**Submission No 130**

# INQUIRY INTO TEACHER SHORTAGES IN NEW SOUTH WALES

**Organisation:** The Centre for Independent Studies

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# Submission into Parliamentary Committee's Inquiry into Teacher Shortages

**July 2022**

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The Centre for Independent Studies (CIS) is a leading independent public policy think tank in Australasia. Our work is driven by a commitment to the principles of a free and open society. The CIS is independent and non-partisan in both its funding and research, does no commissioned research, nor takes any government money to support its public policy work.

At CIS, we have long seen education reform as key to our mission. We advance the need for a high-quality education system in order to deliver economic prosperity for the next generation, to promote social mobility, and to foster social cohesion.

CIS welcomes the opportunity to contribute to the Inquiry into Teacher Shortages in NSW. We are especially supportive of the Committee's objective to work toward "a teaching workforce with the size, strength and skill to deliver the excellent education that we all want for our children."

In this submission, we focus on several items identified in the Inquiry's terms of reference, particularly:

- Current teacher shortages in NSW schools;
- Future teacher supply and demand;
- Out-of-area teaching, merged classes and minimal supervision in NSW schools;
- The NSW Teacher Supply Strategy;
- Teaching workforce conditions;
- Initial Teacher Education;
- The impacts of the Staffing Agreement on the ability of principals to effectively staff schools and manage performance;
- And the measurement of staff turnover.

By way of introduction, we would also like to draw the Committee's attention to the need to clearly distinguish between teacher shortages and school vacancies.

While there is evidence that current school vacancies are relatively high, it is not clear that this necessarily reflects an overall teacher shortage in NSW. Instead, relatively high vacancies — despite relatively high teacher numbers — reflects that there are considerable geographic and subject-specific shortages, not that there is a lack of teachers — or *potential* teachers — per se in the NSW education system. This means that policymakers must ensure that responses to this challenge are targeted to the specific areas of need.

In addition to the evidence presented in this submission, we would also like to direct the Committee to the 2022 CIS research report: *Teacher workforce: fiction vs fact*.

## Recommendations

*Respond to short-term school vacancies through participation rate measures*

Policymakers must be conscious that current economy-wide labour shortages are temporary and do not necessarily reflect a permanent supply shortfall within the teacher workforce. There is also no reason to believe there is widespread dissatisfaction or degrading of the status of the teaching profession that would significantly put future supply of the workforce at risk.

Addressing current vacancies within the broader skills shortage environment requires context-specific policy approaches.

For instance, short-term supply measures should look to maximising the participation rate within the potential teacher workforce. The potential teacher workforce can be supplemented by measures that could temporarily return recently retired teachers into relevant positions, granting provisional permission to new teachers to practice where applicable, and supporting international migration for suitable candidates. While secondary school teachers are listed as eligible for permanent work visas based on the Medium to Long Term Strategic Skills List, policymakers in NSW should seek to ease all further restrictions to maximise attractiveness to potential international applicants.

*Secure long-term teacher supply through promoting a more flexible and diverse teacher workforce*

There is little evidence that overall teacher workforce numbers are in long-term crisis. However, there are potential gains for the teacher workforce from increasing its diversity and flexibility.

In particular, increasing the proportion of the workforce who are subject matter experts and professionals from a range of backgrounds is likely to help secure the supply of teachers in subject areas that have traditionally been difficult to fill.

More flexible approaches to salary may be required to support the transition of new entrants, rather than requiring those with professional experience to commence teaching at starting rates of pay. A comparison of likely salaries of potential target individuals for mid-career changers suggests that teaching salaries of around $115,000 would be comparable to current earnings.

Under section 4.3 of the Standards Based Teacher Salary provision: “Relevant Teaching experience” , there is a provision to offer a higher salary based on relevant non-school teaching experience. Broadening this provision to include experience other than teaching could give the Department the flexibility required to offer mid-career professionals an incentive to enter teaching by starting their pay at a higher band. This may be particularly effective when recruiting people from STEM sectors as roles in parts of these sectors may attract higher than average salaries.

However, it is also likely that more transparency of actual rates of pay of teachers may increase likelihood of entry. As identified in the QITE review, members of the community — including those potentially considering teaching as a career — underestimate the actual salaries available to teachers.

It may also be suitable to consider permanently higher salary for in-demand subject specialists. There is some international research that suggests a salary supplement equivalent to a 5 per cent permanent differential for science and maths teachers can result in a significant increase in teacher supply and reduction in attrition of these in-demand teachers.[1] Moreover, the additional cost associated with this higher wage for maths and science teachers is found to be more cost-effective than having to recruit

(and subsidise) additional ITE students and directly impacting salary is more cost-effective than other approaches, such as loan forgiveness.

*Focus on raising teacher entry, not blocking teacher exits*

There is no evidence that the number of teachers exiting the profession is a major contributing factor to current workforce challenges. For this reason, there is little reason to believe that attrition-prevention measures — such as across-the-board pay rises and easing of work conditions — will materially improve the state of teacher supply. Current levels of attrition are already very low and there would be little reason to believe that further reductions in attrition are likely to result in greater outcomes. It is likely that extremely low rates of attrition may unnecessarily result in the retention of teachers who are not well-suited to the profession.

However, there are opportunities to improve the number of entrants to teaching. This could be materially improved by increasing the retention of students undertaking ITE qualifications, increasing access and availability of employment-based and accelerated pathways into teaching, and reducing barriers to enter teaching.

*Continuously evaluate teacher supply initiatives to produce an evidence base for success and scaling up*

There are a range of initiatives contained within the NSW Teacher Supply Strategy that are likely to produce desired outcomes. However, there is an underdeveloped evidence base concerning what approaches to teacher recruitment are generally most cost-effective in attracting, retaining, and developing new teachers to the profession.

Clearer data regarding the costs and effectiveness of scholarship and sponsorship programs from the NSW Department of Education would allow for an accurate comparison of the relative costs and benefits of employment–based pathways vs. other incentives in more traditional pathways.

It remains unclear if key performance indicators have been established for current initiatives and scholarships, how many applications are received, how many places are awarded, how many people successfully complete each scholarship, and how many are still teaching years after the completion of their service term.

*Improve teacher time use through red tape reduction and lesson preparation efficiencies*

While it is true that the workload burden and burnout of teachers is a matter worthy of policymakers' attention, it is not clear that simply reducing working hours is a solution to this problem.

The greatest opportunities to support teachers' workload are in reducing the time required for lesson preparation, school management activities, and general administrative tasks. Helping teachers to use more of their time on teaching and on providing student feedback is likely to improve outcomes and reduce burnout.

While previous attempts to reduce teacher workload have not typically been very successful, policymakers should undertake to make better use of existing non-teaching staff in schools to reduce the burden on teachers, as well as identify appropriate red tape reductions.

The most suitable option to meaningfully reduce time burden for teachers is to provide more and better access to curriculum-aligned, high-quality teaching resources.

*Regulate ITE providers, not ITE students*

Some teacher workforce policy settings in NSW (and federally) — particularly on ITE — have been calibrated to narrow the access to teaching as a profession. Such policies were largely introduced in response to concerns about significant oversupplies of teachers and risks posed by inadequate academic standards of new teachers.

It is not clear that policy measures intended to restrict entry to teaching remain a prudent approach — particularly as there is no evidence to suggest that Australian teachers are of a generally low academic standard, compared to similar countries.

However, there is evidence that ITE programs are not consistently preparing trainee teachers effectively. A CIS audit of ITE programs at 31 universities found at least 27 clearly emphasised practices that are not evidence-based and did not provide trainee teachers with sufficient exposure to explicit teaching approaches.

Policymakers should commit to ensuring all ITE students, irrespective of their background, are given every opportunity to succeed through high quality ITE programs. While the NSW government does not directly regulate the content in ITE degrees, it does regulate the accreditation process and can apply quality assurance measures to ensure that ITE providers comply with high quality preparation programs.

*Improve initial teacher education by improving school-based practicums*

Among all factors contributing to teacher preparation, the quality and quantity of school-based practicum is the most significant. For this reason, a sustained commitment to improving and expanding access to school-based practicums is necessary to better prepare new teachers.

CESE produced a literature review of professional experience in ITE in 2016. Further evidence could be beneficial in helping to support schools and ITE providers in facilitating high quality school placements and practicums.

As with other NSW policy initiatives, like the Ambassador Schools program, examples of high-quality practicum experiences can be highlighted in order to share and replicate successful practice.

*Phase out the 2-year Master's degree*

There is little reason to believe the current expectation for postgraduate study — a two-year Master's degree — is contributing to improved preparedness or effectiveness of trainee teachers. However, it adds considerable imposts to new entrants.

The NSW Productivity Commission's 2021 White Paper recommended that the costs and benefits of a two-year Master's program be reviewed and compared with the potential benefits associated with an equivalent one-year qualification, such as the former Graduate Diploma.

While there are currently some accelerated ITE programs for postgraduates mean not all candidates are required to take two years full time to complete, the capacity for an accelerated completion could be better communicated to ITE applicants.

Policymakers should support reducing the duration of postgraduate ITE qualifications, with a focus on ensuring that programs emphasise evidence-based practice and classroom management, along with the need for suitable practicum, as noted above. An option can remain available for current teachers wishing to pursue a longer qualification, such as for those wishing to further upskill, but the shortened qualification should be prioritised for those commencing teaching.

*Provide a greater nexus between teachers' performance and remuneration*

Like all professions, teachers require performance management and professional development that nurtures career advancement. To date, there is little evidence that measures introduced to reward and recognise teachers has delivered sustained improvements to performance or advancement.

While the Education Minister's pledge to significantly increase the number of HALTs in NSW may be a worthy goal, it is not yet clear that this will necessarily result in more highly effective teachers and more high achieving students.

Policymakers should also ensure there are an appropriate range of pathways for teachers to advance. As the NSW Productivity Commission recommended, an Instructional Lead position may be suited for teachers who demonstrate high performance but would like to remain in classrooms.

*Better collect and report data for monitoring the ITE pipeline and demand*

There is limited available data that meaningfully informs teacher workforce strategy — contributing toward frequent misconceptions and misunderstanding within the education community and wider public. Improving the transparency and reporting of the teacher workforce would improve decision-making and reduce the capacity for vested interests to politicise public discourse on the matter.

NSW should publicly report teacher workforce supply and demand in a way similar to the Victorian Department. At the very least, this reporting should clearly identify the number of vacancies, the rate of attrition, the number of ITE students expected to complete qualifications and entering the workforce within 12 months, forecasted replacement demand, forecasted additional demand, potential teacher supply, and the prevalence of out-of-field teaching. This should result in timely and consistent reporting of both supply and demand of the teacher workforce, with reliable forecasts to inform ITE providers, ITE students, schools, and policymakers.

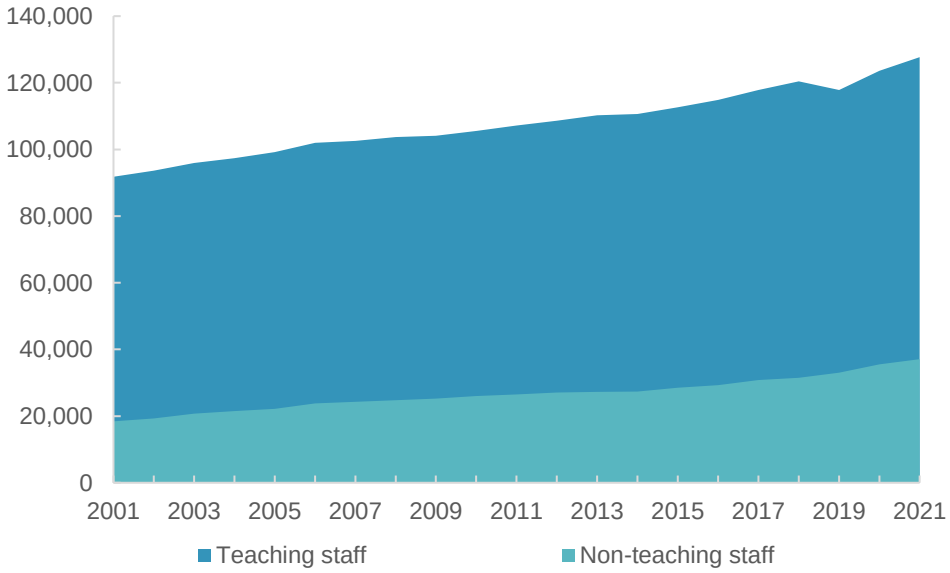
In addition to regular point-in-time data on the teacher workforce, a longitudinal survey of teachers should be commissioned in order to identify the destinations of teachers who leave the profession.

## Size and state of the NSW teacher workforce

*The overall size of the teacher workforce*

The schooling workforce in NSW is large — including more than 90,000 teachers, supported by around 37,000 non-teaching staff — and has been generally growing over the past 20 years.

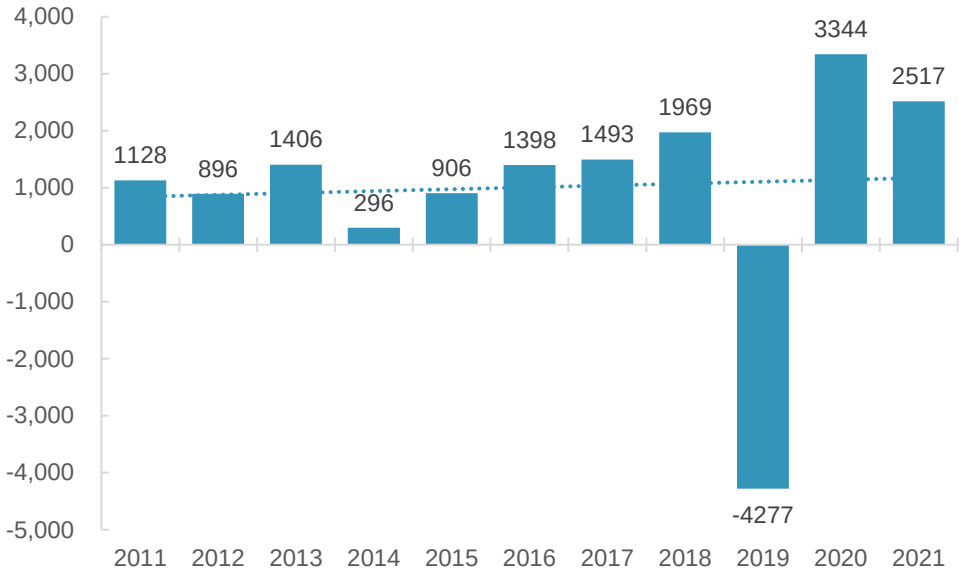
**Combined teaching and non-teaching staffing in NSW, 2001 to 2021.**




Source: ABS Schools data.

In almost every year, the number of teachers increases — with the notable exception of 2019, resulting from a change in measurement (due to introduction of a new payroll system that redefined how casual and temporary teachers were classified as ‘generally active’ in schools, and therefore included in counting). While this shows a large measurement-related decline in that year, it has been more than offset by above trend growth in subsequent years. For this reason, there’s no evidence of a prolonged or long-term overall teacher shortage in NSW.

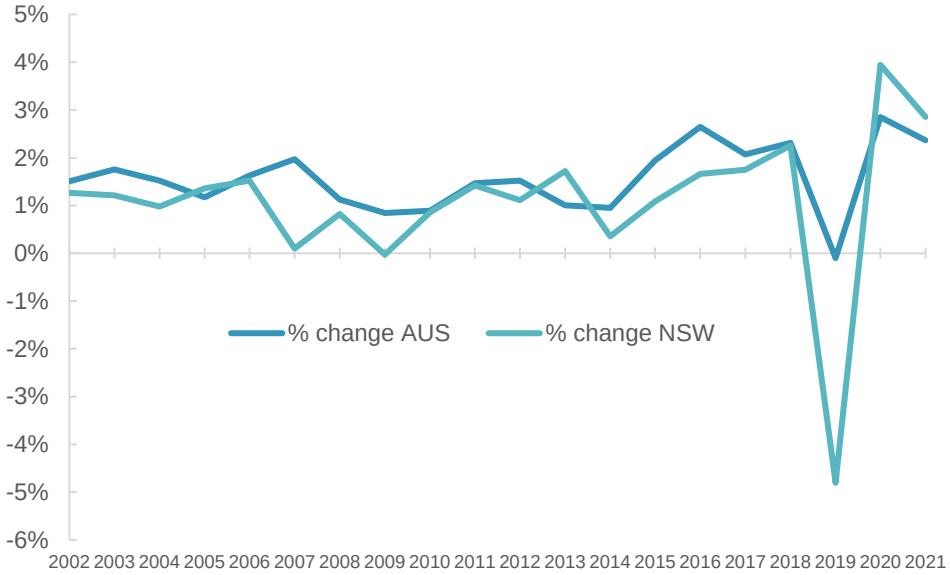
**Annual change in number of NSW teachers, 2011 to 2021.**




Source: ABS Schools data.

The size of the NSW teacher workforce has broadly followed trends in the Australian teacher workforce. Other than the measurement-related negative shock to the trend in 2019, teacher numbers have trends have generally been similar in magnitude and direction over time.

**Annual change in teacher workforce, NSW and Australia, 2002 to 2021.**




Source: ABS Schools data.

*School vacancies*

A teacher shortage exists when the demand for teachers exceeds the supply of teachers. It is an aggregate measure of the potential ability of the teacher workforce to meet the school systems' needs.

School vacancies are related to, but not the same, as teacher shortages. Notably, vacancies can be persistent even when there are teacher surpluses. This indicates not necessarily a quantum problem in the teacher workforce, but an allocation problem — because existing, available teacher resources are not reaching where they are needed.

Vacancies reflect quantity and quality mismatches. A vacancy may exist because there are not potential teachers to fill a position, or available teachers are not suited to the unfilled position, or an advertised position is not suited to an available pool of potential teachers.

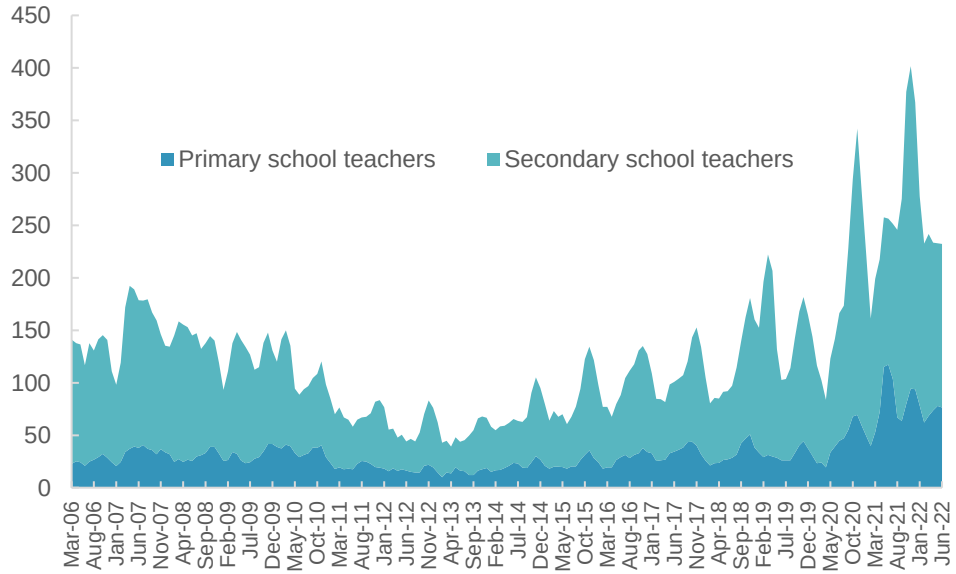
In NSW, vacancies are generally defined as the number of unfilled permanent positions — which is a relatively limited definition. The reporting of vacancies are not currently published in a consistent and timely way and are nor reported as transparent as they could be.

An alternative indicator is the Internet Vacancy Index (IVI). The IVI provides a monthly record of online job advertisements newly lodged on SEEK, CareerOne and Australian JobSearch each month. While it does not reflect the total number of vacancies in the labour market, it is a generally reliable measure for relative changes in vacancies across many occupations.

*Trends in school vacancies*

This indicator shows the number of school teacher vacancies has been elevated since 2020 and peaking in late 2021.

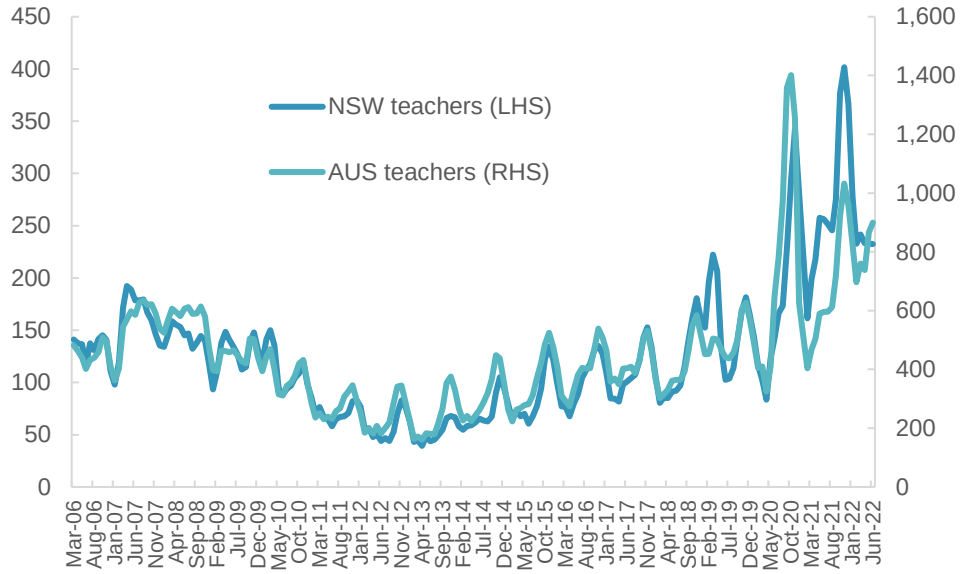
**Primary and secondary school teacher vacancies, NSW, March 2006 to June 2022.**




Source: National Skills Commission (2022). Internet Vacancy Index.

It is important to put in context that increased vacancies of school teachers is not unique to NSW. Over time, vacancies in NSW have tended to follow the trend observed across Australia. Compared to the national trend, NSW experienced a relatively high spike in vacancies in late 2021.

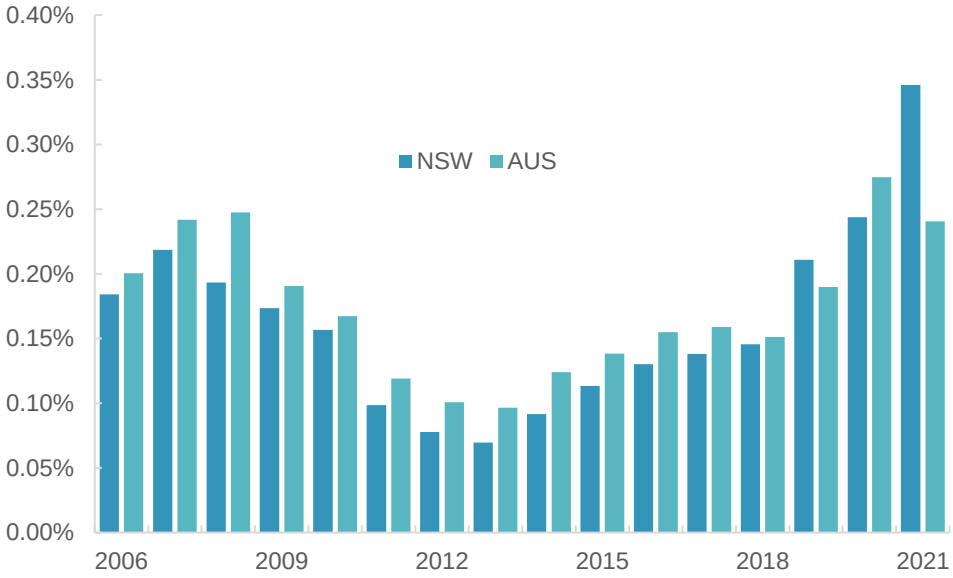
**Primary and secondary school teacher vacancies, NSW and Australia, March 2006 to June 2022.**




Source: National Skills Commission (2022). Internet Vacancy Index.

Over 16 years of available data, the proportion of NSW school teacher vacancies has been lower than the national trend in almost every year — with the only exceptions being 2019 and 2021. This suggests that while recent years have seen relatively high reporting of vacancies, it is not clear it reflects long-term and structural issues unique to the NSW teacher workforce.

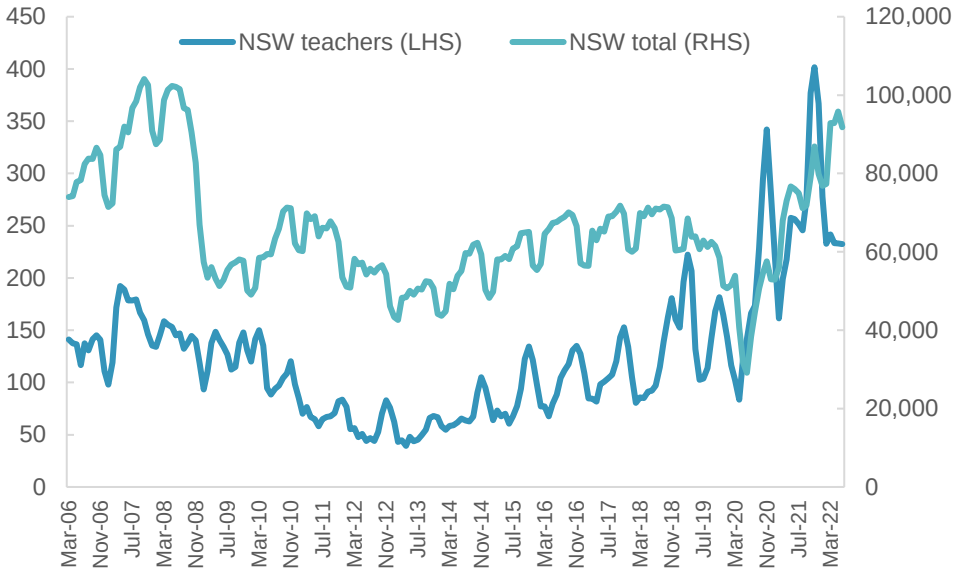
**Average number of school teacher vacancies per year as a proportion of the FTE teacher workforce, NSW and Australia, 2006 to 2021.**




Source: National Skills Commission (2022). Internet Vacancy Index.

Teacher vacancies are modestly correlated with wider economy vacancies. The recent upswing in teacher vacancies has coincided with wider economy skills shortages.

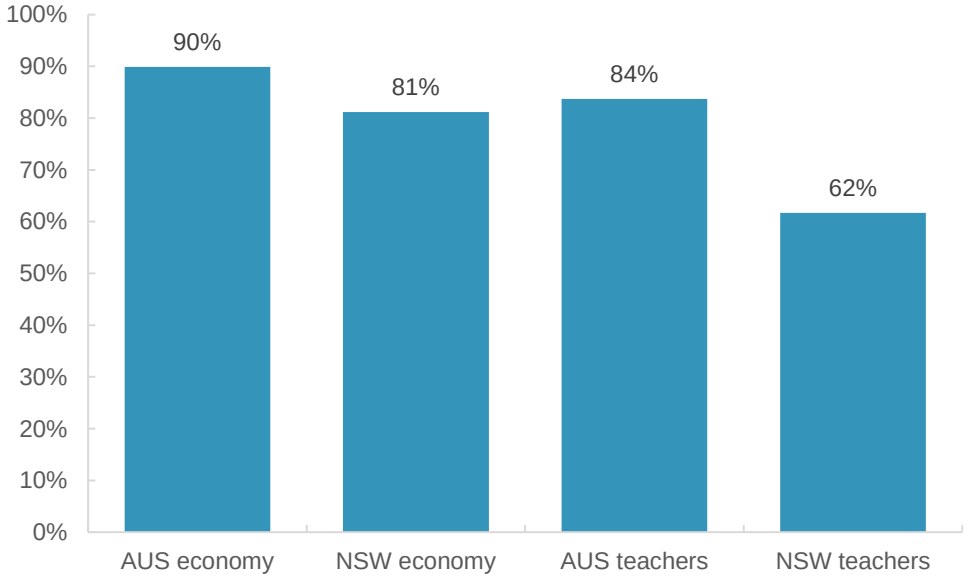
**NSW primary and secondary school teacher vacancies and NSW economy-wide vacancies, March 2006 to June 2022.**




Source: National Skills Commission (2022). Internet Vacancy Index.

Compared to monthly vacancies between January 2020 and June 2022, NSW teacher vacancies have increased by around 62 per cent — lower than the increase over the same period in the Australian teacher workforce and within the wider Australian and NSW economies.

**Change in monthly vacancies, economy wide (Australia, NSW) and primary and secondary school teacher vacancies (Australia, NSW), January 2020 to June 2022.**




Source: National Skills Commission (2022). Internet Vacancy Index.

Difficulties with school vacancies are not unique to Australian school systems. Across 27 European school systems, a 2021 report identified overall teacher workforce shortages, as well as a further 8 school systems that experience both shortages at the same time as a general oversupply. Only five European education systems report that teacher supply is adequate and well allocated.[2]

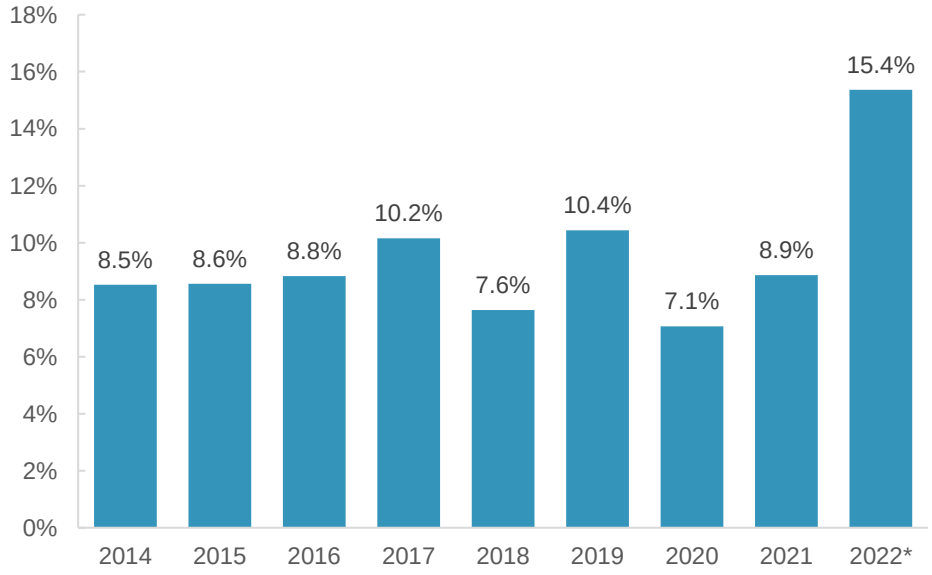
*Factors contributing to temporary vacancies*

In addition to permanent vacancies, workers' time lost due to illness is another factor contributing to the experience of temporary shortages in schools.

Across all workplaces, 2022 has seen an increase in employees losing work hours to illness. The May ABS labour force survey included a specific analysis of this and observed that there was little change in hours through earlier waves of covid-19. However, from December 2021 to January 2022 the number of total workers who worked fewer hours due to illness increased by 70 per cent and has remained at these elevated levels in most months of 2022 with available data.

There is little publicly available data to indicate the impact this has had on the teacher workforce specifically; however an analysis of ABS data would suggest nearly twice the proportion of teachers who normally lose time to illness may have done so in 2022. This would potentially equate to around 14,000 NSW teachers in a given week losing work hours to illness — around 6,000 more than is typically the case.

**Proportion of school teachers (Australia) who worked fewer hours in a given week due to their own or family member illness, 2014 to 2022.**




Source: ABS Characteristics of Employment, 2014 to 2021. NB that the 2022 value is estimated from extrapolating from the trend in workers losing working time to illness from August 2021 to May 2022. This is because the more detailed Characteristics of Employment survey data is collected in August, but the general labour force survey is collected monthly. The May 2022 labour force survey includes specific analysis of the matter of time lost to illness.

Another factor contributing to temporary vacancies has been the Covid-19 tutoring scheme. As identified in a 2021 NSW Audit Office review of the Covid-19 Intensive Learning Support Program, the recruitment of tutors had an adverse effect on the supply, in particular, of limited casual relief teachers.

## Trends in teacher supply and demand

*Trends in the demand for teachers*

Demand for teachers is determined largely by the number, distribution, and composition of the population of school-age children, as well as the workforce composition.

Most analyses of the teacher workforce do not match supply and demand. This means it is generally taken as given that more teachers are needed each year to meet increases in population and increases in student need (such as to meet learning and other difficulties). It is also assumed that student-teacher ratios necessarily must decline consistently over time.

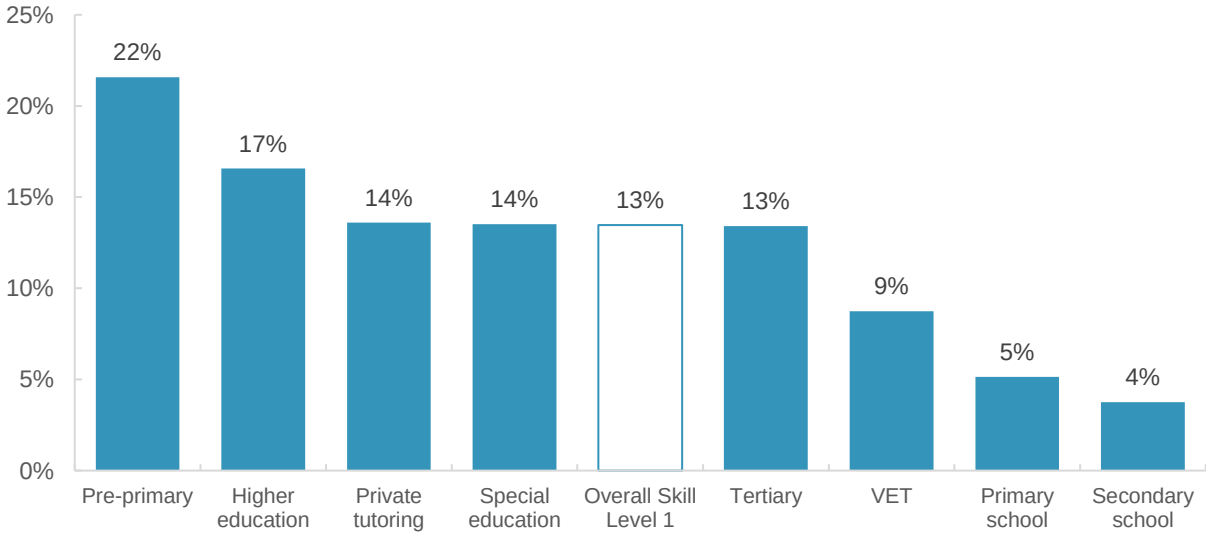
This can be seen in forward projections that appear to indicate future teacher shortfalls. For instance, the NSW Teachers Federation-commissioned Rorris report projected a shortfall of teachers in NSW of between 11,095 and 13,724 by 2030.[3] However, this estimate is clearly based on excessively and unjustifiably inflated assumptions of demand.

For instance, there is an assumed *reduction* of up to 11 per cent in the student-teacher ratio and a resulting projected increase in demand for teachers of between 20 and 25 per cent. That is despite the previous decade (from 2010 to 2020) recording a slight *increase* to the student-teacher ratio in NSW — from 14 to 14.1.

The projected scale of increased demand is significantly higher than historical precedent (by around double the growth of teachers from the past two decades), other projections (by at least double), or likely population changes.

The projected five-year employment growth in secondary and primary school teachers is relatively low — 4 and 5 per cent respectively — compared to other education professionals (particularly pre-primary educators) and other tertiary educated professions (Skill Level 1, 13 per cent). This is also higher than the increase in number of teachers over previous decades has been 12 per cent from 2011 to 2021 and 10 per cent from 2001 to 2011.

**Projected five-year employment growth, November 2021 to 2026, selected education professionals.**



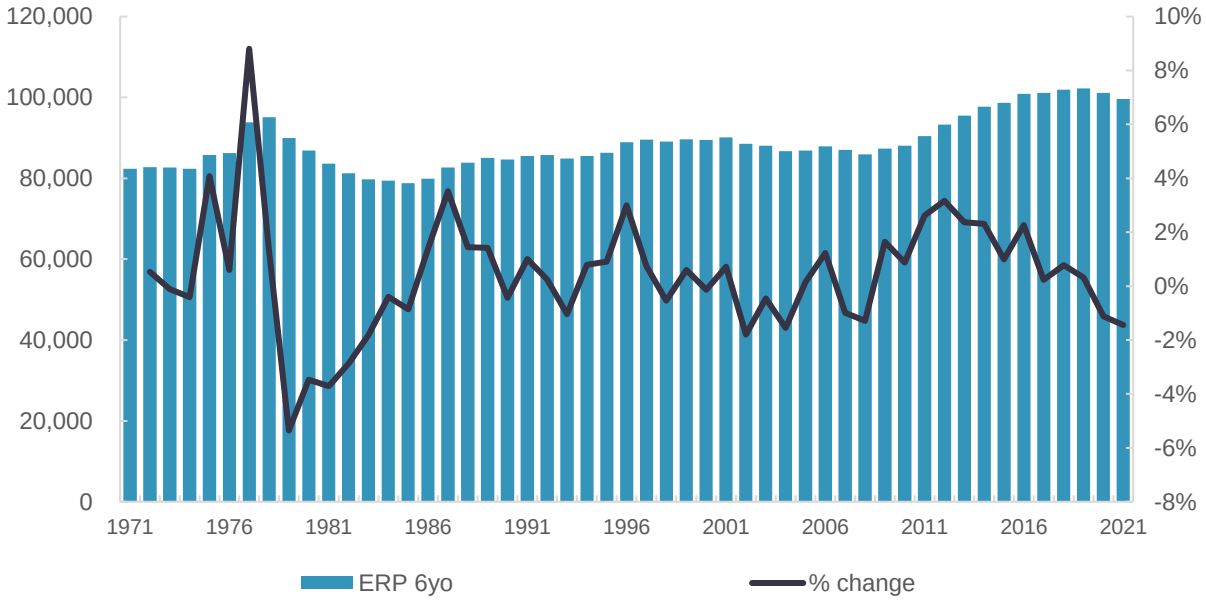
Source: National Skills Commission (2021). Employment Outlook (five years to November 2026).

Population trends in the school-age population over this decade are also projected to be relatively slow.

This is largely because of declines in recent years to the school-entering population, along with a combination of declining birth rates, historically low fertility rates, and relatively low nett overseas migration.

While relatively high population growth in the school-entering age group was recorded between 2009 and 2016, it has reduced since that time — shrinking in 2020 and 2021. In 2021, there were around 2600 fewer children aged 6 compared to 2019 — corresponding to an approximate *decline* in teacher demand, on average, of around 191 teachers for each year of schooling on current NSW student-teacher ratios (not counting nett overseas migration or internal domestic migration).

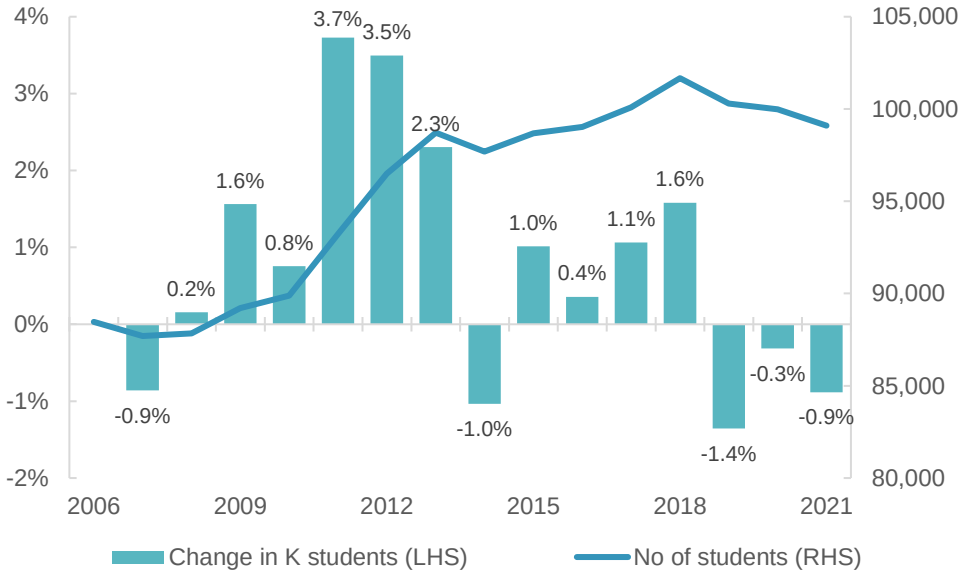
**NSW estimated population (aged 6) (LHS) and annual change (RHS), 1971 to 2021.**




Source: ABS Estimated Resident Population.

This is also reflected in declining school enrolments for Kindergarten in NSW since 2019 — placing downward pressure on forward teacher demand.

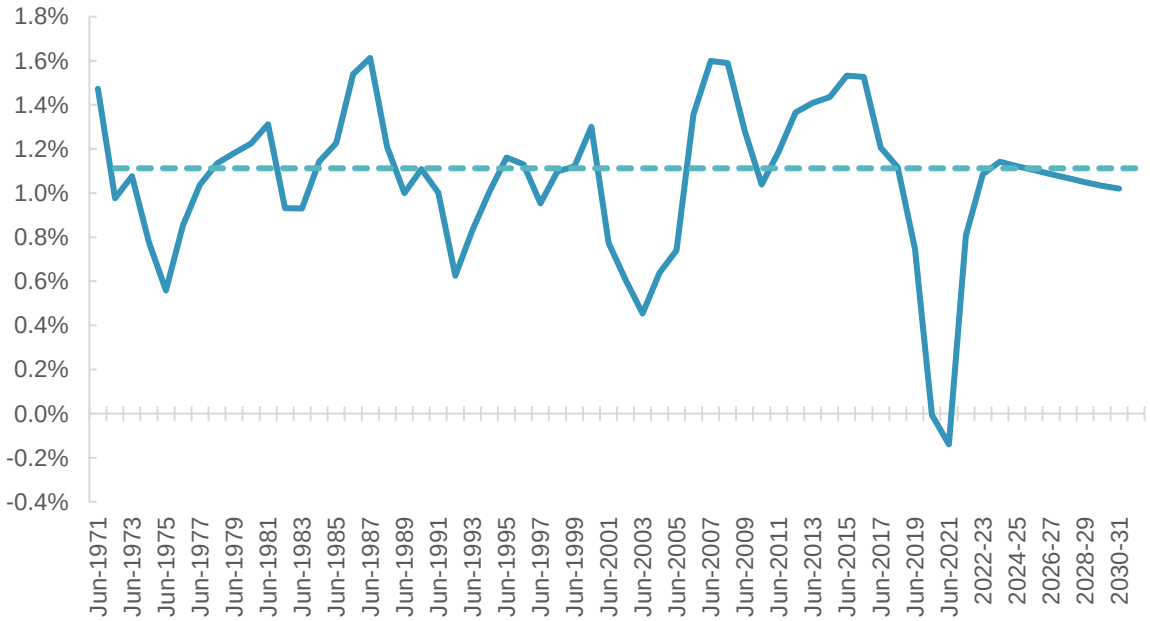
**Full time equivalent students in Kindergarten in NSW (RHS) and annual change (LHS), 2006 to 2021.**




Source: ABS Schools data.

Overall population growth is also expected to be modest and below the long-run pre-pandemic average. Together with the above, this means it is very unlikely there will be especially high demand for teachers into the medium term.

**Average NSW annual population growth, 1971 to 2021 and projected growth 2021-22 to 2030-31 (dotted line marks the average annual population growth rate from 1971 to 2019).**




Source: ABS Estimated Resident Population; Centre for Population (2021). Population Statement: State and Territory Population Projections, 2020-21 to 2031-32.

*Trends in the supply of teachers*

Changes to teacher supply can be looked at in terms of both exits and entrants to the profession. There is currently no evidence to suggest exits are likely to materially impact on the NSW teacher

workforce. However, there is some evidence that a lack of entrants to the workforce could contribute to present challenges. Policymakers are encouraged to pursue strategies to increase entry, not necessarily focussed on preventing exits.

### Teacher workforce exits

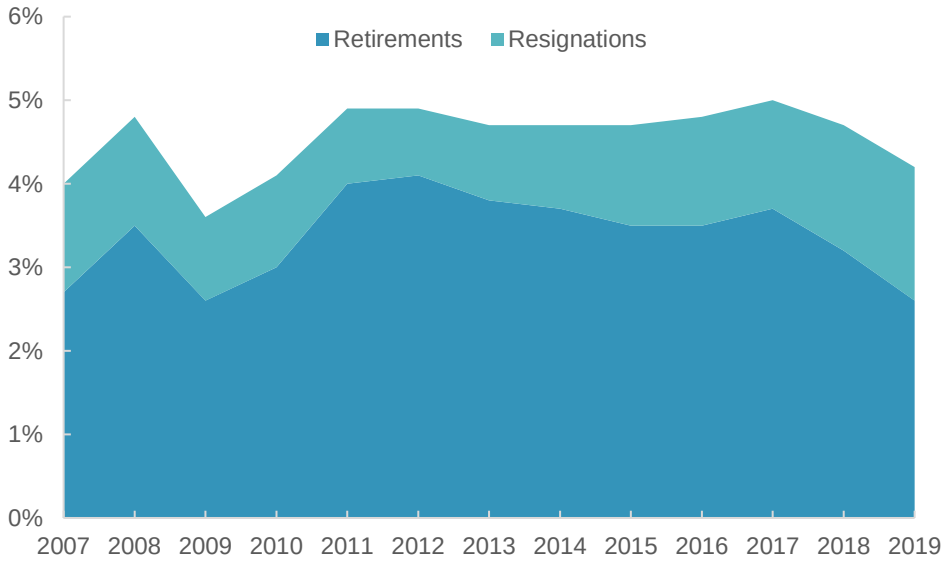
Teachers exit the profession through retirement, resignation, and (rarely) termination.

It is conventionally assumed that teacher exits are relatively high. This is probably because some surveys of teachers ask non-specific questions relating to intention to leave the profession — such as whether the respondent has ever thought about leaving, or if they intend to leave before retirement age.

Survey data of general intention to potentially leave teaching are not reflected in actual attrition data or more narrowly defined survey measures, such as that collected by the ABS — which asks respondents if they expect to be in their current job in 12 months' time. More narrow indicators of forward attrition appear to match much closer to actual attrition than wider indicators do.

Available data shows teacher attrition in NSW is relatively low and has not significantly changed over time. In fact, in the more recent years of data, there has been a decline in the proportion of teachers leaving the workforce from retirements and resignations.

**Teacher separation rates (government schools only), by retirements and resignations, 2007 to 2019.**



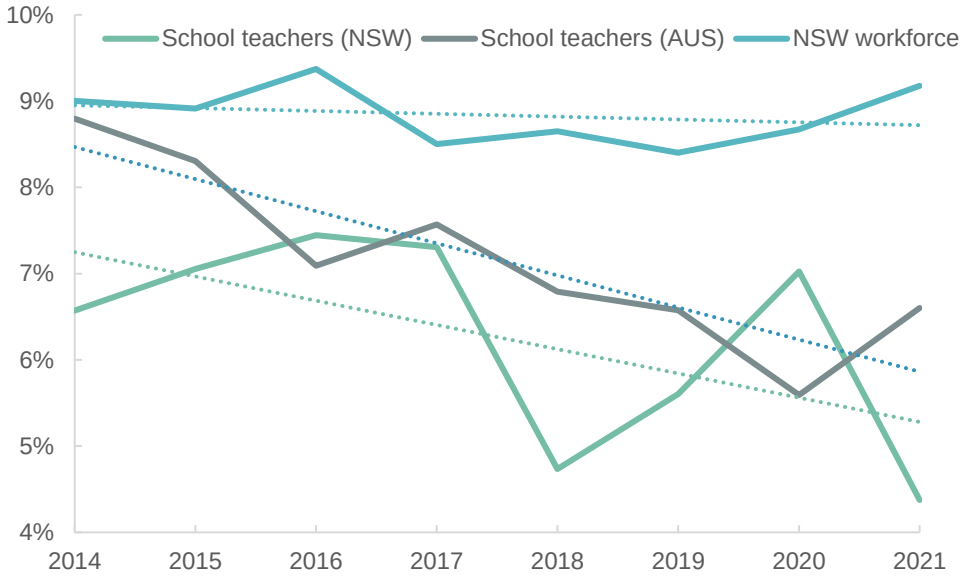

Source: NSW Department of Education (2020). Separation rates for School Teachers.

ABS data also shows the proportion of teachers expecting to leave their job within 12 months is consistently lower than within the wider workforce, and it has been trending lower. Compared to the Australian average, NSW teachers are generally less likely to report intending to leave.

Other ABS data sources confirm a generally low actual attrition rate among teachers. From 2015 to 2021, job mobility data implies an average attrition rate of school teachers (across Australia) of

around 4.1 per cent (based on survey respondents who were teachers 12 months prior but report they have changed jobs since).

**Proportion of school teachers and NSW workforce not expecting to remain in current job in next 12 months, 2014 to 2021.**

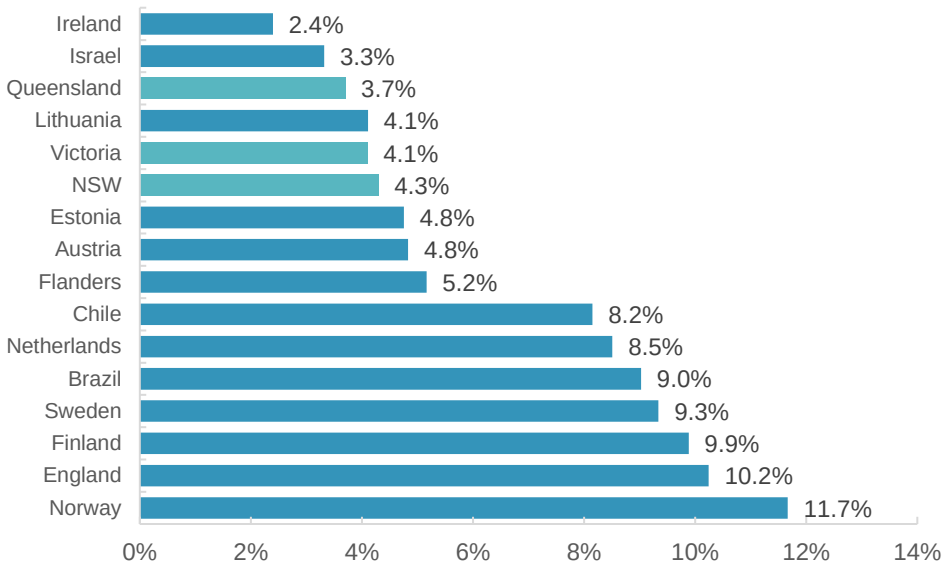



Source; ABS (2021). Characteristics of Employment, 2014 to 2021. NB that the NSW school teacher sample reports high standard errors in some years, however consolidated trend data appears reliable across the years covered.

By international standards, the rate of teacher attrition in NSW is also relatively low — less than half the rate observed in most European countries.

**International comparison of approximate teacher attrition rates in government schools.[1]**

[1] OECD figures based on an indirect measure of attrition for 2016, computing attrition based on the number of teachers in two successive reference years and the number of teachers who entered the teaching profession between these two reference years. Australian data is estimated from varying methods from counting lapsed teacher registrations. There are no directly comparable statistics on teacher attrition across Australia or internationally.

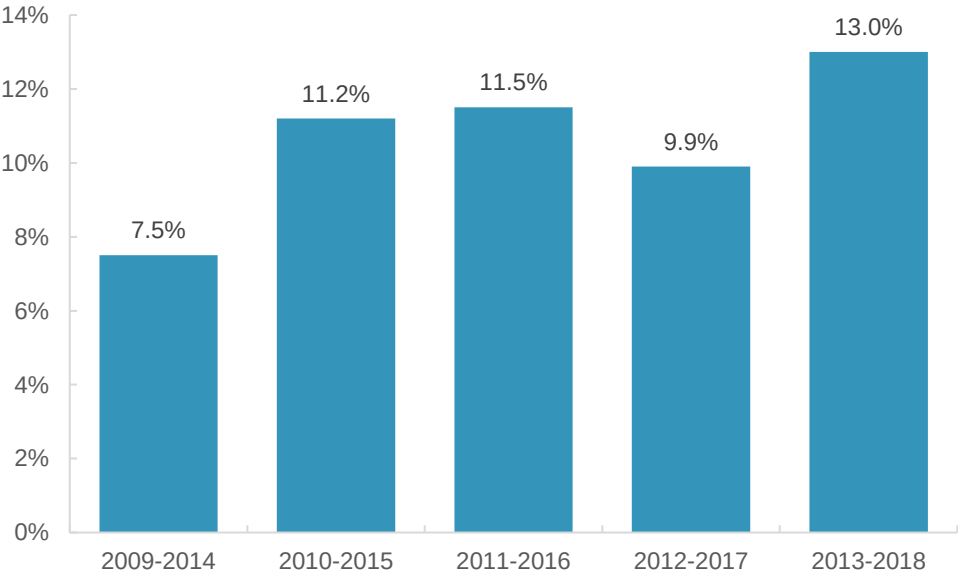



Source: OECD (2021). Education at a Glance, Table D7.1; Victorian Education Department; NSW Education Department; Queensland College of Teachers.

Early career teachers (within the first five years from entering teaching) are considered the most vulnerable to drop out of the workforce, and generally report higher rates of attrition and intentions to potentially leave the profession.

An analysis over five cohorts of early career teachers in NSW found around 10.7 per cent of graduate teachers granted initial accreditation were removed from the accreditation list within six years — indicating they had likely dropped out of the teacher workforce. The early career attrition of NSW teachers is slightly lower than the rate estimated in Queensland (around 14 per cent).

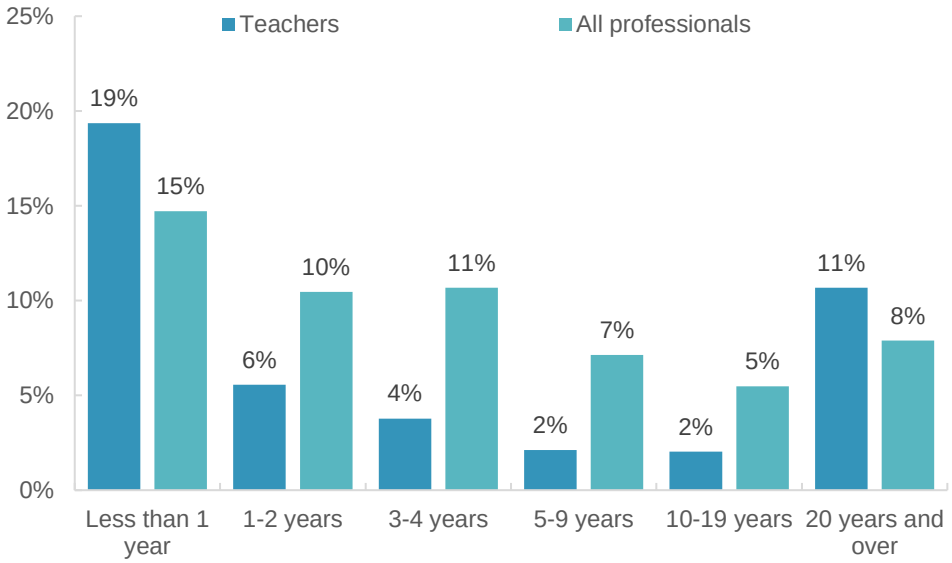
**Attrition rate of NSW early career teachers, 2009 graduate cohort to 2013 graduate cohort.**




Source: NSW Education Standards Authority (2020). Attrition of NSW Graduate Teachers, March 2020 Report.

Compared to early career entrants in other professions, more Australian teachers generally intend to remain in the job. There is slightly higher churn experienced in the first year of work in teaching, but this is much lower than in other professions in subsequent years.

**Proportion of school teachers and all professionals expecting to leave their job within 12 months (Australia), August 2021.**



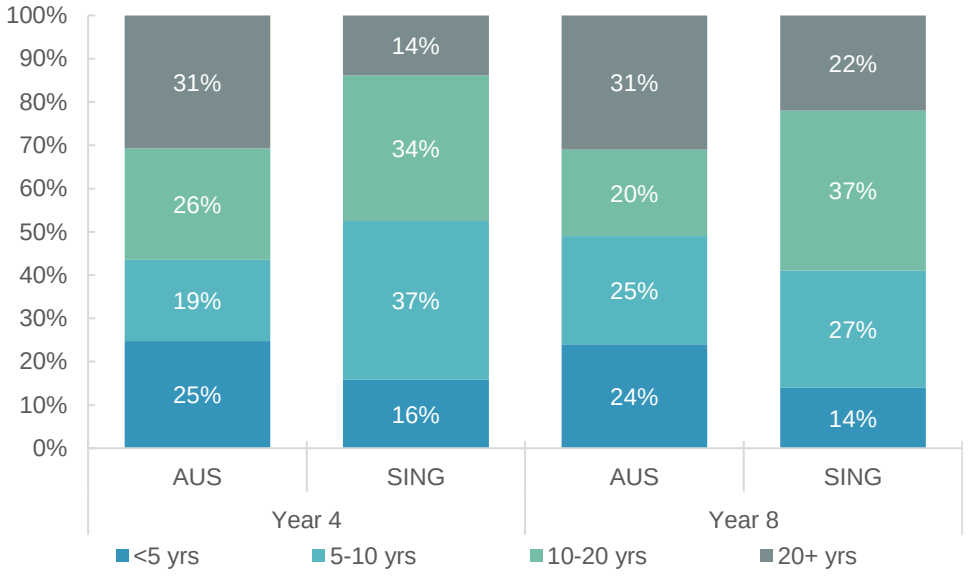

Source: ABS Participation, Job Search and Mobility, 2015 to 2021.

There is little available evidence to indicate a large risk of excess retirements of teachers. ABS data shows around 21 per cent of school teachers in NSW are aged 55 or over (slightly above the national figure of 19 per cent) — but this proportion has not changed significantly over recent years.

The 2015 NSW Teacher Workforce Strategy was also sanguine about the risk posed by the retirements — noting it was likely that retirement rates will decline from 2020 onwards, because many of the baby-boomer generation of teachers were expected to have retired by this time.

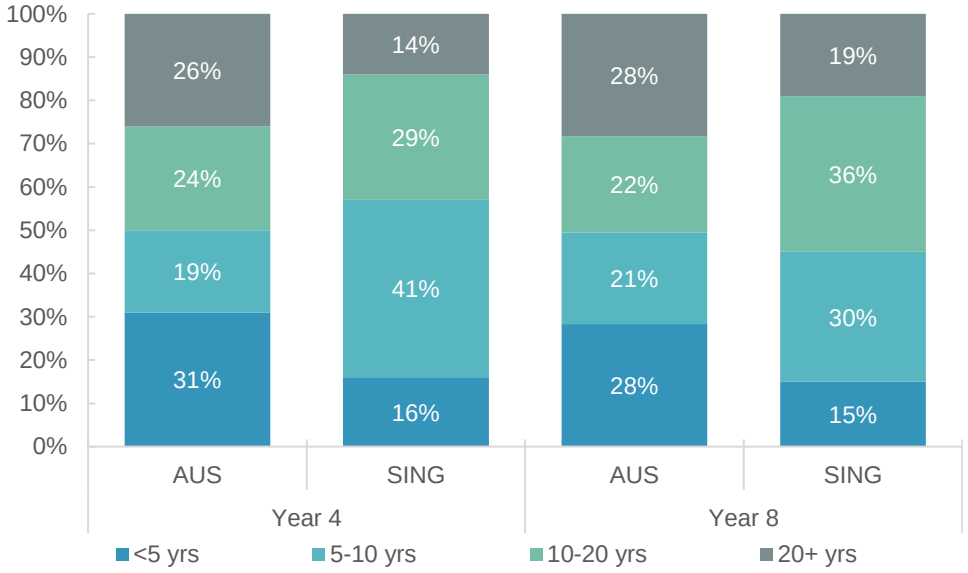
While there is not likely to be a major risk to the overall teacher workforce overall due to retirement, some senior secondary specialisations may be disproportionately impacted. According to national data, mathematics and science teachers are overrepresented at both the most experienced and least experienced ends of the distribution.

**Distribution of years of experience of teachers providing mathematics instruction, Year 4 and Year 8, Australia and Singapore.**




Source: IEA (2020). Trends in International Mathematics and Science Study (TIMSS), Boston College, TIMSS & PIRLS International Study Center.

**Distribution of years of experience of teachers providing science instruction, Year 4 and Year 8, Australia and Singapore.**



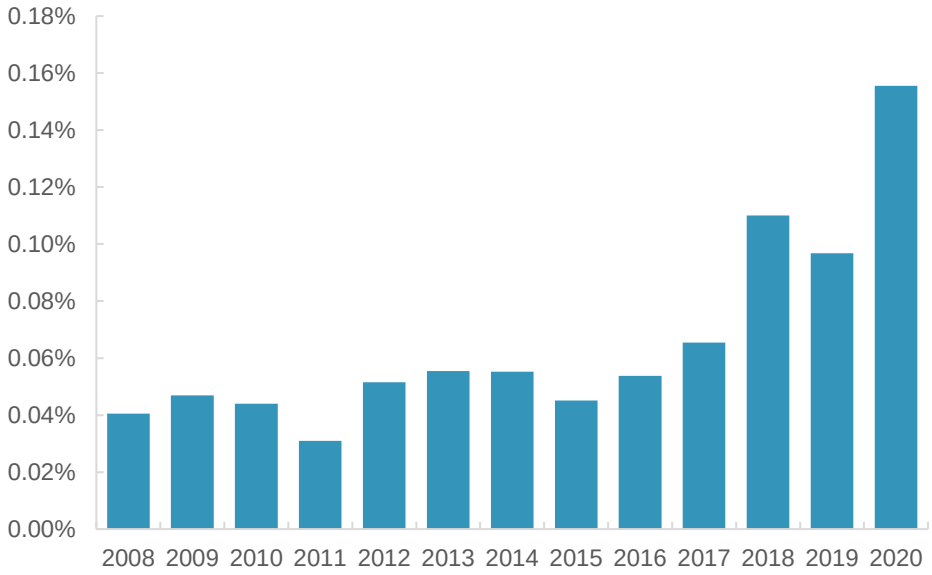

Source: IEA (2020). Trends in International Mathematics and Science Study (TIMSS), Boston College, TIMSS & PIRLS International Study Center.

A small number of NSW teachers leave the workforce by dismissal — such as resulting from misconduct or lack of performance.

The NSW Audit Office's 2019 report on teacher quality identified many shortcomings of the performance management system in schools, including a very low proportion of teachers identified as underperforming and receiving support for performance improvement. It observed that principals are typically not confident in managing underperforming teachers and that there are significant barriers preventing independent and objective performance management. It also noted that the proportion of

NSW teachers identified as underperforming or unsatisfactory was around 0.1 per cent, which it concluded was artificially low, in comparison to the United Kingdom's notional equivalent of around 3 per cent (based on school-level inspection ratings).

**Proportion of NSW teacher workforce dismissed, 2008 to 2020.**




Source: NSW Department of Education (2021). Teacher conduct and performance 2008-2020.

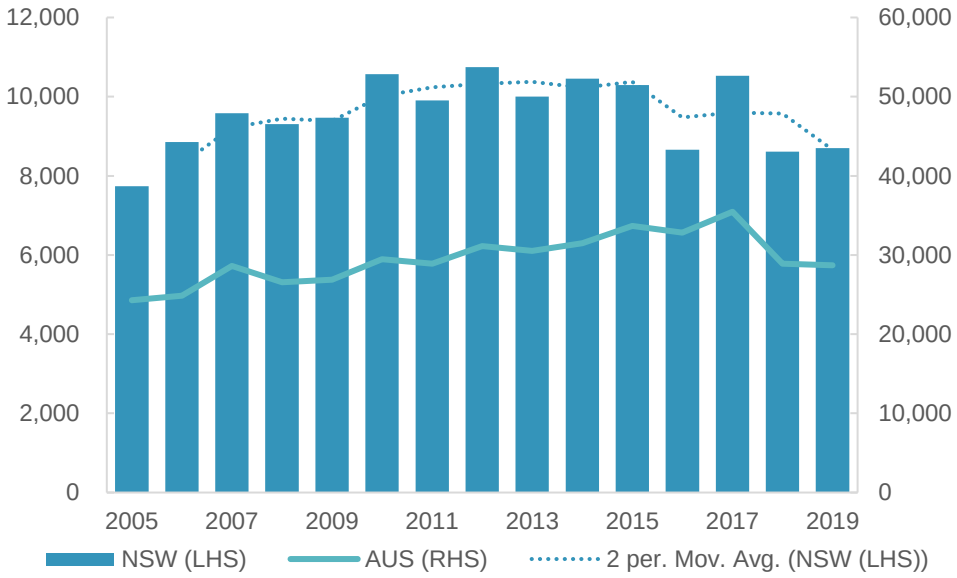
## Teacher workforce entrants

Teachers enter the profession through traditional initial teacher education (ITE) programs as well as a relatively small number through non-traditional pathways.

Many potential factors impact on the entry of new teachers through the ITE pipeline. This includes demand-side factors (population, graduate and future salary expectations, perceived status of the teaching profession, ITE completion rates, ITE course fees) as well as supply-side factors (university places available, advertised ATAR cut-off, subject or other prerequisites, duration of course length, accreditation and compliance processes, additional literacy and numeracy testing).

ITE commencements have generally grown at relatively high rates, but have been markedly lower in both 2018 and 2019. The causes of this decline are not clear, but are unlikely to be due to structural issues impacting on the teacher workforce — such as perceptions of pay, conditions, and the like — because if they were, significant structural issues like this would also be negatively impacting on attrition (which as demonstrated above, they do not appear to have done).

**Initial teacher education commencements in NSW (LHS) and Australia (RHS), 2005 to 2019.**

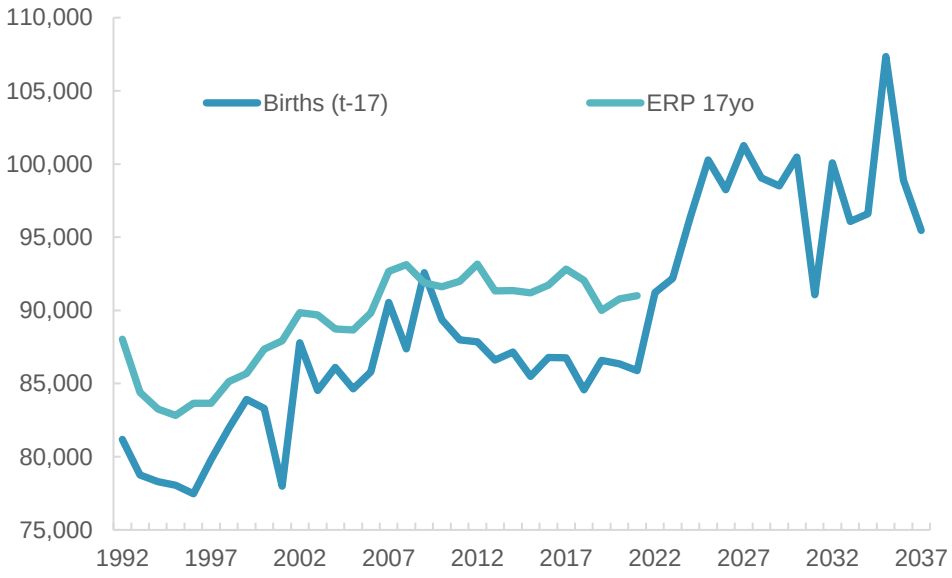



Source: Department of Education, Higher Education statistics.

The population of school-leaving cohorts can impact on potential ITE commencements. While this points to some decline in the potential domestic population for 2018 and 2019, it does not alone explain the decline observed in ITE commencements.

The effect of the introduction of the Baby Bonus in the mid-2000s means that there is expected to be an elevated level of potential university students available for undergraduate study from 2022 (as show in the below figure). This may support a significant rebound in ITE commencements over the next few years.

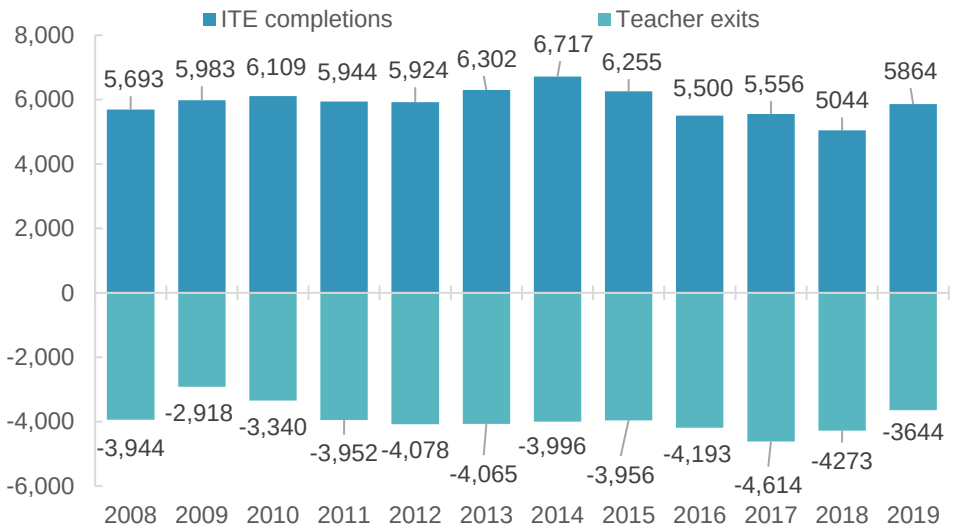
**Estimated population of 17 year-olds in NSW and number of births 17 years prior, 1992 to 2037.**




Source: ABS Estimated Resident Population by age and region; ABS births by region.

Despite relatively low commencements to ITE in recent years, to date completions from ITE have easily exceeded the number of exits from teaching each year (sometimes referred to as 'replacement demand').

**Yearly completions from ITE in NSW (positive values) and approximate yearly teacher exits (negative values), 2008 to 2019.**




Source: Exits are estimated from the available NSW separations data and may not be exact, because there is not a headcount of teacher exits from resignation and retirement.

There is little evidence that current school vacancies beginning in 2020 can be attributed to declining ITE commencements (which have declined only since 2018; meaning they would not have been placed in the workforce full-time under regular arrangements anyway), but a contributing factor could potentially be that ITE completion rates have been declining in recent years.

On average, there are around 5,900 ITE completers in NSW each year, but in 2018 there were only around 5,050 ITE completers (despite relatively high ITE commencements in prior years). This suggests that declining ITE completion rates are more likely than declining ITE commencements as contributing to current school vacancies.

It is not yet clear whether additional quality assurance in higher education policy and additional measures implemented in recent years will translate to higher ITE completion rates. This is because there are relatively high proportions of ITE students commencing who enter through non-ATAR pathways (which have lower successful completion rates than those entering using their ATAR). However, at the same time the intakes to teacher education degrees must also meet other requirements intended to relate to higher completion rates — such as successfully passing literacy and numeracy benchmarks.

## The NSW Teacher Supply Strategy

Historically, policies to increase supply through government programs have achieved limited success and do not typically have the scope to materially impact on overall teacher workforce numbers. In 2019, the NSW Audit Office observed poor data collection to track success in recruitment initiatives and, that where data were available, relatively low success rates could be demonstrated.

**Uptake of NSW Scholarship and Sponsorship opportunities.**

| Scholarship (2021) | Places available | Applications | Places awarded/offered | Completed |
|---|---|---|---|---|
| Early Childhood Education Teaching Scholarships | — | — | 54 | — |
| Teach.MathsNOW Scholarship | — | — | 41 | Delivered 5 new teachers in 2021, 12 expected in 2022. |
| Inclusive Practice in Education Scholarships | 200 | — | 79 | 122 in 2021 |
| teach.Rural scholarships | 60 (120 in 2022) | 634 | 62 | 50 finalised deed of agreement |
| Graduate Teacher Scholarship | 40, 20 in Technological and Applied Studies subjects | — | — | — |
| Teacher Education Scholarship | 230, 80 for Aboriginal people or Torres Strait Islanders | 81 Aboriginal applicants in 2021, for 2022 | — | — |

Source: New South Wales Department of Education website.

The NSW Teacher Supply Strategy 2021-2031 includes an ambitious range of initiatives intended to increase the quantity and quality of teacher supply. These involve monetary incentives, professional development opportunities, and offers to work as a teacher. Monetary incentives include reimbursing course fees, payments to study, payments upon completion of study, practicum allowances, and paid employment during study. A summary of current and recent arrangements has been provided below based on publicly available documentation and reporting.[2]

Though publicly-available Department information currently remains limited, the Supply Strategy appears to have addressed some of the recommendations made by the NSW Audit Office in its 2019 review.

[2] Listed items are based on publicly available data on initiatives as found on New South Wales Department of Education website.. Note that initiatives are broadly categorised and are colour-coded to aid interpretation: Cash payment – includes appointment allowance, training allowance etc.; Employment – Educational Paraprofessional (EP) or Teacher; Course Fee contribution; Practicum allowance/Rural practicum allowance. Also note that Teach for Australia and the Nexus program were included for comparison between multiple mid-career pathway programs. They do not run in NSW. Rural and Remote Incentives are not scholarships and are available to all eligible teachers in NSW.

**NSW Government initiatives to recruit teachers and benefits to participants.**

| | Commencement | 4 years to accreditation | 3 years to accreditation | 2 years to accreditation | 1 year to accreditation | Appointment/Study completion | 1st Year of teaching | 2nd year of teaching | 3rd year of teaching |
|---|---|---|---|---|---|---|---|---|---|
| Teach.MathsNOW | $50k<br>$5k | | | | EP part-time | $15k for industry professionals<br>$5k others | | | |
| Teach and Learn Scholarship (High Demand Areas) | | | | $20k | $20k<br>$500 pw ($5k maximum) | | | | |
| Graduate Teacher Scholarship (High Demand Areas) | | | | | $5k | $10k | | | |
| Mid-Career Transition to Teaching Program | | | | $30k | EP (0.4-0.6) | | $10k | $10k | $10k |
| Leadership Development Program (TFA) | ? | | | Teacher (0.8) | Teacher (0.8) | | | | |
| Nexus Program | | | | EP (0.2-0.4) | EP(0.8) | | | | |
| GTIL Cadetship | | | EP (0.4) | EP (0.4) | EP (0.5) | | | | |
| GTIL Internship | | | | | EP (0.5) | | | | |
| Early Childhood Education Scholarship | $20k | | | | | OR $20k | | | |
| Inclusive Practice in Education | | | | $10k | $10k | $3k | | | |
| Teach.RURAL | $50k | $7.5k | $7.5k | $7.5k<br>$500 pw | $7.5k<br>$500 pw | $6k allowance | | | |
| Rural Experience Program | $500 | | | | | | $500 pw | | |
| Grow Your Own Program | | | | | $3k | | | | |
| Rural and Remote Incentives | | | | | | $20k | $20-30k, less Rental Subsidy (50-90%).<br>$10k experienced teacher benefit<br>$5k retention benefit | $20-30k, less Rental Subsidy (50-90%).<br>$10k experienced teacher benefit<br>$5k retention benefit | $20-30k, less Rental Subsidy (50-90%).<br>$10k experienced teacher benefit<br>$5k retention benefit |

## Factors potentially impacting on teacher supply — exits and entrants

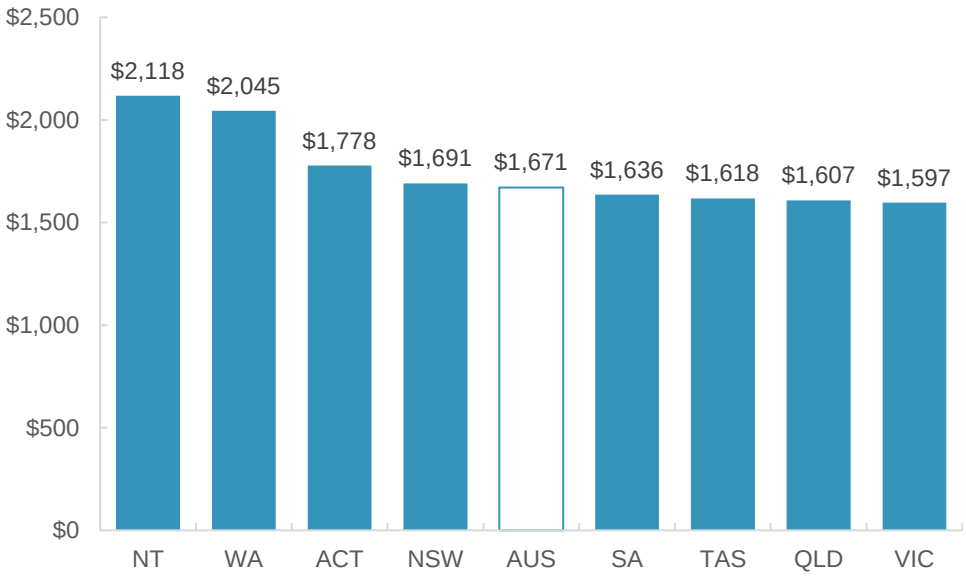
*Factors potentially affecting teacher exits*

Teacher remuneration

It is not clear that an allegedly inadequate overall salary level of teachers is a likely reason for current school vacancies. According to the Australian Teacher Workforce Data (ATWD) Teacher Survey, only a minority of NSW teachers considering leaving the profession nominated pay as a contributing reason.

NSW teacher salaries compare favourably to the other Eastern states — around 6 per cent higher than in Victoria. NSW salaries increased by 11 per cent from 2018 to 2021, compared to 10 per cent in Queensland and 5 per cent in Victoria.

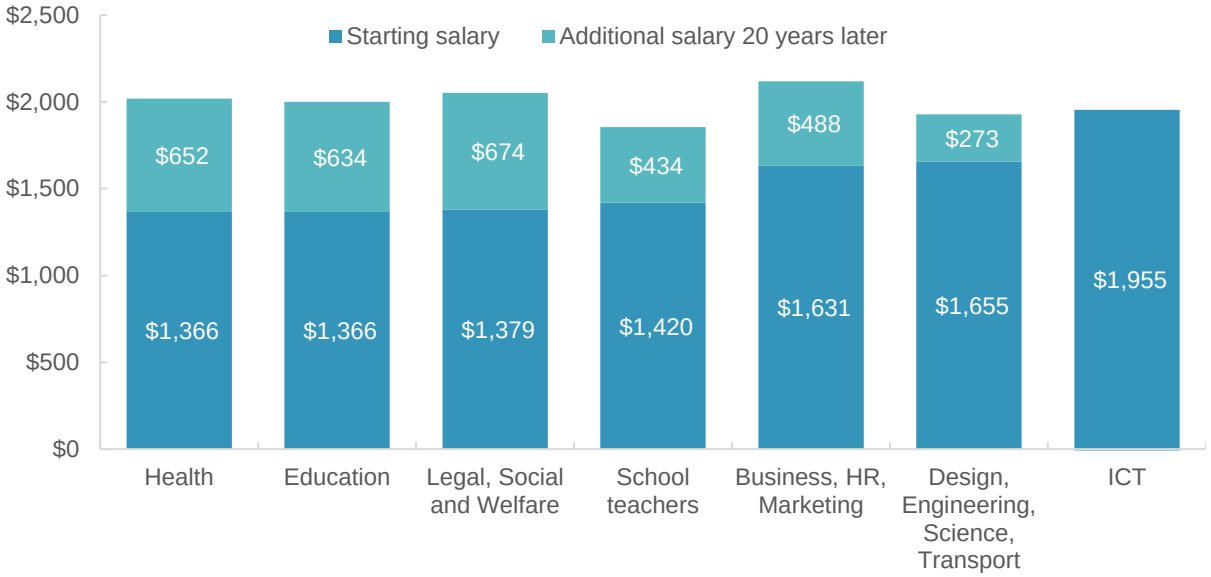
**Median weekly ordinary earnings of school teachers, by state and territory.**




Source: ABS (2021). Employee Earnings and Hours, May 2021.

While Australian teachers tend to earn relatively high starting salaries, they do not gain similar increases to salaries as some other professions with additional years of experience. On average, teachers who have been in the job for 20 years or over earn around 31 per cent more than those who have been in the job less than one year. In some professions — such as legal, social, and welfare professionals, health professionals, and broader education professionals — those with 20 years or more experience earn close to 50 per cent more than those with a year or less of experience.

**Median full-time weekly earnings, based on duration in main job.**



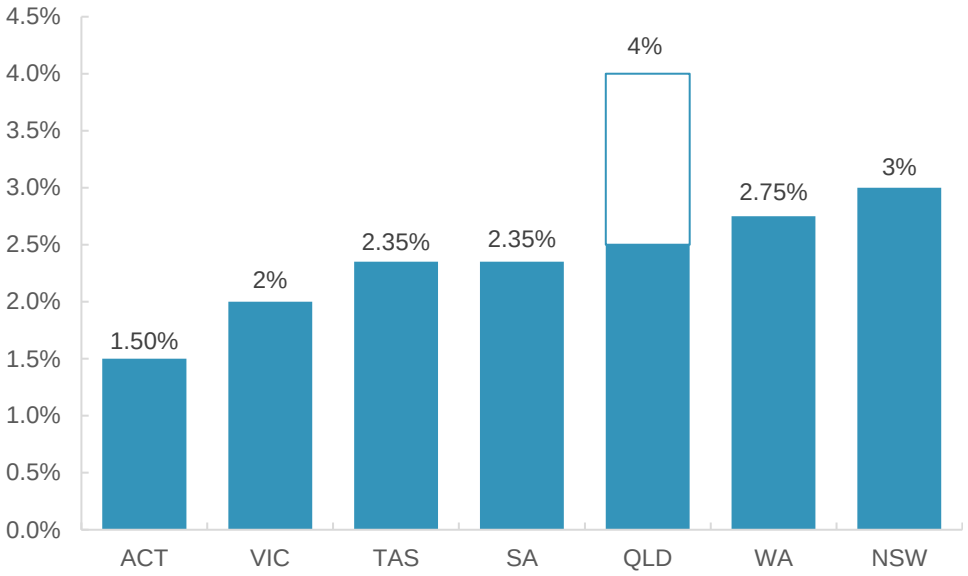

Source: ABS Characteristics of Employment 2021. Earnings are calculated as the median weekly earnings from main job of a full-time worker. Occupations other than school teachers are aggregated at 1-digit ANZSCO.

Current industrial agreements across states and territories are at varying stages of maturity and negotiation, with a range of offers currently under consideration or accepted across different states and territories.

However, the 3 per cent salary increase offered to NSW teachers is at the upper end of current pay rise offers across the country at the time of writing. Queensland teachers received a pay rise of 2.5 per cent on 1 January 2022, but are now in further negotiations. The government has offered a 4 per cent rise over the next year, 11 per cent over the next 3 years and an up to 3 per cent cost of living bonus if the annual CPI in Brisbane is above the pay increase. The total increase of this offered pay rise is therefore between 11 per cent and 20 per cent over the next 3 years.

Some jurisdictions have not necessarily offered a change to industrial agreements, but have provided remuneration in other ways — for instance, despite the Northern Territory's 4-year pay rise freeze for public servants, it has offered teachers a $10,000 payment, spread out over 4 years.

**Actual and offered pay increases to teachers by state or territory for current year.**




Source: Various state- and territory-based industrial agreements. While reported data is current at the time of writing, it is likely that details may evolve as there are industrial negotiations occurring across several states and territories.

### Teachers' reward and recognition

While there are a range of bands of teacher remuneration intended to provide pathways toward higher salaries, it is not clear these are sufficiently helping to sort and recognise teachers' performance. Rather, they are largely based on tenure served in the profession.

| Band/Level of Accreditation | Salary from the first pay period to commence on or after 1.1.2022 |
|---|---|
| Increase | 2.04% |
| Band 1 (Graduate) | $73,737 |
| Band 2 (Proficient) | $88,935 |
| Band 2.1 | $96,531 |
| Band 2.2 | $100,336 |
| Band 2.3 | $109,978 |
| Band 3 (Highly accomplished/Lead) | $117,060 |

Source: NSW Teachers in Schools and Related Employees' Salaries and Conditions Award 2020.

There are several routes for career advancement for high-performing teachers — some requiring teachers to exit classrooms to take on alternative positions, however it is regularly reported by teachers that there is insufficient opportunity for career advancement.

**Selected current and proposed recognition and career advancement programs for school teachers.**

| Position | Description | Salary band and experience requirement |
|---|---|---|
| Highly Accomplished and Lead Teacher (HALT) | Highly Accomplished and Lead Teacher (HALT) certification process aims to recognise quality teachers.<br><br>The role of lead teachers is to improve the skill, knowledge and performance of the | $117,060 |

| | | |
|---|---|---|
| | teaching workforce in a school or group of schools and to improve the curriculum program of a school. Typically, leading teachers are responsible for coordinating a number of staff to achieve improvements in teaching and learning.<br><br>The role of the highly accomplished teacher is to model excellence in teaching and learning through demonstration lessons, and mentoring and coaching teachers in improving the skill, knowledge and effectiveness of the teaching workforce.<br><br>As of May 2022 NSW has 274 teachers accredited at HALT levels. | |
| Instructional Lead | Proposed in NSW Productivity Commission White Paper, this is a career pathway to keep highly effective teachers in classrooms as an alternative to an administrative career progression. Part of the role would include supporting other teachers to improve their teaching practices, with commensurate increases in salary. This would be done through the creation of a Centre for Teaching Excellence, where instructional lead teachers would share their skills and knowledge. | Not specified |
| Master Teachers and Instructional Specialists | Master Teachers work across Sydney Catholic Schools as expert leaders in the art of teaching and school leadership. They mentor and support school-based leaders of teaching called Instructional Specialists.<br><br>Instructional specialists are school-based leaders of teaching who work to develop and support other teachers in their schools. | Around $130,000 |
| Reward Payments for Great Teachers | Gillard Government initiative to provide one-off Teacher Reward Payments to teachers.<br><br>Around one in 10 teachers intended to be recipients. | Bonuses range from $5400 to $8100 (in 2013 dollars). |
| Director of Educational Leadership (DEL) | DELs are employed on performance-based contracts as part of the Public Service Senior Executive (PSSE) structure.<br><br>DELs have a key strategic role in supporting the continuous improvement of principals in NSW public schools to ensure that the work of schools is evidence-based and responsive to the needs of all students from preschool to year 12. On average a DEL works with a group of 20 principals. | $197,400-$281,550 |

The 2021 NEiTA-ACE Teachers Report Card found 87 per cent of teachers see the opportunity to be promoted as important or very important to them, yet 71 per cent also say promotion opportunities happen rarely.

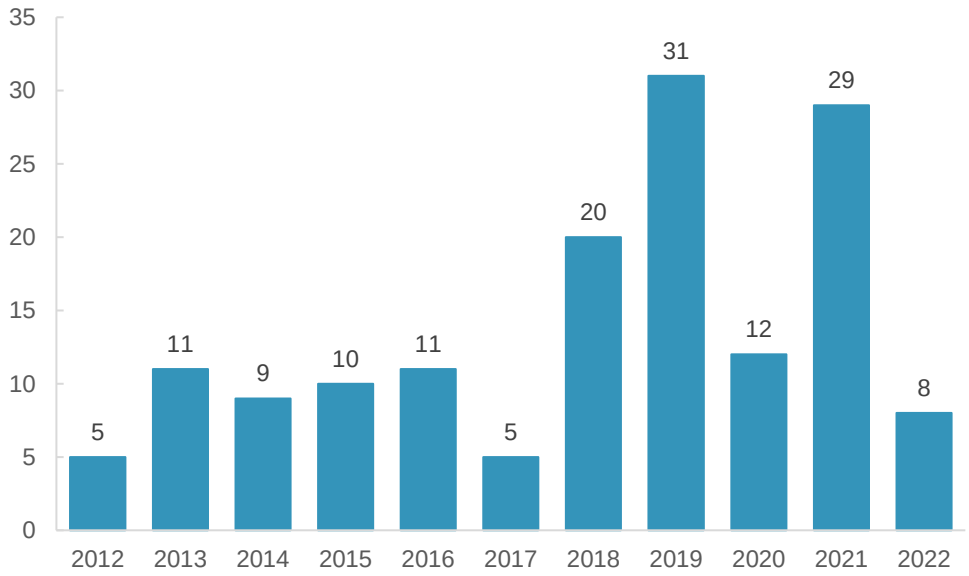
While Australian teachers have procedures in place to monitor performance against a framework of teaching standards, feedback — including from school leaders or from external observations — is limited. For instance, the NSW Audit Office found only a fraction of teachers receive the required twice yearly classroom observations.[4] Moreover, a range of industrially-agreed conditions limit the quality of feedback teachers receive — including that:

- teachers must agree to all written feedback (which comprises principals' ability to formally performance manage underperformers);
- teachers' goals must be agreed (which may conflict with areas of teachers' greatest development needs);, and
- teachers can select who conducts observations and negotiates what will be observed (which risks that observers may not necessarily be objective and qualified observers of practice).

Despite the Minister's intention for 2500 teachers to be accredited at HALT levels by 2025, current numbers are well short of this target. Moreover, to date the HALT certification process has not generally met the expectations of the sector — with relatively low take-up, a complex and time-consuming certification process, and unclear alignment between certification and actual classroom practice.

226 teachers had been appointed as a HALT or equivalent in NSW Government schools by June 2011 compared to a permanent teaching workforce of approximately 49,000, according to the Productivity Commission's Schools Workforce Report. There has only been a nett increase of 48 HALTs in the NSW school system over the last 11 years.

**Number of NSW Highly Accomplished and Lead Teachers accredited per year, 2012 to 2020.**




Source: NSW Education Standards Authority (NESA) Highly Accomplished and Leading Teacher Data.

While there are some professional communities of practice and networks of HALTs — such as AITSL's HALT Summit — there is not yet evidence to demonstrate that HALT certification and promotion has raised education outcomes and the performance of teachers.

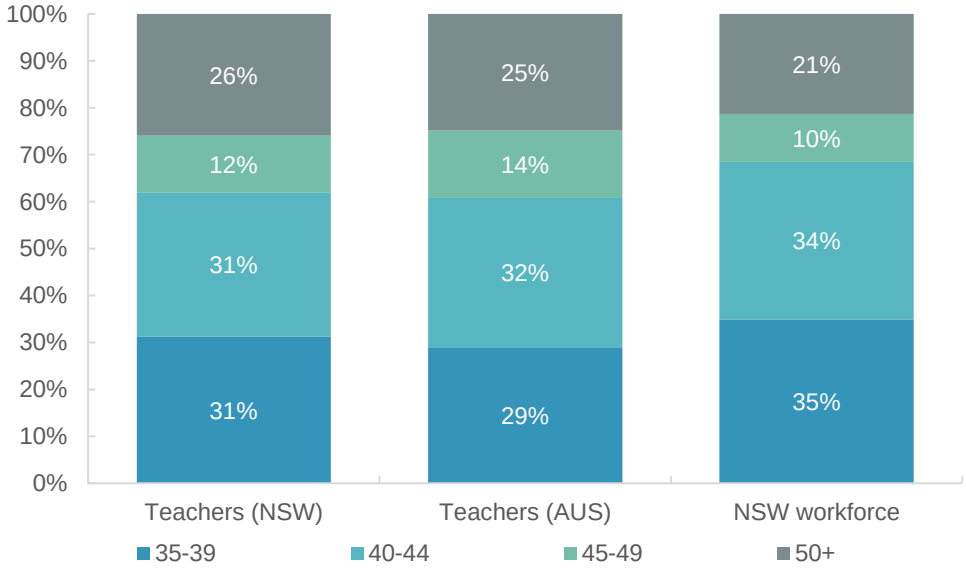
The recently established Victorian Academy of Teaching and Leadership's Teaching Excellence Program is a one-year program designed to advance professional and practice for highly skilled Victorian teachers. The program aims to build teaching excellence through a focus on disciplinary knowledge, practitioner inquiry, responsive pedagogy and dispositions for exceptional teaching. As both the Academy of Teaching and Leadership and the Teaching Excellence Program are very new (launched in 2022), data will need to be generated so the efficacy of the program can be properly evaluated against its stated aims.

### Teacher working hours

Worsening burnout and workload are frequently reported by teachers as contributing to their intention to leave the profession. The ATWD Teacher Survey found the three most frequent responses of teachers considering leaving the profession related to workload and coping. However, it would appear this is likely due to changes in the nature of teachers' work, not just the number of hours.

It is not clear that full-time NSW teachers work particularly longer hours than in other states and territories — though a slightly larger proportion work in excess of 50 hours in a week compared to the wider NSW full-time workforce (before accounting for the variation in work hours between teaching and non-teaching weeks).

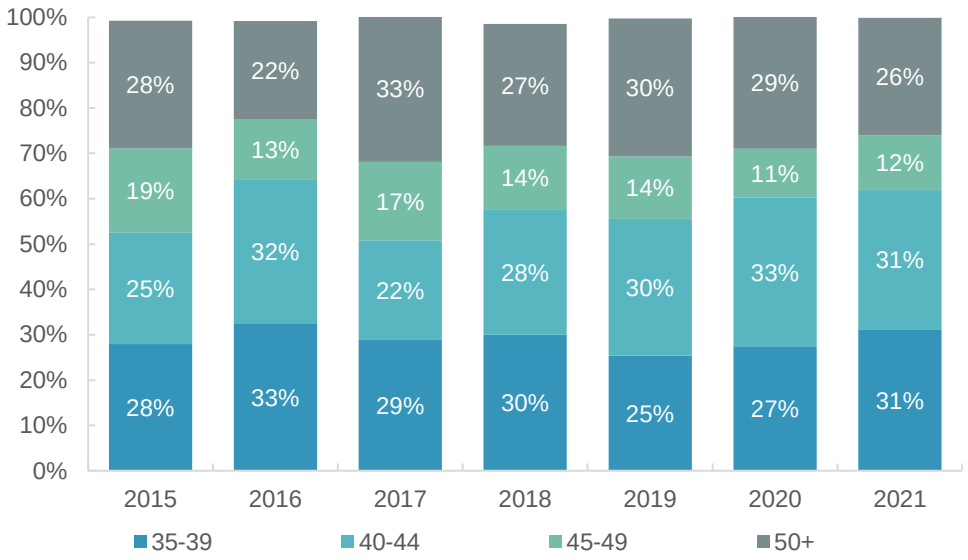
**Actual hours worked per week, full-time NSW teachers, Australian teachers, and NSW workforce, 2021.**




Source: ABS (2021). Participation, Job Search and Mobility, 2021. NB that this survey sums the working hours across all current jobs in the most recent week. Only data for full-time workers is included for this analysis to reduce any bias resulting from individuals who hold multiple jobs.

The data do not suggest there has been an especially large increase in the proportion of full-time teachers working additional hours in recent years.

**Actual hours worked per week, full-time Australian teachers, 2015 to 2021.**

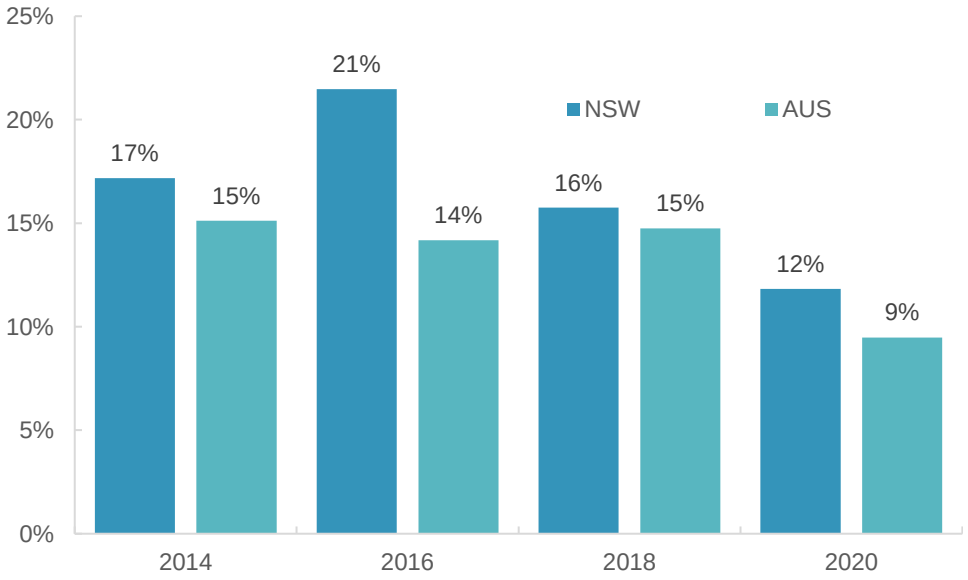



Source: ABS (2021). Participation, Job Search and Mobility, 2015 to 2021. NB that this survey sums the working hours across all current jobs in the most recent week. Only data for full-time workers is included for this analysis to reduce any bias resulting from individuals who hold multiple jobs. To ensure that the sample is as reliable as possible, this figure plots Australian school teachers, not just NSW.

As with all occupations, gaining insufficient hours or working excessive hours can both contribute to attrition.

The proportion of teachers who are employed casually has been reducing in recent years, in both NSW and Australia. In 2021, around 7 per cent of NSW teachers were part-time and underemployed — similar to the national figure of 6.3 per cent. Around 43 per cent of casually employed NSW teachers report that they usually work the same hours each week.

**Proportion of employed teachers who work casually, NSW and Australia, 2014 to 2020.**

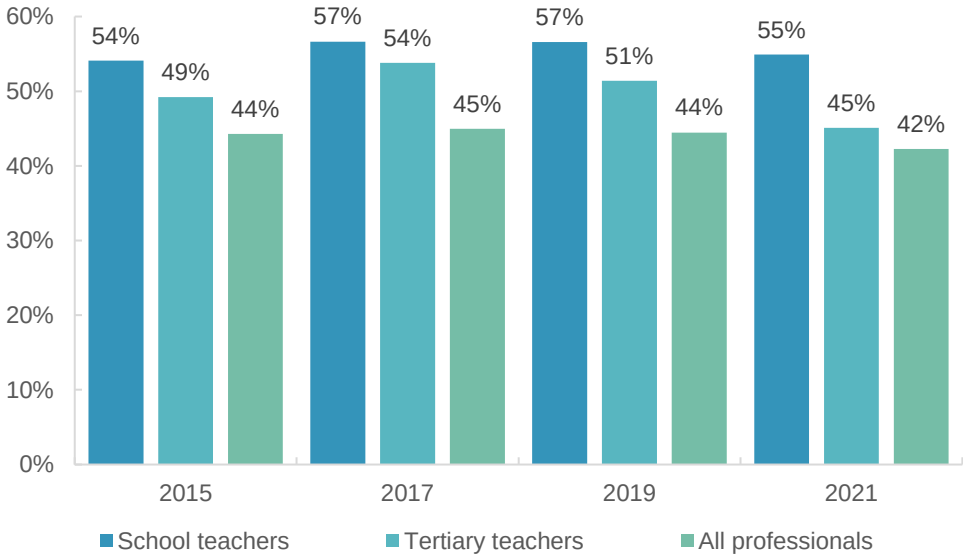



Source: ABS Characteristics of Employment 2014 to 2021. NB that this methodology involves identifying respondents based on whether they work as a teacher and whether they are employed casually in their main job,

which may not be. Further, the definition used by ABS occupational categorisation may not necessarily align with other data collections, such as the Australian Teacher Workforce Data.

A higher proportion of teachers usually work extra hours or overtime (based on ABS methodology that asks respondents if they preferred to work fewer hours), compared to other professionals and tertiary teachers. However, again it is not clear that this proportion of workers has increased in recent years.

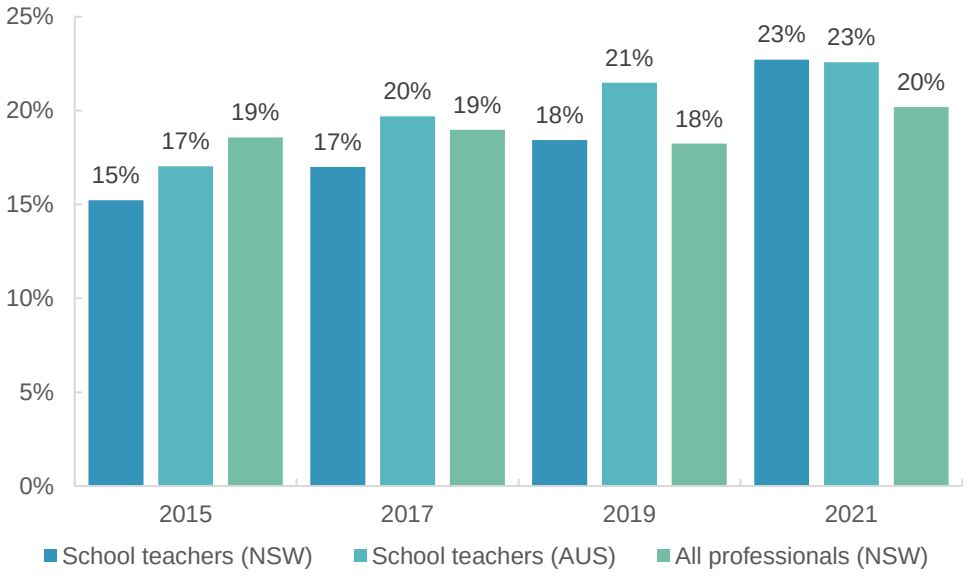
**Proportion of NSW school teachers, tertiary teachers, and overall professions who usually work extra hours or overtime, 2015 to 2021.**




Source: ABS Characteristics of Employment, 2014 to 2021.

While the proportion of teachers who would like to work fewer hours has increased in recent years, it is not significantly higher than the rates observed across other professions.

**Proportion of school teachers (NSW and AUS) and professionals (NSW) who would prefer to work fewer hours, 2015 to 2021.**



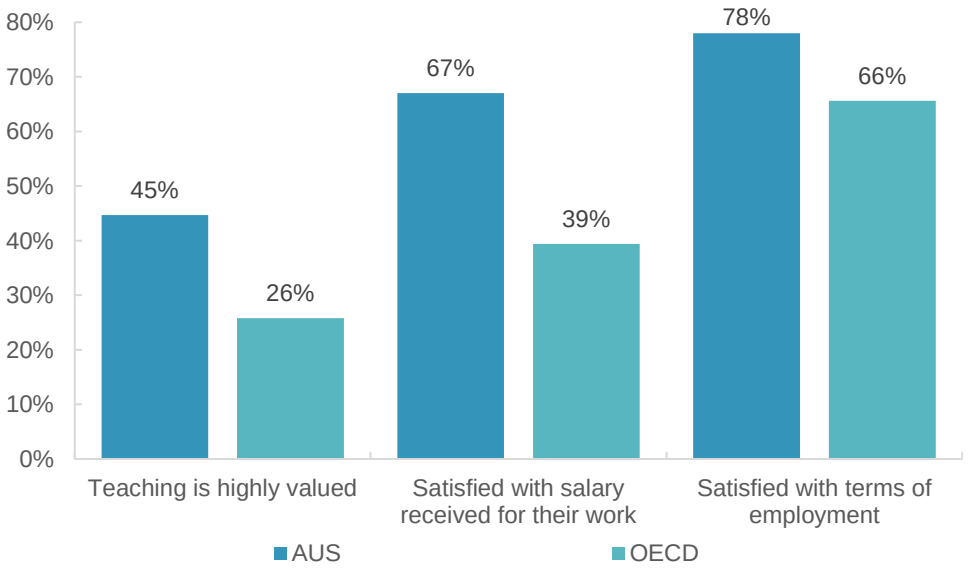

Source: ABS Characteristics of Employment, 2014 to 2021.

An analysis of ABS Characteristics of Employment data shows that teachers who usually work additional hours or overtime are no more likely to report they expect to leave teaching within 12 months than those who don't work extra hours.

### Teachers' working conditions and satisfaction with the profession

By and large, comparative international data does not indicate that Australian teachers exhibit negative perceptions or dissatisfaction with the profession.

**Teachers' perceptions of their work, salary, and working conditions, Australia and the OECD average.**

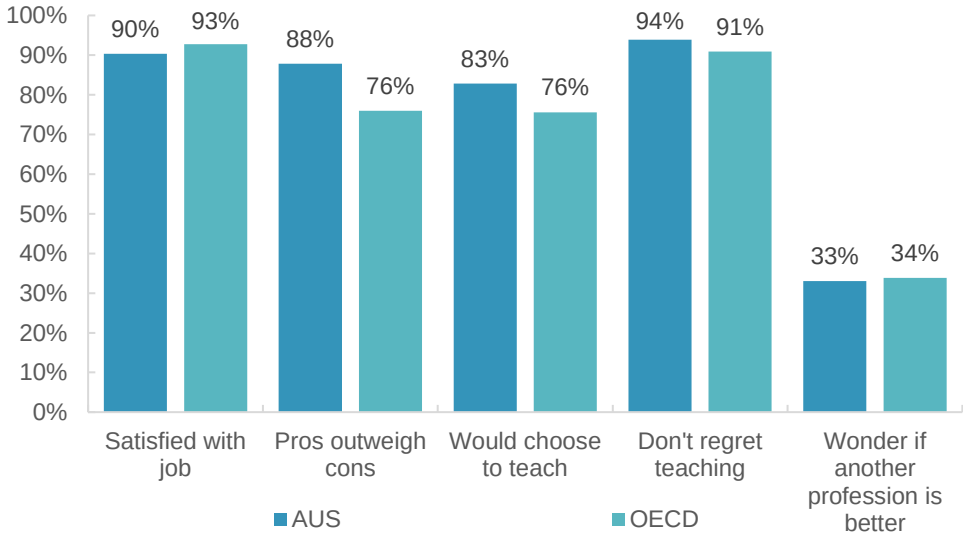



Source: OECD (2019). TALIS 2018 Vol 1.

Understandably, the job satisfaction and working hours of teachers are a matter of serious concern within the workforce and for policymakers. However, such decision-making is rarely based on data sources that properly account for teachers' time use,[5] instead relying on self-reported and subjective measures of teachers' workload and stress.[6] [7]

In any case, against international comparisons, Australian teachers record a similar level of job satisfaction and are more satisfied overall with the profession.

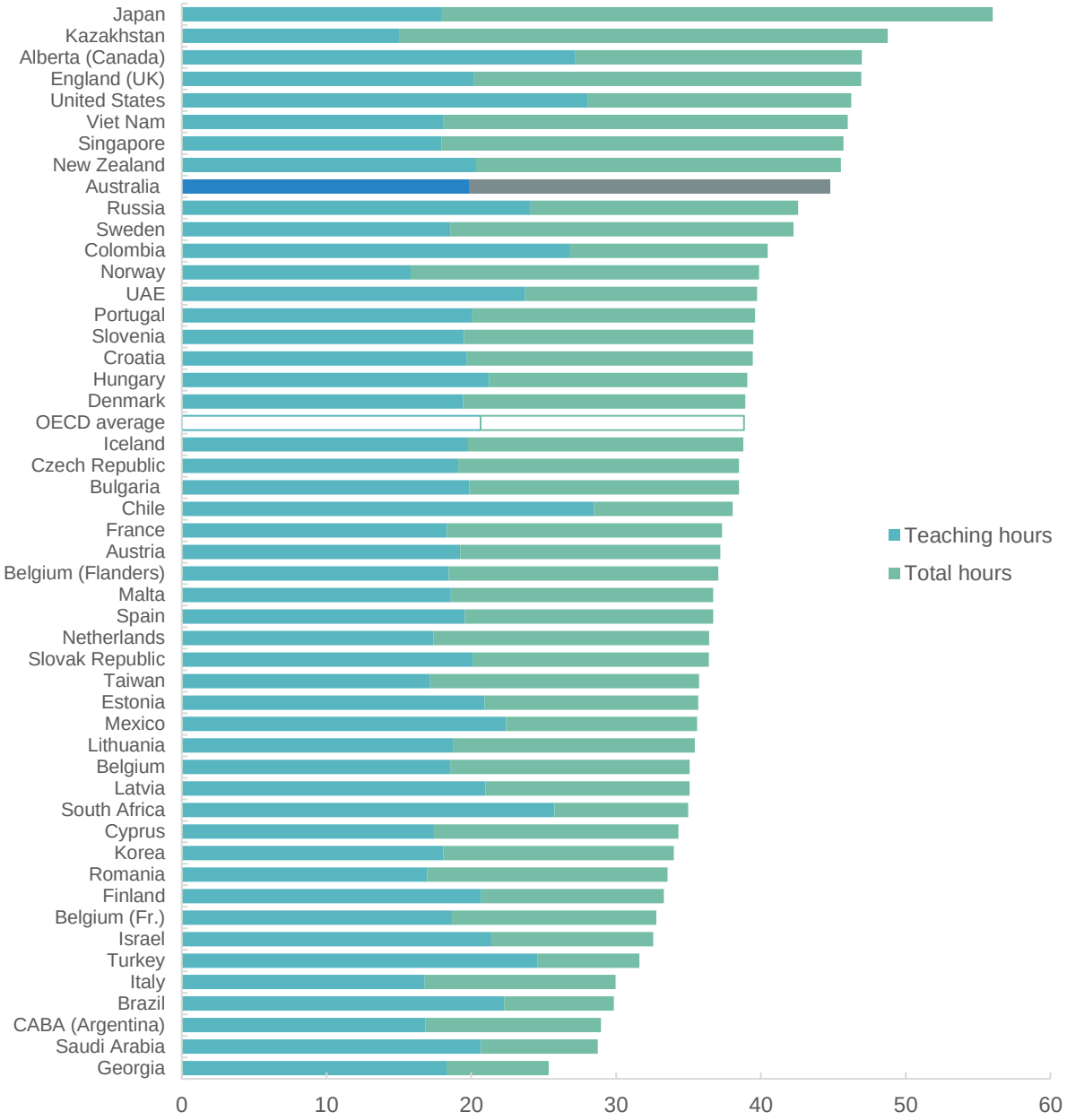
**Teachers' satisfaction with job and the teaching profession, Australia and OECD average.**




Source: OECD (2019). TALIS 2018.

While Australian teachers' average working hours are relatively high by international standards, they are comparable to those found in similar labour markets to Australia. Namely, Australian teachers work slightly shorter hours than in New Zealand, England, the United States, and Alberta (Canada).

**Teachers' average weekly teaching and working time (lower secondary).**

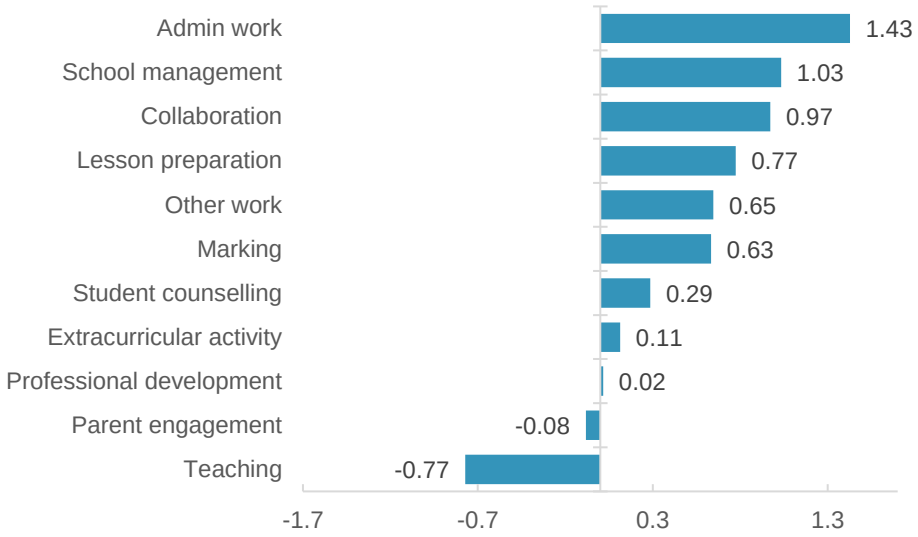



Source: OECD Education at a Glance.

### Administrative burden

Australian teachers' teaching hours are below the OECD average — meaning the relatively high total work hours they report are the result of additional time spent on non-teaching activities. Australian teachers spend relatively large proportions of their work hours on school management activities (around 1.03 hours per week more than the OECD average), general administration (around 1.43 hours per week more than the OECD average), and collaboration activities with colleagues (around 0.97 hours per week more than the OECD average).

**Average number of hours teachers report having spent on the following activities during the most recent complete calendar week, Australian lower secondary teachers compared to OECD average. (NB positive values indicate more time per week spent on this activity compared to the OECD average).**




Source: OECD (2020). Teaching and Learning International Survey 2018.

Aside from higher wages, some education unions in NSW have requested an additional two hours of paid class preparation time per week.

To reduce the time required for lesson preparation, easing access to high quality, trusted, and user-friendly common content and resources would ease the burden on teachers and reduce variability between-classrooms.

A contributing source of additional workload in recent years has been the administrative requirements related to the Nationally Consistent Collection of Data (NCCD) for students with disability, as required under the Australian Education Act. This can be a time-consuming process that can take time away from teachers to implement learning strategies for students who need additional support.

The Independent Education Union's 2021 survey into the NCCD Process in NSW and ACT schools found that the majority of respondents spend significant amounts of out of school hours, additional to daily preparation and planning, in order to fulfil NCCD requirements.

- 47% of respondents spend over five hours per week completing the administrative tasks associated with NCCD process.
- Learning support staff were concerned with the impact this burden had on their ability to support students with special needs and their teachers.
- 42% of those surveyed claimed data collection and NCCD reporting claimed the majority of their professional time in the previous six months.
- Online data collection problems were identified as a major factor in the time taken to complete tasks.
- The majority of participants responded they often had to submit similar or identical data across multiple platforms.

**Out of field teaching**

TIMSS data demonstrates that students with suggest that out-of-field teachers record lower achievement.

There are not consistent definitions of out-of-field teaching, leading to difficulty in systematically quantifying the frequency and impact of out-of-field teaching. These definitions broadly relate to teachers being assigned to teach subjects for which they have inadequate training and qualifications. However, they differ in how "inadequate training and qualifications" are defined. A clear and uniform definition would allow for the collation of accurate data to help inform decision making as it relates to tackling the out-of-field teaching problem.

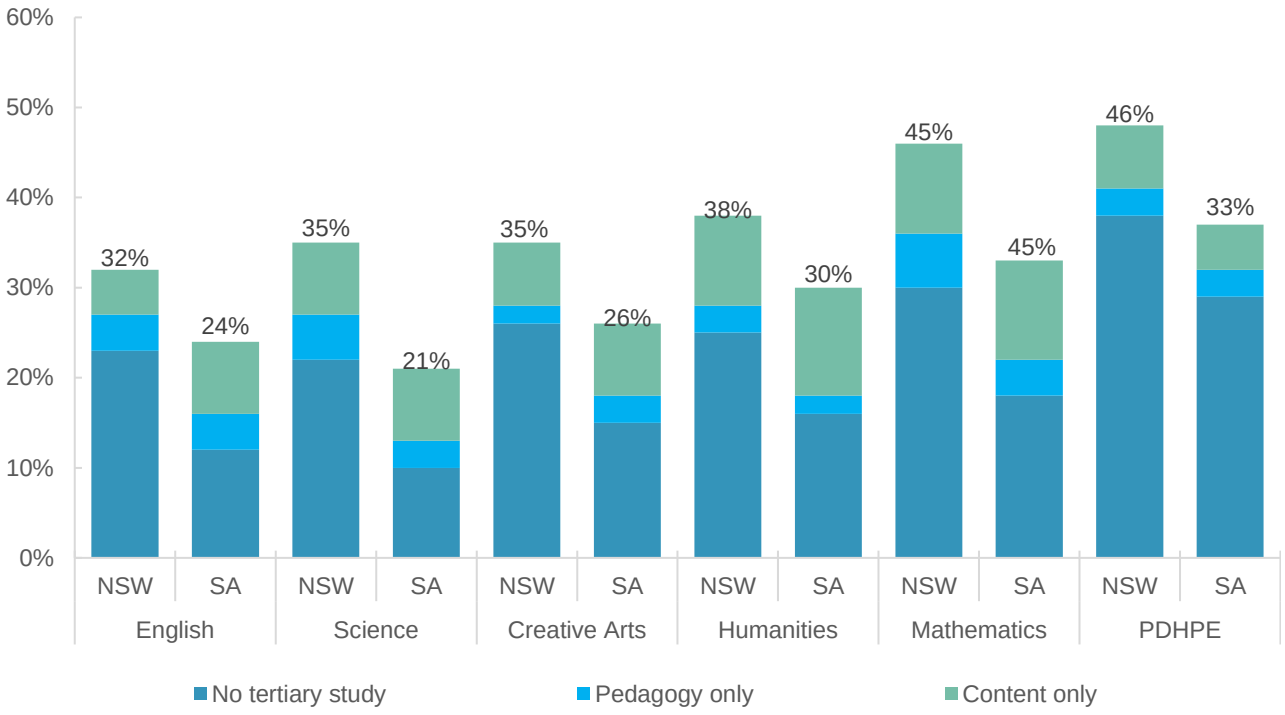
**Definitions of out of field teaching from multiple Australian sources.**

| Source | Definition of out of field teaching |
|---|---|
| Staff in Australia's Schools (SiAS) Survey | *either* did not study the subject at second year tertiary level or above, *or* did not train in teaching methodology for that subject at tertiary level |
| Out-Of-Field Teaching in Australian Secondary Schools Report | *either* did not study the subject at second year tertiary level or above, *or* did not train in teaching methodology for that subject at tertiary level |
| | teachers had to have studied the subject (for at least one semester) at second-year tertiary level (but may or may not have studied teaching methodology in that subject) |
| | teachers had to have both studied one semester at second-year tertiary level and have studied teaching methodology in that subject |
| OOF-TAS Collective | Teaching a subject without the necessary qualifications |
| Australian Teacher Workforce Data (AITSL) | teachers who are teaching a subject for which they have not completed subject-specific tertiary study in both content and pedagogy are considered to be teaching out-of-field |

The 2015 NSW Teacher Workforce Strategy noted that there was an adequate or more than adequate supply of teachers across most discipline areas, but that mathematics teachers were in relatively short and declining supply.

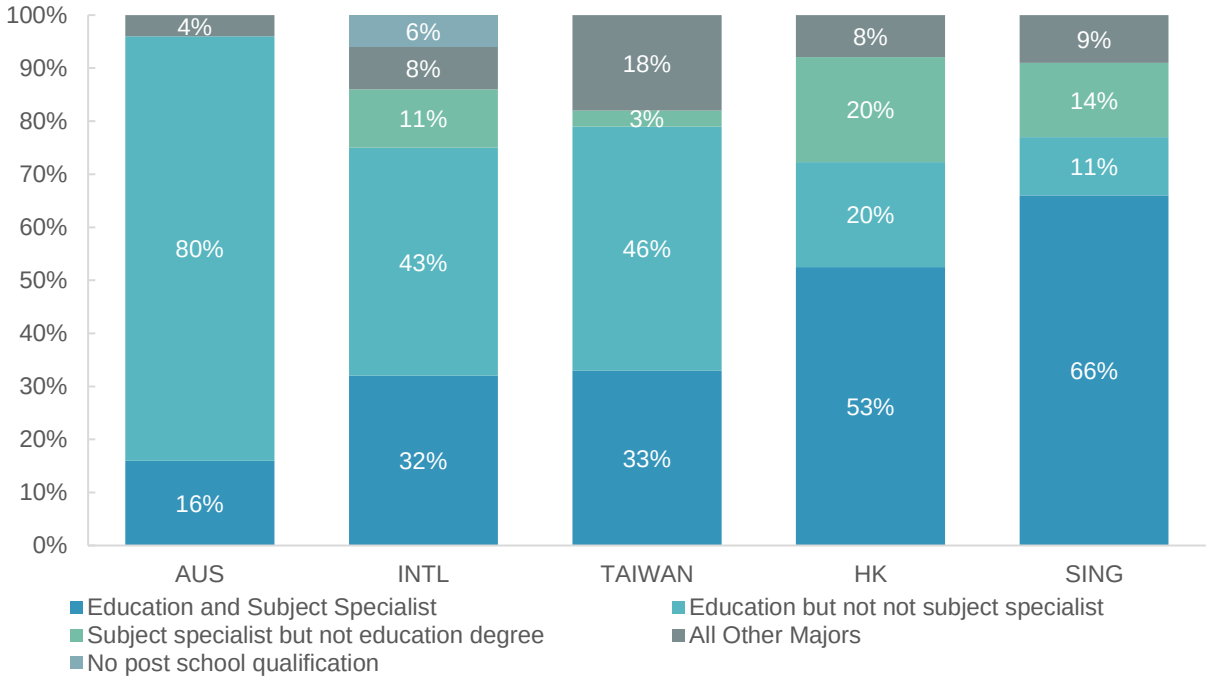
Across a range of subject areas, out-of-field teaching appears more common in NSW than in other jurisdictions. While there is not comparable data available for all jurisdictions, consistently higher rates of out-of-field teaching are observed in NSW compared with South Australia.

**Proportion of teachers teaching out of field in various subjects, NSW and SA compared, 2021.**




Source: AITSL (2021). ATWD Teacher Workforce Report, NSW and SA State Profiles.

**Qualification background (major) of primary school teachers, Australia, international average, and Taiwan, Hong Kong, and Singapore.**




Source: IEA (2020). Trends in International Mathematics and Science Study (TIMSS), Boston College, TIMSS & PIRLS International Study Center.

*Factors potentially affecting teacher entrants*

There are possible demand-side and supply-side explanations for recent trends in teacher entrants — including ITE commencements.

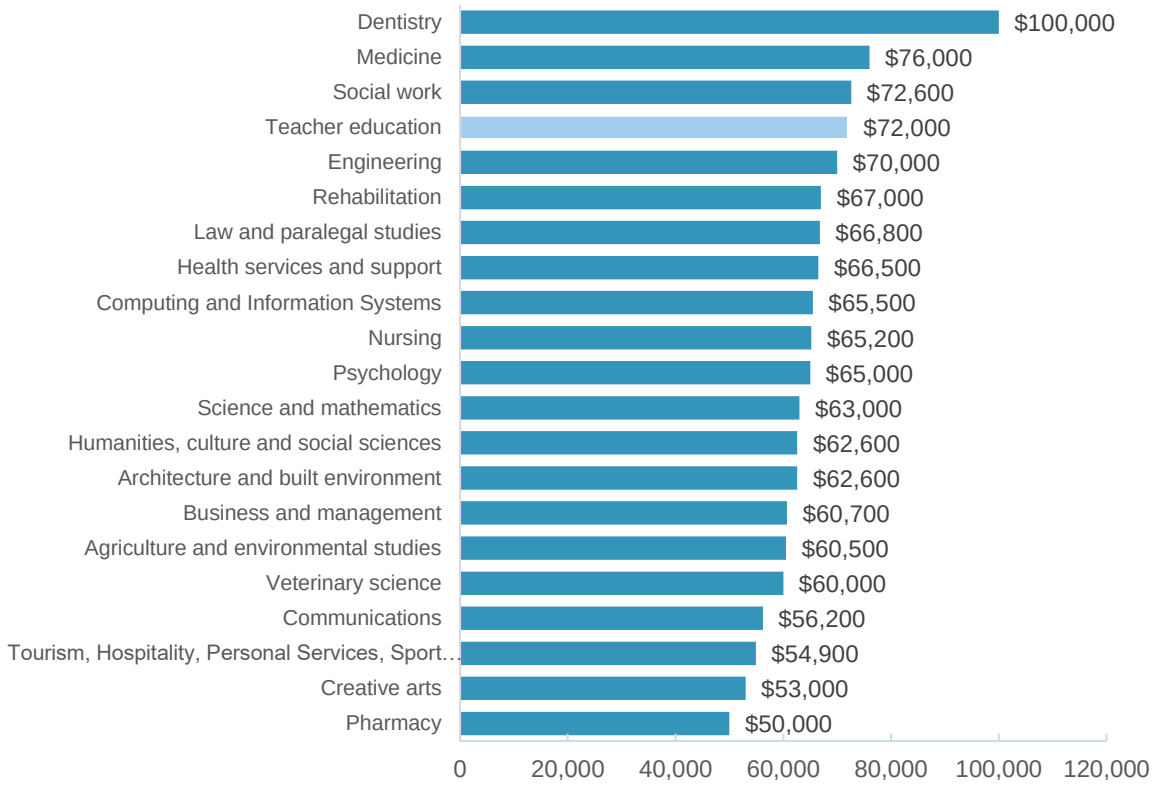
Demand-side explanations relate to possible declines in potential teachers wanting to pursue ITE — and by extension, teaching as a profession — and may point to broad issues with teaching, like inadequate pay, conditions, or status. Supply-side explanations relate to the offerings provided to new teachers, such as the structure and content of ITE, university admissions policy, institutional and regulatory barriers to enter teaching, and the like.

### Teachers' starting salaries

Relatively high starting salaries are likely to be an important driver of new entrants to teaching.

Starting undergraduate salaries for teachers are among the highest available to any university graduate — exceeding engineers, lawyers, and the like. As a result, there is no reason to believe that starting salaries can be attributed to declining ITE commencements, nor to current school vacancies.

**Average starting undergraduate median full-time salary (Australia), by study area, 2021.**




Source: QILT Gradate Outcome Survey, 2021.

### Pathways and salaries for mid-career entrants

Reliable data are not available to indicate the proportion of teachers who enter the workforce each year through non-traditional pathways — though it is generally a very small proportion. However, it

has been increasingly apparent there is a need to broaden entry to teaching so it better accommodates mid-career individuals. Increasing the number of mid-career entrants is an important policy goal that is likely to improve both quantity and quality within the teaching profession.

The federal government's Quality Initial Teacher Education (QITE) Review identified that as many as 4 in 10 mid-career professionals would consider becoming a teacher if there were fewer barriers to enter. This indicates there is a high level of demand and opportunity for a large and diverse pool of teacher candidates.

The NSW Mid-Career Transition to Teaching Program has aimed to recruit candidates with backgrounds in high-demand teaching areas such as mathematics, science (physics and chemistry) and technology and applied studies. The incentives provided through this pathway are in line with the types of incentives found to most increase the probability of mid-career professionals to choose to enter teaching in the QITE review. The average annual cost per candidate is approximately $58,052.22, taking into account cash payments for undertaking the program, and salary as an educational paraprofessional. This excludes any costs related to administration of the program. Data do not yet exist regarding the efficacy and efficiency for this new program.

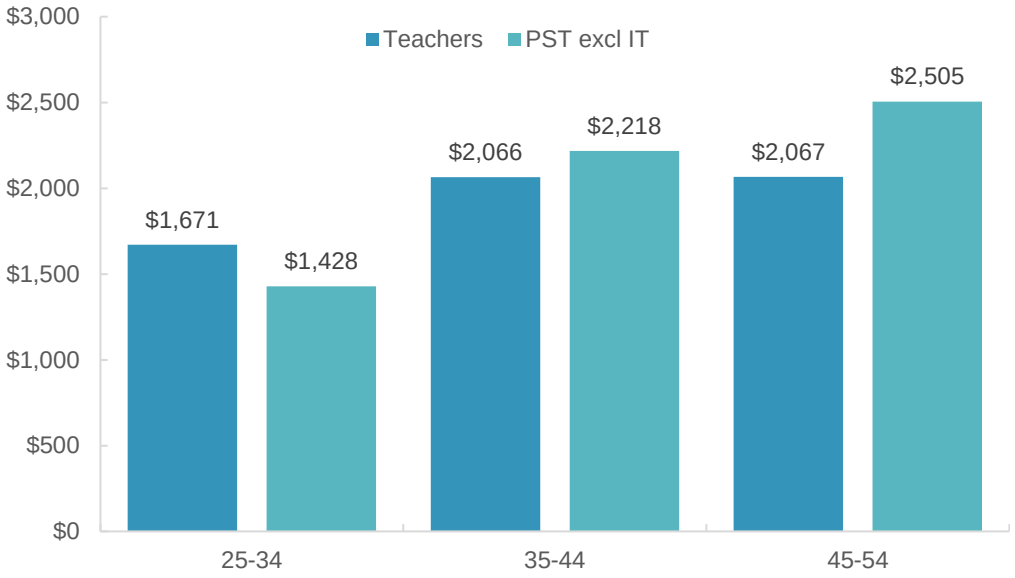
A key consideration for attracting potential mid-career switchers to teaching is the opportunity cost of foregone salaries (and potential discounting of future salaries) — available in their current occupation or industry. This may differ based on the age and occupation of the target — who are disproportionately from professions and relatively young. The QITE Review observed that mid-career professionals from STEM backgrounds were especially motivated by higher starting pay than their non-STEM counterparts.

ABS data shows that, at younger ages, teacher salaries in schools are generally higher than in potential target industries.

In the cohort aged 35 to 44, median earnings within the potential target industries are slightly higher than schooling — by around 7.4 per cent. Median earnings for 35-44 year olds in potential target industries are around $115,000, compared to $107,000 for those in preschool and school education teachers. For those aged 45 or over, salaries in the potential target occupations are considerably higher and may not be as feasible for career-switching on pecuniary grounds — in large part because the salaries earned by teachers appears to cap relatively early in their careers.

This suggests that modest salary bonuses to incentivise career-switching from target industries — in the order of 5 to 10 per cent; or around $10,000 — may be sufficient to attract potential teachers from the 35-44 age cohort.

**Median ordinary weekly earnings, NSW full-time workers in Preschool and School Education and Professional, Technical, and Scientific Services (excluding Computer System Design and related services) employees, by age, 2021.**




Source: ABS (2021). Employee Earnings and Hours May 2021. NB that the ANZSIC 2-digit classification is used here rather than ANZSCO for the purposes of this analysis — meaning it is industry-based, not strictly occupation-based. This is why, for instance, the reported earnings in schools here is higher than the previously cited earnings for teachers — since it also includes school-based occupations that are not classified as school teachers under the ANZSCO classification, such as school principals (who are classified under the 'Managers' occupational category).

### Credential barriers to enter the teacher workforce

There are significant barriers to enter teaching due to accreditation and certification requirements. This is because there is limited recognition of subject area knowledge, professional experience, and generally inflexible credential expectations.

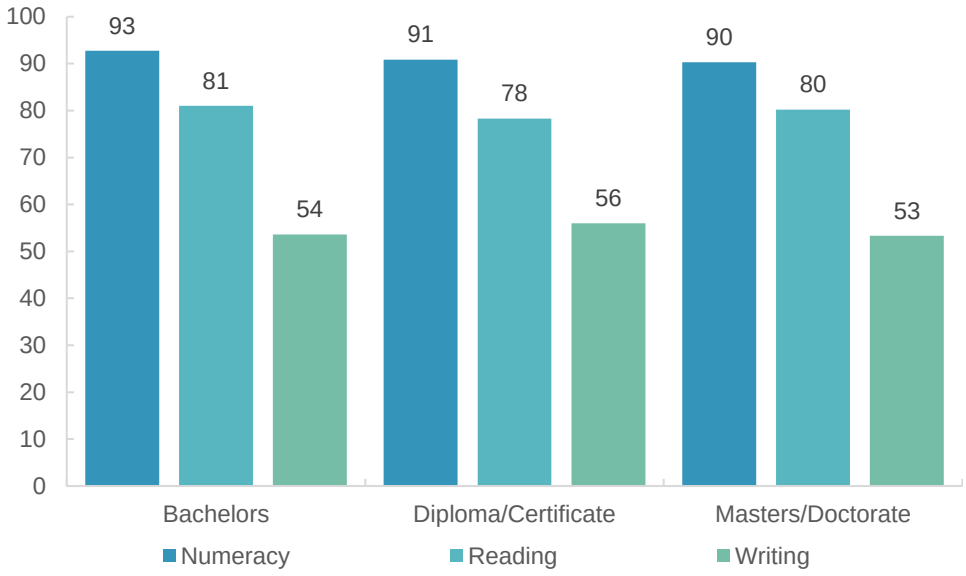
According to the QITE review's survey, around two-thirds of mid-career professions who would consider teaching may be deterred by requirement to obtain a two-year Master's degree. It found a condensed one-year ITE course was as attractive as a $20,000 increase in top pay. This indicates that the number of mid-career changers could be increased significantly by shortening the required time for them to spend out of the workforce.

In any case, it is not clear that additional credential requirements are likely to be associated with greater capacity to be an effective teacher.

While it is often thought that more qualified teachers are more effective, research shows that certification and accreditation practices have little impact on teacher effectiveness.[8] [9] Moreover, teachers with additional years of study — including postgraduate qualifications — are no more effective than other graduate teachers.[10] [11] [12] [13] However, there is evidence that additional licensing and credential requirements act as a disincentive for some potential teachers[14] [15] and can limit interstate teacher mobility.[16]

Australian student data show no difference in student progress based on differences in teachers' qualifications.

**Average student achievement gain (Year 3 to Year 5) in Numeracy, Reading, and Writing, by teachers' highest level of qualification.**




Source: Author's analysis from Longitudinal Study of Australian Children Wave 4 (K Cohort), Wave 6 (B Cohort).

### Employment-based training for mid-career entrants

Employment-based pathways are alternate pathways into teaching where participants work as teachers or educational paraprofessionals while they study a teaching degree. The research shows little evidence that formal ITE programs are more effective than non-traditional training pathways,[17] particularly beyond the very initial period of teaching.[18]

In other jurisdictions, Teach for Australia's (TFA) Leadership Development Program has successfully delivered for many years in recruiting participants who have not typically been attracted to other government-run initiatives — such as those qualified to teach STEM (comprising 51 per cent of the 2021 cohort). The Commonwealth's High Achieving Teachers Program (of which TFA and La Trobe University are partners) and the Victorian Government's Accelerated Learning Programs have also looked to improve employment-based pathway for mid-career professionals.

### **School-based practicum**

Teacher preparation includes preservice teaching placements with a supervising teacher, as well as processes to onboard new teachers — including an induction program and having a mentor assigned.

International research identifies the greatest factor that explains preparation of early career teachers as being the quantity and quality of time spent in school-based practicum. Graduate teachers who enjoy a practicum in a high-performing school, with a supportive school culture, and with a highly-effective supervising teacher, are as effective as a third-year teacher. [19]

An OECD analysis of top-performing education systems shows their ITE programs focus less on preparing preservice teachers to be academics and more on preparing teachers for the classroom — finding that preservice teachers in high-performing countries begin practical teaching in schools earlier, spend more time in practicum, and receive more and better support in the process.[20] Greater attention to classroom management,[21] preparation for the work of first-year teaching,[22] [23] and promoting supportive learning environments[24] are consistently found in effective ITE programs.

Despite this, many preservice teachers report a lack of opportunities to study, practise, and rehearse teaching.[25] Within the Australian context, studies have highlighted that trainee teachers feel they need more practicum time, in a greater range of school settings, and with better linkage between theory and practice.[26]

The Teacher Education Ministerial Advisory Group (TEMAG) review also concluded "it is clear that providers, schools and school systems are not working effectively together in the delivery of professional experience, and that not all programs are providing new teachers with the practical skills they need to be effective teachers."[27] This was confirmed by the QITE review's finding that the quality of professional experience is highly variable and was a source of concern for ITE students.

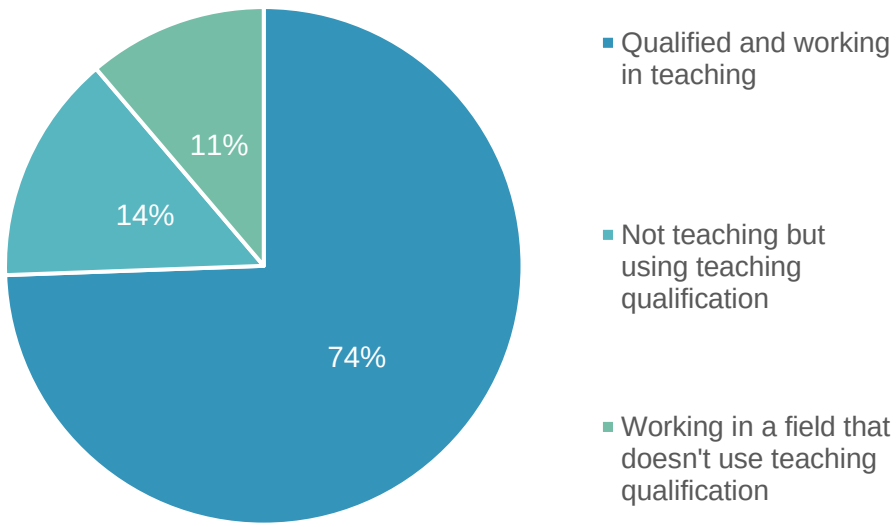
It is largely recognised that the process of allocating and placing trainee teachers into schools and selecting supervising teachers lacks coordination.[28] For instance, there are few clear incentives for schools to host practicums, which contributes to some reluctance based on perceptions of increased workloads, competing priorities, lack of recognition for supervising teachers and the lack of understanding that ITE students can be useful resources for school initiatives.[29] This is compounded because schools are not always sure of their capability to host ITE placements.

### Returning teachers and the potential teacher workforce

The potential teacher workforce includes, not only those currently working as teachers, but those who could feasibly enter or re-enter the workforce. In Victoria's data collection, potential supply includes all individuals not currently employed or contracted, but holding a teaching registration. This definition could also be expanded to include those who could potentially qualify for provisional permission to teach.

ABS data show there are a relatively large number of workers with teaching qualifications who don't work as teachers — with around one in four teaching degree holders not currently teaching. The workforce participation rate of teachers is slightly higher than that of the general workforce. Around 69 per cent of NSW and Australian teaching degree holders are in the labour force — compared with around 67 per cent of the wider labour force participation.

**Proportion of workers with a teacher education qualification, by current status of work, NSW.**



Source: ABS Qualifications and Work, 2018-19. Data contains NSW workers who hold a teacher education degree, as identified under the Australian Standard Classification of Education (ASCED). Labels are adapted from the responses to survey question for the relevance of non-school qualification to current job.

A study in the United States, observed through a national longitudinal survey of beginning teachers, found many teachers who depart the profession ultimately return to it. Of those who left after the first year, 33 per cent later returned to teaching; and of those who left after the second year, 25 per cent returned — typically returning the school year after the one in which they had left.[30]

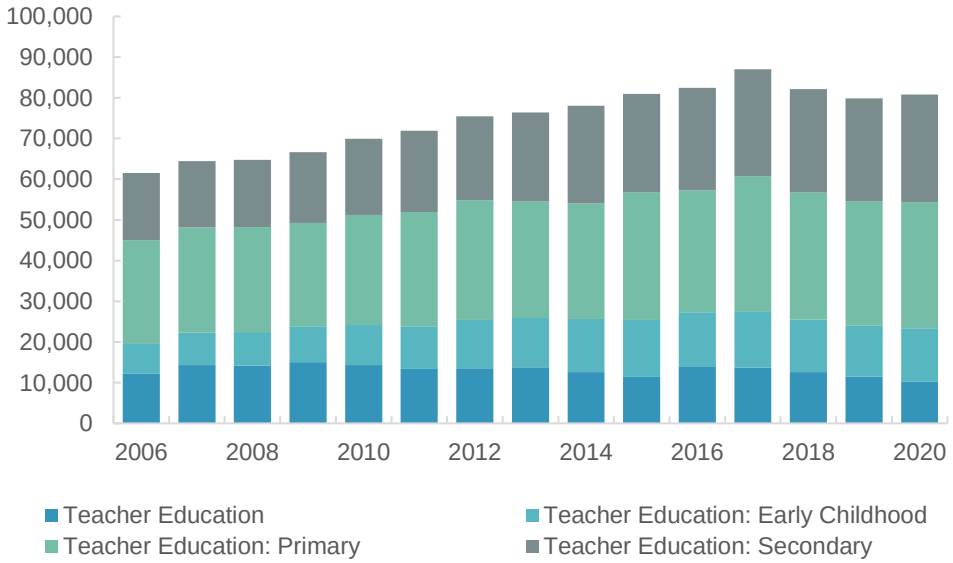
Teachers who returned to teaching were more likely to be female and had earned a higher salary while teaching (compared to those who did not return), but otherwise teacher characteristics, the types of schools in which teachers had worked, and their reasons for leaving had little relationship to their decision to return. The exception was that teachers who left hoping to earn more money in another field were 15 percentage points more likely to return.

### Intrasectoral demand for teachers

Additional demand for degree qualifications of early childhood educators contributes to some stretching of the potential teacher workforce — as some potential school teachers may alternatively consider working in early childhood education instead. This is likely to become an increasing challenge for the teacher workforce as the NSW government looks to further increase the number of places and time spent in formal preschool. Increased recognition and pay rates for early childhood educators will also contribute to attracting some potential teachers to that sector.

Across Australia, the number and proportion of ITE students in early childhood education has increased over time.

**Australian ITE student enrolments, by field, 2006 to 2020.**




Source: Department of Education, Skills and Employment, Higher Education Statistics, Section 8 – Special Courses.

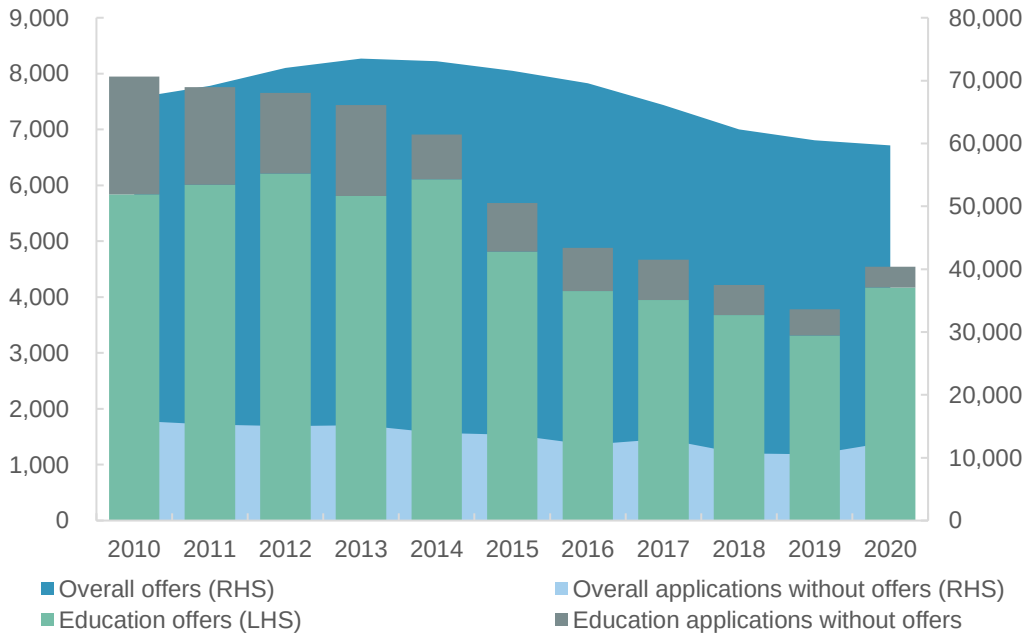
### Higher education policy settings and preferences

There are two major higher education policy changes in recent years that may contribute to declining ITE enrolments: the phasing out of one-year postgraduate ITE degrees to two-year degrees; and the phasing out of the demand-driven funding model of Australia undergraduate placements.

In common with trends in university entry, the number of applicants to Education degrees (note that this includes, but is not limited to, teacher education degrees) through tertiary admissions centres has been in decline. This is because many applicants have preferred to apply directly to universities rather than through tertiary admissions centres.

There appears to be no evidence that increased stringency in admissions is to blame for fewer degree entrants. The offer rate is exceptionally high in Education — in 2020, 92 per cent of highest preference applications resulted in offers (compared to 83 per cent overall across all fields of study); an increase in the offer rate from 73 per cent in 2010.

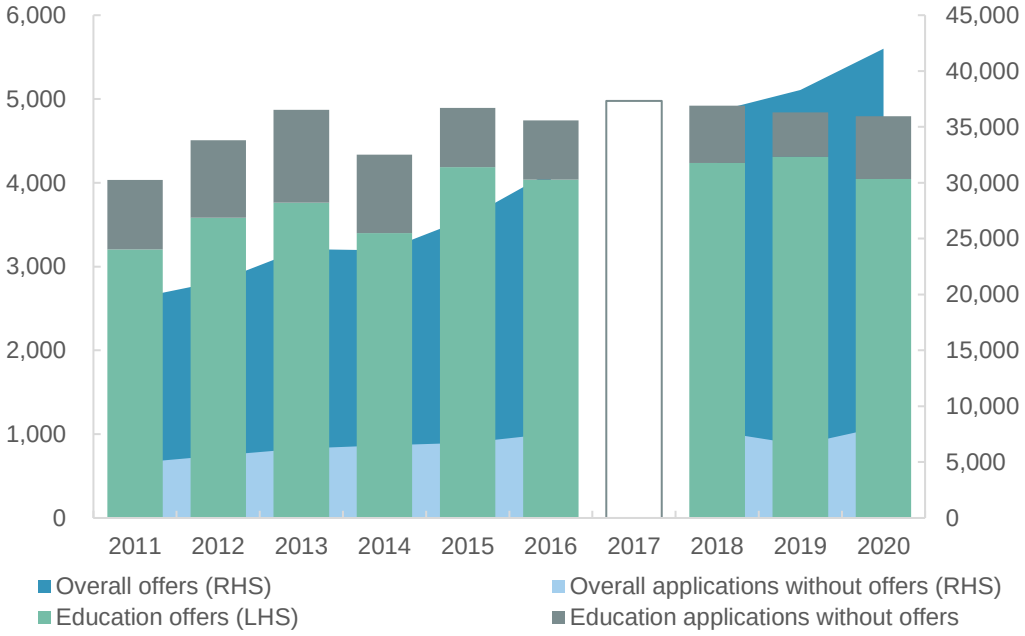
**NSW university highest preference applications and offers in Education (LHS) and all Fields of Study (RHS) through tertiary admissions centre, 2010 to 2020.**




Source: Department of Education, Higher Education Statistics.

Unlike the trend observed with tertiary admissions centre applicants, the number of admissions to university Education degrees by direct entry has not declined in recent years.

**NSW university highest preference applications and offers in Education (LHS) and all Fields of Study (RHS) through direct entry, 2011 to 2020.**




Source: Department of Education, Higher Education Statistics. NB that there is incomplete data available for 2017.

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