP Hours Worked (ranges).

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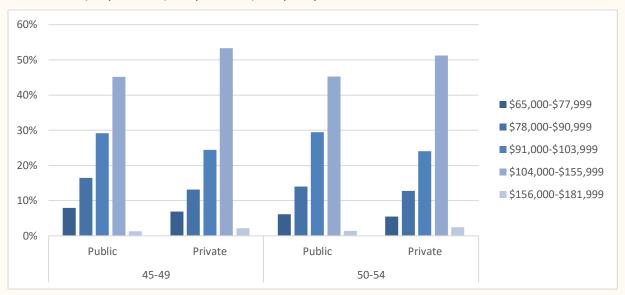
6. Incomes of classroom teachers, principals and those in comparable occupations

Individuals completing the 2021 Census reported income within specified ranges provided on the form. Those ranges are the bases of the data reported in this section.

Public and private classroom teachers

Census data indicate that full-time private sector classroom teachers at the peak of their careers (aged 45 to 54)⁵ earn more than their public sector counterparts. Even though the differences are quite substantial, the data should be treated with caution and the differences may be overstated because, first, the public sector may include a greater percentage of recent graduates and early career teachers at all age ranges (see Section 11), and, second, the Census data includes income in addition to wages and salaries, and private sector teachers may tend to have more income from sources such as investment properties and shares. With those caveats in mind, the Census data for full-time classroom teachers indicate that in the 45 to 49 age range, 56% of private sector teachers and 46% of public school teachers earned more than \$104,000 a year, and in the 50 to 54 age range, 54% of private sector teachers and 47% of public school teachers earned more than \$104,000. In as far as this reflects differences in experienced teachers' salaries, explanations for the differences may include a higher percentage of teachers in the private sector in promotions positions as well as a number receiving over-award payments. Figure 15 and Table 12 provide details.

Figure 15. Percentage of full-time public and private school classroom teachers in the age ranges 45-49 and 50-54 in each annual income range, \$65,000 - \$77,999 to \$156,000 to \$181,999, 2021



Source: Table 12. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classroom teacher classification); GNGP Public and Private employers (adjusted for ABS miscoding); INCP for annual incomes (the ranges provided on the Census form)

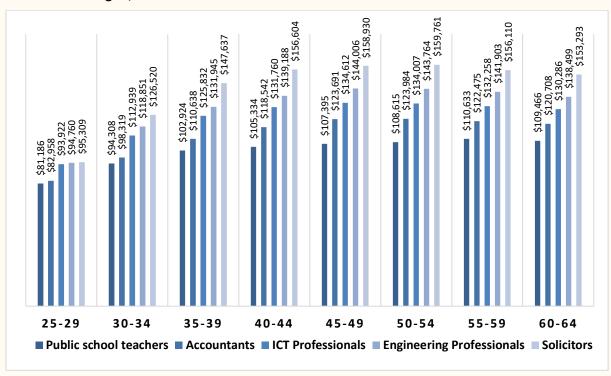
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⁵ Younger age ranges are not considered because of the very different rates of employment of graduates between the sectors. The public sector employs a disproportionate share of graduates, and the private sector tends to recruit more experienced early career teachers from the public sector (see Section 11). Higher experience-based award pay cannot be differentiated from higher over-award pay in Census data.

Classroom public school teachers and selected comparable occupations

Public school classroom teachers begin their careers earning less on average than those in the comparable occupations of accountants, information and communications technology professionals, engineering professionals and solicitors. In 2021, the estimated average annual salaries for those aged 25 to 29 ranged from \$81,186 for publics school classroom teachers to \$95,309 for solicitors. The gap increased by age. At age 60 to 64 the average annual salary of public school classroom teachers was \$109,466, while the average annual salary of solicitors was \$153,293. Salaries at age 50 to 54 were greater than salaries at age 25 to 29 by 36% for public school classroom teachers, 48% for accountants, 41% for ICT professionals, 50% for engineering professionals, and 64% for solicitors. Figure 16 illustrates the estimated average salaries at each age range for the five professions, and Table 13 sets out that data and the percentage increases from age 25 – 29 to age 50 - 54.

Figure 16. Approximate average annual salaries, full-time public school classroom teachers and selected other professional occupations, five year age ranges, 2021



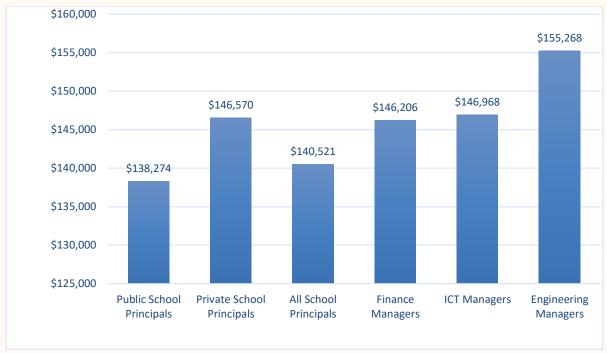
Source: Table 13. ABS 2021 Census (2023a). Census classifications: OCCP Occupation(custom classroom teacher classification); GNGP Public and Private employers (adjusted for ABS miscoding); INCP for annual incomes (the ranges provided on the Census form)

Leadership and management positions

The approximate average annual income of those working full-time in all managerial occupations was \$118,610. However, this includes small business owners and others who would not usually have high incomes. More useful comparisons can be made between public and private school principals and specific comparable management positions in other industries or fields. Such comparisons are made in Figure 17.

The 2021 estimated average annual salaries of public school principals (at \$138,274) were substantially lower than those of private school principals (\$146, 570), and finance (\$146, 206), ICT (\$146,968) and engineering (\$155,268) managers.

Figure 17. Approximate average annual salaries, public and private school principals and selected other management occupations, 2021



Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation; GNGP Public and Private employers (adjusted for miscoding) INCP for calculating approximate average annual incomes

7. Teachers in geographic locations defined by remoteness and socioeconomic status

Teachers in remote and very remote localities were much more likely to be very young (aged under 30, especially under 28), and much less likely to be mid-career (aged 40 to 54) than teachers in any other locality type defined by remoteness from services. Teachers in major cities also had a higher percentage of early career, and a lower percentage of mid-career teachers, but the pattern is not as pronounced as for teachers in remote and very remote localities. Figure 18 illustrates this.

Figure 18. Percentage of all school teachers in each level of remoteness at each one year age, 25 to 65, 2021

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for school teachers); Remoteness Areas (National)

Note: The more jagged line for teachers in remote and very remote areas reflects the relatively small numbers, but the general pattern is clear.

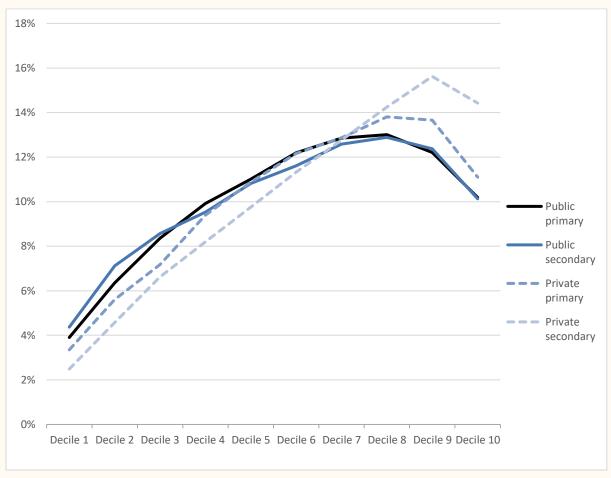
The home locations of school teachers by socio-economic status (defined by the ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage) reflects some combination of the SEIFA of the location of the school at which they teach, teachers' own financial status and the costs of housing, and home location preferences. Like others in professional and managerial occupations, all categories of teachers were less likely to live in in localities with lower SEIFA deciles.

Public school secondary teachers were the most likely to live in the most disadvantaged localities, and private school secondary teachers the most likely to live in the most advantaged localities. Figure 19 illustrates the patterns for teachers' home localities, and Table 14 provides the data.

Comparing the SEIFA scores for teachers and students' home localities, the Census data indicates that public school students are relatively evenly spread by decile at the primary and secondary level with around 10% in both the most disadvantages and most advantaged deciles (public secondary students a little less likely to live in the most advantaged decile). However, private school students are very

unevenly spread. Like private school teachers, very low percentages live in the most disadvantaged decile 1 localities (around 5% of primary and 4% of secondary), and generally high percentages live in decile 10 localities (10% of Catholic primary students, 15% of independent primary students, 13% of Catholic secondary students, and 22% of independent secondary students). Table 15 sets out the data.

Figure 19. Percentage of public and private school, primary and secondary teachers, with home location in each decile of SEIFA Index of Relative Socioeconomic Advantage and Disadvantage, SA1 level, 2021



Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); GNGP Public or private sector employer (adjusted to take account of ABS erroneous coding; ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

Note: If teachers in both sectors and both levels were evenly spread among all SEIFA deciles, all curves would be horizontal at 10%.

Public school teachers living in the most disadvantaged localities, where cheaper rental and owner-occupied houses are more common, were more likely to be young. Decile 1 is the most disadvantaged, and it had the highest percentage of the youngest teachers, while deciles 9 and 10 are the most advantaged, and these have the highest percentages of teachers over 45, and, especially, over 50. Figure 20 illustrates the patterns.

20% 18% 16% Decile 1 14% Decile 2 Decile 3 12% Decile 4 Decile 5 10% Decile 6 8% Decile 7 Decile 8 6% Decile 9 Decile 10 4% 2% 0% 20-24 45-49 50-54 55-59

Figure 20. Percentage of public school teachers living in each SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) decile aged in each five year age range, 20-24 to 65-69, 2021

Source: Table 19. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); AGE Age; ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

8. Home ownership for Indigenous and non-Indigenous public school teachers

Around 80% of all school teachers owned their own homes. Private school teachers were slightly more likely to own their own homes, especially at the 25-29 year old age range⁶. The percentages of home ownership by Indigenous status and remoteness are very similar for public and private school teachers, and the rest of this section is concerned only with public school teachers. Note that some numbers are small, especially for Indigenous teachers and for remote and very remote regions, so data should be treated with caution.

There are substantial differences in home ownership by Indigenous status, age and remoteness of region. Table 16 provides detailed percentages, summarised in Figure 21.

Indigenous public school teachers were much less likely to own their own homes than non-Indigenous public school teachers (69% compared with 80%), though this is partly explained by their younger age profile (see Figure 5 and Table 4). In remote and very remote regions, 15% of Indigenous teachers

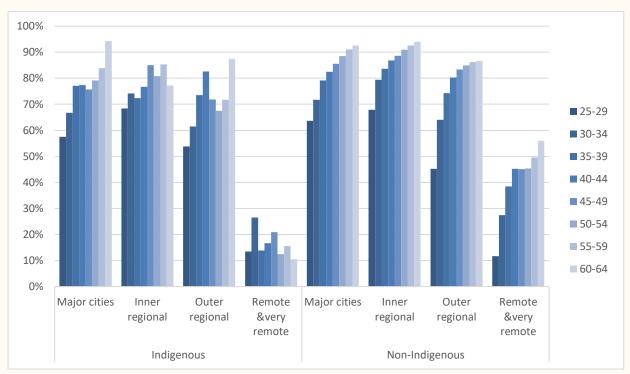
⁶ In the 25 to 29 age range, 64% of private school teachers compared with 61% of public school teachers own their own homes. This difference is likely to reflect, in part, the different age profiles in the sectors, with the public sector disproportionately employing graduate teachers, and thus a higher proportion of younger teachers in this age range. It may also reflect greater family wealth of private school teachers, enabling a greater percentage of home ownership with support from young teachers' parents.

compared with 37% of non-Indigenous teachers owned their own homes. The differences in home ownership between Indigenous and non-Indigenous teachers were greatest in the older age ranges.

Teachers in inner regional areas were more likely to own their own homes (85%) than teachers in major cities (80%), and much more likely than teachers in outer regions (75%) and, especially, teachers in remote or very remote regions (35%).

Younger teachers were much less likely to own their own homes. Only 61% of those aged 25 to 29 and 71% of those aged 30 to 30 owned their own homes, compared with around 90% of those age 50 and over.

Figure 21. Percentage of Indigenous and non-Indigenous public school teachers who owned their own homes, by five year age range and remoteness of region, 2021



Source: Table 16. ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); GNGP Public or private sector employer (adjusted to take account of ABS erroneous coding); INDP Indigenous status; TEND Tenure type; Remoteness Areas (National)

PART C. Workforce planning for school teachers

A comprehensive analysis of teacher supply and demand is beyond the scope of this report. The teaching labour market is complex. Relevant variables such as net separation rates, are difficult to estimate; and the teaching labour market is segmented by geographic location, primary and secondary levels, subject specialisations (Productivity Commission, 2022, p. 203), and by more or less desirable schools for teachers to teach at and by school authorities with more or less strength in the labour market. Segmentation leads to shortages co-existing with surpluses, and qualitative shortages even if there are no apparent quantitative shortages.

This report will not consider such complexities in detail, but will focus on the macro-level, national variables, especially those that can be informed by Census data. The following section covers requirements for new teachers (demand), the supply of new recruits, and some issues in the segmentation of the teaching labour market.

9. Requirements for new teachers

Two major factors influence requirements for new teachers⁷. The first is the *growth* factor: the annual growth (or reduction) in the total size of the teaching workforce, arising out of changes in student numbers and in teacher to student ratios. The second is the *replacement* factor: the need for teachers to replace those who have left the profession, taken leave, or reduced their employed hours of work⁸, net of re-entrants or those who have increased their hours of work. In addition, the number qualified who do not enter the teaching workforce need to be accounted for.

It is relatively easy to make reasonable assumptions about the future *growth* of the teaching workforce. Over the decade to 2021, student enrolments increased by an annual average of 1.3%, and teacher numbers by an annual average of around 1.7% (Australian Bureau of Statistics, 2023b), indicating an increase in teacher to student ratios as well as enrolment increase. It is usually not difficult to make reasonable assumptions about future student enrolments and student to teacher ratios – while there can be unexpected changes in, especially, immigration and recurrent funding for schools, overall trends are usually reasonably clear. But it is much more difficult to make reasonable assumptions about *replacement* needs. This section will discuss this in detail.

The replacement factor is based on net separation rates, which are usually the most important and difficult factor in estimating future requirements for teachers. Separate rates incorporate rates of resignation, retirement, not seeking re-employment after limited term or casual engagements, taking short or long term leave, and reduction in formal teaching load. *Net* separation rates also include rates of re-entry after leave or a long or short period out of the teaching workforce or an increase in formal teaching load. Separations and re-entries must match – for example the re-engagement of a casual or

⁷ Requirements for new teachers are assumed in this section to be in terms of headcounts – that is individuals (not full-time equivalents) who graduate from initial teacher education courses or arrive from overseas. Unless otherwise indicated, the analysis covers both public and private sector teachers throughout Australia.

⁸ Two teachers reducing their time fraction from 1.0 to 0.5 is equivalent to one teacher leaving the workforce (temporarily or permanently).

short-term contract teacher should only be counted as a re-entry if the end of the previous engagement was counted as a separation.

The Productivity Commission discussed the lack of any consensus regarding the broad parameters of (net) separation rates (Productivity Commission, 2022, pp. 209-210), especially for early career teachers, and quoted Weldon:

The attrition rate of early career teachers in Australia is an issue, but not because it is worryingly high or an intractable problem of epidemic proportions. While these claims may be true there is currently no reliable evidence to support them. Therefore, the main issue is that the attrition rate in Australia is, in fact, not well established. It is unknown. (2018, p. 72)

Estimating current net separation rates is difficult because of, first, the high proportion of teachers (especially early career teachers) employed on casual or short-term contracts (often engaged at an individual school level), second, the diversity of employers of teachers (especially in the independent sector), many with limited administrative data systems from which information can be extracted, and, third, the limitations in the data available from registration authorities.

Census data can be used to estimate the broad trends in net separation rates, but have not been adequately utilised in government and most other workforce analyses. In a 1989 paper for the Economic and Policy Analysis Division of the Australian Department of Employment, Education and Training, Thomas pointed out that Census data 'enables the calculation of separation rates for a wide range of occupations' (1989, Foreword)⁹.

The relevant variables are, first, the percentage of individuals with school teaching qualifications¹⁰ at each age who are teaching (or working in other occupations or not working), second, the percentage of teachers at each age who are working full-time, working part-time or not working (on leave)¹¹, and, third, the age profile of the teaching workforce in the period of concern (age profiles can be projected into the future). These three sets of variables are considered in turn.

The percentages of those qualified who are working as teachers at each one of year age in 2021 are shown in Figure 23. Such data can be used to estimate net separation rates at all ages — but not separations arising from leave or reduced teaching loads, which are discussed later in this section.

At the time of the 2021 Census, around 84% of recent graduates with school teaching qualifications (at age 25) were working as school teachers, most of the rest working in other occupations, just 5% not working (possibly studying, with caring responsibilities or looking for work). The percentage of those qualified working as teachers is lower for those a decade older (around age 35) - around 71%.

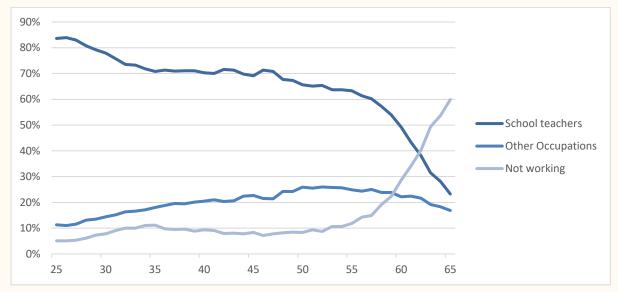
⁹ Thomas prepared two reports for the Australian Department of Employment, Education and Training analysing 1981 and 1986 Census data, in which he investigated separations from selected professions, para-professions and trades, including teaching (1986, 1989). The analyses were limited by the definitional problems of the occupation and qualifications of school teaching that are discussed in the Technical Notes.

¹⁰ Which Census variables constitute a definition of school teaching qualifications is problematic and is discussed in the Technical Notes. The definition used here is narrow to ensure that it excludes teacher education and other education qualifications that prepare individuals for occupations other than school teaching (such as vocational education and training).

¹¹ This is especially important for occupations such as teaching where a relatively large proportion of the workforce are working part-time or taking leave in patterns that change with age.

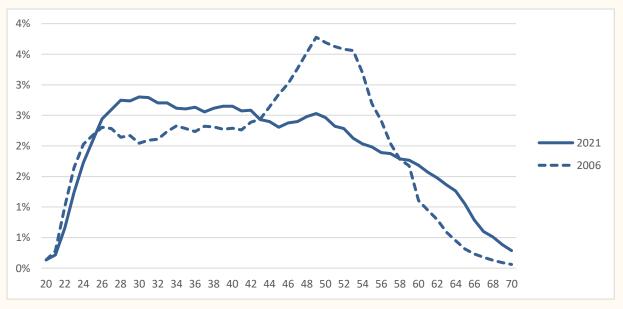
There is very little apparent change from around age 35 to the late 40s. Then the percentage qualified working as teachers sharply reduces from around age 55. ABS Censuses over several decades have had similar percentages of individuals with school teaching qualifications at each one year of age working as school teachers, working in other occupations or not working, so the data in Figure 22 is assumed to provide a reasonable indication of the percentage qualified who are working as teachers at each year of age, whatever the age profile of the teaching workforce at the time.

Figure 22. Percentage of individuals with school teaching qualifications (narrow definition) at each one year age 25 to 65 working as school teachers, working in other occupations or not working, 2021



Source: ABS 2021 Census (2023a). Census classifications: QALFP Non-School Qualification: Field of Study (custom narrow classification for School Teacher Education); AGEP Age; OCCP Occupation (custom classification for School Teachers), LFSP Labour Force Status.

Figure 23. Percentage of school teachers at each one year age, 20 to 70, 2006 and 2021



Source: ABS 2006 and 2021 Census (2023a). Census classifications: AGEP Age; OCCP Occupation (custom classification for School Teachers).

Taking account of net separation rates by age, and the age profile in a given year, it is possible to estimate net separation numbers and rates for that given year. Box C1. explains the method for estimating the major component of net separation numbers and rates between 2021 and 2022.

Box C1. Method for estimating the major component of net separation rates

Assumptions:

- the percentages by age of those qualified and working as teachers were the same in 2022 as 2021 (Figure 22)
- the age profile of the teaching workforce in 2021 is shown in Figure 23
- the total number of teachers in 2021 is 382,910
- the labour force status of teachers is ignored¹².

To estimate the separation numbers for two different single years of age in 2021 (both ages with relatively high net separation rates):

[1] Age 27

- at age 27 in 2021, 83% of those qualified were working as teachers
- at age 28 in 2022, 81% of those qualified were working as teachers
- % change 2021 to 2022 = 2.41%
- number of teachers aged 27 in 2021 = 9925 (percentage in Figure 22 * 382,910)
- 2.41% * 9925 = 239

[2] Age 60

- at age 60 in 2021, 49% of those qualified were working as teachers
- at age 61 in 2022, 43% of those qualified were working as teachers
- % change 2021 to 2022 = 12.24%
- number of teachers aged 60 in 2021= 6440 (percentage in Figure 22 * 382,910)
- 12.24% * 6440 = 788

To obtain the net separation number and rate for the whole teaching workforce in 2021, this method should be applied to every age of teachers (at least from around 23 to 70). The number for each age should be summed, and this number is the net separation number. The rate is derived from the separation number as a percentage of the total teaching workforce. For example, if the total separation number is 10,000 and the total teaching workforce 300,000, then the net separation rate is 3.0%, and if the total net separation number is 15,000, then the net separation rate is 5.0%.

The above calculation is for net separations from the teaching workforce. It does not include those graduates, qualified in initial school teacher education, who do not ever enter the teaching workforce. Using the assumptions here, this is estimated at around 16% of graduates. Note that if, for example, many of this 16% enter the teaching workforce at a later time (around age 30, say), then they are accounted for by decreasing the estimated net separation rate at that age.

¹² This method ignores the net separations arising out of changes in labour force status of teachers (changes in hours of work – into and out of full-time, part-time and leave), which in many periods nets out to a low rate for the teaching workforce as a whole, depending on the age profile. Changes in workforce status are likely to involve higher net separations when those aged in their late 20s to mid 30s are a larger percentage of the total workforce (such as in 2021 compared to 2006).

Teachers not only need replacement when they leave the teaching workforce (that is, their occupation ceases to be that of school teacher, whether temporarily or permanently), but also when their labour force status changes - they go on leave ('away from work') and when they move from full- time to part-time work. Figure 24 shows the pattern through the age ranges for teachers in 2021. The percentage of teachers working full-time drops sharply from the mid-20s to the mid-30s (increasing the requirement for replacements), then increases to the mid-40s (more will be returning to full-time work — negative net separations replacements), then it levels out until the mid-50s when it again reduces (again increasing requirements for replacements). Changes in labour force status can result in overall positive or negative additions to net separations, depending on the age profile. For example, when there are high percentages of teachers younger than 35 and older than 53 (such as in 2021), then the addition to net separations is positive. On the other hand, when there is a large percentage of the teaching workforce aged between around 30 and 53 (such as in 2006), then the addition to net separations is likely to be negative. These tend to reinforce the net separation rates arising from movement out of (and re-entry into) the profession.

Figure 24. Percentage of school teachers in each one year age group 25-65 who are working full-time, working part-time or are away from work, 2021

Source: ABS 2021 Census (2023a). Census classifications: AGEP Age; OCCP Occupation (custom classification for School Teachers), LFSP Labour Force Status.

The different age profiles of the teaching workforce every decade since the 1950s are indicated in Figure 2 (in Section 2). Through the decades until the late 1980s overall separation rates were high because teachers in their 20s were the largest age cohort. Through the 1990s and into the 2000s overall separations were low because the mid-career age range dominated. Then the proportion of teachers aged 60 and over increased with consequent increased separations. In 2021, compared with 2006, the proportion of teachers in the higher separation under 35 age range, as well as those 60 and over, increased, and thus separations, and the need consequent for replacements, can be expected to be higher.

In addition to requirements for new teachers arising from net separations from the profession, the demand for initial teacher graduates also needs to take account of the net number who do not enter the teaching workforce – approximately 16% of the number recently qualified, according to the 2021 data.

10. Supply of new recruits to the teaching workforce

The most important source of new recruits to teaching are graduates of initial teacher education programs. This section is brief because the ABS Census cannot provide data on initial teacher education. However, to complement the previous section, Australian Government Department of Education data is reported. Figures 25 and 26 show the differences in commencements and completions between initial teacher education and pre-registration nurse and midwifery education courses over recent decades. Tables 17 and 18 provide greater detail, showing that between 2011 and 2020 initial teacher education completions declined by 15% (an annual average of -1%), while pre-registration nurse and midwifery education completions increased by 75% (an annual average of 6%). Given the similarities between the professions, teacher shortages in the 2020s are unsurprising.

35,000 30,000 25,000 20,000 Initial teacher education 15,000 Pre-registration nurse education 10,000 5,000 n 2007 2009 2011 2013 2015 2017 2019

Figure 25. Commencements in initial teacher education and pre-registration nurse education, 2007 to 2020

Source: Table 17. Australian Government Department of Education (2022a), Table 8.6: Commencing and All Students Enrolled in Special Courses, 2007 to 2020

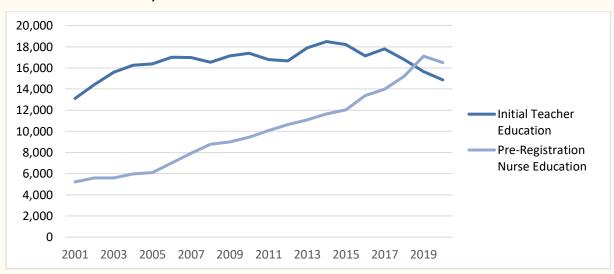


Figure 26. Completions in initial teacher education and pre-registration nurse education, 2001 to 2020

Source: Table 18. Australian Government Department of Education (2016, 2022b), Award course completions, Special Interest Courses

11. Teaching labour market segmentation: strong and weak employing authorities and localities

The teaching labour market is complex, and there are many sources of relevant data. In this section Census data is used to illuminate just two issues. The first is the relative age profiles of the public and private sector teaching work forces, which indicate the relative strength of the private sector employing authorities, and the second is age profiles of the public sector teaching workforce by deciles of relative socio-economic advantage and disadvantage, which can indicate harder to-staff localities (those weaker in the labour market). A similar argument can be made for data on remoteness or other geographic classifications.

The Census data on age is what is important to indicate relative competitive strength of both employing authorities and localities (the Census cannot provide data on individual schools): In general a higher percentage of young, early-career teachers indicates a more difficult to staff school, sector or locality, as experienced teachers are recruited to more desirable schools or move to more desirable locations to live. A preponderance of young teachers (especially graduates in their first year) creates considerable costs to schools and school authorities, and, often, to students.

The relative strength of the private sector in the teaching labour market

Private sector school authorities (systems and individual schools) are substantially stronger in the teaching labour market than public sector school authorities. This competitive strength in the teaching labour market parallels the private sector's competitive strength regarding students: they can select and exclude, while the public sector must take all comers; in times of enrolment fluctuation the private sector can maintain optimal enrolments while the public sector bears more than its proportional share of overcrowding or costly under-utilisation.

The strength of the private sector in the teaching labour market is apparent throughout the career stages of teachers, but is especially so in the early career stages, and when there are shortages of teachers, whether specialist, locational or general. In his 2000 review of teacher education and the teaching profession for the NSW government, Gregor Ramsey investigated these issues and expressed his concerns throughout the report (2000, pp. 90, 122. 123, 166, 182, 203). It is more than 20 years since the late influential administrator and policy-maker in higher education and schooling wrote his report, and it is worth quoting at some length:

A key issue affecting the supply of teachers in government schools is the high level of transfer of teachers from government to non-government schools. The nongovernment school system is able to recruit teachers after they have had a few years of experience in the government system or can take their pick of the very best young graduates. Practices which allow only what is essentially a one-way flow of teachers between systems should be questioned. The government school system is, in a very real sense, the 'well' from which teachers for all schools are drawn. The government school system, therefore, bears the major costs of new teacher induction and is responsible for delivering the bulk of on-the-job learning that new teachers require during their early years. The important issue is that the training ground obligations of the government school sector should be acknowledged and funded from sources [other than the government school sector]. There is a strong case for an employer who engages a teacher from a government school to pay a 'training fee' or at least for the Commonwealth to do so on their behalf....

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The difficult-to-staff schools are overwhelmingly in the government system, the Commonwealth government should acknowledge the effect of movement of teachers between the sectors. Nongovernment schools are free to operate in the most desirable locations and generally do not serve low socioeconomic communities or where they do their populations are not representative of all sectors of the community. These 'free-rider' schools therefore benefit disproportionately from teachers who have been inducted by the government school system. Again, there is a strong case for the government school authorities to receive some recompense. (p. 182)

Census data indicate that the problems raised by Gregor Ramsey¹³ remain. If the public and private sectors' teacher workforces had been growing at the same rate for the previous decades and teachers were equitably distributed between the sectors by career stage, the age profiles of the two teaching workforces would be similar. If one sector was growing faster than the other sector, early career teachers would be expected to be a larger percentage of the workforce in the faster growing sector. The private sector teaching workforce has been increasing at a much faster rate than the public sector: between 2001 and 2021 – by 57%, compared with the public sector's increase of just 30%. These different rates of increase would, other things equal, result in the private sector having a larger percentage of its workforce aged under 35. Yet the contrary is the case: in 2021 only 24% of private sector teachers compared with 28% of public sector teachers were aged 25 to 34. In the peak career age range from around 46 to 56 there were 26% of private sector teachers and 24% of public sector teachers. Figure 27 clearly shows the difference in age profiles between the sectors.

3.5% 3.0% 2.5% 2.0% Public school teachers 1.5% Private school teachers 1.0% 0.5% 0.0% 25 30 35 40 45 50 55 60 65

Figure 27. Percentage of all public and all private school teachers at each one year of age, 25 to 65, 2021

Source: ABS 2021 Census (2023a). Census classifications: Age AGEP; OCCP Occupation (custom classification for School Teachers); GNGP Public or private sector employer (adjusted)

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¹³ From the 1970s to the 2010s Gregor Ramsey senior administrative and policy advisory roles in education, including Chair of the National Board of Employment, Education and Training.

Harder to staff localities

The Census cannot directly tell us *where* there are teacher shortages, but the data and analysis in Section 7 provides some indications that will be summarised here. The age of teachers in different localities can be an indicator of greater shortage and higher teacher turnover: in general a higher percentage of young, early-career teachers indicates a more difficult to staff locality, as recent graduates have less strength in the teaching labour market, and more experienced (and effective) teachers can more readily find positions in more desirable locations. This is apparent in the age profiles of public school teachers in each decile of the ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD) (Figure 20). Decile 1 is the most disadvantaged, and it has the highest percentage of the youngest teachers, while deciles 9 and 10 are the most advantaged, and these have the highest percentages of teachers over 45, and especially over 50 (numbers are set out in Table 19). However, cheaper and rental housing is more common in lower SEIFA deciles, and this would in part explain the SEIFA deciles in which teachers of different ages tend to live. Younger teachers are also disproportionately employed in remote and very remote localities, indicating that those localities are harder to staff.

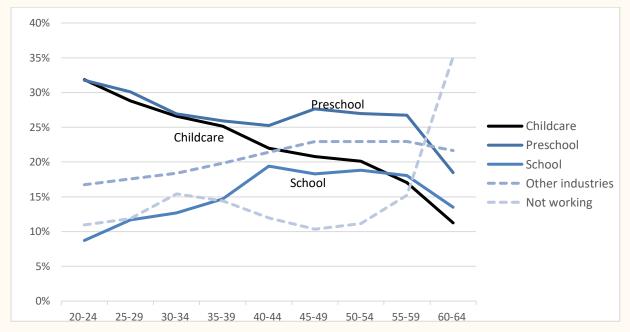
PART D. Teachers in non-school early childhood settings

In addition to school teachers, there are also qualified teachers in preschools and childcare settings. Gaining statistics on their *number* from Census data is problematic. There are options of using various combinations of the professional occupation (OCCP) of Early Childhood (Pre-Primary School) Teachers, the qualification field of study (QALFP) of Teacher Education: Early Childhood, and the qualification level (QALLP) of Bachelor Degree and above. These occupation and qualification variables can, to an unclear degree, differentiate teachers from other workers in the Census Industry (INDP) categories of School Education, Preschool Education and Childcare Services. The total number in the three industries according to these various combinations range from 22,270 to 58,291 (see Table 20). It is important, therefore, to treat Census data on early childhood teachers with great caution.

Whatever variables are used, there is a similar pattern of industry participation by age. The highest proportions of young early childhood teachers begin their careers (age range of 20-24) working in childcare and preschools. These proportions sharply decline through 20s and 30s age ranges as participation in schools and all other industries increase. The proportion working in childcare continues to fall through older age ranges to retirement, while the proportion working in preschools increases slightly in the early 40s age range before levelling then declining to retirement. These data probably are largely a reflection of relative wages and conditions in the sectors. The pattern of early childhood teachers not working follows the usual female pattern of being greatest through the 30s age range. Figure 28 shows these patterns for early childhood education professionals defined by their qualifications.

Figure 28. Percentage of all individuals with qualifications in Teacher Education:

Early Childhood at the level of Bachelor or above employed in the industries of Childcare Services, Preschool Education and School Education, other industries or not working, by five year age range, 2021



Source: ABS 2021 Census (2023a). Census classifications for Persons: INDP Industry; QALLP Non-School Qualification: Level of Education; QALFP Non-School Qualification: Field of Study; AGE5P Age.

Appendix: Technical notes

Census data: introduction

This report primarily draws on data from the Australian Bureau of Statics Census of Population and Housing, 2021, and some earlier years (Australian Bureau of Statistics, 2005-2011, 2023a). The 2021 Census was carried out in August 2021. Respondents (completing household or individual forms) could complete the Census online or on paper, responding for personal characteristics and circumstances on the night of Tuesday 10 August or the week before for employment and other matters (Australian Bureau of Statistics, 2021b, 2021d).

During the week before the Census many Australian workers, notably in Victoria and New South Wales, were working remotely because of the COVID-19 pandemic, and some would have been ill with the disease or isolating because they were a contact of an infected person.

Responses made on Census forms are coded by ABS into variables. The *Census dictionary* (Australian Bureau of Statistics, 2021c) lists variables by a four to seven character mnemonic and provides a definition for each variable and other information such as scope (the population that the variable is applicable to) and how the variable was created, including the questions on the Census form related to the variable. Most of the Census data in this report is from the Place of Enumeration dataset and has been accessed using the ABS online tool TableBuilder Pro (Australian Bureau of Statistics, 2022c). The *Census geography glossary* (Australian Bureau of Statistics, 2022b) provides information about geographic variables used in the report: Place of enumeration, Statistical Areas (such as SA1), and Remoteness Areas National (RAN). In addition, information about the Socio-Economic Indexes for Areas (SEIFA) index, Relative Socio-Economic Advantage and Disadvantage (IRSAD), is available in (Australian Bureau of Statistics, 2023c).

The following sections explain the main data classifications used in this report and how they are derived from responses on Census forms. The classifications used in this report for school teachers, for differentiating public and private school teachers, and for school teaching qualifications are complex or problematic. These are discussed in the follow three sections.

A.1. Census classifications: the occupation of school teaching

The occupation variable, indicated by the mnemonic OCCP, classifies occupations according to the *Australian and New Zealand Standard Classification of Occupations (ANZSCO)*, Version 1.3. (Australian Bureau of Statistics, 2021a). Recent Census data is available to the six digit level, but the four digit level is usually sufficient.

The ANZSCO does not provide an appropriate single classification for school teachers (as commonly understood), and thus a custom classification is used in this report. In the ANZSCO School Principals (1343) are classified separately from school teachers under the increasingly specific classifications of 1 Managers, 13 Specialist Managers, and then 134 Education, Health and Welfare Services Managers. Other school teachers are classified under 2 Professionals and then 24 Education Professionals. The classification of 241 School Teachers includes 2411 Early Childhood (Pre-primary School) Teachers as well as categories for school teachers. In the custom classification for school teachers used in this report, School Principals are included, but Early Childhood (Pre-primary School) Teachers are excluded, the remainder of the 241 School Teachers included. The sub-classifications used in this report's custom

classification of school teachers and the number in each sub-classification in 2021 Census data are shown in Box A1.

Box A1 ANZSCO classifications that constitute the custom definition of school teachers, and the number in each classification, 2021 Census										
ANZSC	ANZSCO classification Number									
1343	School Principals	24,323								
2410	School Teachers nfd	13,640								
2412	Primary School Teachers	164,891								
2413	Middle School Teachers (Aus) / Intermediate School Teachers (NZ)	604								
2414	Secondary School Teachers	155,842								
2415	Special Education Teachers	25,504								
	Total School teachers (custom classification)	384,807								

Census staff coding for OCCP take account of responses to the six Census questions in Box A2 (question and page numbers from the household form, excerpts from the guidance provided on the form are in italics) (Australian Bureau of Statistics, 2021c).

Box A2 Items from the ABS Census Household and Personal forms (numbering from paper forms)

- 43. In the main job held last week, what was the person's occupation? *Give full title. For example: REGISTERED AGED CARE NURSE ...*
- 44. What are the main tasks that the person usually performs in that occupation? *Give full details. For example: NURSING THE AGED, ... For managers, write the function managed. For example: MANAGING CONSTRUCTION PROJECTS ...*
- 45. For the main job held last week, what was the employer's business name?... For teachers, write the name of the school.
- 46. What best describes the industry or business of the employer at the location where the person works? *Examples for industry or business of the employer: SECONDARY SCHOOL EDUCATION, ...*
- 47. What are the main goods produced or main services provided by the employer's business? *Describe as fully as possible, using two words or more. For example: PROVIDING EDUCATION TO SECONDARY SCHOOL STUDENTS ...*
- 48. For the main job held last week, what was the person's workplace address?

(Australian Bureau of Statistics, 2021b, p. 18)

Using the custom classification for school teachers, the Census data appears to be of a very high quality, with the exception of the differentiation of public and private school teachers, discussed in the following section.

A.2. Census classifications: Public and private school teachers

The Census classification that differentiates public and private school teachers is GNGP (Australian Bureau of Statistics, 2021c), which classifies whether an individual works in the public or private sector and, if in the public sector, the level of government. In this report only teachers who are classified State/Territory Government are included in the public school category (very few school teachers work for other levels of government), and private school teachers are classified Private Sector. Coding for GNGP takes account of responses to questions 45, 46, 47 and 48 (Box A2) (Australian Bureau of Statistics, 2021c).

Census data on school teachers is generally of very high quality, with the exception of this GNGP classification. Census data and the reasonably accurate National Schools Statistics Collection data on school teachers are almost exactly the same for Australia as a whole, and for explanations of differences in individual states and territories, see notes under Table A1. However, the exception is the data distinguishing public from private school teachers – the GNGP classification (Table A1). There is a national undercount of public school teachers in the Census compared with the NSSC of 12%, and a consequent overcount of private school teachers of 20%. The directions of under- and over-count is consistent among all states and territories, though the magnitude differs. A rough, indirect check with teachers at the primary and secondary levels indicates that the erroneous classification occurs at both levels, and is probably greater at the primary level.

This is a serious data quality issue. The erroneous classifications appear to arise from the method of coding teachers to the respective sectors. The Census Dictionary explains the derivation of the GNGP variable as follows:

How this variable is created

Data for this variable is captured automatically from written responses to Labour Force questions on the Census form. The employer's business name and the workplace address of the employed person is used to classify employed persons into the public or private sector. If the person's employment cannot be determined as public sector, responses are coded to private sector as the default code. (Australian Bureau of Statistics, 2021c)

The item in the Census forms asking for employer's business name includes the guidance: '... for teachers write name of school'. It is unlikely that the problem arises from respondent error, given the consistent direction of the over- and under-counts, the generally very high quality of data on school teachers in the Census, the high response rate for this item (0.2% of teachers did not clearly respond to the item), and the certainty that teachers would know the name of the school where they worked the previous week. The error must therefore arise from the inadequacy of the list of employers that is linked to Census responses to automatically capture the category from the employer's name, and from the default of classifying unclear responses to the private sector. The error appears to arise out of the use of the Australian Bureau of Statistics Business Register (Australian Bureau of Statistics, 2015) to match the name of the schools teachers report working at. If so, the source of the error could be the existence of nongovernment (private) entities (especially Parents and Citizens Associations or P&Cs) that have the same name (with addition of the entity name such as P&C) and address as the school. The automated process cannot distinguish between an actual public school and its P&C, so defaults to recording a private employer. This issue is likely to arise in many other public sector industries – for example, for employees of public hospitals that have nongovernment auxiliaries with names including the name of the hospital. However, for teachers and employees of schools, the Australian Schools List is a comprehensive, searchable list of all Australian schools that includes

whether each school is public or private (Australian Curriculum Assessment and Reporting Authority, 2023a).

In this report it is assumed that school teacher data classified in the GNGP variable as State/Territory are representative of all public school teachers, but school teacher data classified as Private need adjustment to ensure it is better representative of private school teachers – that is, to exclude the public school teachers erroneously included in the private sector classification. The necessary adjustments are set out in Box A.3.

Table A.1. School teachers (headcount): National Schools Statistics Collection and ABS Census, States and Territories and Australia, 2021

	Public	school tea	chers	Private	school te	achers	All school teachers			
	NSSC (Head count)	Census (At Work)	Census as a % of NSSC	NSSC (Head count)	Census (At Work)	Census as a % of NSSC	NSSC (Head count)	Census (At Work)	Census as a % of NSSC	
NSW	64,675	65,942	102%	39,449	43,913	111%	104,124	109,851	105.5%	
Vic	57,769	45,799	79%	35,908	44,597	124%	93,677	90,400	96.5%	
Qld	46,792	40,752	87%	23,627	28,261	120%	70,419	69,013	98.0%	
SA	14,601	10,966	75%	8,873	12,158	137%	23,474	23,122	98.5%	
WA	24,273	20,920	86%	12,569	15,456	123%	36,842	36,369	98.7%	
Tas	5,064	4,399	87%	2,607	3,093	119%	7,671	7,496	97.7%	
NT	2,683	1,966	73%	994	1,377	139%	3,677	3,344	90.9%	
ACT	3,756	2,701	72%	2,397	3,116	130%	6,153	5,817	94.5%	
Australia	219,613	193,445	88%	126,424	151,971	120%	346,037	345,416	99.8%	

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); INDP Industry (School Education); GNGP (distinguishing public school teachers from private school teachers); Main ASGS (States and Territories, Other Territories excluded)

ABS *Schools* 2021 (2023b), Table 50a: Number of In-school Staff by Function, Sex and Affiliation, States and Territories, 2006-2021

Note 1. To maximise consistency between the two datasets, the NSSC data is for the headcount of teachers, not full-time equivalent, and the Census data is for school teachers in the Industry of School Education and Labour Force Status at work (employed and worked full-time or part-time).

Note 2. The figures for Australia are the totals of the state and territory figures in the table, and exclude other territories.

Note 3. The larger All school Teachers anomalies between the NSSC and Census totals in NSW and the territories possibly can be explained by the following: The NSW anomaly and the mirroring anomalies in Queensland, Victoria and the ACT can be explained by net cross border travel to work by teachers from LGAs in NSW (Tweed, Albury City and Queanbeyan-Palerang in particular) to Queensland, Victoria and the ACT respectively – Census providing the numbers of teachers *living* in the LGA, the My School Website (Australian Curriculum Assessment and Reporting Authority, 2023b) providing the number of teachers *working* in schools in the LGAs across the borders. The NT Census undercount relative to the NSSC could be explained in part by the general Census undercount in that territory, similarly the lesser Tasmanian anomaly (Australian Bureau of Statistics, 2022a)

Box A.3. Adjustment of Census data for public and private school teachers

In the following equations:

PuC = Public sector Census (At Work)

PuN = Public sector NSSC (Headcount)

PrC = Private sector Census(At Work)

PrN = Private sector NSSC (Headcount)

The first step is to derive alpha (α), a factor that will be different for each state and territory and for Australia as a whole. It will also be different in different years if the Census in those years has similar coding problems.

$$\alpha = 1-PuC/PuN$$

To derive a more accurate estimation of the Census numbers for public and private school teachers, apply the following equations:

Public school teachers = $PuC / (1-\alpha)$

Private school teachers = $PrC - PuC * \alpha / (1 - \alpha)$

For Australia as a whole in 2021, α = 0.119155.

To adjust the Census (At Work) numbers for Australia as a whole in Table A1, the following equations are applied:

Public school teachers: $193,445 / (1-\alpha) = 219,247$

Private school teachers: $151,971 - 193,445 * \alpha / (1-\alpha) = 126,214$

For both sectors, the adjusted Census (At Work) values are very close to the NSSC (Headcount) values (less than 1% difference). This is expected, given the totals (for combined sectors) for both the NSSC and the Census (346,037 and 345,416 respectively) have less than 1% difference.

Figure A1 illustrates the difference the adjustment makes to the 2021 age profile of private school teachers if the public school teachers erroneously included in the private school category are excluded (assuming the misclassification of public school teachers is random). As expected, the difference between public and private school teachers is greater with the adjustment.

3.0% 2.5% Public school teachers 2.0% Private school teachers (adjusted) Private school 1.5% teachers (unadjusted) 1.0% 25 30 40 50 55 60 65

Figure A.1. Percentage at each age, 25 to 65, public school teachers and private school teachers, adjusted and unadjusted for the misclassification of around 12% of public school teachers as private school teachers, 2021

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers), GNGP Public or Private sector employment (adjusted and unadjusted for misclassification of around 12% of public school teachers as private); AGEP Age.

A.3. Teaching qualifications

Measures of school teaching qualifications and early childhood teaching qualifications are important for estimating the destinations of those with such qualifications and *attachment* to and *separation* from the home occupations – that is, those who are qualified and teaching or not teaching in schools or early childhood settings respectively at any time after qualification until retirement.

QUALFP describes the field of study of a person's highest completed non-school qualification. It is coded using *the Australian Standard Classification of Education (ASCED), 2001* (Australian Bureau of Statistics, 2001). Responses are coded based on responses to five Census questions, the most important being:

- 34. What is the level of the highest qualification the person has completed?
- 35. What is the main field of study for the person's highest qualification completed? For example: ... PRIMARY SCHOOL TEACHING, ... If the person has two qualifications of the same level, completed at the same time (for example, double degrees), select the qualification considered the most important to them.

Determining whether or not individuals have school teaching qualifications is problematic. First, many individuals who have school teaching qualifications have completed courses other than those that

lead to teaching qualifications that they consider higher qualifications. Second, the ASCED classifications do not align precisely with teaching qualifications. These issues are dealt with in turn.

While school teachers are required to have formal teaching qualifications, not all school teachers record an obvious teaching qualification as their highest qualification. More than 11% of teachers working full-time report their highest qualification in a field outside the 2-digit Education field of study – including Society and Culture (3% of teachers working full-time), Natural and Physical Sciences (2%), Management and Commerce (2%), Health (1%) and Creative Arts (1%). Some of these may be honours or postgraduate qualifications in a field other than Education that were part of (or preceding) the preservice qualification and the respondent considered 'higher' than the teacher education component, or they might be qualifications obtained later in fields other than Education, such as the Management qualifications obtained by many principals. While only 3% of full-time teachers in their 20s report their highest qualification in these other fields, of those aged in their 40s or older 10% or more report a highest qualification in these other fields, increasing to 15% of full-time teachers 65 and over.

The second problem with the QALFP variable is that categories do not always align with school teaching. ABS codes responses in the 2-digit Education field of study according to the following categories (at the 6-digit level):

Education, nfd [not further defined]

0701 Teacher Education

Teacher Education, nfd

070101 Teacher Education: Early Childhood

070103 Teacher Education: Primary

070105 Teacher Education: Secondary

070107 Teacher-Librarianship

070109 Teacher Education: Vocational Education and Training

070111 Teacher Education: Higher Education

070113 Teacher Education: Special Education

070115 English as a Second Language Teaching

070117 Nursing Education Teacher Training

070199 Teacher Education, nec [not elsewhere classified]

0703 Curriculum and Education Studies

Curriculum and Education Studies, nfd

070301 Curriculum Studies

070303 Education Studies

Education, nec

Among those school teachers who reported a highest qualification in the 2-digit Education field of study, 36% reported their highest qualification to be in Teacher Education, nfd (not further defined). Yet only 65% of full-time workers who reported Teacher Education, nfd as their highest qualification were working as school teachers (77% of those in their 20s) — in contrast with those who reported Teacher Education: Primary or Teacher Education: Secondary as their highest qualification, of whom 83% and 84% respectively were working as teachers (over 90% of those in their 20s) (see Table A2.). Thus it appears that some individuals whose responses were coded as Teacher Education, nfd as their highest qualification were not qualified to be school teachers.

An adequate measure of the numbers and characteristics of individuals with school teaching qualifications who are not working as school teachers can be important for workforce planning and other purposes (see Part C. Workforce Planning for School Teachers). Two measures of school teaching

qualifications are considered here. One is a narrow definition and only includes Teacher Education: Primary; Teacher Education: Secondary; and Teacher-Librarianship. Though only 37% of school teachers in 2021 reported any of these as their highest qualification, very few non-teachers did so. The broad definition also includes Teacher Education, nfd, and 69% of teachers reported one of these as their highest qualification. Tables A.3. and A.4. show the percentages of all school teachers (principals and classroom teachers) recorded as having a highest qualification in school teacher education according to the narrow and broad definitions, by five year age range, 2021. While the narrow definition covers a much smaller proportion of the school teaching population, in this report it is used when estimating the percentages (not numbers) of individuals with school teaching qualifications who are working in other occupations or not working, relative to the percentage who are working as school teachers. Figure A2. shows that the two definitions have almost parallel curves, the broad definition around 10 percentage points below the narrow definition. This is likely to indicate that around the same magnitude of individuals who have the qualifications that compose the broad definition do not in fact have school teaching qualifications.

Box A.4. provides evidence to support the narrow definition of initial teacher education, rather than the broad definition, especially for the purposes such as estimating net separation rates (Part C, Section 9).

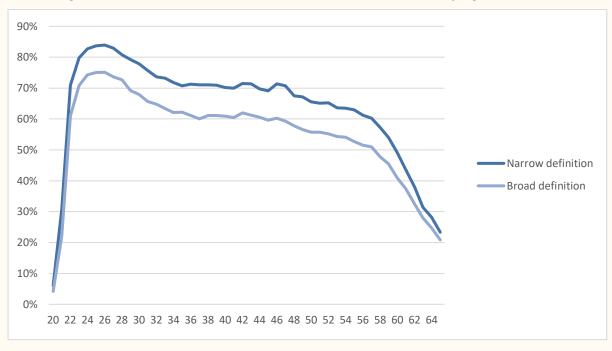


Figure A.2. School teachers as a percentage of all those with teaching qualifications according to the Narrow Definition and the Broad Definition, by age, 2021

Source: ABS 2021 Census (2023a). Census classification: Occupation OCCP; Non-school qualification QALFP narrow and broad custom definitions for school teacher education (Narrow: Teacher Education: Primary, Teacher Education: Secondary, and Teacher-Librarianship; Board: Teacher Education nfd, Teacher Education: Primary, Teacher Education: Secondary, and Teacher-Librarianship respectively

Box A.4. Evidence to support the narrow definition of initial teacher education

- At age 35, 71% of those with teaching qualifications according to the narrow definition were working as school teachers in 2021 (Figure 27)
- Total number of school teachers aged 35 in 2021 was 9,973 (Figure 1
- Initial teacher education completions in 2010¹⁴ were 17,392 (Table A5). Around 80% of them were school teacher education completions. 80% of 17,392 is 13,914.
- 71% of those school teacher education completions 11 years later (assumed aged 35 in 2021) is 9,879 (close to the actual number of teacher of 9,973).

Applying the same method does not support the *broad definition*:

- At age 35 62% of those with teaching qualifications according to the broad definition were working as school teachers in 2021 (Figure 27)
- (As above) Total number of school teachers aged 35 in 2021 was 9,973
- (As above) Initial teacher education completions in 2010 were 17,392. Around 80% of them were school teacher education completions. 80% of 17,392 is 13,914.
- 62% of those school teacher education completions 11 years later (assumed aged 35 in 2021) is 8,627 (well below the actual number of teacher of 9,973).

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¹⁴ 2010 selected as the year of completion because the median age of initial school teacher education graduates (excluding most Teacher Education: Early Childhood graduates) would have been approximately 24, the mean around 27 (Australian Institute for Teaching and School Leadership, 2019a, Figure 37)

Table A.2. School teachers as a percentage of all those working full-time with 6-digit level qualifications in a detailed Education field of study, by five year age group, 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total teachers as % of all working full-time		hers with lification)
										with qualification	(Number)	(%)
Education, nfd	41%	72%	68%	63%	61%	59%	53%	49%	45%	58%	(34,314)	(16%)
Teacher Education, nfd	77%	77%	70%	65%	66%	63%	60%	57%	51%	65%	(78,407)	(36%)
Teacher Education: Early Childhood	3%	7%	6%	7%	10%	9%	8%	9%	9%	7%	(2,639)	(1%)
Teacher Education: Primary	93%	90%	86%	82%	82%	81%	77%	77%	71%	83%	(53,827)	(24%)
Teacher Education: Secondary	95%	92%	87%	84%	82%	81%	78%	78%	72%	84%	(37,481)	(17%)
Teacher-Librarianship		100%	76%	93%	94%	85%	87%	81%	71%	83%	(424)	(0%)
Teacher Education: Voc Edn &Training	0%	18%	6%	8%	4%	5%	5%	4%	3%	5%	(84)	(0%)
Teacher Education: Higher Education	30%	43%	33%	21%	34%	13%	8%	9%	11%	19%	(144)	(0%)
Teacher Education: Special Education	73%	74%	78%	73%	75%	69%	69%	70%	64%	71%	(3,137)	(1%)
English as a Second Language Teaching	0%	17%	12%	11%	14%	20%	21%	16%	22%	16%	(195)	(0%)
Nursing Education Teacher Training	0%	0%	21%	0%	10%	9%	5%	4%	0%	8%	(43)	(0%)
Teacher Education, nec	43%	49%	37%	27%	26%	23%	22%	22%	21%	27%	(9,340)	(4%)
Curriculum & Ed Studies, nfd											-	(0%)
Curriculum Studies				0%	56%	100%	0%	64%	67%	48%	(25)	(0%)
Education Studies	25%	17%	31%	38%	30%	42%	48%	33%	46%	34%	(165)	(0%)
Education, nec	2%	3%	2%	3%	2%	2%	2%	2%	2%	2%	(197)	(0%)
TOTAL Education fields of study	54%	70%	65%	59%	59%	56%	53%	51%	48%	58%	(220,421)	(100%)

Source: ABS 2021 Census (2023a). Census classifications OCCP Occupation (custom classification for school teachers); QALFP Non-School Qualification: Field of Study

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Table A.3. Percentage of all school teachers, principals and classroom teachers recorded as having a highest qualification in school teacher education (narrow definition), by five year age range, 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total
All school teachers	45%	46%	40%	36%	33%	32%	33%	33%	37%	37%	37%
School Principals	45%	46%	40%	36%	34%	33%	33%	34%	37%	38%	37%
Classroom teachers	0%	45%	39%	34%	30%	29%	30%	28%	28%	27%	30%

Source: ABS 2021 Census (2023a). Census classifications: Occupation OCCP; Non-school qualification QALFP narrow custom definition for school teacher education

Table A 4. Percentage of all school teachers, principals and classroom teachers recorded as having a highest qualification in school teacher education (broad definition), by five year age range, 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total
All school teachers	73%	80%	74%	70%	67%	65%	65%	65%	66%	66%	69%
School Principals	63%	77%	72%	67%	64%	61%	59%	58%	56%	57%	61%
Classroom teachers	73%	80%	74%	70%	67%	66%	66%	65%	68%	66%	70%

Source: ABS 2021 Census (2023a). Census classifications: Occupation OCCP; Non-school qualification QALFP broad custom definition for school teacher education

Table A.5. Completions in initial teacher education, by level of course and detailed field of education, 2017

	Undergraduate	Postgraduate	Total
Teacher Education	1,661	1,276	2,937
Teacher Education: Early Childhood	1,965	339	2,304
Teacher Education: Primary Education	4,503	1,730	6,233
Teacher Education: Secondary Education	2,835	3,258	6,093
Teacher Education: Other Education	311	532	843
Total completions	11,275	7,135	18,410
Estimated total Teacher Education: Schools (only)	8,840	6,063	14,902

Source: Australian Institute for Teaching and School Leadership, *ITE Data Report 2019: Data Spreadsheet*, Table 49 (2019b) . Original source: Australian Government Department of Education customised data.

Note: Author's Estimated total Teacher Education: Schools (only), based on 80% of Teacher Education, 8% of Teacher Education: Early Childhood and 5% of Teacher Education: Other Education. See Table A2. for the basis of these assumptions.

A. 4. Other Census classifications

INDP classifies the industry in which an individual works, coded to the *Australian and New Zealand Standard Industrial Classification (ANZSIC)*, Revision 2.0 (Australian Bureau of Statistics, 2006). Within the broad category of the Education and Training industry (Division P) is Preschool and School Education (80), and within it at the three digit level is Preschool Education (801) and School Education (802), which is composed of Primary Education (8021), Secondary Education (8022), Combined Primary and Secondary Education (8023), and Special School Education (8023. The Census also includes a category of School Education nfd. Census staff coding for INDP take account of responses to questions 45 and 46 (above). In the 2021 Census data 96% of those in the custom occupational category of school teachers (see above) are classified as working in the School Education industry (98% of public school teachers, 93% of private school teachers).

INCP Total Personal Income is derived directly from responses to question number 38 (p. 16), 'What is the total of all income the person usually receives?' Guidance includes not to deduct tax, superannuation contributions or other automatic deductions, and to include wages and salaries, government payments, business income (including from rental properties) and all other income. Respondents are provided with a choice among 16 income ranges (including nil and negative income) and the Census data in TableBuilder is available in the same ranges.

LFSP Labour Force Status is derived from Hours Worked (HRSP) and these are closely associated variables. LFSP indicates whether an individual was employed and worked full-time, part-time or was away from work, was unemployed and seeking full-time or part-time work, or was not in the labour force. LFSP is derived from five questions, including number 50 (p. 20), 'Last week, how many hours did the person work in all jobs?', with guidance to 'Add any overtime or extra time worked and subtract any time off'. This question (only) is used to derive the hours worked by an individual (HRSP). An employed person would be classified as working full-time if they worked 35 hours or more a week, part-time if working fewer hours, and away from work if working zero hours or if no response is given (Australian Bureau of Statistics, 2021c, Hours worked (HRSP) section). Thus a school teacher who is employed on a part-time basis but actually worked more than 35 hours the previous week would be classified as working full-time. Data on hours worked is provided as two separate variables, HRSP in single number of hours per week from zero to 99 hours, and in ranges (HRWRP). Both variables are used in this report. Table A7 indicates that a higher percentage of teachers (especially older teachers over 60, and teachers younger than 45) were away from work in 2021 compared with 2016. This probably reflects the impact of COVID19, with many teachers infected or isolating as the September/October 2021 national peak in infections developed.

Table A.7 Total teachers and teachers away from work, 2016 and 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total	
2021												
Total teachers	15,235	48,256	52,140	50,006	48,356	46,284	42,984	35,620	28,145	12,769	379,777	
% away from work	4.0%	5.5%	10.8%	7.4%	3.7%	3.1%	3.7%	5.7%	9.2%	11.2%	6.2%	
Number away from work	612	2,676	5,614	3,680	1,781	1,449	1,593	2,044	2,585	1,436	23,459	
					201	6						
Total teachers	15,665	43,364	44,008	42,336	42,390	42,118	37,655	39,542	26,351	8,649	342,083	
% away from work	2.4%	5.0%	9.6%	6.2%	3.0%	3.0%	3.5%	6.2%	7.8%	7.7%	5.4%	
Number away from work	376	2,166	4,222	2,611	1,275	1,255	1,316	2,453	2,046	666	18,381	

Statistical Annex

Table 1. Australian teachers by sex and labour force status, 2021

	Number	% of all female, all male or all teachers	% of all teachers
		Female	
Worked full-time	176,549	62%	69%
Worked part-time	88,386	31%	83%
Away from work	20,261	7%	84%
Total female	285,199	100%	74%
	Male		
Worked full-time	77,533	78%	31%
Worked part-time	18,279	18%	17%
Away from work	3,796	4%	16%
Total male	99,606	100%	26%
		All teachers	
Worked full-time	254,087	66%	100%
Worked part-time	106,660	28%	100%
Away from work	24,056	6%	100%
Total	384,807	100%	100%

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation for custom classification for School Teachers; LFSP Labour Force Status; SEXP Sex.

Table 2. School teachers, the total Australian managerial and professional workforce and the total Australian workforce, by labour force status and sex, 2021

	Sch	School teachers			stralian ma essional w	•	Total Australian workforce			
	Males	Females	Total	Males	Females	Total	Males	Females	Total	
Full-time	78%	62%	66%	81%	61%	71%	70%	47%	59%	
Part-time	18%	31%	28%	15%	32%	24%	23%	44%	33%	
Away from work	4%	7%	6%	4%	7%	5%	7%	9%	8%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Males	Females	Total	Males	Females	Total	Males	Females	Total	
% by sex	26%	74%	100%	57%	43%	100%	51%	49%	100%	

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation for custom classification for School Teachers and for total managerial and professional workforce, LFSP Labour Force Status; SEXP Sex.

Table 3. School teachers, number and percentage in each ten year age range, 1954 – 2021

	<29	30-39	40-49	50-59	>59	Total
1954	23,133	10,509	13,357	9,875	5,126	62,000
1954	37%	17%	22%	16%	8%	100%
1961	31,319	12,862	12,604	11,596	5,618	74,000
1901	42%	17%	17%	16%	8%	100%
1971	57,360	26,652	18,216	12,048	5,724	120,000
19/1	48%	22%	15%	10%	5%	100%
1981	74,124	57,762	31,428	14,526	2,142	180,000
1301	41%	32%	17%	8%	1%	100%
1991	46,490	79,544	63,124	20,899	2,986	213,256
1991	22%	37%	30%	10%	1%	100%
2001	46,179	53,211	91,398	57,129	1,712	249,629
2001	18%	21%	37%	23%	1%	100%
2011	54,217	73,943	77,380	88,441	26,222	320,206
2011	17%	23%	24%	28%	8%	100%
2016	59,734	86,341	84,506	77,198	37,393	345,172
2010	17%	25%	24%	22%	11%	100%
2021	63,487	102,148	94,638	78,604	44,493	383,362
2021	17%	27%	25%	21%	12%	100%

Source: Australian Bureau of Statistics (2005-2011, 2023a).

Table 4. Indigenous teachers as a percentage of all public sector, private sector and teachers in all sectors, five year age range, and by remoteness, 2021

	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total			
		3001	35 33		ctor teache		33 33	33 3 .	05 05				
[r ubiic sec	tor teache	.13							
Major Cities of Australia	1.5%	1.5%	1.5%	1.4%	1.4%	1.2%	1.0%	0.7%	0.9%	1.3%			
Inner Regional Australia	3.2%	2.9%	2.1%	2.5%	2.8%	2.2%	1.7%	1.6%	1.5%	2.4%			
Outer Regional Australia	3.4%	3.0%	3.4%	3.0%	2.8%	3.4%	2.5%	2.2%	1.8%	3.0%			
Remote and very remote	3.7%	4.1%	6.0%	6.9%	8.0%	10.7%	9.4%	7.9%	5.4%	6.7%			
Total	2.0%	1.9%	1.9%	1.9%	2.0%	1.9%	1.6%	1.2%	1.2%	1.8%			
Private sector teachers													
Major Cities of Australia	1.0%	0.7%	0.6%	0.5%	0.7%	0.7%	0.4%	0.5%	0.4%	0.7%			
Inner Regional Australia	2.0%	1.6%	1.7%	1.1%	1.3%	1.2%	1.5%	0.6%	0.9%	1.4%			
Outer Regional Australia	1.8%	2.2%	1.4%	1.8%	3.5%	2.3%	1.6%	1.7%	0.6%	2.0%			
Remote and very remote	10.3%	10.0%	10.4%	11.9%	11.2%	13.9%	11.7%	13.3%	6.8%	10.5%			
Total	1.3%	1.1%	1.0%	0.9%	1.2%	1.1%	0.9%	0.8%	0.7%	1.0%			
				All t	eachers								
Major Cities of Australia	1.3%	1.2%	1.2%	1.0%	1.1%	1.0%	0.8%	0.6%	0.7%	1.1%			
Inner Regional Australia	2.8%	2.5%	2.0%	2.0%	2.2%	1.8%	1.6%	1.2%	1.3%	2.0%			
Outer Regional Australia	3.0%	2.8%	2.8%	2.6%	3.0%	3.0%	2.3%	2.0%	1.4%	2.7%			
Remote and very remote	5.2%	5.6%	7.2%	8.3%	8.9%	11.6%	10.1%	9.4%	5.8%	7.8%			
Total	1.8%	1.6%	1.6%	1.5%	1.7%	1.6%	1.3%	1.1%	1.0%	1.5%			

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); INGP Indigenous status; GNGP Public or private sector employer (adjusted); AGEP Age; Remoteness Areas (National) (EN)

Table 5. Ratios of Indigenous students to Indigenous teachers and all students to all teachers, public, private and all sectors by remoteness of regions,2021

		nous stude genous teac		All students to all teachers				
	Public	Private	All sectors	Public	Private	All teachers		
Major Cities	33	26	31	11	10	11		
Inner Regional	40	35	39	9	10	9		
Outer Regional	50	41	48	9	10	10		
Remote and very remote	54	19	41	9	7	8		
Total	40	29	37	10	10	10		

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); INGP Indigenous status; TYPP Public or private school students; GNGP Public or private sector employer (adjusted); Remoteness Areas (National) (EN)

Table 6. Percentage working 45 hours or more a week: full-time school teachers, full-time workers with bachelor degree or above, and full-time workers with school teaching qualifications who are not working as school teachers, by five year age range, 2011, 2016, 2021

AGE	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	TOTAL		
				202	1							
School Teachers	37%	43%	46%	49%	53%	55%	55%	54%	50%	48%		
All others with bachelor or above qualifications	23%	25%	27%	31%	37%	40%	39%	38%	38%	31%		
Non-teachers with school teaching qualifications	17%	21%	24%	27%	30%	32%	33%	32%	36%	28%		
2016												
School Teachers	45%	49%	49%	51%	54%	56%	58%	55%	51%	52%		
All others with bachelor or above qualifications	30%	31%	34%	39%	43%	44%	45%	43%	43%	37%		
Non-teachers with school teaching qualifications	25%	31%	33%	34%	35%	35%	37%	37%	39%	34%		
		Per	centage	point cha	nge, 201	6 to 2021	.,					
School Teachers	-8pp	-6рр	-3рр	-2pp	-1pp	-1%	-3pp	-1%	-1pp	-4%		
All others with bachelor or above qualifications	-7рр	-6%	-7рр	-8%	-6рр	-4%	-6рр	-5%	-5pp	-6%		
Non-teachers with school teaching qualifications	-8pp	-10%	-9pp	-7%	-5pp	-3%	-4pp	-5%	-3pp	-6рр		

Source: ABS 2011, 2016 and 2021 Censuses (2023a). Census classifications: Age AGEP; OCCP Occupation (custom classification for School Teachers); HRWRP Hours Worked (ranges); QALLP Non-School Qualification: Level of Education; QALFP Non-School Qualification Field of Study (School Teacher Education broad definition)

Note: The number of individuals with school teaching qualifications who are not teaching is small in the younger age ranges (25-29 and 30-35) and thus the data should not be relied on.

Because of the COVID-19 pandemic, many workers (notably in NSW and Victoria) were working remotely in the reference week for the 2021 Census. It is therefore not surprising that smaller percentages generally were working 45 hours or more a week in 2021 compared with the earlier years.

Table 7. Percentage working 45 hours or more a week: full-time female and male principals, classroom teachers and all teachers, by five year age range, 2021

	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total
Principals - female	61%	71%	69%	75%	79%	81%	83%	81%	82%	78%
Principals - male	65%	67%	73%	76%	82%	83%	85%	83%	80%	79%
All principals	65%	70%	71%	75%	80%	82%	84%	82%	82%	79%
Classroom tchers - female	38%	44%	45%	47%	51%	53%	53%	51%	47%	47%
Classrooms tchers - male	32%	39%	42%	44%	45%	47%	47%	44%	39%	42%
All classroom teachers	37%	42%	44%	46%	50%	51%	51%	49%	44%	45%

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for Classroom Teachers); HRWRP Hours Worked (ranges); AGE Age

Table 8. Percentage working 45 hours or more a week: full-time public and private, female and male school teachers, by five year age range, 2021

AGE	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	TOTAL				
	Public school teachers													
Male teachers	33%	40%	44%	47%	50%	51%	51%	48%	43%	45%				
Female teachers	39%	45%	47%	50%	55%	55%	57%	55%	52%	50%				
All teachers	37%	44%	46%	49%	54%	54%	56%	53%	50%	48%				
	Private school teachers													
Male teachers	33%	40%	45%	49%	51%	55%	54%	52%	47%	47%				
Female teachers	39%	44%	47%	49%	54%	57%	56%	56%	52%	50%				
All teachers	37%	42%	46%	49%	53%	56%	55%	54%	50%	49%				
			A	II school t	eachers									
Male teachers	33%	40%	45%	48%	51%	53%	53%	50%	46%	46%				
Female teachers	39%	45%	47%	50%	54%	56%	57%	55%	52%	50%				
All teachers	37%	43%	46%	49%	53%	55%	55%	54%	50%	48%				

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); HRWRP Hours Worked (ranges); AGE Age; GNGP Public or private sector employer (adjusted)

Note: These data include principals and classroom teachers

Table 9. Percentage working 45 hours or more a week: full-time primary and secondary, female and male classroom teachers, by five year age range, 2021

AGE	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	TOTAL			
Primary school teachers													
Male teachers	31%	40%	44%	44%	45%	49%	51%	48%	42%	42%			
Female teachers	38%	44%	45%	48%	52%	53%	53%	52%	47%	47%			
All teachers	37%	43%	45%	47%	51%	52%	53%	52%	46%	46%			
	Secondary school teachers												
Male teachers	33%	40%	42%	45%	46%	48%	47%	45%	39%	43%			
Female teachers	40%	45%	47%	48%	54%	56%	56%	53%	49%	49%			
All teachers	38%	43%	45%	47%	51%	53%	52%	49%	44%	46%			
			All class	sroom sc	hool tead	hers							
Male teachers	32%	40%	43%	44%	46%	48%	48%	45%	39%	42%			
Female teachers	39%	45%	46%	48%	53%	54%	54%	53%	48%	48%			
All teachers	37%	43%	45%	47%	51%	52%	52%	50%	45%	46%			

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation; HRWRP Hours Worked (ranges); AGE Age; GNGP Public or private sector employer (adjusted)

Note: The primary and secondary school teacher categories do not include school principals (and several other smaller categories of school teachers), which explains the smaller percentages working 45 hours or more a week than shown in Table 8.

Table 10. Percentage working 45 hours or more a week: full-time school teachers by remoteness and five year age range, 2021

	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	TOTAL
Major Cities	36%	43%	45%	48%	53%	55%	54%	54%	50%	48%
Inner Regional	38%	43%	46%	50%	53%	56%	58%	52%	49%	50%
Outer Regional	42%	47%	50%	52%	53%	58%	58%	54%	50%	52%
Remote and Very Remote	42%	46%	48%	51%	59%	56%	61%	58%	57%	52%

Source: ABS 2011, 2016 and 2021 Censuses (2023a). Census classifications: Age AGEP; OCCP Occupation (custom classification for School Teachers);

Table 11. Percentage working 45 hours or more a week: full-time professionals working in their home or other occupations, selected occupations, 2021

AGE	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	TOTAL
Engineers	30%	32%	28%	30%	34%	36%	34%	32%	30%	31%
Others with Engineering qualifications	24%	24%	23%	29%	37%	39%	38%	35%	33%	30%
Nurses	16%	15%	15%	16%	18%	19%	19%	19%	19%	17%
Others with Nursing qualifications	23%	21%	23%	27%	30%	32%	34%	32%	35%	28%
ICT professionals	9%	9%	10%	12%	17%	21%	19%	20%	17%	12%
Others with ICT qualifications	15%	16%	18%	22%	29%	33%	32%	31%	26%	22%

Source: ABS 2011, 2016 and 2021 Censuses (2023a). Census classifications: Age AGEP; OCCP Occupation (custom classification for School Teachers); QALFP Non-School Qualification: Field of Study; QALLP Non-School Qualification: Level of Education;

Table 12. Percentage of full-time public and private school classroom teachers in the age ranges 45-49 and 50-54 in each annual income range, \$65,000 - \$77,999 to \$156,000 to \$181,999, 2021

	45 -	- 49	50-	54
	Public	Private	Public	Private
\$65,000-\$77,999	8%	7%	6%	6%
\$78,000-\$90,999	16%	13%	14%	13%
\$91,000-\$103,999	29%	24%	29%	24%
\$104,000-\$155,999	45%	53%	45%	51%
\$156,000-\$181,999	1%	2%	1%	2%

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation for custom classroom teacher classification; GNGP for differentiating public and private school teachers (adjusted for ABS miscoding); INCP for annual incomes (the ranges provided on the Census form)

Table 13. Approximate average annual salaries, public school classroom teachers and selected other professional occupations, five year age ranges, 2021

	Public school classroom teachers	Engineering Professionals	ICT Professionals	Accountants	Solicitors	All professionals
25-29	\$81,186	\$82,958	\$93,922	\$94,760	\$95,309	\$88,273
30-34	\$94,308	\$98,319	\$112,939	\$118,851	\$126,520	\$106,106
35-39	\$102,924	\$110,638	\$125,832	\$131,945	\$147,637	\$117,710
40-44	\$105,334	\$118,542	\$131,760	\$139,188	\$156,604	\$123,038
45-49	\$107,395	\$123,691	\$134,612	\$144,006	\$158,930	\$124,163
50-54	\$108,615	\$123,984	\$134,007	\$143,764	\$159,761	\$123,398
55-59	\$110,633	\$122,475	\$132,258	\$141,903	\$156,110	\$122,493
60-64	\$109,466	\$120,708	\$130,286	\$138,499	\$153,293	\$120,534
% increase 25-29 to 50-54	36%	48%	41%	50%	64%	39%

Source: Table 13. ABS 2021 Census (2023a). Census classifications: OCCP Occupation(custom classroom teacher classification); GNGP Public and Private employers (adjusted for ABS miscoding); INCP for annual incomes (the ranges provided on the Census form)

Note: All professions except teaching have peak estimated average incomes in the 50 to 54 age range. The peak for teaching is in the 55 to 59 range, but the increase from the 25 to 29 age range remains at 36%.

Table 14. Percentage of public and private, primary and secondary classroom teachers, by home location SEIFA decile, 2021

	Public primary	Public secondary	Private primary	Private secondary
Decile 1	4%	4%	3%	2%
Decile 2	6%	7%	6%	5%
Decile 3	8%	9%	7%	7%
Decile 4	10%	10%	9%	8%
Decile 5	11%	11%	11%	10%
Decile 6	12%	12%	12%	11%
Decile 7	13%	13%	13%	13%
Decile 8	13%	13%	14%	14%
Decile 9	12%	12%	14%	16%
Decile 10	10%	10%	11%	14%

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation; GNGP Public or private sector employer (adjusted to take account of ABS erroneous coding; ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

Table 15. Percentage of public and private school, primary and secondary classroom teachers, by home location SEIFA decile, 2021

	Public primary	Public secondary	Priv prin	rate nary	Private secondary							
		Teachers										
Decile 1	4%	4%	3'	%	2%							
Decile 10	10%	10%	11	%	14%							
	Public primary	Public secondary	Catholic primary	Independent primary	Catholic secondary	Independent secondary						
			Students									
Decile 1	10%	10%	6%	5%	4%	4%						
Decile 10	10%	8%	10%	15%	13%	22%						

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); GNGP Public or private sector employer (adjusted); TYPP for type and level of school attended; ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

Table 16. Percentage of Indigenous and non-Indigenous public school teachers who own their own homes, by five year age range and remoteness of region

	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	Total				
			Indigenou	s public sch	ool teacher	s							
Major cities	57%	67%	77%	77%	76%	79%	84%	94%	73%				
Inner regional	68%	74%	72%	77%	85%	81%	85%	77%	77%				
Outer regional	54%	61%	74%	83%	72%	68%	72%	88%	69%				
Remote & very remote	14%	26%	14%	17%	21%	13%	16%	11%	15%				
Total	58%	65%	71%	73%	72%	69%	72%	73%	69%				
Non-Indigenous public school teachers													
Major cities	64%	72%	79%	83%	86%	88%	91%	93%	80%				
Inner regional	68%	79%	84%	87%	89%	91%	93%	94%	86%				
Outer regional	45%	64%	74%	80%	83%	85%	86%	87%	75%				
Remote & very remote	12%	27%	38%	45%	45%	45%	50%	56%	37%				
Total	61%	71%	79%	82%	85%	88%	90%	91%	80%				
			All pui	blic school t	eachers								
Major cities	64%	72%	79%	82%	85%	88%	91%	93%	80%				
Inner regional	68%	79%	83%	87%	89%	91%	93%	94%	85%				
Outer regional	46%	64%	74%	80%	83%	84%	86%	86%	75%				
Remote & very remote	12%	27%	37%	43%	43%	42%	45%	51%	35%				
Total	61%	71%	79%	82%	85%	87%	90%	91%	80%				

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); GNGP Public or private sector employer (adjusted to take account of ABS erroneous coding); INDP Indigenous status; TEND Tenure type; Remoteness Areas (National)

Table 17. Commencements in initial teacher education and pre-registration nurse education, number and annual change, 2007 to 2020

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	change 2007 – 2020 total & average annual
Initial teacher	26,159	24,825	26,290	28,640	28,203	30,457	29,595	30,506	30,769	29,961	31,532	27,531	27,366	29,021	10%
education		-5%	6%	9%	-2%	8%	-3%	3%	1%	-3%	5%	-13%	-1%	6%	1%
Pre-registration	13,434	13,598	15,232	16,628	16,338	17,862	18,989	20,266	22,049	23,645	24,362	26,645	26,493	27,169	51%
nurse education		1%	12%	9%	-2%	9%	6%	7%	9%	7%	3%	9%	-1%	3%	6%

Source: Australian Government Department of Education (2022a), Table 8.6: Commencing and All Students Enrolled in Special Courses, 2007 to 2020

Table 18. Completions in initial teacher education and pre-registration nurse education, number and annual change, 2001 to 2020

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	change 2001 – 2010 total & average annual
Initial teacher	13,107	14,423	15,596	16,250	16,374	17,002	16,973	16,526	17,146	17,392	33%
Education	10%	8%	4%	1%	4%	0%	-3%	4%	1%	10%	3%
Pre-registration	5,222	5,607	5,599	5,976	6,103	7,011	7,924	8,786	9,008	9,445	81%
nurse education	7%	0%	7%	2%	15%	13%	11%	3%	5%	7%	7%
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	change 2010 – 2020 total & average annual
Initial teacher	16,783	16,650	17,903	18,488	18,194	17,147	17,811	16,796	15,642	14,866	-15%
Education											
Education	-1%	8%	3%	-2%	-6%	4%	-6%	-7%	-5%	-1%	-1%
Education Pre-registration	-1% 10,072	8% 10,635	3% 11,084	-2% 11,640	-6% 12,041	4% 13,385	-6% 13,967	-7% 15,200	-5% 17,106	-1% 16,491	-1% 75%

Source: Australian Government Department of Education (2016, 2022b), Award course completions, Special Interest Courses

Note: Change 2001 to 2020: Initial teacher education Total 13%, average annual 1%; Pre-Registration Nurse Education Total 216%, average annual 6%

Table 19. Number of public school teachers living in each SEIFA decile of advantage/disadvantage by five year age range, 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total
Decile 1	617	1,735	1,407	1,120	1,103	1,073	1,003	856	715	330	9,961
Decile 2	822	2,621	2,343	1,983	1,874	1,609	1,549	1,304	1,083	512	15,705
Decile 3	861	3,050	3,126	2,741	2,370	2,212	1,964	1,705	1,312	606	19,944
Decile 4	905	3,275	3,551	3,234	2,926	2,637	2,470	1,869	1,489	746	23,108
Decile 5	892	3,447	3,963	3,784	3,339	3,019	2,738	2,158	1,754	766	25,866
Decile 6	989	3,603	4,175	4,135	3,731	3,335	3,027	2,488	1,818	850	28,151
Decile 7	987	3,798	4,321	4,281	3,985	3,648	3,221	2,718	2,107	871	29,934
Decile 8	994	3,654	4,236	4,267	3,973	3,815	3,511	2,941	2,309	1,042	30,734
Decile 9	947	3,398	3,852	3,491	3,561	3,638	3,601	3,042	2,439	1,141	29,120
Decile 10	809	2,958	3,032	2,653	2,790	2,940	2,738	2,539	2,172	1,084	23,715
Total	8,824	31,537	34,006	31,688	29,651	27,925	25,821	21,620	17,198	7,947	236,236

Source: ABS 2021 Census (2023a). Census classifications: OCCP Occupation (custom classification for School Teachers); GNGP (adjusted) Public school teachers; AGE Age; ABS SEIFA Index of Relative Socio-economic Advantage and Disadvantage (IRSAD)

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Table 20. Numbers of early childhood teachers in the Industry classifications of Child Care Services, Preschool Education and School Education, by selected variables of Occupation, Non-School Qualification: Level of Education and Non-School Qualification: Field of Study, 2021

INDP Industry	-	Childhood ary School) Teachers	School) Te QALLP L	e-primary	Educat	P Teacher tion: Early Childhood	QALP Teacher Education: Early Childhood & QALLP Level Bach and above		
Child Care Services	6,639	25%	5,196	23%	23,233	40%	13,047	36%	
Preschool Education	12,763	48%	10,225	46%	24,236	42%	14,714	41%	
School Education	7,464	28%	6,847	31%	10,820	19%	8,094	23%	
Total	26,866	100%	22,270	100%	58,291	100%	35,855	100%	

Source: ABS 2021 Census (2023a). Census classifications for Persons: INDP Industry; OCC Occupation; QALLP Non-School Qualification: Level of Education; QALFP Non-School Qualification: Field of Study.

Table 21. Industries of employment and labour force status of individuals with qualifications in the Teacher Education: Early Childhood field of education, at the level of Bachelors or above, numbers by five year age group, 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total
Childcare	1,414	2,596	2,348	2,051	1,466	1,267	909	561	308	118	13,047
Preschool	1,410	2,716	2,380	2,111	1,686	1,684	1,217	879	506	120	14,714
School	387	1,054	1,120	1,198	1,295	1,115	849	593	370	123	8,094
Other occupation	743	1,586	1,627	1,617	1,427	1,399	1,036	755	593	256	11,023
Not working	486	1,070	1,364	1,172	799	630	504	501	962	1,095	8,589
TOTAL	4,440	9,022	8,839	8,149	6,673	6,095	4,515	3,289	2,739	1,712	55,467

Source: ABS 2021 Census (2023a). Census classifications: INDP Industry of Employment; LFSP Labour Force Status; QALFP Non-School Qualification: Field of Study; QALLP Non-School Qualification: Level of Education

Table 22. Industries of employment and labour force status of individuals with qualifications in the Teacher Education: Early Childhood field of education, at the level of Bachelors or above, percentages by five year age group, 2021

	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	Total
Childcare	32%	29%	27%	25%	22%	21%	20%	17%	11%	7%	24%
Preschool	32%	30%	27%	26%	25%	28%	27%	27%	18%	7%	27%
School	9%	12%	13%	15%	19%	18%	19%	18%	14%	7%	15%
Other occupation	17%	18%	18%	20%	21%	23%	23%	23%	22%	15%	20%
Not working	11%	12%	15%	14%	12%	10%	11%	15%	35%	64%	15%
TOTAL	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Table 22 [above]

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