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Australian Institute for Teaching and School Leadership Limited

Australian Teacher Workforce Data

National Initial Teacher Education Pipeline

Australian Teacher Workforce Data Report 1

Informing the future of the teaching profession

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The ATWD initiative

Developed as part of the national initial teacher education reforms, the Australian Teacher Workforce Data (ATWD) initiative is a national project, jointly funded by the Australian Government and all state and territory governments.

The ATWD will deliver comprehensive national data that will identify trends in teacher education, the teacher supply pipeline and the teacher workforce in Australia, and help inform national policy on how to better support the profession and strengthen the impact our teachers have on the lives of the children and students they teach.

The ATWD is governed by the Australian Education Senior Officials Committee (AESOC) through the ATWD Oversight Board, which consists of representatives from: Department for Education South Australia; University of Western Australia; Department of Education and Training Victoria; Department of Education Western Australia; Department of Education Queensland; Australian Government Department of Education, Skills and Employment; Independent Schools Australia; National Catholic Education Commission; Australasian Teacher Regulatory Authorities; Australian Council of Deans of Education; Universities Australia; and the AITSL Board.

Acknowledgements

The ATWD Oversight Board acknowledges the traditional custodians of the land, sea country and waterways from across Australia. We honour and pay our respects to their Elders past, present and emerging.

The ATWD Oversight Board, through the ATWD project team, has worked closely with education stakeholders in the development and implementation of the ATWD initiative. These include the state and territory education departments, the non-government education sectors, the state and territory teacher regulatory authorities, initial teacher education (ITE) providers and the Australian Government Department of Education, Skills and Employment. The expert contribution of the Australian Institute of Health and Welfare (AIHW) has been critical. The ATWD Oversight Board also thanks key partners in the ATWD Technical Working Group.

About AITSL

The Australian Institute for Teaching and School Leadership (AITSL) was formed to provide national leadership for Commonwealth, state and territory governments in promoting excellence in the profession of teaching and school leadership, with funding provided by the Australian Government. AITSL works to ensure that Australia has a high-quality education community in which teachers and school leaders have the greatest impact on the educational growth and achievement of every student. AITSL works in partnership with governments, jurisdictions, sectors and agencies to improve professional practice through evidence-based policies, standards and resources. In December 2016, AITSL was tasked with implementing the ATWD initiative by Education Council.

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From the Chair

When it comes to influencing student outcomes, the quality of teaching matters. By understanding the pathways, challenges and opportunities teachers face throughout their career we can better support and prepare the profession and, in turn, allow student learning to thrive.

The Australian Teacher Workforce Data (ATWD) initiative provides a means to achieve this.

The ATWD is a nationally agreed data linkage project that—for the first time in Australia—brings together both national and jurisdictional-based data on initial teacher education (ITE) and the teacher workforce. It provides nationally consistent, longitudinal data and information about the teaching workforce—from ITE to the end of a teaching career; across states and territories, systems and sectors.

The purpose of the ATWD is to gain an understanding of the life cycle of the modern teaching career so we can identify trends in teacher education, the teacher supply pipeline and the teacher workforce in Australia, that will help inform national policy and programs to support the profession and improve student outcomes.

Commencing in 2017, implementation of the ATWD is well underway and new data will be uploaded annually to provide longitudinal insight into the trends of the teaching workforce.

The *National Initial Teacher Education Pipeline* (the Pipeline Report or the Report) is the first of several ATWD reports to be published on an annual basis. The Pipeline Report is shaped by the ITE data collected annually by the Australian Government between 2006 and 2017 and made available through the ATWD. It includes, for the first time, an analysis of ITE unit record data.

The Pipeline Report contains detailed analysis of the characteristics of individual students who are entering, are currently enrolled in, or have completed their ITE. It focuses on undergraduate and postgraduate students, and drills down into specific categories of detailed fields of education including early childhood, primary and secondary education. The nature of the data allowed detailed analysis that has previously not been possible. This will support workforce planning modelling and help address critical issues.

The first of its kind, this Pipeline Report builds on the annual AITSL *Initial Teacher Education: Data Report*, and is the first of a suite of reports to be produced from the ATWD. The next will be the *National Teacher Workforce Characteristics: Australian Teacher Workforce Data Report 2,* also to be released in 2021. This Pipeline Report provides new insights into the ITE pipeline for the teaching profession. The report is written for employers, ITE providers, policymakers at all levels and the broader education community. It describes—with supporting data—who is being prepared to teach, what they are being prepared to teach and where, and when they will be available to teach in Australian schools. It provides the basis for future comprehensive reporting on the pipeline into the teacher workforce.

Mr Rick Persse
Chair
Australian Teacher Workforce Data Oversight Board

Chief Executive
Department for Education South Australia

Report summary

The *National Initial Teacher Education Pipeline* (the Pipeline Report) is structured to allow readers to readily access the information that is relevant to them. For ease of reference, a brief summary of each chapter is provided below. Each of Chapters 3–6 also begin with an introduction and a summary of key data findings.

The Pipeline Report and project overview

Chapter 1: Discussion of key findings

Provides a summary and discussion of the key findings and highlights new information that has surfaced in this first Pipeline Report.

Chapter 2: Context

The background and objective of the ATWD is outlined in this chapter, along with the purpose of the Pipeline Report, further proposed ATWD reporting, and information regarding the data sources.

Detailed analyses

Chapter 3: Who are ITE students?

A detailed analysis of the number of commencing and enrolled ITE students. Data are provided about program level and qualification type, demographic characteristics, and basis for admission into ITE for all commencing and enrolled ITE students. Data are also provided separately for those studying early childhood education programs, primary education programs and secondary education programs.

Chapter 4: Where do ITE students come from?

An analysis of the state or territory of residence of all ITE students, compared to the state or territory in which they are studying, and the mode of attendance (online or on-campus).

Chapter 5: Who has completed ITE?

Provides insights into the characteristics of ITE students who completed their ITE in 2017, including a breakdown of the completion rates of different student cohorts. It also explores trends in retention and completion rates across the detailed fields of education.

Chapter 6: What are ITE students preparing to teach?

This section looks at the potential of the ATWD to support teacher workforce planning at the curriculum level, and provides an analysis of the subjects being studied by secondary education ITE students. It discusses the potential of the ATWD to provide insight into what ITE students are being prepared to teach, and an understanding of the supply pipeline through ITE at the curriculum level.

1 Key findings

Assessing national trends in the supply of new teachers is an essential step in gaining new insights into teacher preparation and the potential pressures facing the teaching workforce.

The Australian Teacher Workforce Data (ATWD) is an exciting initiative that will provide a clearer picture of the teaching workforce, vastly improving our understanding of national and local workforce trends, challenges and opportunities that face the teaching profession.

This *National Initial Teacher Education Pipeline* (Pipeline Report) focuses on the early parts of any teacher's professional journey: their initial teacher education (ITE) at a higher education provider and identifying challenges and opportunities for ITE providers and policymakers.

The next ATWD report will complete the picture by focusing on the teaching workforce. The *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2* will focus on data about those who enter and progress through the teaching profession. For the first time, policymakers will have information drawn from the comprehensive, linked data sets about the teaching life cycle.

Through new levels of national collaboration and analysis, this Pipeline Report uses course information for individual ITE students from de-identified data to provide valuable insights into the pipeline of those being prepared to teach. These insights include:

- improved estimates of the number of ITE students studying early childhood, primary and secondary education
- a comprehensive assessment of which students commenced and completed ITE, who they are and where they come from
- improved clarity on the factors influencing an accurate determination of the available supply of graduates available to work in any state or territory
- a novel approach to assessing the subject areas that ITE students will be qualified to teach, such as mathematics and science.

The Pipeline Report replaces and expands on the previously produced *AITSL ITE Data Report*, using ITE data up to 2017. As the ATWD matures, ongoing reporting will be increasingly up-to-date, building a longitudinal trend picture of the supply pipeline.

To follow are the key findings, drawn from the body of the report.

1.1 ITE supply

Despite increasing numbers of commencements, the overall numbers of ITE graduates available to teach in any year (number of completions) has largely plateaued, although this is not consistent across primary, secondary and early childhood programs or across jurisdictions.

Numbers of commencing and completing graduates

Overall, growth in ITE commencements has averaged at 2% per year and enrolments have grown at an average rate of 3% per year, each year from 2006 to 2017.[1]

Growth in the overall number of available ITE graduates, that is the number of completions per annum, has increased by an average of only 0.4% per year since 2006. This is lower than the growth in the Australian population of school-aged children and teenagers aged 3–18 years, which has grown at 1% per year over this time period.

Reductions in the number of completions were largely due to decreases in completions in primary education, which fell at an average annual decrease of 0.6% per year between 2006 and 2017, falling most rapidly between 2014 and 2017. This compares to growth of an average 1.4% per year, from 2006–2018, in Australian children aged 5 to 12 years.

Early childhood and secondary programs experienced some growth over the period 2006–2017. The number of completions in secondary education programs grew by an average 0.9% per year. This compares with average growth in the number of Australian children of secondary education age (13–18 years), of an average 0.3% per annum. Early childhood program completions grew by an average 2.9% per annum over the period. This compares with an average growth of 1.7% for Australian children aged 3–4 years from 2006 to 2018.

Demand is not singularly a function of population growth. A potential decline in completions of primary graduates is not necessarily of concern if this is responding to an existing oversupply of graduates or teachers. Equally, growth in completions for early childhood and secondary teachers may be responding to current unmet demand, particularly in some curriculum areas. However, the combination of plateauing growth in the numbers of new ITE graduates overall, together with the mismatch between growth in fields of education[2] and growth in the population of children aged between 3 and 18 years, deserves further longitudinal analysis for impact as there may be implications for the ability of ITE to meet the demand for teachers, some types of teachers, or teacher demand in some regions both in the short and long term.

1 Commencements refer to the cohort of students beginning study in ITE and entering the ITE pipeline. Commencing students are a subset of all enrolled students. The number of enrolments refers to all students in the ITE pipeline across all stages of enrolment or years of study. Refer to Chapter 3 for further details.

2 Refers to the categorisation of higher education programs based on specialisations and units of study. In this report, it refers to early childhood, primary, secondary, mixed and 'education other' ITE programs.

Completion rates

Completion rates are of interest because trends in completion rates, together with trends in commencements, can predict completion numbers in future years.

Declining completion rates can be seen across all tertiary education courses, and ITE overall follows the same trend. Completion rates have decreased across all of primary, secondary and early childhood education courses, for both undergraduate and postgraduate study, with the largest decrease in primary completion rates for students commencing undergraduate primary studies after 2010. This decrease brought completion rates across primary, secondary and early childhood undergraduate programs to equivalent levels (47–48%) by 2012.

- Completion rates (over six years) for undergraduate ITE programs fell from 57% to 47% for programs commenced in 2006, compared those commenced in 2012. For postgraduate ITE programs the completion rate (over four years) declined from 82% for programs commenced in 2006, to 76% for programs commenced in 2012 and 2013.
- Completion rates for primary education programs were equivalent (postgraduate) or higher (undergraduate) than those of secondary programs, and higher than those of both undergraduate and postgraduate early childhood programs that commenced between 2006 to 2009, but fell rapidly for all primary programs that commenced from 2010. Completion rates in primary undergraduate programs rose to 62% by 2009, but fell rapidly after 2010 to 48% for the students who commenced studying in 2012. For postgraduate students, primary completion rates have steadily declined by 10 percentage points from 2006 to 2014.
- Early childhood program completions rates have shown a gradual decline of three percentage points across both undergraduate and postgraduate programs commenced between 2006 and 2012, with undergraduate program completion rates moving from 52% to 49% and postgraduate completion rates moving from 74% to 71%.
- Secondary education program completion rates fell gradually from 51% for undergraduate programs commenced in 2006 to 47% for those commenced in 2012. Completion rates fell more steeply for postgraduate programs from 84% for programs commenced in 2006 to 77% for those commenced in 2012.

Declines in completion rates, such as those in primary education, may reflect market adjustments to decreased demand, or may reflect other adjustments, such as adjustments to intakes and courses offered by ITE providers. However, longitudinal analysis of trends in completion rates, and their value for prediction of the number and type of completions in primary, secondary and early childhood ITE programs, will be increasingly important to planning. See Chapter 5 for details.

1.2 Uptake of postgraduate ITE qualifications

Growth in ITE commencements and enrolments has occurred in postgraduate programs.

Masters level commencements were only a small proportion of ITE studies in 2006, but they have since grown at almost four times the pace of undergraduate programs, to 21% of students in 2017. Postgraduate programs experienced the greatest growth, and more consistent positive year-on-year growth, in both commencements and enrolments over the period 2006 to 2017.

In 2013, processes for the accreditation of ITE programs were introduced, including the requirement that all postgraduate programs be two years in duration. This policy change has resulted in the gradual removal of ITE Graduate Diploma programs and an increase in Masters courses.

Total postgraduate commencements almost reached parity with undergraduate commencements in 2017 for secondary education programs.

Postgraduate programs are completed more quickly and have considerably higher completion rates.

- Postgraduate enrolments grew at an average rate of 9% per year. Undergraduate enrolment average annual growth was 2%.
- Postgraduate commencements grew by an average of 4% per year. Undergraduate commencements grew by an average of 1% per year between 2006 and 2017.
- Completion rates of postgraduate programs were at 76% (after four years), compared with 47% in undergraduate programs (after six years).

Future longitudinal analysis of trends in postgraduate commencement and completion rates will provide insight into the impact of postgraduate courses on supply. See Chapter 3 for details.

1.3 Supporting ITE students

A greater focus on supporting those ITE students at risk of not successfully completing their program of study may increase the number of ITE graduates and increase the diversity of those graduates.

As the ITE student body grows more diverse, course offerings may need to evolve to meet student needs, such as flexible course delivery. This has been happening in ITE courses through the growth in online courses, part-time study and postgraduate degrees. Yet the changing pattern of students entering and undertaking ITE may have unintended consequences for the future pipeline of teachers. Increasing the number of ITE graduates to meet teacher demand will require a greater focus on supporting ITE students who may be at risk of not successfully completing their program of study. Overall, diverse students are under-represented, and these students are less likely to complete their ITE program. See Chapter 3 for details.

An increasingly diverse and culturally responsive teaching workforce is a crucial step towards addressing achievement gaps across Australian schools. The *Alice Springs (Mparntwe) Education Declaration* has set a clear goal to 'ensure that education promotes and contributes to a socially cohesive society that values, respects and appreciates different points of view and cultural, social, linguistic and religious diversity.'

Aboriginal and Torres Strait Islander ITE students

Aboriginal and Torres Strait Islander ITE students are under-represented in the commencement ITE student cohort and have lower completion rates. Aboriginal and Torres Strait Islander ITE students represent 2% of all ITE enrolments. This figure is consistent with Aboriginal and Torres Strait Islander enrolments in other areas of tertiary study (where Aboriginal and Torres Strait Islander students also comprise only 2% of enrolments) but is an under-representation compared to the Aboriginal and Torres Strait Islander population of Australia (3%), and compared to the number of Aboriginal and Torres Strait Islander school students (5.6% of all students in 2017).

While completion rates for Aboriginal and Torres Strait Islander undergraduate students are lower than for non-Aboriginal and Torres Strait Islander students, they are trending upwards.

- For Aboriginal and Torres Strait Islander undergraduates, completions rose from 33% of the commencing cohort in 2006 to 36% for the cohort that commenced studies in 2012.

Completion rates for Aboriginal and Torres Strait Islander postgraduate students are lower than for non-Aboriginal and Torres Strait Islander students but have trended upwards since the 2006 cohort. However, Aboriginal and Torres Strait Islander students represent only 1% of all ITE postgraduate students.

- Aboriginal and Torres Strait Islander postgraduate completions fell from 69% for the 2006 commencing cohort to 52% for the 2012 commencing cohort. The figure rose to 70% for those who commenced studies in 2014.

Other diversity characteristics

Undergraduate students who are less likely to complete their ITE studies are those from regional and remote areas; with disabilities; from low socio-economic areas; who are male. These differences, however, are less marked for postgraduate students.

- Undergraduate students from regional and remote areas have slightly lower completion rates (44%) compared with 48% for those from metropolitan areas. Postgraduate students from regional and remote areas have completion rates of 72%—compared with 75% for those from metropolitan areas.
- Undergraduate and postgraduate students with disabilities have lower completion rates, at 40% and 67% respectively, compared with those without disabilities (46% for undergraduate and 77% for postgraduate students).
- Undergraduate students residing in low socio-economic areas have slightly lower completion rates (48%) than those residing in medium (51%) or high (53%) socio-economic areas. This compares with completion rates of 73% for postgraduate students residing in low socio-economic areas, while completion rates for those in medium and high socio-economic areas are 76% and 74% respectively.
- Male undergraduate students have lower completion rates than female students (42% for males and 49% for females) compared with postgraduate students (74% for males and 76% for females).

Alternative modes of delivery

ITE students are increasingly studying through online courses. Online study has grown in most states and territories since 2006, with the greatest growth occurring since 2014. By 2016, 19% of enrolled students were undertaking part of their studies online and 25% of students were studying their ITE programs entirely online. See Chapter 4.4 for more details.

Undergraduate students who studied externally only, via online programs, had low completion rates (27%). Students who studied internally, via traditional face-to-face delivery, had higher completion rates (43%). However, students who combined internal and external study methods had the highest completion rates (69%).

Postgraduate students who studied only via external modes also had the lowest completion rates (59%). Students who studied only via internal modes of attendance had completion rates which fell from 87% for the 2006 commencing cohort to 78% for the 2014 commencing cohort. Postgraduate students who studied via mixed modes of attendance had the highest completion rates, rising from 85% in 2006 to 89% for the 2014 commencing cohorts.

Given the much higher completion rates of students who completed their programs via a mix of online and face-to-face delivery compared with fully online mode, an examination of the modes of delivery of ITE may be required to better understand the potential and the challenges, and the best means of assisting students to complete their study programs.

Previous analysis of completion rates has shown that failure to complete online study covaries significantly with other demographic variables also associated with low completion rates.[3] For example, those studying online are more likely to be part-time and/or mature aged and/or from regional and rural/remote areas. These factors may contribute as much, if not more, to a student's likelihood of completion as their mode of study. Further analysis of longitudinal data from subsequent ATWD collections is required to provide definitive insight into the role mode of delivery plays on completion of ITE.

3 Australian Institute for Teaching and School Leadership 2019, *Spotlight – The rise of online initial teacher education: What do we know?*, AITSL, Melbourne.

Part-time students

Part-time students have very low completion rates. Full-time students have a much higher completion rate, especially for postgraduate students. However, undergraduate students who completed their studies through both full-time and part-time enrolments had the highest completion rates.

- Completion rates for part-time only undergraduate students commencing in 2006 were 25%, and this fell to 12% for the 2012 cohort. This compares with students who studied full-time only throughout their enrolment with completion rates of 62% for the 2006 cohort and 52% for the 2012 cohort. Undergraduate students who completed their studies through both full-time and part-time enrolments had completion rates of 57% for both the 2006 and 2012 cohorts.
- Completion rates for part-time only postgraduate students were 54% for the 2006 commencing cohort, falling to 38% for the 2014 cohort. Students who studied only full-time had the highest completion rates: 92% and 83% for 2006 and 2014 commencing cohorts respectively. Postgraduate students who studied via mixed types of attendance had completion rates of 79% and 78% for the 2006 and 2014 commencing cohorts respectively.

1.4 Changes in teacher supply

Primary education programs have seen the lowest growth in commencements and enrolments, and a sharp decline in completions over the last 12 years. Secondary education programs have grown consistently in commencements, enrolments and completions.

Of all students who completed ITE programs in 2017, 40% (6,947 students) completed secondary education programs, 36% (6,328 students) completed primary education programs and 13% (2,206 students) completed early childhood education programs. The remainder completed 'mixed programs'[4] or 'education other'[5] programs. Refer to Chapter 3 for commencement and enrolment information, and Chapter 5 for information about completions.

Primary education programs

Demand for primary school teachers is expected to continue to grow due to the growth in the Australian population of children of primary school age (5–12 years old) and pre-school age (3–4 years old). Both populations of children, based on ABS data, grew by more than 1% per year between 2007 and 2018.

- Primary education enrolments have stalled as a proportion of overall ITE enrolments, with enrolments in primary education programs dropping by five percentage points over the 12-year period. Commencements in primary education programs remained flat at 40% of all ITE commencements.
- Six-year completion rates for undergraduate primary education programs showed the largest decline, with a decrease of 14 percentage points, from 62% for the students commencing in 2006, to 48% for the students commencing in 2012.

Based on current completion rates for primary education:

- Of the 9,510 students who commenced undergraduate programs in 2017, around 4,600 would be expected to complete their studies by the end of 2022 and be available to join the workforce between 2021 and 2023.
- Of the 3,143 students who commenced postgraduate programs in 2017, around 2,400 would be expected to complete their studies by the end of 2020 and be available to join the workforce over the 2019–2021 period.

Secondary education programs

Secondary education ITE program commencements and enrolments have grown consistently, as have the number of students completing secondary education ITE programs each year.

The number of completions in secondary education programs grew by 11% from 6,233 students in 2006 to 6,947 students in 2017, at an average rate of 0.9% per year. The Australian population of 12–18-year-old students grew at an average rate of 0.3% per year.

Based on completion rates for secondary education programs:

- Of the 6,714 students who commenced undergraduate programs in 2017, around 3,160 would be expected to complete their studies by the end of 2022 and be available to join the workforce between 2021 and 2023.
- Of the 5,201 who commenced postgraduate programs in 2017, around 4,000 are expected to complete their studies by the end of 2020 and be available to join the workforce between 2019 and 2021.

4 Students who completed dual qualifications, such as early childhood and primary, fall into the 'mixed program' category.

5 'Education other' programs refer to ITE programs where the detailed field of education is not specified (e.g. general education) or that could not be identified as early childhood, primary, secondary or mixed programs.

1.5 Early childhood supply

Early childhood programs have seen a high rate of growth, however, 20% of the growth may be current workers retraining rather than new supply.

- Commencements increased by 61% from 2,753 in 2006 to 4,438 in 2017. The number of enrolments almost doubled (98% increase) from 7,323 in 2006 to 14,497 in 2017.
- Commencements rose from 11% (2006) of all ITE commencements, to 14% (2017). Enrolments rose from 11% (2006) of all ITE enrolments, to 16% (2017).
- Completions for early childhood education programs grew by 41%, at an average rate of 2.9% per year, from 1,562 in 2006 to 2,206 in 2017.

Data on basis of admission to early childhood education programs indicates that 20% of commencing students are entering ITE on the basis of a vocational education and training (VET) qualification and may therefore be retraining to upgrade their currently held VET qualifications to undergraduate or postgraduate university qualifications.

This is likely in response to higher qualification requirements, including requirements for degree-qualified early childhood teachers in early learning settings, introduced as part of the National Quality Framework in 2012.[6] These students, therefore, are likely already part of the workforce, rather than potential new additions to it.

In addition, early childhood education programs have the highest proportion of international students[7] (10%, 210 students) completing their studies in 2017, whose likelihood to join the Australian workforce is unknown.

Based on completion rates for early childhood education:

- Of the 3,855 students who commenced undergraduate programs in 2017, around 1,900 would be expected to complete their studies by the end of 2022 and be available to join the workforce between 2021 and 2023.
- Of the 583 students who commenced postgraduate programs in 2017, around 415 would be expected to complete their studies by the end of 2020 and be available to join the workforce between 2019 and 2021.

Refer to Chapter 3 for commencement and enrolment information, and Chapter 5 for information about completions.

6 Australian Children's Education and Care Quality Authority 2020, *Guide to the National Quality Framework,* ACECQA, Sydney.

7 International students are students who do not have Australian or New Zealand citizenship or permanent residency status

1.6 Pipeline clarity for states and territories

The pipeline data that jurisdictions currently rely on may not be a clear indicator of the real number of graduates likely to be seeking work in each state or territory.

Most graduate teachers will work in the state or territory where they reside (see graduate outcomes analysis in Chapter 5). With many higher education providers now offering online ITE programs, students are increasingly able to reside in one location and study in another.

The workforce supply pipeline in any jurisdiction is, therefore, not simply the number of students graduating from education providers in that state or territory. Instead, it is the number of ITE students who reside in that state or territory, regardless of where they studied. The difference is, in some cases, substantial.

The information in this Pipeline Report provides much greater clarity than has previously been available about where graduating students reside, and therefore where they are likely to seek work, providing greater visibility of the supply pipeline in each jurisdiction. Refer to Chapter 4 for details.

In summary, from 2006 to 2017:

- New South Wales, Queensland, South Australia and the Australian Capital Territory experienced steady growth in the number of students studying ITE programs outside of the state or territory, suggesting that while the number of completions from ITE programs in these states and territories may still be showing a declining trend, there may be more ITE students based in these jurisdictions and available to teach than might have been expected.
- ITE programs in Western Australia and Victoria have seen large relative growth in the number of interstate and international students undertaking ITE programs through the higher education providers in those states. However, these students live elsewhere and are unlikely to seek work in the state in which they studied, meaning the pipeline for these jurisdictions previously may have been overestimated.
- The pipelines of Tasmania and the Northern Territory have shown highly variable numbers of interstate and international students studying in ITE programs through higher education providers in those jurisdictions. Given this, in addition to an overall decline in the numbers of students in ITE programs, the actual number of graduates available to work in these jurisdictions may be overestimated and difficult to predict.

Further work is required to refine this analysis by applying an understanding of completion rates in each field of education in each jurisdiction. However, the trends identified so far suggest that this type of analysis may offer considerable insight for workforce planning in jurisdictions.

1.7 New information about the subjects ITE students are being prepared to teach

We can now begin to assess the subject areas that ITE students have studied to teach, including in areas of need such as mathematics or science.

Previously, there have been no national data about which curriculum areas ITE students have studied to teach. Understanding the pipeline of potential teachers coming through ITE in accordance with the curriculum areas they are being prepared to teach is of critical importance to understanding supply trends and potential workforce shortages or oversupply; for example, the supply of teachers able to teach science, technology, engineering and mathematics (STEM) subjects in the coming years.

The ATWD has delivered an opportunity to analyse program code data and develop a process for examining future supply at the granular level of subject expertise. However, this new process is in preliminary stages and the data sets, at this stage, is indicative only. See Chapter 6 for details.

Of the 51% of students for whom accurate data were available, the curriculum areas that secondary education students were clearly being prepared to teach in 2017 were:

- STEM (1,409 students)
- humanities/studies of society and environment (SOSE) (994 students)
- english (813 students)
- health/physical education (543 students)
- creative arts (474 students).

These figures are the beginning of an invaluable comparative baseline for future analysis.

As we move forward, this information will provide important insights and allow for a much greater understanding of the pipeline of teachers. A joint project between the ATWD project team and ITE providers is continuing to secure and develop the usefulness of this data for understanding supply at the curriculum level into the future.

1.8 Admissions data

Since 2015, the proportion of students entering undergraduate ITE courses via a secondary pathway with a recorded Australian Tertiary Admission Rank (ATAR) has increased, as has the mean ATAR held by those students. However, more accurate data sets are required to reliably assess basis of admission trends of both undergraduate and postgraduate programs.

A key recommendation of the findings in the Teacher Education Ministerial Advisory Group (TEMAG) report, *Action Now: Classroom Ready Teachers*,[8] the of the Higher Education Standards Panel report—*Improving Retention, Completion and Success in Higher Education*[9] (Shergold Report)—was the need to improve the accuracy and transparency in reporting of basis of admission data by higher education providers. This would help to accurately assess the qualifications of students entering ITE.

It is a requirement of all ITE providers to apply selection criteria for all entrants. The selection criteria must incorporate both academic and non-academic components that are consistent with the capacity to engage successfully with a rigorous higher education program, the requirements of the particular program, and subsequent success in professional teaching practice.

At the overall level, and comparing 2006 to 2017, the relative proportions of students entering ITE based on different types of admission into ITE—including secondary education with or without ATAR, higher education, VET or other—have not markedly changed since 2006, suggesting that more granular and accurate data are vital. See Chapter 3.6 for more detail.

However, statistical analysis of bases of admission data at the unit record level comparing successive years has revealed interesting and deeper insights into trends in ATAR that will require further monitoring over time and verification through improved data accuracy. Ongoing national effort to improve ITE data in this area remains critical.

- Overall, the proportion of students entering ITE from secondary education with an ATAR has decreased slightly over the period 2006–2017 from 70% (2006) to 67% (2017). In 2017, of all students admitted to undergraduate ITE programs based on a secondary education qualification in 2017, 67% (5,465 students) had a recorded ATAR. This accounted for 25% of all admissions to ITE in 2017 (slightly lower than the 26% in 2006).
- However, year-on-year statistical comparison of the unit record data indicates that while the proportion of students entering ITE from secondary education with a recorded ATAR decreased steadily from 2006 (70%) to 2014 (62%), this trend reversed to 67% in 2017.
- Overall, the median ATAR of students admitted into an undergraduate ITE program based on an ATAR decreased from 78 in 2006 to 75 in 2017. In 2017, 64% of students entering an undergraduate ITE program based on a secondary qualification with a recorded ATAR had an ATAR greater than 70.
- However, year-on-year statistical comparison of the unit record data suggests that the median ATAR may have been rising since 2015. While the proportion of students with an ATAR greater than 70 has trended downward between 2006 and 2015, this trend reversed since 2015 across all detailed fields of education.

8 Craven, G (Chair) 2014, *Action Now: Classroom Ready Teachers,* Teacher Education Ministerial Advisory Group, viewed 20 January 2020, <docs.education.gov.au/node/36783>.

9 Higher Education Standards Panel 2017, *Final report – Improving retention, completion and success in higher education,* Australian Government Department of Education and Training, Canberra.

1.9 Policy reform impacts

Policies implemented at all government levels, and by various jurisdictions and sectors, have impacted on ITE commencements throughout the data period.

ITE reform following the TEMAG report[10] has been progressively implemented since 2015, and the impact of some of these reforms can be measured in the data presented in this report.

The standards and procedures for the accreditation of ITE programs introduced in 2011, updated in 2015 (post-TEMAG) and 2018 (post-Excellence Review), stipulate the requirement that ITE program structures:

> Comprise at least two years of full-time equivalent professional studies in education and be structured so that a graduate has undertaken a four-year or longer full-time equivalent program(s) that leads to a higher education qualification(s).

These can be configured in various forms, one of which is 'a three-year undergraduate degree providing the required discipline knowledge, plus a two-year graduate entry professional qualification'[11].

- Postgraduate programs have increased at the Masters level in all detailed fields of education (from 1% to 16% of all enrolments in 2006 and 2017 respectively) in both primary education and particularly in secondary education programs.

A decrease in one-year postgraduate programs for primary education and secondary education programs, such as the Graduate Diploma, also reflects the impact of ITE accreditation initiatives. The impact has been greatest on the postgraduate qualifications of secondary education students.

Enrolments in the Graduate Diploma decreased from 13% (2006) to 4% (2017) of commencing primary education students in 2017 and decreased from 41% (2006) to 20% (2017) of commencing secondary education students. A small number of students enrolled in Graduate Diplomas are still in the pipeline, and universities are obliged to see them through to completion. This number will continue to fall and the employment outcomes for these students will be investigated in the next report: the *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2*.

The ITE pipeline has been impacted over time by the availability of 'uncapped' higher education places and changes in the way education providers are funded over the data period. However, in addition to increases in postgraduate programs, both the pattern and absolute number of the decline in undergraduate programs offered by higher education providers suggest policy impacts.

Robust assessment of graduates, including the introduction of the Teaching Performance Assessment (TPA)[12] as a requirement for graduation from 2019, will continue to support the preparation of classroom-ready teachers. The impact of this on the teacher workforce will be monitored in future ATWD reports.

10 Craven, G (Chair) 2014, Action Now: Classroom Ready Teachers, Teacher Education Ministerial Advisory Group, viewed 20 January 2020, <docs.education.gov.au/node/36783>.

11 Australian Institute for Teaching and School Leadership 2018, *Accreditation of initial teacher education programs in Australia, Standards and Procedures*, AITSL, Melbourne.

12 Accreditation Program Standard 1.2; for more information please see here.

Early childhood education teacher policy

The Education and Care Services National Law Act 2010 and *Education and Care Services National Regulations* set out the minimum qualification requirements for early childhood education and care services operating under the National Quality Framework.[13]

Under the regulations, long-day-care services and preschools/kindergartens educating and caring for children preschool age and under must engage or have access to one or more registered early childhood teachers. From 1 January 2020, larger long-day-care and preschool/kindergarten services educating and caring for more than 60 children will need an additional registered early childhood teacher or other suitably qualified person. In addition, while teacher registration/accreditation is not a requirement under the National Quality Framework, it is a requirement under some state and territory legislation.

- In 2017, 39% of all admissions to undergraduate early childhood education programs were based on VET qualifications, with secondary education (Year 12) and higher education qualifications accounting for a further 41% of admissions.
- Admissions via a VET pathway between 2006 and 2017 grew by eight percentage points.

Further analysis of the teacher workforce characteristics will explore if these trends are partly due to re-training of the existing workforce in line with policy changes in early childhood education, or whether this growth represents new entrants to the pipeline.

13 Australian Children's Education and Care Quality Authority 2020, Guide to the National Quality Framework, ACECQA, Sydney.

1.10 Opportunities for the future

In future, the ATWD will address increasingly complex issues. The next ATWD report—the *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2* will add teacher workforce data to the analysis and address increasingly complex issues, including:

- Which locations and schools are ITE graduates first employed in (such as regional, rural and remote locations), and how is this related to where they studied ITE?
- How long do recently employed ITE graduates stay employed as a teacher, and is this related to their location (i.e. regional, rural and remote schools), type of employment, or early career support?
- Do ITE graduates with specialist qualifications work in locations and/or curriculum areas of particular need?

For the first time, the ATWD is connecting information on ITE students with data on their employment. As the ATWD matures and all states and territories participate in the data collection process, the ATWD will provide further opportunities to understand the supply of teachers and the teacher workforce across Australia.

2 Context

2.1 The ATWD initiative

Background

The teaching profession in Australia, like many professions, is constantly changing. Challenges include population growth, workplace attrition, new policies and reforms, and the need to be 'future-ready'.

The Teacher Education Ministerial Advisory Group (TEMAG) report, *Action Now: Classroom Ready Teachers (2014)*,[14] identified the compelling need for better national research and workforce planning as one of the five key approaches to improving education outcomes through initial teacher education (ITE). It found that a lack of consistent and timely national teacher data 'hinders both continuous improvement, and workforce planning, including the ability to address shortages in specialist subject areas'.

The Australian Teacher Workforce Data (ATWD) initiative was established to unite and connect ITE data and teacher workforce data from around Australia to provide a comprehensive picture of the teacher workforce nationally, across all systems and sectors, from entry into the profession to the end of a teaching career.

The ATWD is a joint initiative between, and is funded by, all state, territory and Commonwealth governments. The ATWD is governed by the Australian Education Senior Officials Committee (AESOC) through the ATWD Oversight Board, which consists of representatives from: Department for Education South Australia; University of Western Australia; Department of Education Victoria; Department of Education Western Australia; Department of Education and Training Queensland; Australian Government Department of Education, Skills and Employment; Independent Schools Australia; National Catholic Education Commission; Australasian Teacher Regulatory Authorities; Australian Council of Deans of Education; Universities Australia; and the AITSL Board.

The ATWD

The ATWD initiative is the first of its kind in Australia. It will offer new insights into the characteristics and life cycle of the Australian teacher and enable a deeper understanding of national and local workforce challenges and opportunities.

The ATWD will be a valuable resource that allows more effective responses to emerging trends and issues affecting the workforce, helping us ensure that teachers are well supported, and schools are well resourced to deliver quality learning for every child.

The ATWD will initially produce two key reports, with others to follow annually.

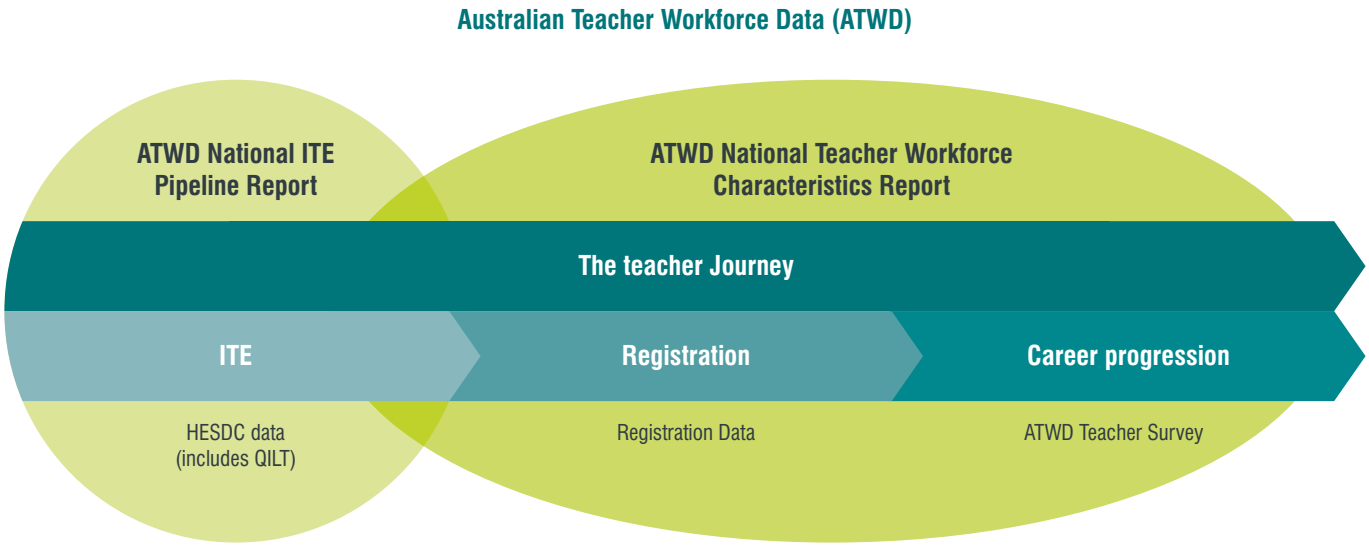
- The *National Initial Teacher Education Pipeline: Australian Teacher Workforce Data Report 1* provides a detailed analysis of the characteristics of and trends in students who are learning to become teachers, as well as insights into the supply 'pipeline' of teachers from 2006 onwards.
- The *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2* will provide an understanding of the profile and demographics of Australian teachers, and identify trends in the teacher workforce in terms of national and local workforce challenges and opportunities.

14 Craven, G (Chair) 2014, *Action Now: Classroom Ready Teachers,* Teacher Education Ministerial Advisory Group, viewed 20 January 2020, <docs.education.gov.au/node/36783>.

The diagram in **Figure 2-1** outlines these two reports.

More detail about the ATWD model is provided at **Appendix 9**. A comprehensive Technical Report, showing which data were used and how the data were transformed and summarised, supplements this Pipeline Report and is available separately.

Figure 2-1: ATWD report structure and data



Implementation

The Australian Institute for Teaching and School Leadership (AITSL) is managing the implementation of the ATWD, under the auspices of the ATWD Oversight Board, with governance through the Australian Education Senior Officials Committee (AESOC) on behalf of Education Council.

The ATWD Oversight Board is responsible for overall governance of the ATWD, including data management, data access and reporting protocols, and approval of the publication of data. The ATWD Oversight Board includes representatives from ITE providers, teacher regulatory authorities (TRAs) and employer sectors. A list of members of the ATWD Oversight Board is at **Appendix 7**.

The Australian Institute of Health and Welfare (AIHW) has been appointed as the Commonwealth Integration Authority for the ATWD. The AIHW provides end-to-end management of the data collection, storage and linkage, and ensures the data are handled in accordance with the *Australian Institute of Health and Welfare Act 1987*, the *Privacy Act 1988* and the *ATWD Data Access and Reporting Protocols*.

The ATWD Technical Working Group comprises representatives from all data sources including: all state and territory TRAs; the Australian Government Department of Education, Skills and Employment; AITSL; and the AIHW. It provides advice to the ATWD Oversight Board on technical matters related to the ATWD, and is working towards achieving national consistency in data provided for the ATWD. A list of members of the ATWD Technical Working Group is at **Appendix 8**.

2.2 Purpose of the Pipeline Report

The first of its kind in a series of annual reports, the Pipeline Report provides an in-depth view of Australia's future teachers through an analysis of ITE data and delivers new and comprehensive insights into the teacher supply pipeline.

This Pipeline Report provides an in-depth analysis of the first tranche of higher education data made available through the ATWD, indicating the potential of the data and where further data analysis can be developed. It shows that fascinating new insights can be gained from the analysis of linked data (in this case HEIMS–QILT) and it is anticipated that subsequent ATWD reports will deliver similarly new and powerful findings as the data builds out longitudinally.

This Pipeline Report expands on, and from 2020 will replace, the AITSL-produced *ITE Data Report*, the last of which was published in December 2019 and, like this Pipeline Report, included data to 2017. While the *ITE Data Report* identified and compared broad characteristics of the ITE pool based on aggregated data prepared by the Australian Government Department of Education, Skills and Employment, the Pipeline Report uses statistical analysis of unit record ITE data in the ATWD to provide more in-depth and detailed analysis of trends in the ITE data.

As the project progresses, and as the implementation challenges presented in collating and linking multiple data sets from a variety of sources across Australia are resolved, there will be a reduction in the publication/data delay. As the ATWD matures, ongoing reporting will be more timely, building a longitudinal trend picture of the supply pipeline.

Access to linked, de-identified unit record data has allowed deeper analysis of the ITE supply pipeline, and provides an understanding of the progress of different student cohorts from program commencement to program completion or exit, including:

- demographic profiles: age, gender, socio-economic status, disability, citizenship, Aboriginal and Torres Strait Islander status and diversity
- primary, secondary and tertiary education
- qualification type and program level
- state and territory of a student's residential address compared to the location of their higher education provider
- subjects that students are being prepared to teach.

The Pipeline Report reports on historical trends in ITE, identifies the profile of the supply pipeline of teachers, and provides a valuable source of data for considering the impact of existing, historical and future policies. It is expected that the Pipeline Report will provide the foundation for more detailed and comprehensive analyses of ITE data in future years.

2.3 Data in the ATWD Pipeline Report

Data sources

The Pipeline Report is based on ITE data at the unit record level from the Australian Government Department of Education, Skills and Employment, and comprises the following data sources.

Higher Education Student Data Collection (HESDC)

Data for all students who have completed an ITE program at an Australian tertiary provider between 2006 and 2017 (inclusive) have been sourced from the Australian Government Department of Education, Skills and Employment Higher Education Student Data Collection (HESDC).

The HESDC is a census of administrative and statistical information on higher education students in Australia. Data are collected by higher education providers (HEPs) and submitted to the Australian Government Department of Education, Skills and Employment through the Higher Education Information Management System (HEIMS) under the *Higher Education Support Act 2003*.

HESDC data includes data on enrolments, units of study, programs, and completions for students attending higher education who are eligible for Commonwealth assistance.

Quality Indicators for Learning and Teaching (QILT)

The Quality Indicators for Learning and Teaching (QILT) surveys comprise the Student Experience Surveys (SES), the Graduate Outcomes Surveys (GOS) and the Employer Satisfaction Surveys (ESS) that are conducted annually across all higher education students by the Social Research Centre on behalf of the Department of Education, Skills and Employment. QILT data have been extracted for students studying ITE who completed the survey and linked to their HESDC record. The ATWD provides this de-identified data linked to other related ITE data so that it can be analysed by detailed field of education.[15]

15 Refers to the categorisation of higher education programs based on specialisations and units of study. In this report it refers to early childhood, primary, secondary, mixed and 'education other' ITE programs.

Opportunities

Unit record data

The ATWD provides data analysis based on unit record data for individual ITE students allowing full, granular and robust analysis of trends in ITE and the ITE trajectory of each student. The unit record data in the ATWD is de-identified and analysed for aggregate trends. No individual is identifiable from the data in the ATWD.

Linked data for time series longitudinal trend analysis

The HESDC and QILT data for ITE have been linked at the individual level, providing insight into the outcomes and experiences of students throughout the ITE pathway. The longitudinal analysis of 2006–2017 data allows in-depth analysis of trends in ITE over the decade.

Enhancement of reported data through data transformations

Algorithms applied to transform the data for reporting and to generate new variables are explained in the comprehensive and supplementary Technical Report, that shows which data were used and how the data were transformed and summarised. The Technical Report is available separately.

Privacy and security

The ATWD and the use of data in this report complies with all Commonwealth, state and territory privacy legislation. The ATWD Oversight Board provides governance for the ATWD and the AIHW has been appointed to provide end-to-end data handling and management for the ATWD initiative. It is responsible for ensuring and protecting privacy. It must comply with the *AIHW Act 1987* and will only release data in accordance with its legislation and the *ATWD Data Access and Reporting Protocols 2018 and 2019* (the Protocols).

The ATWD only includes de-identified data that cannot be attributed to an individual teacher or ITE student. All reported data are presented as aggregated statistics, de-identified information and conclusions. To be included in this report, aggregated data must meet minimum cell size criteria to ensure data confidentiality is maintained. The minimum cell size is five–that is, where data aggregations result in groups of less than five individuals, the data and any related statistics are not reported and will be shown as ‘n.p’.

3 Who are the ITE students?

3.1 Chapter introduction

This chapter provides an analysis of the characteristics of undergraduate and postgraduate initial teacher education (ITE) students studying early childhood, primary and secondary education programs, at various stages of enrolment, with Australian higher education providers during the period 2006–2017.

It includes the:

- overall number and trends of ITE enrolments[16]
- overall number and trends of students commencing ITE programs[17]
- demographic characteristics of ITE students—including age, gender, socio-economic status, citizenship and Aboriginal and Torres Strait Islander status
- number and characteristics of students being prepared to teach in the detailed fields of education, early childhood, primary, secondary, mixed[18] and 'education other'[19] programs, including the type of qualification undertaken.

Commencements refer to the cohort of students beginning study in ITE and entering the ITE pipeline. Commencing students are a subset of all enrolled students. The number of enrolments refers to all students in the ITE pipeline across all stages of enrolment or years of study. The enrolled student population is indicative of changes in the student population over time and is subject to variation due to students continuing or discontinuing their ITE studies or returning from a period of deferment.

A summary of the total number of students commencing and enrolled by detailed field of education 2006–2017 is provided at **Appendix 1**.

16 Enrolment: refer to glossary.
17 Commencement: refer to glossary
18 Students who complete dual qualifications, such as early childhood and primary, fall into the 'mixed program' category.
19 'Education other' programs refer to ITE programs where the detailed field of education is not specified (e.g. general education) or that could not be identified as early childhood, primary, secondary or mixed programs.

3.2 Chapter summary

Commencements and enrolments

All ITE programs

Nationally, ITE has seen steady growth in the total number of enrolments and commencements since 2006, although at a slower rate than the growth in enrolments and commencements in all higher education programs.

Between 2006 and 2017, the number of students enrolled in ITE programs increased by 43%, from 64,495 students in 2006 to 92,090 in 2017. The number of students commencing ITE programs increased by 27%, from 24,997 students in 2006 to 31,688 in 2017.

The greatest growth in both commencements and enrolments occurred in early childhood education.

Detailed field of education

Early childhood education programs

- Commencements increased by 61%, from 2,753 students in 2006 to 4,438 in 2017.
- Enrolments increased by 98%, from 7,323 students in 2006 to 14,497 in 2017.

Primary education programs

- Commencements increased by 28%, from 9,910 students in 2006 to 12,653 in 2017.
- Enrolments increased by 34%, from 27,877 students in 2006 to 37,406 in 2017.

Secondary education programs

- Commencements increased by 39%, from 8,557 students in 2006 to 11,915 in 2017.
- Enrolments increased by 55%, from 20,105 students in 2006 to 31,077 in 2017.

Program level

Over the period 2006 to 2017, postgraduate ITE programs experienced much higher growth, in both commencements and enrolments, than undergraduate programs.

- Postgraduate program commencements increased by 59%, from 6,100 students in 2006 to 9,679 in 2017.
- Undergraduate program commencements increased by 16%, from 18,897 students in 2006 to 22,009 in 2017.
- Postgraduate program enrolments increased by 144%, from 8,040 students in 2006 to 19,638 in 2017.
- Undergraduate program enrolments increased by 28%, from 56,455 students in 2006 to 72,452 in 2017.

Postgraduate program enrolments have grown in line with an increase in the number of postgraduate programs offered, from 93 programs in 2006 to 185 programs in 2017. During the same period, the number of undergraduate programs decreased from 654 programs in 2006 to 597 in 2017. This is likely the result of ITE accreditation policy reform, and further work will be required to understand this better. The number of programs identified in the data is greater than the number of accredited teaching programs listed on the Australian Institute for Teaching and School Leadership (AITSL) website. This is due to higher education providers having separate codes to distinguish between different streams of the same program. A mapping of distinct program codes in the Higher Education Student Data Collection (HESDC) data to the accredited teaching programs listing is required to understand this better.

The growth in primary and secondary education commencements and enrolments is likely driven by new entrants to the profession. This may also be the case in early childhood education programs, but the significant growth is also likely driven by existing workers seeking higher qualifications. Higher qualification requirements, including requirements for degree qualified early childhood teachers in early learning settings, were introduced as part of the National Quality Framework[20] in 2012.

Since January 2014, centre-based services that educate and care for children who are preschool age and under, must engage or have access to an early childhood teacher (based on the number and age of children in the service) to meet the National Quality Standard. From 1 January 2020, this requirement extended to requiring a second early childhood teacher, or alternatively a suitably qualified teacher in attendance, when 60 or more children preschool age or under are being educated and cared for.

Early childhood education programs

Commencements in:

- undergraduate programs grew by 49%, from 2,583 students in 2006 to 3,855 in 2017
- postgraduate programs grew by 243%, from 170 students in 2006 to 583 in 2017.

Enrolments in:

- undergraduate programs grew by 89%, from 7,055 students in 2006 to 13,321 in 2017
- postgraduate programs grew by 339%, from 268 students in 2006 to 1,176 in 2017.

Primary education programs

Commencements in:

- undergraduate programs grew by 11%, from 8,590 students in 2006 to 9,510 in 2017
- postgraduate programs grew by 138%, from 1,320 students in 2006 to 3,143 in 2017.

Enrolments in:

- undergraduate programs grew by 19%, from 26,108 students in 2006 to 31,033 in 2017
- postgraduate programs grew by 260%, from 1,769 students in 2006 to 6,373 in 2017.

Secondary education programs

Commencements in:

- undergraduate programs grew by 34%, from 5,019 students in 2006 to 6,714 in 2017
- postgraduate programs grew by 47%, from 3,538 students in 2006 to 5,201 in 2017.

Enrolments in:

- undergraduate programs grew by 37%, from 15,321 students in 2006 to 21,062 in 2017
- postgraduate programs grew by 109%, from 4,784 students in 2006 to 10,015 in 2017.

20 The National Quality Framework can be found at the NQF website

Qualification type

Overall, the most common ITE qualification type is the Bachelor Degree. In 2017, Bachelor Degree programs comprised 79% of all ITE enrolments, including 92% of early childhood, 83% of primary and 68% of secondary ITE student enrolments.

Postgraduate Masters Degree qualifications have grown from 1% to 16% of all ITE enrolments from 2006–2017, in response to accreditation policy changes.

Postgraduate qualifications of the Graduate Certificate and Graduate Diploma type have decreased since 2006. The growth in the proportion of both commencements and enrolments in Masters Degree programs, and the comparable decrease in commencements and enrolments in Graduate Diploma programs, can be attributed to qualification accreditation policy changes. However, students enrolled in Graduate Diplomas are still in the pipeline and universities are obliged to see them through to completion. This number will continue to drop off. The employment outcomes for these students will be investigated in the next report: the *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2*.

Basis of admission and ATAR

The number of students who were admitted to undergraduate ITE programs on the basis of Australian Tertiary Admission Rank (ATAR), with ATARs above 70, has increased since 2015.

Of all admissions to undergraduate ITE programs, 80% enter via one of the following three pathways:

- Just under one-third (28%) are admitted via higher education pathways.
- One-sixth (16%) are admitted via a vocational education and training (VET) pathway.
- Just over one-third (37%) are admitted via a secondary school pathway. However, only 67% of these students are entrants with ATARs, this means that the remaining 33% were awarded admission based on other criteria, the details of which are not collected in the HESDC. The remaining 33% includes:
    - students commencing an undergraduate award course
    - applicants applying for an undergraduate award who meet the criteria (i.e. completed Year 12 and is a domestic student) but for whom no tertiary entrance score is available
    - students commencing an undergraduate award course but who do not meet the criteria (i.e. completed Year 12 and is a domestic student).

A large part of the remaining 20% of undergraduate admissions are via 'other bases' (14%), followed by mature-age special entry provisions (4%) and professional qualifications (0.3%).

In 2016, the Shergold Report[21] provided 14 recommendations to the then-federal Minister for Education and Training to improve the transparency of higher education student admissions policies, while minimising the regulatory burden on higher education providers. In particular, the report recommended that providers 'publish information that clearly identifies the basis for determining admission to each program, including whether admission is on the basis of ATAR or an alternative pathway'.

21 Higher Education Standards Panel 2016, Final report – Improving the transparency of higher education admissions, viewed 20 January 2020, <https://docs.education.gov.au/system/files/doc/other/revised_20161115_pm_final_accessibility_version_hesp_admissions_transparency_report.pdf>.

The main impetus for these improvements was to support prospective students when choosing higher education programs. Another approach to meeting these recommendations may be to require that information about additional selection criteria is also included in the HESDC.

The distribution of basis of admission varies across all undergraduate programs by detailed field of education.

Early childhood education programs

- In 2017, most admissions were via VET pathways (39%). Secondary school pathways accounted for 23% of admissions and 19% were via higher education pathways.

Primary education programs

- In 2017, most admissions were via secondary school (33%) and higher education pathways (30%). VET pathways accounted for 14% of all admissions.

Secondary education programs

- In 2017, 50% of all undergraduate program admissions were via secondary school pathways, with a further 28% via higher education pathways.

Demographic trends

In 2017, the average age for:

- an ITE undergraduate was 23 years for commencing students, and 25 years for enrolled students
- an ITE postgraduate was 29 years for commencing students, and 30 years for enrolled students.

Primary and secondary ITE students were, on average, two years younger at all stages of their enrolment compared with early childhood education students. The mean age of students enrolled in primary education programs was 26 years, in secondary 25 years and in early childhood 28 years.

The proportion of ITE students from low socio-economic status (SES) backgrounds[22] is similar across all detailed fields of education—early childhood education programs (21%), primary education programs (22%), and secondary education programs (19%). However, there was a higher proportion of students from low SES backgrounds studying undergraduate ITE programs (23%) compared with postgraduate ITE programs (15%).

Compared to the incidence in the Australian population, the proportion of enrolled students with Aboriginal and Torres Strait Islander status was uniformly under-represented across all fields of education—early childhood education programs (2%), primary education programs (3%), and secondary education programs (2%). There was a tendency for enrolled ITE students with Aboriginal and Torres Strait Islander status to be undertaking undergraduate study (3%) rather than postgraduate study (1%).

The proportion of international students[23] was highest, at all stages of enrolment, in early childhood programs (13% for commencing students), followed by secondary education (5% of commencing students) and primary education programs (1% of commencing students).

22 Socio-economic status is determined based on the students' residential address

23 International students are students who do not have Australian or New Zealand citizenship or permanent residency status.

3.3 All ITE commencements and enrolments

All ITE programs

In 2017

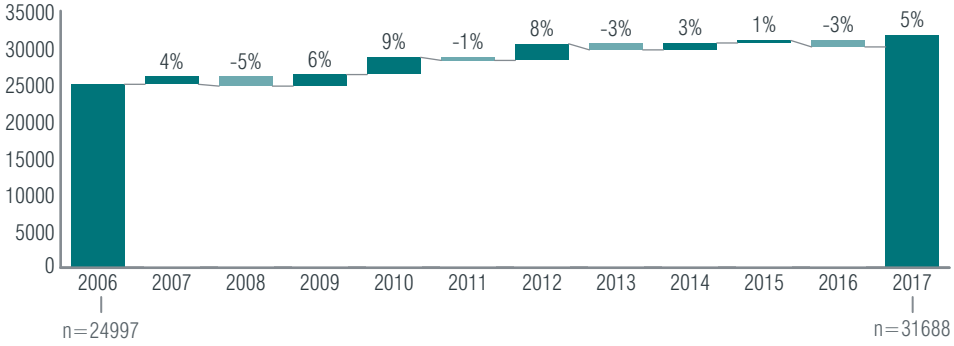
There were 31,688 students commencing ITE, representing 3% of all students commencing higher education programs. There was a total of 92,090 students enrolled in ITE programs in Australia, representing approximately 4% of all higher education enrolments.

Trends 2006–2017

Figure 3-1 shows the total number of students commencing ITE programs, as well as the year-by-year changes in commencement numbers and proportions between 2006–2017.

- Overall, the number of students commencing ITE programs increased[24] by 27% between 2006 (n=24,997) and 2017 (n=31,688). Year-on-year change has fluctuated between 5–9%.
- The greatest annual increases in commencements occurred in 2010 (9%) and 2012 (8%). A 5% fall was observed from 2007 to 2008.
- All higher education commencements grew by an average 4% per year between 2012 and 2017.

Figure 3-1: Number of students commencing ITE, 2006–2017

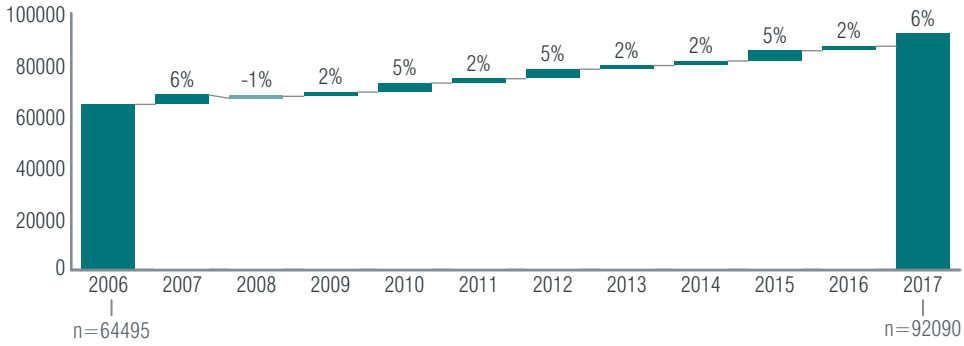


24 The percentage increase is calculated by comparing commencements in 2006 and 2017—it is not accumulative across annual increases.

Figure 3-2 shows the total number of enrolments[25] in ITE programs, as well as the year-by-year changes in enrolment numbers and the proportions between 2006–2017.

- Overall, there has been a 43% increase in the number of ITE enrolments between 2006 (n=64,495) and 2017 (n=92,090). Year-on-year change has fluctuated between 1–6%.
- The greatest annual increases in enrolments occurred in 2007 (6%), 2010 (5%), 2012 (5%), 2015 (5%) and 2017 (6%).
- All higher education enrolments grew by an average of 4% per year between 2006 and 2017.
- Of all students enrolled between 2006 and 2017, 94% enrolled in a single ITE program, while 6% enrolled in more than one ITE program—this represents the proportion of students who have transferred between programs.[26]

Figure 3-2: Total number of students enrolled with year-on-year percentage changes, 2006–2017



25 Enrolments refers to the number of students in ITE programs at any year level. Commencements refers to the number of students beginning the first year of an ITE program.

26 The HESDC collects data for all students enrolled in ITE by semesters in any year. When students transfer from one program to another in the same year, records of both enrolments are included in the data. The 3% represents the students who have transferred between programs during a single year.

Detailed fields of education

In 2017

Primary education had the greatest proportion of commencements with 40% in primary education programs, followed by secondary education programs (38%) and early childhood education programs (14%). The proportion of students enrolled in ITE programs followed a similar pattern, with 41% in primary education programs, followed by secondary education programs (34%) and early childhood education programs (16%).

Mixed programs accounted for 5% of commencements and 7% of enrolments in ITE. Four percent of commencing students and 2% of enrolled students could not be categorised and fell into 'education other'.

Trends 2006–2017

Early childhood education programs:

- Showed the greatest increase in commencements and enrolments.
- Commencements increased by 61%, from 2,753 in 2006 to 4,438 in 2017. The number of enrolments almost doubled (98% increase) from 7,323 in 2006 to 14,497 in 2017.
- Commencements rose from 11% (2006) of all ITE commencements to 14% (2017). Enrolments rose from 11% (2006) of all ITE enrolments to 16% (2017).

Primary education programs:

- Showed the smallest increase in commencements and enrolments.
- Commencements increased by 28%, from 9,910 in 2006 to 12,653 in 2017. The number of enrolments increased by 34%, from 27,877 in 2006 to 37,406 in 2017.
- Commencements remained flat at 40% of all ITE commencements. Enrolments fell from 43% (2006) of all ITE enrolments to 41% (2017).

Secondary education programs:

- Showed the second greatest increase in commencements and enrolments.
- Commencements increased by 39%, from 8,557 in 2006 to 11,915 in 2017. The number of enrolments increased by 55%, from 20,105 in 2006 to 31,077 in 2017.
- Commencements grew from 34% (2006) of all ITE commencements to 38% (2017). Enrolments grew from 31% (2006) of all ITE enrolments to 34% (2017).

Mixed and 'education other' programs:

Mixed program enrolments comprise students who are preparing to teach specific detailed fields of education, but it cannot be determined from the data what specific detailed field of education is being studied.

'Education other' enrolments comprise students who are classified as 'Teacher Education–Other' in the HESDC and could not be recoded into a specific detailed field of education based on other information available in the data.

- The proportion of commencing ITE enrolled in mixed or education other programs grew from 15% (n=3,777) in 2006 to 17% (n=4,394) in 2009, and then fell to 8% (n=2,682) in 2017.
- The proportion of students enrolled in mixed programs or education other grew from 14% (n=9,190) in 2006 to 17% (n=11,715) in 2009 and then fell to 10% (n=9,110) in 2017.
- While the data shows enrolments in mixed programs increased from 5,681 in 2006 to 6,826 in 2017, this is likely to be an artefact of the re-coding process and not a reliable indicator of change. This will be monitored in future annual reports.

The following analysis of detailed field of education does not include students enrolled in mixed program and education other.

Figure 3-3 and **Figure 3-4** show the total number of students commencing, and the total number of students enrolled in ITE programs, segmented by detailed field of education, between 2006 and 2017.

Figure 3-3: Total number of ITE commencements by detailed field of education, 2006–2017

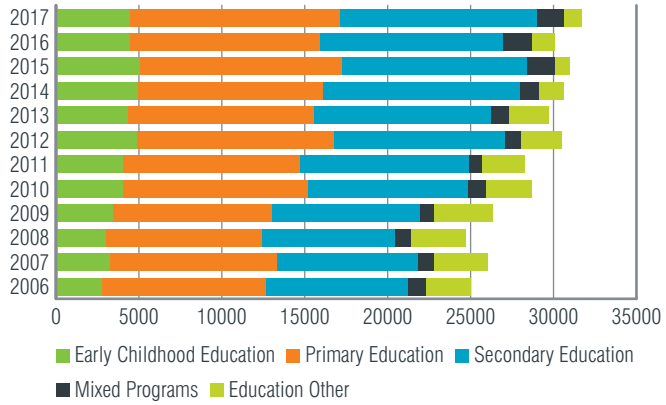


Figure 3-4: Total number of ITE enrolments by detailed field of education, 2006–2017

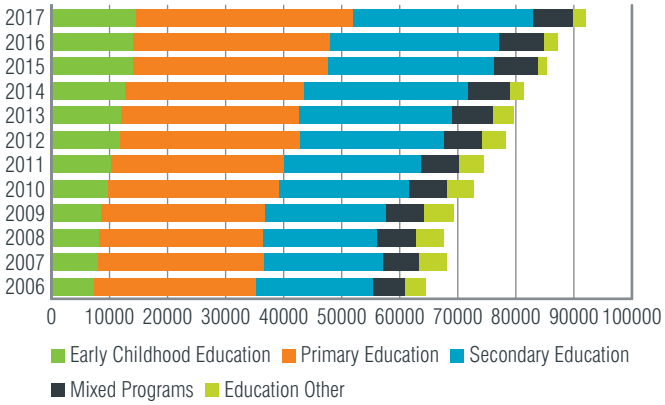


Figure 3-5 and **Figure 3-6** show the proportion of students commencing, and the proportion of students enrolled in ITE programs, segmented by detailed field of education, between 2006–2017.

Figure 3-5: Proportion of students commencing ITE by detailed field of education, comparing 2006 and 2017

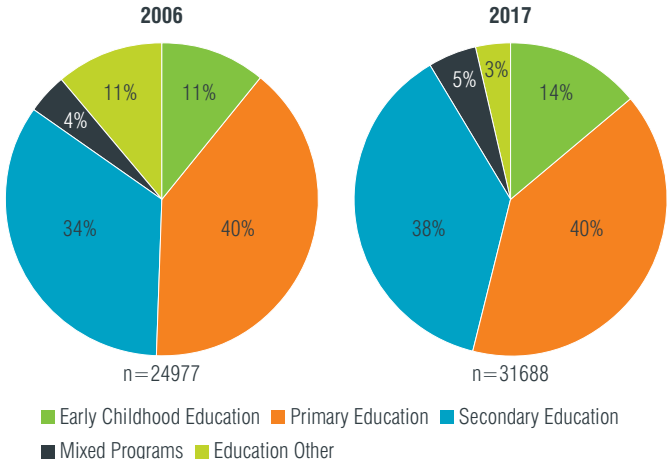
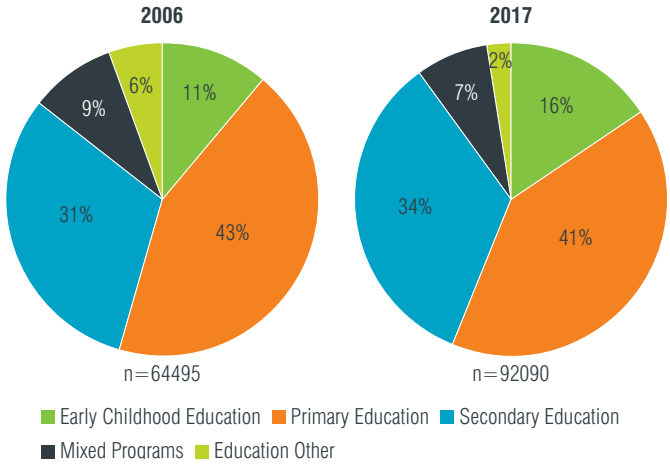


Figure 3-6: Proportion of students enrolled in ITE by detailed field of education, comparing 2006 and 2017



3.4 Program level

'Program level' refers to whether an ITE program leads to the award of an undergraduate or postgraduate qualification. In this report, enrolments and commencements are then further segmented by detailed field of education between 2006 and 2017.

All ITE programs

In 2017

Of all commencing ITE students, 69% (n=22,009) commenced undergraduate programs and 31% (n=9,679) commenced postgraduate programs.

Of all ITE students, 79% (n=72,452) were enrolled in undergraduate programs and 21% (n=19,638) were enrolled in postgraduate programs.

Primary education comprised the largest proportion of students commencing (43%) and enrolled in (43%) undergraduate programs, followed by secondary education program commencements (31%) and enrolments (29%), and early childhood education program commencements (18%) and enrolments (18%).

Secondary education comprised the largest proportion of students commencing (54%) and enrolled in (51%) postgraduate programs, followed by primary education postgraduate commencements (32%) and enrolments (32%). Early childhood education programs comprised just 6% of postgraduate commencements and 6% of postgraduate enrolments.

Trends 2006–2017

The greatest increase in commencements and enrolments was in postgraduate programs.

The number of commencements in:

- postgraduate programs increased by 59%, from 6,100 in 2006 to 9,679 in 2017
- undergraduate programs increased by 16%, from 18,897 in 2006 to 22,009 in 2017.

The number of enrolments in:

- postgraduate programs increased by 144%, from 8,040 in 2006 to 19,638 in 2017
- undergraduate programs grew by 28%, from 56,455 in 2006 to 72,452 in 2017.

ITE programs represented 3% of all postgraduate commencements and enrolments, and 3% of undergraduate commencements and 4% of undergraduate enrolments in 2017. There was a 48% and 63% increase in all higher education postgraduate and undergraduate programs, respectively, between 2005 and 2017.

There was a 50% and 51% increase in enrolments in all higher education postgraduate and undergraduate programs, respectively, during this time.

Year-on-year changes in both the number of commencements (refer to **Figure 3-7**: Undergraduate ITE program commencements, 2006–2017) and enrolments (refer to **Figure 3-8**: Undergraduate ITE program enrolments, 2006–2017) in undergraduate programs fluctuated widely between 2006 and 2017. For example, decreases in commencements occurred in 2008 (7%) and in 2013 (9%), compared with increases in 2010 (8%) and 2012 (12%).

Figure 3-7: Undergraduate ITE program commencements, 2006–2017

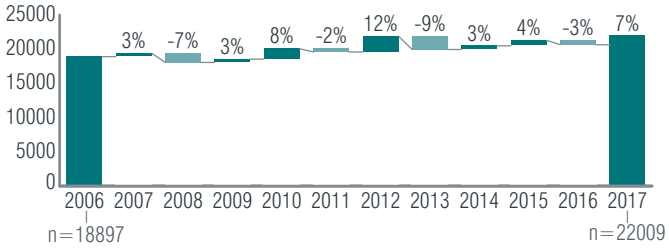
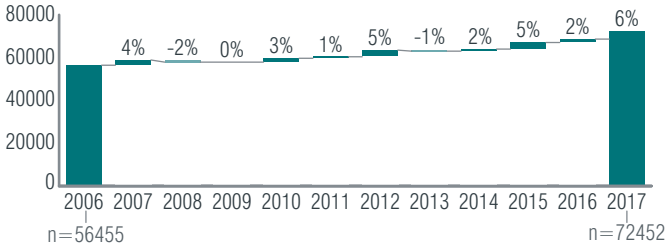


Figure 3-8: Undergraduate ITE program enrolments, 2006–2017



Year-on-year changes in postgraduate commencements (refer to **Figure 3-9**: Postgraduate ITE program commencements, 2006–2017) were marked by wider fluctuations, that is, percentage increases ranging between 1% and 5% in most years, but higher increases in 2007 (9%), 2009 (16%), 2010 (11%) and 2013 (13%).

Year-on-year changes in postgraduate enrolments (refer to **Figure 3-10**: Postgraduate ITE program enrolments, 2006–2017) were less marked in most years and showed more consistent percentage increases. However, substantially higher increases were apparent in 2007 (15%), 2009 (16%), 2010 (15%) and 2013 (13%).

Figure 3-9: Postgraduate ITE program commencements, 2006–2017

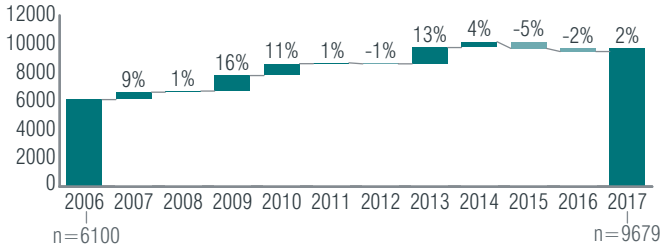
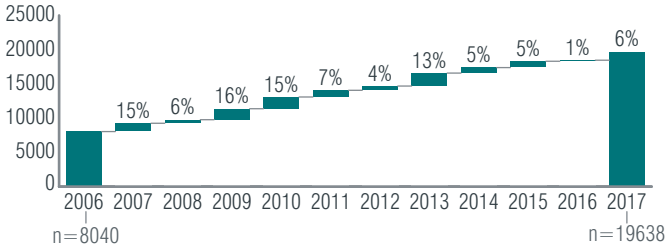


Figure 3-10: Postgraduate ITE program enrolments, 2006–2017



Detailed fields of education

Early childhood education programs

In 2017

Of early childhood education program commencements, 87% commenced undergraduate ITE programs, and 13% commenced postgraduate programs.

Of early childhood education program students, 92% were enrolled in undergraduate ITE programs, and 8% were enrolled in postgraduate ITE programs.

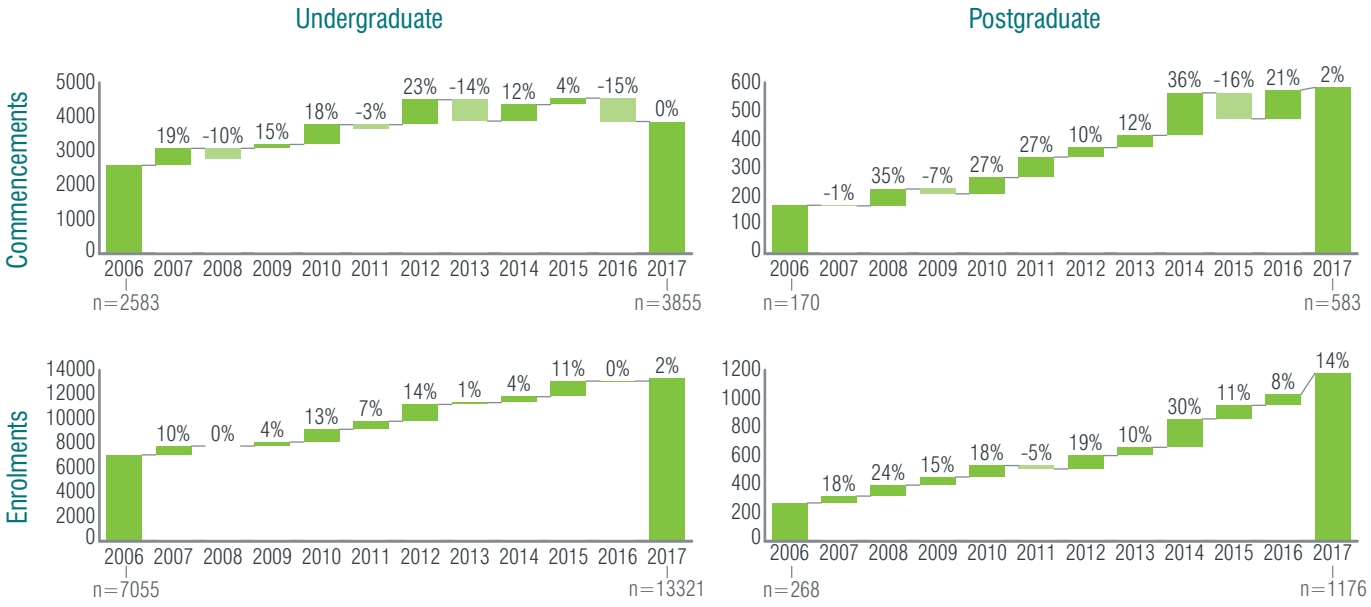
Trends 2006–2017

Figure 3-11 shows the growth in early childhood education program commencements and enrolments since 2006.

Compared with other detailed fields of education, early childhood education postgraduate programs recorded the lowest number of total enrolments and commencements, but the highest rate of growth.

- Undergraduate program commencements grew 49%, from 2,583 in 2006 to 3,855 in 2017.
- Undergraduate program enrolments grew 89%, from 7,055 in 2006 to 13,321 in 2017.
- Postgraduate program commencements grew 243%, from 170 in 2006 to 583 in 2017.
- Postgraduate program enrolments grew 339%, from 268 in 2006 to 1,176 in 2017.

Figure 3-11: Growth in commencements and enrolments for early childhood education programs by program level, 2006–2017



Primary education programs

In 2017

Of primary education program commencements, 75% commenced undergraduate programs, and 25% commenced postgraduate programs. Of primary education program students, 83% were enrolled in undergraduate ITE programs, and 17% were enrolled in postgraduate ITE programs.

Trends 2006–2017

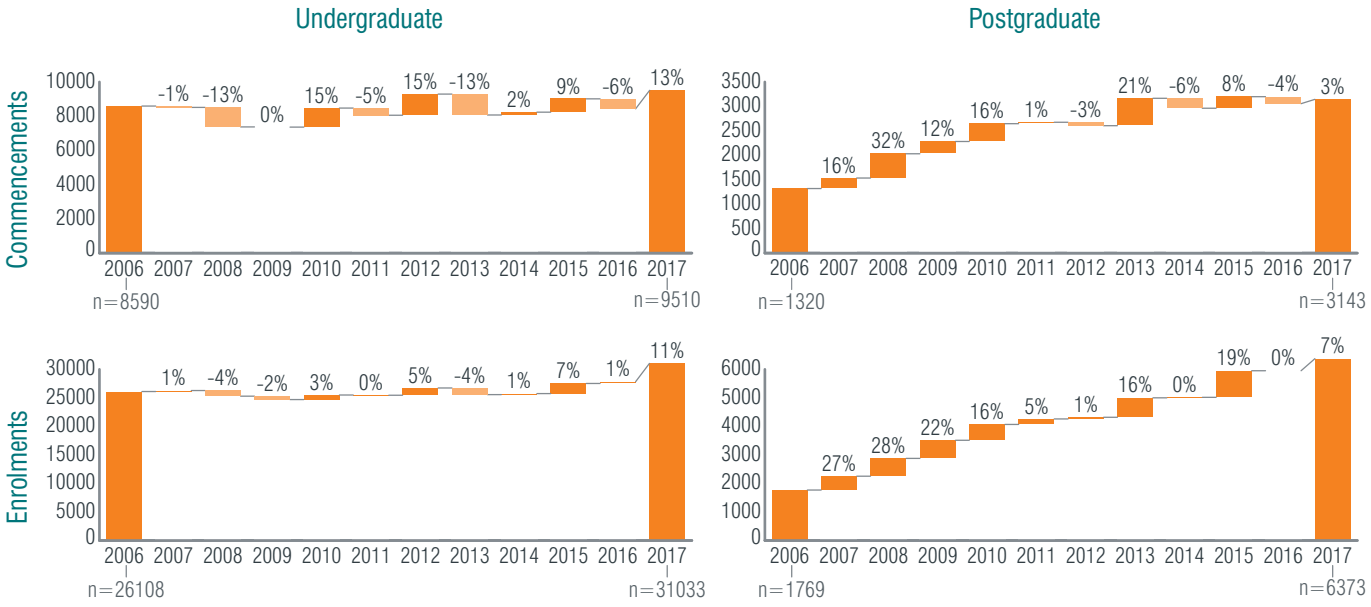
Figure 3-12 shows growth in primary education program commencements and enrolments since 2006.

Compared with undergraduate programs in other detailed fields of education, primary education programs recorded the highest number of enrolments, but the lowest rate of growth. This may be attributed in part to the relatively flat growth in undergraduate commencements during this time.

Postgraduate primary education programs have, however, shown greater growth than secondary postgraduate programs.

- Undergraduate program commencements grew 11%, from 8,590 in 2006 to 9,510 in 2017.
- Undergraduate program enrolments grew 19%, from 26,108 in 2006 to 31,033 in 2017.
- Postgraduate program commencements grew 138%, from 1,320 in 2006 to 3,143 in 2017.
- Postgraduate program enrolments grew 260%, from 1,769 in 2006 to 6,373 in 2017.

Figure 3-12: Growth in commencements and enrolments for primary education programs by program level, 2006–2017



Secondary education programs

In 2017

Of secondary education program commencements, 56% commenced undergraduate ITE programs, and 44% commenced postgraduate ITE programs.

Of secondary education program students, 68% were enrolled in undergraduate ITE programs, and 32% were enrolled in postgraduate ITE programs.

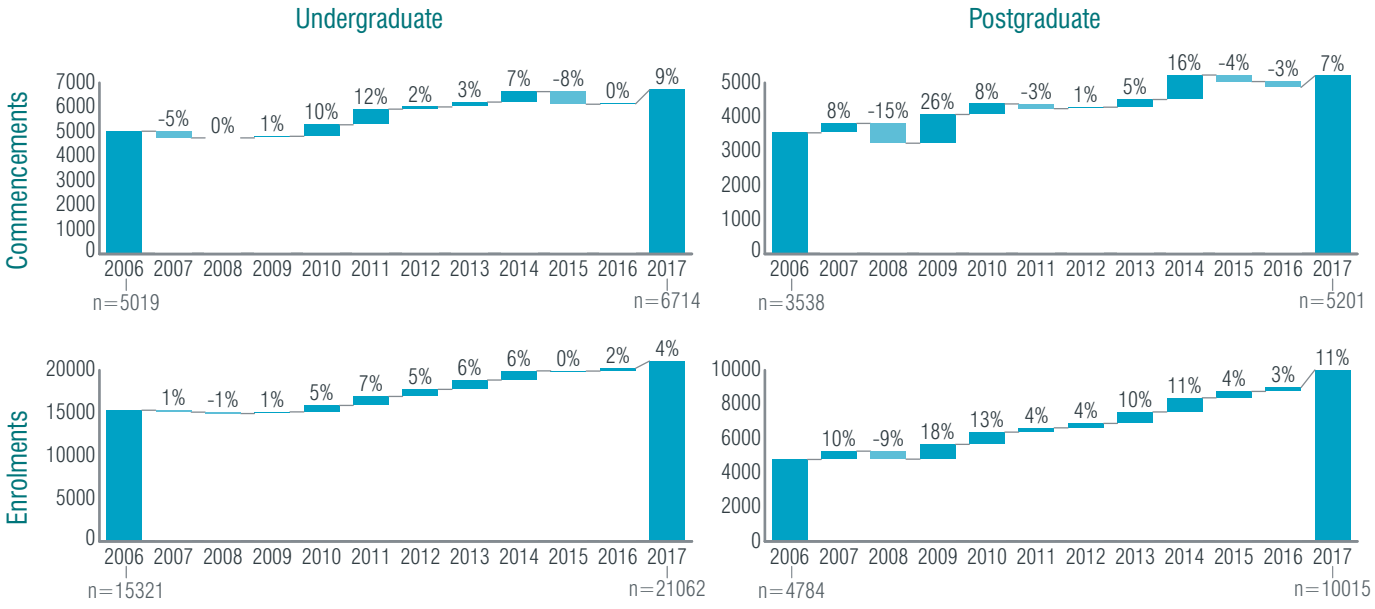
Trends 2006–2017

Figure 3-13 shows growth in secondary education commencements and enrolments since 2006.

Secondary education has shown growth in both undergraduate and postgraduate programs, with higher growth in postgraduate programs. By 2017, relative proportions of commencements in undergraduate and postgraduate secondary programs were almost equivalent (undergraduate commencements 56% and postgraduate commencements 44%).

- Undergraduate program commencements grew 34%, from 5,019 in 2006 to 6,714 in 2017.
- Undergraduate program enrolments grew 37%, from 15,321 in 2006 to 21,062 in 2017.
- Postgraduate program commencements grew 47%, from 3,538 in 2006 to 5,201 in 2017.
- Postgraduate program enrolments grew 109%, from 4,784 in 2006 to 10,015 in 2017.

Figure 3-13: Growth in commencements and enrolments for secondary education programs by program level, 2006–2017



3.5 Qualification type

Qualification type refers to the broad discipline-free nomenclature used in the Australian Qualifications Framework (AQF) to describe each category of qualification.

Qualification types referred to in this report include Bachelor Degree, Bachelor Honours Degree, Graduate Certificate, Graduate Diploma and Masters Degree.

All ITE programs

In 2017

As shown in **Table 3-1**, Bachelor Degrees were the most common types of qualifications sought by students enrolled in and commencing ITE, followed by Masters Degrees.

Trends 2006–2017

The proportion of enrolments in Bachelor Degrees dropped from 80% in 2006 to 70% in 2017; the proportion of enrolments in Graduate Diplomas fell from 12% in 2006 to 6% in 2017; and the proportion of enrolments in Masters Degrees grew from 1% in 2006 to 16% in 2017. Similar patterns of change were evident in the proportion of commencements in these qualification types as shown in **Table 3-1**.

Table 3-1: Number and proportion of ITE students by qualification type, 2006 and 2017

		2006		2017	
	Qualification Type	% of Students	Number of Students	% of Students	Number of Students
Commencements	Bachelor Degree	68%	16,873	62%	19,591
	Masters Degree	<1%	123	21%	6,588
	Graduate Diploma	23%	5,833	10%	3,081
	Bachelor Honours Degree	<1%	25	6%	1,826
	Bachelor Degree (Graduate Entry)	8%	1,967	2%	587
Enrolments	Bachelor Degree	80%	51,842	70%	64,845
	Masters Degree	1%	342	16%	14,466
	Graduate Diploma	12%	7,540	6%	5,159
	Bachelor Honours Degree	<1%	136	6%	5,965
	Bachelor Degree (Graduate Entry)	7%	4,425	2%	1,624

Detailed fields of education

In 2017

Of all early childhood education students:

- 84% commenced Bachelor Degrees, 2% Bachelor Honours Degrees, 10% Masters Degrees, and 3% Graduate Diplomas; the remaining 1% commenced Bachelor Degree (Graduate Entry) qualifications
- 89% were enrolled in Bachelor Degrees, 2% in Bachelor Honours Degrees, 7% in Masters Degrees, and 2% in Graduate Diplomas.

Of all primary education students:

- 68% commenced Bachelor Degrees, 21% Masters Degrees, 6% Bachelor Honours Degrees, 4% Graduate Diplomas and 1% Bachelor Degree (Graduate Entry) qualifications
- 76% were enrolled in Bachelor Degrees, 14% in Masters Degrees, 6% in Bachelor Honours Degrees, 3% in Graduate Diplomas and 1% in Bachelor Degree (Graduate Entry) qualifications.

Of all secondary education students:

- 48% commenced Bachelor Degrees, 24% Masters Degrees, 6% Bachelor Honours Degrees, 20% Graduate Diplomas and 2% Bachelor Degree (Graduate Entry) qualifications
- 58% were enrolled in Bachelor Degrees, 21% in Masters Degrees, 7% in Bachelor Honours Degrees, 12% in Graduate Diplomas and 2% in Bachelor Degree (Graduate Entry) qualifications.

Trends 2006–2017

The greatest change was in secondary education programs where there was a 12 percentage point decrease in the proportion of students enrolled in Bachelor Degrees and a 20 percentage point increase of those enrolled in Masters Degrees.

The proportion of commencements and enrolments in each detailed field of education, by qualification type, in 2006 and 2017 are shown in **Figure 3-14** and **Figure 3-15** (early childhood education), **Figure 3-16** and **Figure 3-17** (primary education), and **Figure 3-18** and **Figure 3-19** (secondary education).

Early childhood education programs

The proportion of students commencing a:

- Bachelor Degree decreased from 91% in 2006 to 84% in 2017
- Masters Degree increased from 2% in 2006 to 10% in 2017
- Graduate Diploma fell from 5% to 3% from 2006 to 2017.

The proportion of students enrolled in a:

- Bachelor Degree decreased from 94% in 2006 to 89% in 2017
- Masters Degree increased from 1% in 2006 to 7% in 2017
- Graduate Diploma remained steady at 2%.

Figure 3-14: Early childhood education program commencements by qualification type, 2006 and 2017

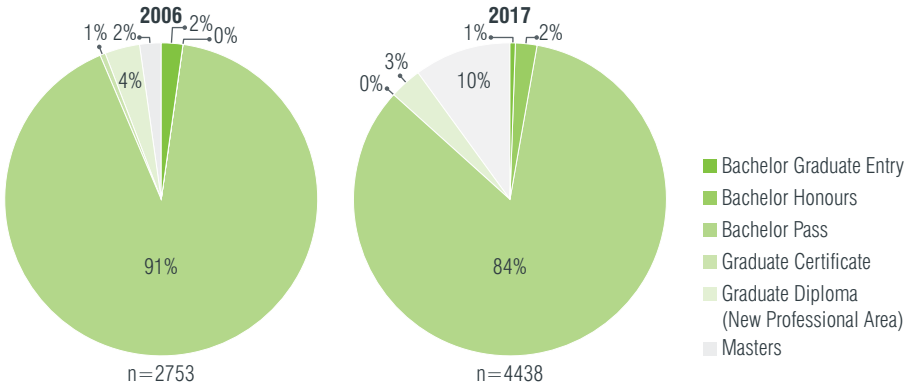
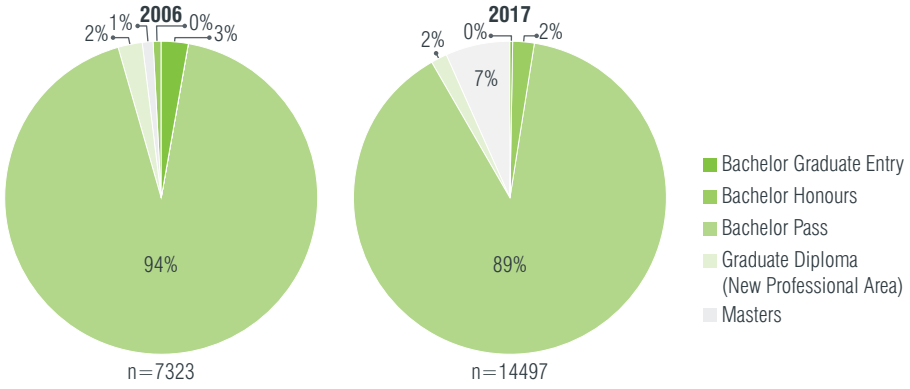


Figure 3-15: Early childhood education program enrolments by qualification type, 2006 and 2017



Primary education programs

The proportion of students commencing a:

- Bachelor Degree decreased from 75% in 2006 to 68% in 2017
- Masters Degree increased from less than 1% in 2006 to 21% in 2017
- Graduate Diploma fell from 13% in 2006 to 4% in 2017.

The proportion of students enrolled in a:

- Bachelor Degree decreased from 86% in 2006 to 76% in 2017
- Masters Degree increased from less than 1% in 2006 to 14% in 2017
- Graduate Diploma fell from 6% in 2006 to 3% in 2017.

Figure 3-16: Primary education program commencements by qualification type, 2006 and 2017

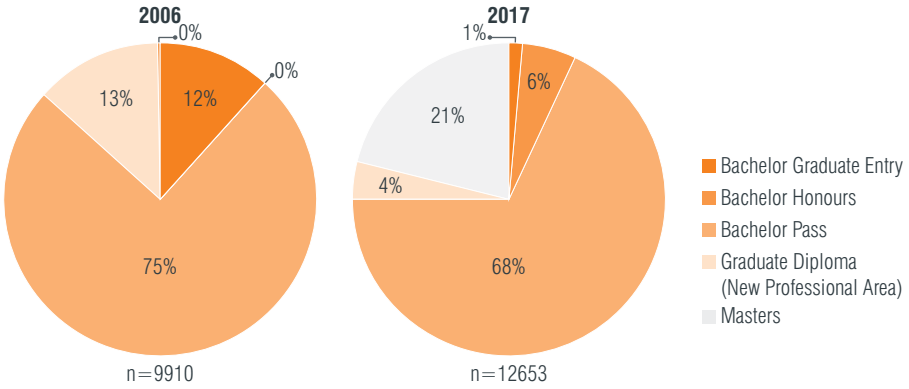
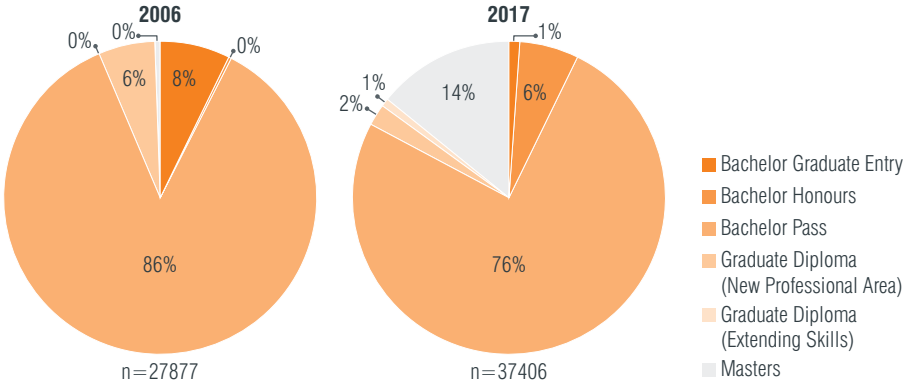


Figure 3-17: Primary education program enrolments by qualification type, 2006 and 2017



Secondary education programs

The number of students commencing a:

- Bachelor Degree decreased from 53% 2006 to 48% in 2017
- Masters Degree increased from less than 1% in 2006 to 24% in 2017
- Graduate Diploma decreased from 41% in 2006 to 20% in 2017.

The number of students enrolled in a:

- Bachelor Degree decreased from 70% in 2006 to 58% in 2017
- Masters Degree increased from 1% in 2006 to 21% in 2007
- Graduate Diploma decreased from 23% in 2006 to 12% in 2017.

Figure 3-18: Secondary education program commencements by qualification type, 2006 and 2017

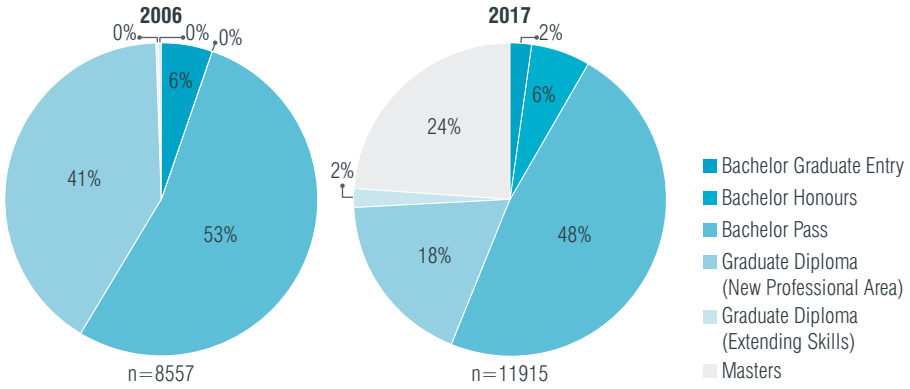
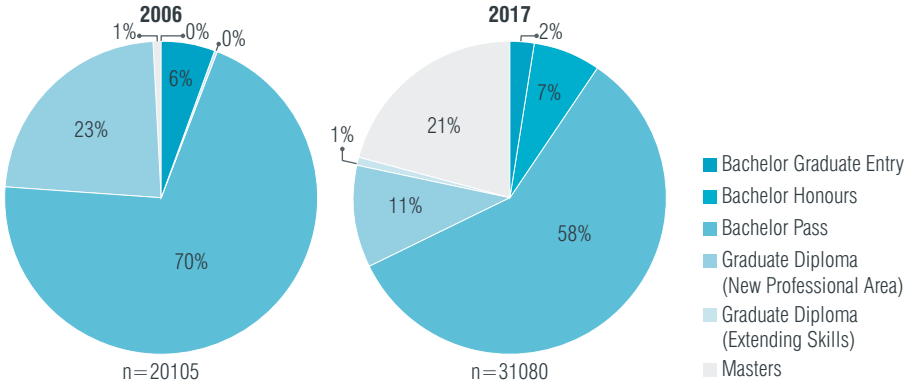


Figure 3-19: Secondary education program enrolments by qualification type, 2006 and 2017



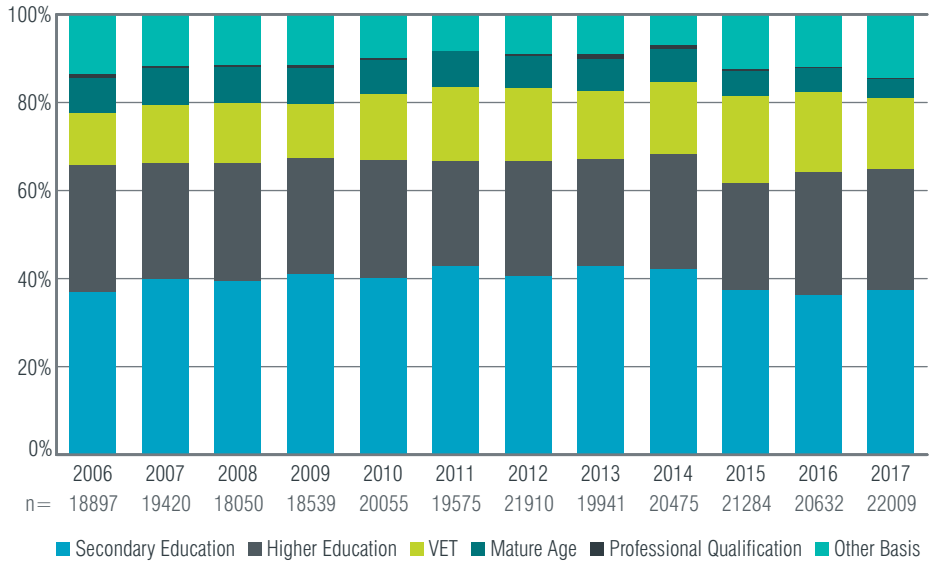
3.6 Basis of admission

This section provides an analysis of the basis for student admissions for students commencing in undergraduate ITE programs, segmented by detailed field of education between 2006 and 2017. Bases for admission include secondary education qualification, higher education qualification, VET qualification, mature age and 'other basis'.[27]

All ITE programs

Figure 3-20 shows the basis of admission by category for all students who commenced undergraduate ITE programs between 2006 and 2017.

Figure 3-20: Basis of admission for undergraduate ITE commencements, 2006–2017



27 'Other basis' is any basis of admission that cannot be classified as secondary qualifications, higher education qualifications, VET qualifications or mature-age special entry provisions.

In 2017

While 37% of students in undergraduate ITE programs were admitted on the basis of their secondary education qualifications, the majority (around 63%) were admitted to undergraduate programs not using secondary education qualifications, but on a range of other basis of admission criteria.

There were 22,009 students who commenced undergraduate ITE programs in 2017. Of these:

- 37% were admitted on the basis of secondary education qualifications
- 28% were admitted on the basis of higher education qualifications
- 16% were admitted on the basis of VET qualifications
- 14% were admitted on an 'other basis'
- 4% were admitted on the basis of mature-age special entry provisions
- less than 1% were admitted on the basis of professional qualifications.

Trends 2006–2017

Secondary education qualifications have continued to be the most common basis for admission to undergraduate ITE programs. During the past decade, approximately 37–40% of all students were admitted to ITE based on secondary education qualifications, except in 2011 and 2013, when it increased to 43%.

Admission to undergraduate ITE programs on other bases has varied during the last decade. From 2006–2017 higher education qualifications have remained the second most common basis for admission to undergraduate programs. This has remained relatively flat, ranging from 24–29% of all commencements during this time.

The proportion of students admitted based on VET qualifications showed the greatest increase, with 12% in 2006 growing to 16% in 2017, following a peak of 20% in 2015.

The proportion of students admitted based on mature-age special entry provisions fell from 8% in 2006 to 4% in 2017.

The proportion of students admitted on an 'other basis' fluctuated during the decade, with 14% in 2006, and 8% in 2011, followed by a rise back to 14% in 2017.

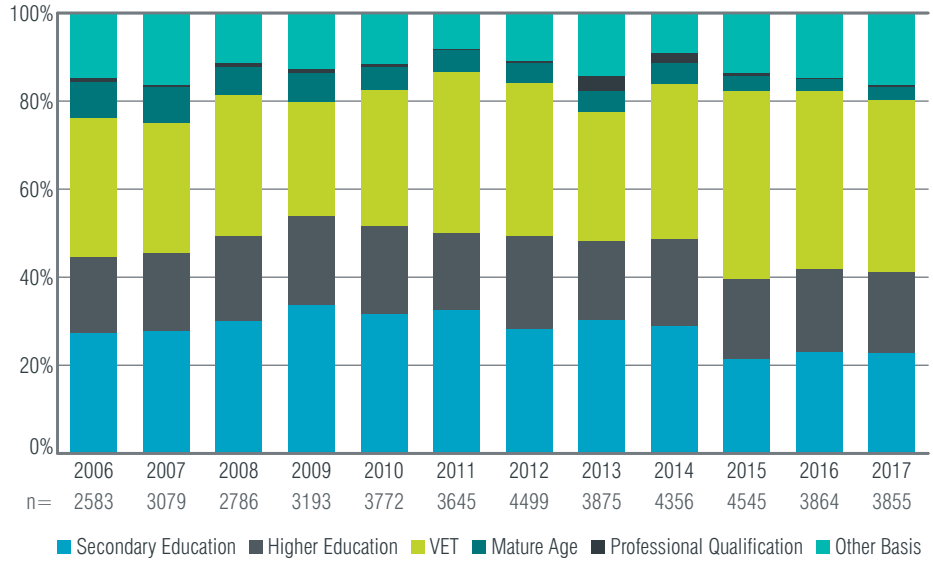
Detailed fields of education

The basis of admission varies markedly across the detailed fields of education.

Early childhood education programs

Figure 3-21 shows the proportion of students commencing undergraduate early childhood education programs, by basis of admission, between 2006 and 2017.

Figure 3-21: Basis of admission for undergraduate early childhood education program commencements, 2006–2017



In 2017

VET qualifications were the most common basis for admission to undergraduate early childhood education programs, where:

- 39% were admitted on the basis of VET qualifications
- 23% were admitted on the basis of secondary education qualifications
- 19% were admitted on the basis of higher education qualifications
- 16% were admitted on an 'other basis'
- 3% were admitted based on mature-age special entry provisions.

Trends 2006–2017

VET qualifications accounted for both the largest number and growth in student admissions, increasing from 31% (n=813) in 2006 to 39% (n=1,503) in 2017, following a peak of 43% in 2015.

Secondary education qualifications accounted for 27% (n=704) of student admissions in 2006 and fell to 23% (n=873) in 2017, including a peak of 34% in 2009.

Admissions based on higher education qualifications fluctuated between 17% (n=448) in 2006 and 19% (n=715) in 2017, including a peak of 21% in 2012.

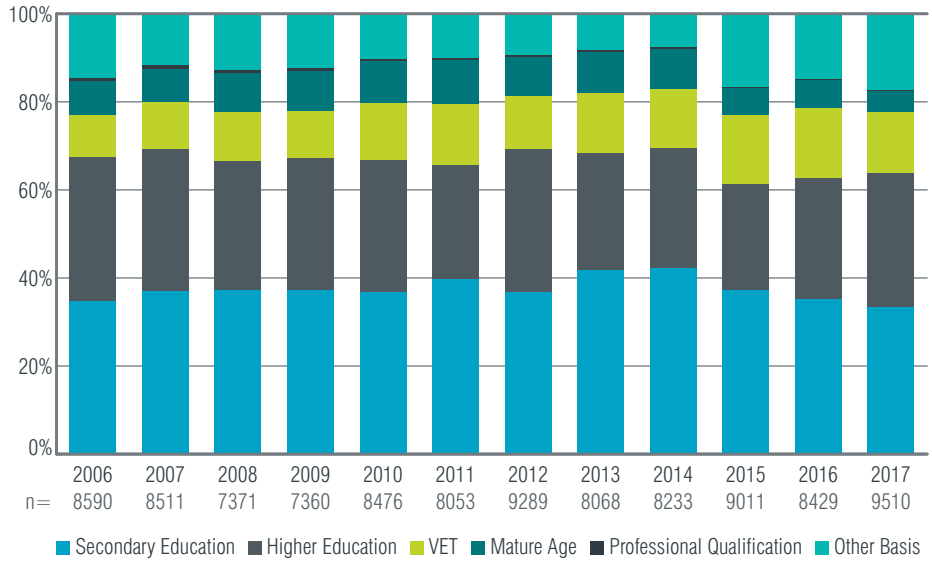
Mature-age admissions fell from 8% (n=211) in 2006 to 3% (n=118) in 2017.

Overall, 'other basis' admissions have remained relatively steady, with 15% (n=385) in 2006, and 16% (n=634) in 2017. Falls were noted in 2011 (8%) and in 2014 (9%).

Primary education programs

Figure 3-22 shows the proportion of students commencing undergraduate primary education programs, by basis of admission, between 2006 and 2017.

Figure 3-22: Basis of admission for undergraduate primary education program commencements, 2006–2017



In 2017

Undergraduate primary education programs were most often accessed via secondary education or higher education qualifications, where:

- 33% were admitted based on secondary education qualifications
- 30% were admitted based on higher education qualifications
- 17% were admitted on an 'other basis'
- 14% were admitted based on VET qualifications
- 5% were admitted based on mature-age special entry provisions.

Trends 2006–2017

Secondary education qualifications accounted for 35% (n=2,973) of student admissions in 2006. This rose to 42% in 2013 and 2014, and decreased to 33% (n=3,159) in 2017.

Higher education qualifications accounted for 33% (n=2,828) of student admissions in 2006 and 30% (n=2,896) in 2017, fluctuating between 24% and 32% in the intervening period.

VET qualifications accounted for a growing proportion of admissions, rising from 9% (n=806) in 2006 to 16% in 2015, before falling to 14% (n=1,319) in 2017.

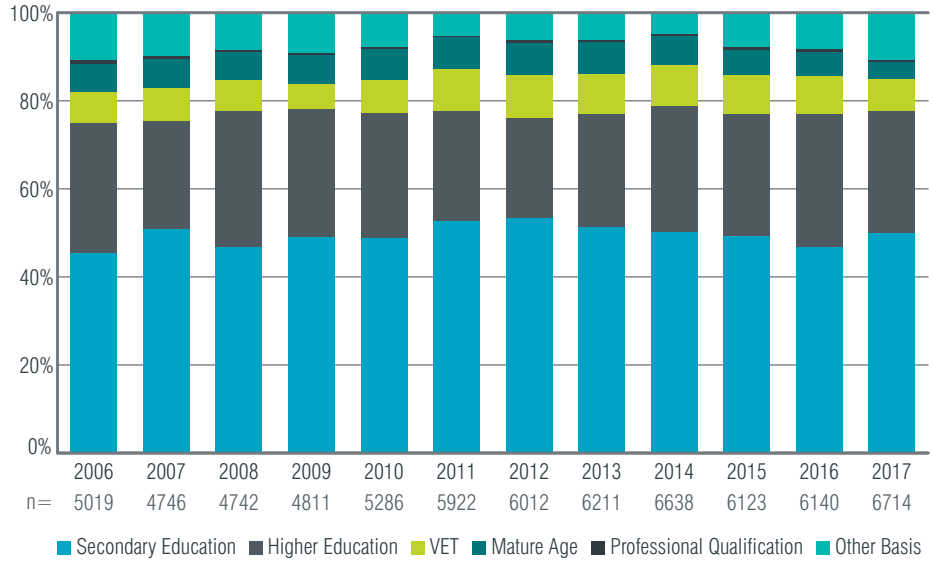
'Other basis' admissions grew from 15% (n=1,261) in 2006 to 17% (n=1,653) in 2017, following a decrease to 8% in 2013 and 2014.

Mature-age special entry provisions accounted for 8% of admissions in 2006 (n=664) and decreased to 5% in 2017 (n=465).

Secondary education programs

Figure 3-23 shows the proportion of students commencing undergraduate secondary education programs, by basis of admission, between 2006 and 2017.

Figure 3-23: Basis of admission for undergraduate secondary education program commencements, 2006–2017



In 2017

Undergraduate secondary education programs were most often accessed via a secondary education qualification pathway, where:

- 50% were admitted on the basis of secondary education qualifications
- 28% were admitted on the basis of higher education qualifications
- 11% were admitted on an 'other basis'
- 7% were admitted on the basis of VET qualifications
- 4% were admitted on the basis of mature-age special entry provisions.

Trends 2006–2017

Secondary education qualifications as a basis for admission grew from 45% (n=2,270) in 2006 to 50% (n=3,343) in 2017, including a peak of 53% in 2011 and 2012.

Higher education qualifications accounted for 30% (n=1,486) of admissions in 2006, which declined to 23% (n=1,364) in 2012, before settling around 28% (n=1,862) in 2017.

Admissions on the basis of VET qualifications increased from 7% (n=363) in 2006, to a peak of 10% in 2011 and 2012, and then fell to 7% (n=496) in 2017.

Mature age as a basis for admission fluctuated between 6% (n=309) in 2006 and 4% (n=263) in 2017.

'Other basis' admissions fell from 11% (n=544) in 2006, to 5% in 2011, and then returned to 11% (n=721) in 2017.

Secondary education pathway to ITE programs

The Australian Tertiary Admission Rank (ATAR), as a basis for admission into tertiary education, applies to students who have been admitted to an undergraduate program via a secondary education qualification pathway.

Not all students admitted based on their secondary education qualification have ATAR data available in the HESDC. Of all admissions to undergraduate ITE programs:

- just under one-third are admitted via higher education pathways
- one-sixth are admitted via a VET pathway
- just over one-third are admitted via a secondary school pathway. However, only 67% of these students are entrants with an ATAR—this means that the remaining 30% were awarded admission based on other criteria, the details of which are not collected in the HESDC. The remaining 30% includes:
    - students commencing an undergraduate award course
    - applicants applying for an undergraduate award who meet the criteria (i.e. completed Year 12 and is a domestic student) but for whom no tertiary entrance score is available
    - students commencing an undergraduate award course but who do not meet the criteria (i.e. completed Year 12 and is a domestic student).

Together, these three pathways account for approximately 80% of all undergraduate admissions. A large part of the remaining 20% of admissions are via 'other basis', followed by mature-age special entry provisions and professional qualifications.

In 2017

Of all students admitted to undergraduate ITE programs on the basis of a secondary education qualification, 67% (n=5,465) had a recorded ATAR. This accounts for 25% of all admissions to ITE in 2017.

Approximately one-third of all students (33%) admitted via a secondary education qualification pathway do not have a recorded ATAR in the HESDC. This group comprised 576 students who were domestic applicants and had completed an Australian Year 12 qualification in the most recent major examinations (shown as 'entrants without ATAR' in **Figure 3-24**) and a further 2,165 students who were either not a domestic applicant or had not completed an Australian Year 12 qualification in the most recent major examinations (shown as 'other entrants without ATAR' in **Figure 3-24**).

Trends 2006–2017

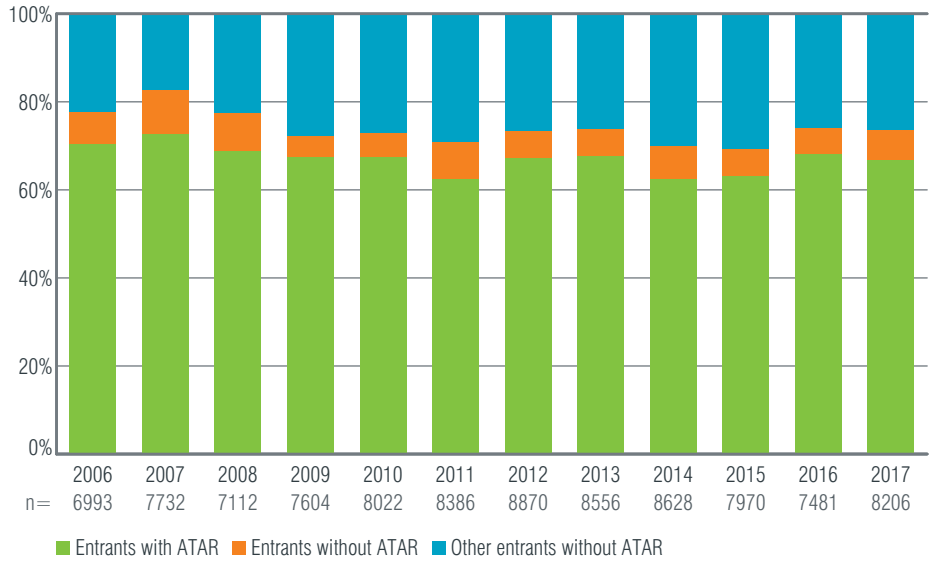
The proportion of all commencing undergraduate ITE students who entered via a secondary education qualification pathway with an ATAR has remained largely stable from 2006–2017.

For all commencing undergraduate ITE students entering via a secondary education qualification pathway:

- Of these, 70% (2006) and 67% (2017) were entrants with ATAR
- Approximately one in three were admitted without an ATAR

This may mean approximately 30% of ITE students entering from a secondary education qualification pathway were awarded entry based on other criteria. It may also be a result of data not being available from ITE providers to HESDC. **Figure 3-24** shows the proportion of students who commenced ITE through a secondary education qualification pathway between 2006 and 2017.

Figure 3-24: Secondary pathway to ITE, proportion of students with/without ATAR, 2006–2017



ATAR distribution for students admitted on the basis of ATAR

In 2017

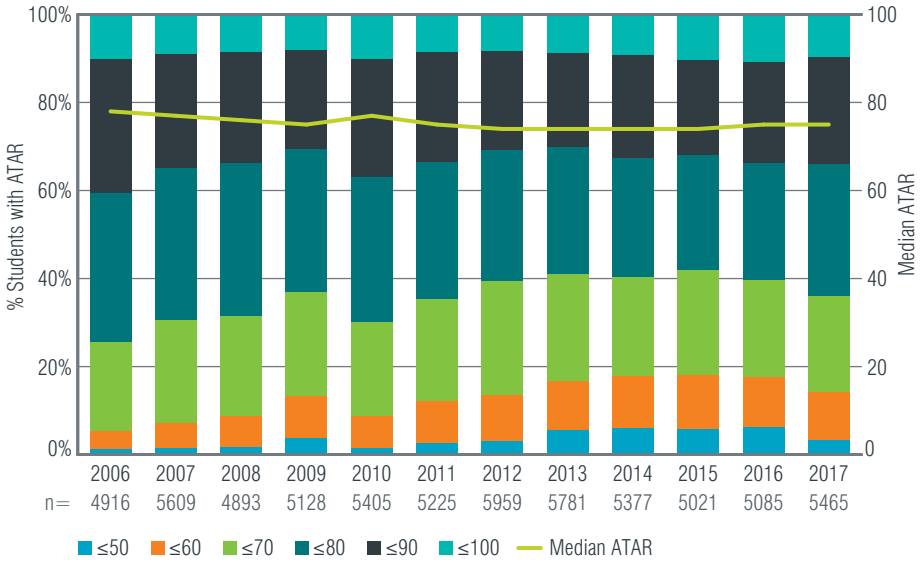
The ATAR distribution for the group of students who entered via a secondary education qualification pathway with a recorded ATAR is provided in **Figures 3-25** to **3-28**.

Figure 3-25 shows both the proportional distribution of all commencing ITE students with a recorded ATAR, for varying ATAR ranges (columns), and the median ATAR entry from 2006–2017 (trend line).

In 2017:

- the median ATAR for students entering an undergraduate ITE program based on a secondary education qualification, as entrants with ATAR, was 75
- 64% of students entering an undergraduate ITE program based on a secondary qualification as entrants with ATAR had an ATAR greater than 70.

Figure 3-25: ATAR distribution for all undergraduate ITE programs with available ATAR, 2006–2017



Trends 2006–2017

The proportion of students entering undergraduate ITE programs via a secondary education qualification pathway, with a recorded ATAR greater than 70, has decreased from 74% (n=3,662) in 2006 to 64% (n=3,501) in 2017.

The median ATAR for admission fell from 78 to 75 during this time.

To further explore trends in ATAR between 2006 and 2017, standardised scores[28] were calculated to evaluate the change in the trends within each set of students—students with an ATAR greater than 70, and those with an ATAR less than or equal to 70. The analysis confirmed that while the number of students with an ATAR greater than 70 had trended downwards between 2006 and 2015, there has been a reversal of this trend since 2015. There was a six percentage point increase in the proportion of students admitted with an ATAR above 70 between 2015 and 2017, and a flattening of the median ATAR.

28 A z-score was applied to two populations of students—those with ATARs greater than 70 and those with ATARs less than or equal to 70 in consecutive years between 2006 and 2017.

Detailed fields of education

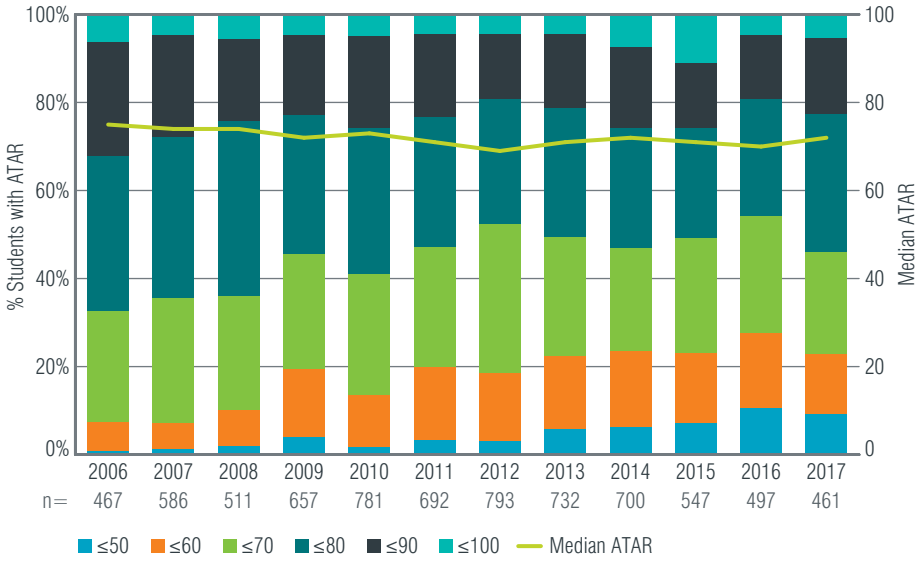
Early childhood education programs

In 2017

Of all students admitted to undergraduate early childhood education programs via a secondary education qualification pathway, 53% (n=461) had a recorded ATAR. Of these students, 54% (n=249) had an ATAR greater than 70.

Trends 2006–2017

Figure 3-26: Early childhood education programs—ATAR as basis of admission, 2006–2017



The proportion admitted with an ATAR moved from 66% in 2006 to a peak of 69% in 2007, and then decreased to 53% in 2017, with fluctuations between 61% and 53% in the intervening years.

The proportion of students admitted with an ATAR greater than 70 has been gradually falling from a peak of 67% (n=315) in 2006 to 54% (n=249) in 2017.

Accordingly, the median ATAR fell from 75 in 2006 to 72 in 2017, with a trough at 69 in 2012.

The number of students with an ATAR greater than 70 increased by 9%, from 228 in 2016 to 249 in 2017. This has followed a gradual decline since 2010.

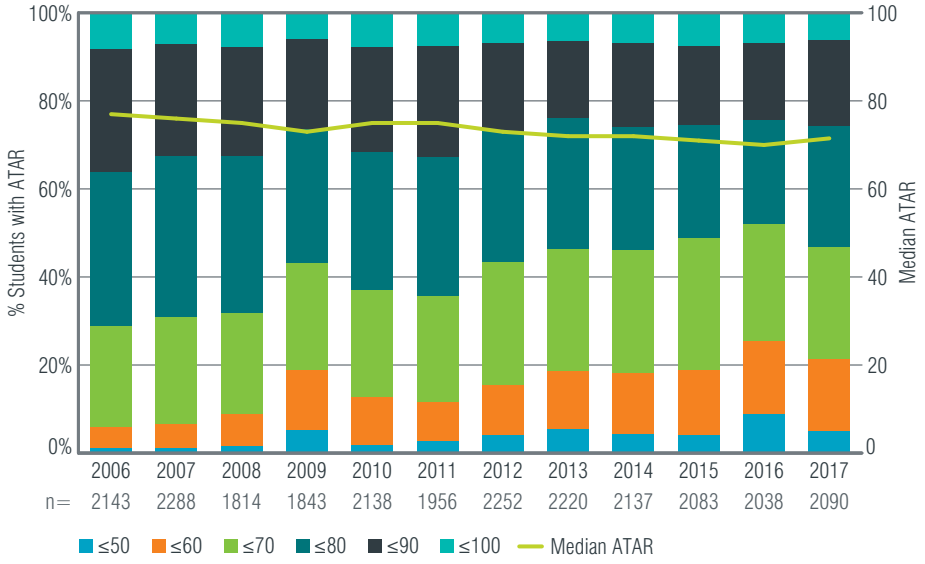
Primary education programs

In 2017

Of all students admitted to undergraduate primary education programs based on a secondary education qualification, 66% (n=2,090) had a recorded ATAR. This proportion decreased from 72% in 2006 (n=2,143).

Trends 2006–2017

Figure 3-27: Primary education programs—ATAR as basis of admission, 2006–2017



The proportion of students admitted with an ATAR greater than 70 fell from 71% (n=1,527) in 2006 to 53% (n=1,114) in 2017.

The median ATAR fell from 77 in 2006 to 72 in 2017.

The number of students with an ATAR greater than 70 increased by 14% from 979 in 2016 to 1,114 in 2017. This has followed a year-on-year decline since 2010.

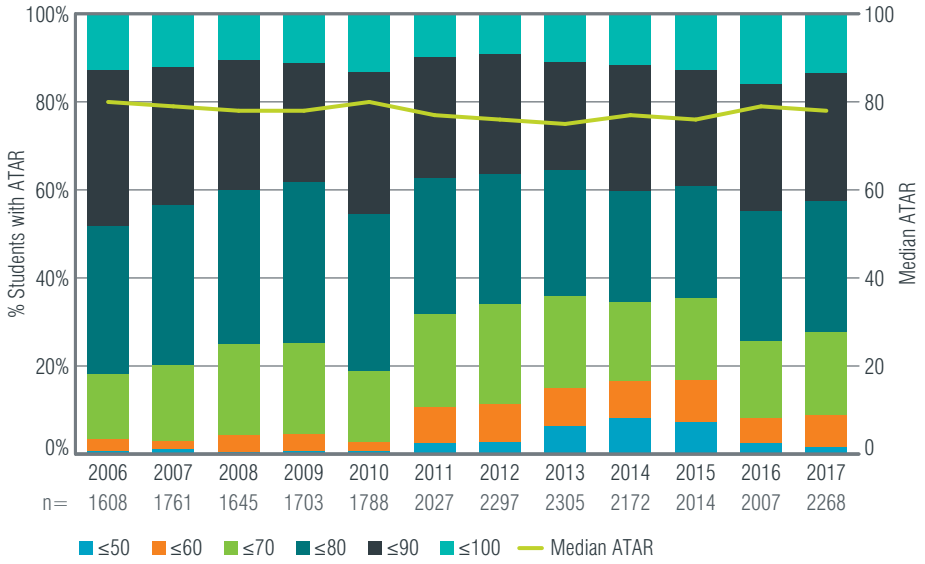
Secondary education programs

In 2017

Of all students admitted to undergraduate secondary education programs via a secondary education qualification pathway, 67% (n=2,268) had a recorded ATAR. This proportion fell from 69% in 2006, following fluctuations between 73% and 64% in the intervening years.

Trends 2006–2017

Figure 3-28: Secondary education—ATAR as basis for admission, 2006–2017



The proportion of students admitted with an ATAR greater than 70 fell from 82% (n=1,316) in 2006 to 72% (n=1,641) in 2017.

The median ATAR fell from 80 in 2006 to 78 in 2017.

The number of students with an ATAR greater than 70 grew by 15% from 1,301 in 2015 to 1,491 in 2016, and by a further 10% to 1,641 in 2017.

3.7 Demographic profile of ITE students in 2017

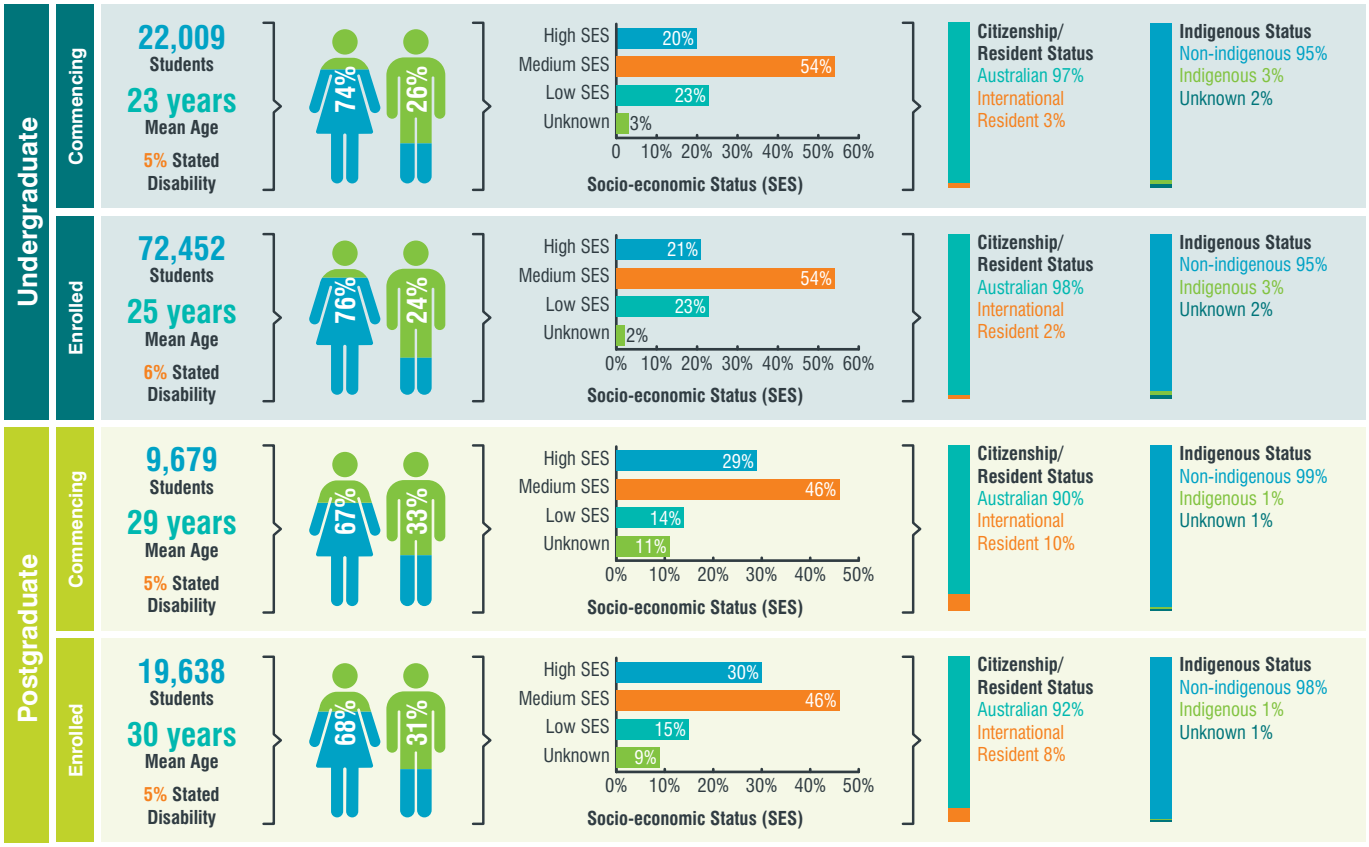
The demographic profile of all enrolled and commencing ITE students in 2017 is provided in **Infographic 3-1** and **Infographic 3-2**.

'Enrolled ITE students' refers to students who commenced,[29] continued or completed[30] an ITE program in 2017, regardless of when they commenced.

The characteristics provide an insight into the diversity and social equity that exists in the ITE student population.

The population of students enrolled or commencing has been compared across field of education and qualification type to identify similarities and differences across a range of characteristics including age, gender, socio-economic status, citizenship, and Aboriginal and Torres Strait Islander status.

Infographic 3-1: Characteristics of all undergraduate and postgraduate ITE students, 2017



29 Refer to Glossary
30 Refer to Glossary

Age

Primary and secondary ITE students were, on average, two years younger at all stages of their enrolment compared with early childhood education students. The mean age of students enrolled in primary education programs was 26 years, in secondary 25 years and in early childhood 28 years.

Gender[31]

Early childhood education programs had the greatest proportion of female students (97%), compared with 79% in primary and 58% in secondary. Overall, a higher proportion of males enrolled in postgraduate ITE programs (31%) compared with undergraduate ITE programs (24%). The reverse is true for females, with 68% enrolled in postgraduate ITE programs and 76% enrolled in undergraduate ITE programs.

Socio-economic status

A slightly higher proportion of students from low SES backgrounds enrolled in primary (22%) and early childhood education programs (21%), compared with secondary education programs (19%). A higher proportion of students from low SES backgrounds were enrolled in undergraduate ITE programs (23%), compared with postgraduate ITE programs (15%).

Stated disability

There was minimal variation in the proportion of students with a stated disability across all stages of enrolment (range 4–6%).

Citizenship/resident status

The proportion of enrolled international students was higher in early childhood education (9%) compared with secondary (4%) and primary (1%).

The proportion of enrolled international students was higher in postgraduate ITE programs (8%) compared with undergraduate ITE programs (2%).

The proportion of commencing international students was highest in early childhood education (13%) compared with secondary (5%) and primary (1%).

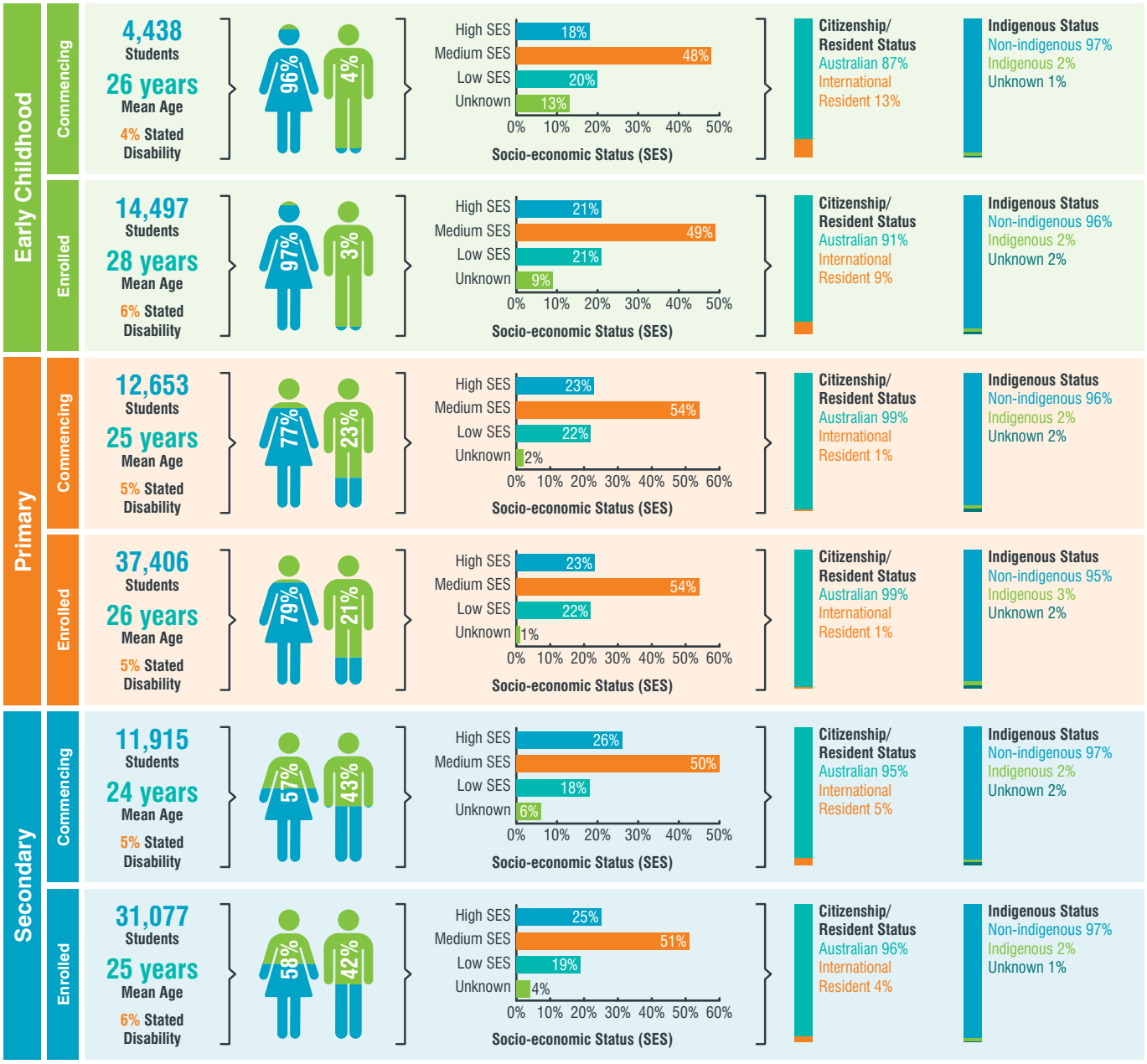
Aboriginal and Torres Strait Islander status

The proportion of enrolled students with Aboriginal and Torres Strait Islander status was highest in primary education programs (3%), compared with early childhood and secondary education programs (both 2%).

The proportion of enrolled students with Aboriginal and Torres Strait Islander status was highest in undergraduate ITE programs (3%), compared with postgraduate ITE programs (1%).

31 From 2015, gender type included a category for indeterminate/intersex/unspecified, however the numbers are too low to be reported from 2015 to 2017.

Infographic 3-2: Characteristics of ITE students by detailed field of education, 2017



4 Where do ITE students come from?

4.1 Chapter introduction

With a number of initial teacher education (ITE) programs now offered through external and online modes, students are increasingly able to reside in one location and study in another. However, we know that most students ultimately seek employment in the state or territory in which they live.

Although previously the total number of enrolments across all ITE programs delivered in a given state or territory may have been a reliable predictor of workforce supply, recognising where students live—as well as where they study—is becoming increasingly critical to understanding the pipeline for each jurisdiction.

Data in the Australian Teacher Workforce Data (ATWD) at the unit record level has, for the first time, enabled comparative analysis of where students live (i.e. the location of their home residence) and where their program is delivered (i.e. the location of the higher education provider, regardless of the mode of attendance).

This chapter provides an analysis of all students commencing and completing ITE for each jurisdiction, segmented as follows:

- students studying in their home state or territory
- students studying outside their home state or territory
- interstate and international students studying in the state or territory.

This analysis has revealed significant jurisdictional differences between the *program pipeline* (i.e. the number of students enrolled across all ITE programs delivered in a given jurisdiction) and the *resident pipeline* (i.e. the number of ITE students residing in that jurisdiction, regardless of where they are enrolled).

Using this data, an estimate of the resident pipeline has been prepared for each jurisdiction by excluding all students commencing and completing ITE programs delivered in that jurisdiction but residing elsewhere, and including all students living in that jurisdiction but commencing and completing ITE programs delivered in another state or territory.

Also provided in this chapter is an analysis of commencing students who are studying via external or mixed modes of attendance, segmented by their home state or territory.

There is an opportunity to refine this analysis in future years by developing a greater understanding of completion rates across the detailed fields of education in each jurisdiction. However, initial analysis of these trends can offer considerable insight for workforce planning at the jurisdictional level.

4.2 Chapter summary

We now have greater clarity about where ITE students live. This is crucial, given that we know most will seek employment in the state in which they reside. As a result, students who study interstate or via online programs, in this analysis, are considered part of the pipeline of their 'home' state—not the state where they studied.

In New South Wales, for example, for all ITE completions in 2017 there were 4,392 students living and studying in New South Wales, as well as 385 international and interstate students studying in New South Wales, thereby creating a program pipeline of 4,777 for New South Wales.

As international and interstate students are unlikely to seek employment in New South Wales, a more accurate resident pipeline is as follows:

- In New South Wales, for completions in 2017 there were 4,392 students living and studying in New South Wales, and 690 students living in New South Wales but studying interstate—creating a resident pipeline of 5,082.
- The difference between the program pipeline and the resident pipeline is an extra 305 graduates.

For all 2017 ITE completions in the other states and territories:

- In Victoria there were 3,806 students living and studying in Victoria, and 230 students living in Victoria but studying interstate—creating a resident pipeline of 4,036. The difference between the program pipeline and the resident pipeline is 462 fewer graduates.
- In Queensland there were 3,085 students living and studying in Queensland, and 249 students living in Queensland but studying interstate—creating a resident pipeline of 3,334. The difference between the program pipeline and the resident pipeline is 61 fewer graduates.
- In Western Australia there were 2,033 students living and studying in Western Australia, and 95 students living in Western Australia but studying interstate—creating a resident pipeline of 2,128. The difference between the program pipeline and the resident pipeline is 537 fewer graduates.
- In South Australia there were 1,115 students living and studying in South Australia, and 189 students living in South Australia but studying interstate—creating a resident pipeline of 1,304. The difference between the program pipeline and the resident pipeline is 111 extra graduates.
- In the Australian Capital Territory there were 231 students living and studying in the Australian Capital Territory, and 62 students living in the Australian Capital Territory but studying interstate—creating a resident pipeline of 293. The difference between the program pipeline and the resident pipeline is 21 fewer graduates.
- In Tasmania there were 237 students living and studying in Tasmania, and 45 students living in Tasmania but studying interstate—creating a resident pipeline of 282. The difference between the program pipeline and the resident pipeline is 13 fewer graduates.
- In the Northern Territory there were 52 students living and studying in the Northern Territory, and 29 students living in the Northern Territory but studying interstate—creating a resident pipeline of 81. The difference between the program pipeline and the resident pipeline is 99 fewer graduates.

In 2017, the distribution of ITE students by permanent home residence was as follows:

- New South Wales: 30%
- Victoria: 24%
- Queensland: 21%
- Western Australia: 13%
- South Australia: 7%
- Australian Capital Territory: 2%
- Tasmania: 1%
- Northern Territory: 1%

This largely reflects the relative populations in the states and territories, except in Western Australia, where they are slightly over-represented, and in New South Wales and Victoria, where they are slightly under-represented when compared with the national population distribution. Of all ITE students, 4% did not have a home residence in Australia and are assumed to be international students.

Attendance via external (online) mode and multi-mode has grown in most states and territories since 2006, with the greatest growth occurring since 2014. In most states and territories, ITE students who were studying ITE via external mode or multi-modal attendance were more likely to have commenced study in early childhood and primary education programs.

The greatest proportion of students commencing ITE studies outside their home state and territory were in the Northern Territory (25%) and the Australian Capital Territory (23%). Other percentages included:

- South Australia: 20%
- Tasmania: 20%
- New South Wales: 15%
- Queensland: 15%
- Victoria: 6%
- Western Australia: 4%

4.3 Choice of ITE program relative to place of residence

Data on location of study for ITE commencements and completions are provided for all programs in each state and territory. These data are also provided by detailed field of education (early childhood, primary and secondary) for all states and territories, except Tasmania and the Northern Territory—only the overall ITE commencements and completions are provided for these jurisdictions as population sizes are too small for analysis when segmented by detailed field of education.

Please note that 'program pipeline' refers to the number of students enrolled in ITE programs being delivered in the jurisdiction being discussed, whereas 'resident pipeline' refers to the number of students who are living in the jurisdiction and studying ITE programs anywhere within Australia.

The following presents overall proportional trends from 2006 to 2017. Year-on-year changes for each jurisdiction and field of education are available on request to atwd@aitsl.edu.au.

New South Wales

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in New South Wales who commenced programs delivered in New South Wales grew 19% between 2006 (n=7,841) and 2012 (n=9,309), and then fell 19% to 7,521 in 2017.

The number of interstate and overseas students who commenced programs delivered in New South Wales fell by 38% between 2006 (n=1,731) and 2017 (n=1,081).

The number of students from New South Wales who commenced ITE programs delivered outside of New South Wales grew by 205% between 2006 (n=441) and 2017 (n=1,345).

This suggests that while the number of students commencing programs delivered in New South Wales decreased by 10% between 2006 (n=9,572) and 2017 (n=8,602), the number of students living in New South Wales who entered the pipeline increased by 31% in 2006 (n=8,282), to a peak in 2012 of 10,857, and then fell by 18% to 8,866 in 2017.

Table 4-1: New South Wales—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	NSW students studying in NSW	7,841	7,521
	NSW students studying outside NSW	441	1,345
	Interstate and international students studying in NSW	1,731	1,081
Early Childhood Education	NSW students studying in NSW	1,093	862
	NSW students studying outside NSW	22	262
	Interstate and international students studying in NSW	246	199
Primary Education	NSW students studying in NSW	2,469	3,246
	NSW students studying outside NSW	236	815
	Interstate and international students studying in NSW	489	340
Secondary Education	NSW students studying in NSW	2,563	3,173
	NSW students studying outside NSW	135	231
	Interstate and international students studying in NSW	532	413

2017 Overview	
No. students - NSW resident	8,866
No. students in NSW Programs	8,602
	>>
+/- students in NSW pipeline	+264
No. students - NSW resident	1,124
No. students in NSW Programs	1,061
	>>
+/- students in NSW pipeline	+63
No. students - NSW resident	4,061
No. students in NSW Programs	3,586
	>>
+/- students in NSW pipeline	+475
No. students - NSW resident	3,404
No. students in NSW Programs	3,586
	>>
+/- students in NSW pipeline	-182

Completions

The number of students living in New South Wales who completed ITE programs delivered in New South Wales grew 51% between 2006 (n=3,970) and 2014 (n=5,996), and fell 27% to 4,392 in 2017.

The number of interstate and overseas students who completed ITE programs delivered in New South Wales fell by 78% between 2006 (n=1,761) and 2017 (n=385).

The number of students living in New South Wales who completed ITE programs delivered outside of New South Wales grew by 313% between 2006 (n=167) and 2017 (n=690).

This suggests that while the number of students completing programs delivered in New South Wales decreased by an overall 16% between 2006 (n=5,731) and 2017 (n=4,777), the number of students living in New South Wales who completed ITE increased by 59% between 2006 (n=4,137) to a peak of 6,592 in 2014, and then fell by 23% to 5,082 in 2017.

Table 4-2: New South Wales—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017	2017 Overview	
All ITE	NSW students studying in NSW	3,970	4,392	No. students - NSW resident	5,082
	NSW students studying outside NSW	167	690	No. students in NSW Programs	4,777
	Interstate and international students studying in NSW	1,761	385		>>
				+/- students in NSW pipeline	+305
Early Childhood Education	NSW students studying in NSW	455	476	No. students - NSW resident	586
	NSW students studying outside NSW	20	110	No. students in NSW Programs	576
	Interstate and international students studying in NSW	239	100		>>
				+/- students in NSW pipeline	+10
Primary Education	NSW students studying in NSW	1,440	1,848	No. students - NSW resident	2,244
	NSW students studying outside NSW	52	396	No. students in NSW Programs	1,937
	Interstate and international students studying in NSW	590	89		>>
				+/- students in NSW pipeline	+307
Secondary Education	NSW students studying in NSW	1,535	1,741	No. students - NSW resident	1,862
	NSW students studying outside NSW	59	121	No. students in NSW Programs	1,876
	Interstate and international students studying in NSW	600	135		>>
				+/- students in NSW pipeline	-14

Early childhood education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in New South Wales who commenced early childhood education programs delivered in New South Wales grew 44% between 2006 (n=1,093) and 2014 (n=1,574), and then fell 45% to 862 in 2017.

The number of interstate and overseas students who commenced early childhood education programs delivered in New South Wales fell by an overall 19% between 2006 (n=246) and 2017 (n=199), with peaks in 2014 (n=254) and 2015 (n=271).

The number of students living in New South Wales who commenced early childhood education programs delivered outside of New South Wales increased by 1091% between 2006 (n=22) and 2017 (n=262). There were fluctuations within this range during this period.

This suggests that while the number of students commencing early childhood education programs delivered in New South Wales decreased by 21% between 2006 (n=1,339) and 2017 (n=1,061), the number of students living in New South Wales who entered the early childhood education pipeline increased by 57% between 2006 (n=1,115) to a peak of 1,753 in 2012, and then fell by 36% in 2017 (n=1,124).

Completions

The number of students living in New South Wales who completed early childhood education programs delivered in New South Wales grew 27% between 2006 (n=694) and 2009 (n=883), and then fell 35% to (n=576) in 2017. There were fluctuations within this range during this period.

The number of interstate and overseas students who completed early childhood education programs delivered in New South Wales fell by 58% between 2006 (n=239) and 2017 (n=100).

The number of students living in New South Wales who completed early childhood education programs delivered outside of New South Wales grew by 450% between 2006 (n=20) and 2017 (n=110).

This suggests that while the number of students completing programs delivered in New South Wales decreased by an overall 17% between 2006 (n=694) and 2017 (n=576), the number of students living in New South Wales who completed early childhood education programs increased by 72% in 2006 (n=475), to a peak of 816 in 2014, before falling by 28% to 586 in 2017.

Primary education programs

Commencement and completion trends

Commencements

The number of students living in New South Wales who commenced primary education programs delivered in New South Wales grew 44% between 2006 (n=2,469) and 2012 (n=3,553), and then fell 9% to 3,246 in 2017.

The number of interstate and overseas students who commenced primary education programs delivered in New South Wales grew by 10% between 2006 (n=489) and 2010 (n=539), and then fell 37% to 340 in 2017.

The number of students living in New South Wales who commenced primary education programs delivered outside of New South Wales increased by 325% between 2006 (n=236) and 2012 (n=1,004), and then fell by 19% to 815 in 2017.

This suggests that while the number of students commencing primary education programs delivered in New South Wales increased by 21% between 2006 (n=2,958) and 2017 (n=3,586), the number of students living in New South Wales who entered the primary education pipeline increased by 68% in 2006 (n=2,705) to a peak of 4,557 in 2012, before falling by 11% to 4,061 in 2017.

Completions

The number of students living in New South Wales who completed primary education programs delivered in New South Wales grew 64% between 2006 (n=1,440) and 2014 (n=2,366), and then fell 22% to 1,848 in 2017.

The number of interstate and overseas students who completed primary education programs delivered in New South Wales fell by 85% between 2006 (n=590) and 2017 (n=89).

The number of students living in New South Wales who completed primary education programs delivered outside of New South Wales grew by 662% between 2006 (n=52) and 2017 (n=396).

This suggests that while the number of students completing primary education programs delivered in New South Wales decreased by an overall 5% between 2006 (n=2,030) and 2017 (n=1,937), the number of students living in New South Wales who completed primary education programs increased by 50% from 1,492 in 2006 to 2,244 in 2017.

Secondary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in New South Wales who commenced secondary education programs delivered in New South Wales grew 57% between 2006 (n=2,563) and 2014 (n=4,024), and then fell 21% to 3,173 in 2017.

The number of interstate and overseas students who commenced secondary education programs delivered in New South Wales fell 22% between 2006 (n= 532) and 2017 (n=413).

The number of students living in New South Wales who commenced secondary education programs delivered outside of New South Wales increased by 71% between 2006 (n=135) and 2017 (n=231). There were fluctuations within this range during this time.

This suggests that while the number of students who commenced secondary education programs delivered in New South Wales increased by 16% between 2006 (n=3,095) and 2017 (n=3,586), the number of students living in New South Wales who entered the secondary education pipeline increased by 56% from 2,698 in 2006, to a peak of 4,201 in 2014, before falling by 19% to 3,404 in 2017.

Completions

The number of students who completed secondary education programs delivered in New South Wales grew 29% from 2,135 in 2006 to 2,762 in 2014 and then fell 32% to 1,876 in 2017.

The number of interstate and overseas students who completed secondary education programs delivered in New South Wales fell by 78% between 2006 (n=600) and 2017 (n=135).

The number of students living in New South Wales who completed secondary education programs delivered outside of New South Wales grew by 105% between 2006 (n=59) and 2017 (n=121).

This suggests that while the number of students who completed programs delivered in New South Wales decreased by an overall 12% between 2006 (n=2,135) and 2017 (n=1,876), the number of students living in New South Wales who completed secondary education programs increased by 17% from 1,594 in 2006 to 1,862 in 2017.

Victoria

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Victoria who commenced ITE programs delivered in Victoria grew 94% between 2006 (n=3,936) and 2015 (n=7,638), and then fell 10% to 6,885 in 2017.

The number of interstate and overseas students who commenced ITE programs delivered in Victoria increased by 216% between 2016 (n=592) and 2017 (n=1,872).

The number of students living in Victoria who commenced ITE programs delivered outside of Victoria grew by 227% between 2006 (n=308) and 2012 (n=1,007), and then fell 58% to 426 in 2017.

This suggests that while the number of students commencing ITE programs delivered in Victoria grew by an overall 93% between 2006 (n=4,528) and 2017 (n=8,757), the number of students living in Victoria who entered the ITE pipeline increased by 89% from 4,244 in 2006 to a peak of 8,010 in 2015, before falling by 9% to 7,311 in 2017.

Table 4-3: Victoria—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017	2017 Overview	
All ITE	Vic. students studying in Vic.	3,936	6,885	No. students - Vic resident	7,311
	Vic. students studying outside Vic.	308	426	No. students in Vic Programs	8,757
	Interstate and international students studying in Vic.	592	1,872		>>
				+/- students in Vic pipeline	-1,446
Early Childhood Education	Vic. students studying in Vic.	126	1,003	No. students - Vic resident	1,091
	Vic. students studying outside Vic.	139	88	No. students in Vic Programs	1,638
	Interstate and international students studying in Vic.	20	635		>>
				+/- students in Vic pipeline	-547
Primary Education	Vic. students studying in Vic.	2,188	3,348	No. students - Vic resident	3,539
	Vic. students studying outside Vic.	56	191	No. students in Vic Programs	4,132
	Interstate and international students studying in Vic.	281	784		>>
				+/- students in Vic pipeline	-593
Secondary Education	Vic. students studying in Vic.	1,567	2,110	No. students - Vic resident	2,221
	Vic. students studying outside Vic.	55	111	No. students in Vic Programs	2,406
	Interstate and international students studying in Vic.	253	296		>>
				+/- students in Vic pipeline	-185

Completions

The number of students living in Victoria who completed ITE programs delivered in Victoria grew 53% between 2006 (n=2,812) and 2016 (n=4,295), and then fell 11% to 3,806 in 2017.

The number of interstate and overseas students who completed ITE programs delivered in Victoria fell 71% between 2006 (n=751) and 2008 (n=219), and then grew 216% to 692 in 2017.

The number of students living in Victoria who completed ITE programs delivered outside of Victoria grew by 139% between 2006 (n=133) and 2013 (n=318), and then fell 28% to 230 in 2017.

This suggests that while the number of students completing ITE programs delivered in Victoria grew by an overall 26% between 2006 (n=3,563) and 2017 (n=4,498), the number of students living in Victoria who completed ITE programs increased by 54% from 2,945 in 2006 to a peak of 4,531 in 2016, before falling by 11% to 4,036 in 2017.

Table 4-4: Victoria—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	Vic. students studying in Vic.	2,812	3,806
	Vic. students studying outside Vic.	133	230
	Interstate and international students studying in Vic.	751	692
Early Childhood Education	Vic. students studying in Vic.	75	427
	Vic. students studying outside Vic.	40	39
	Interstate and international students studying in Vic.	34	219
Primary Education	Vic. students studying in Vic.	1,291	1,443
	Vic. students studying outside Vic.	46	94
	Interstate and international students studying in Vic.	319	199
Secondary Education	Vic. students studying in Vic.	1,199	1,323
	Vic. students studying outside Vic.	37	58
	Interstate and international students studying in Vic.	317	166

2017 Overview	
No. students - Vic resident	4,036
No. students in Vic Programs	4,498
	>>
+/- students in Vic pipeline	-462
No. students - Vic resident	466
No. students in Vic Programs	646
	>>
+/- students in Vic pipeline	-180
No. students - Vic resident	1,537
No. students in Vic Programs	1,642
	>>
+/- students in Vic pipeline	-105
No. students - Vic resident	1,381
No. students in Vic Programs	1,489
	>>
+/- students in Vic pipeline	-108

Early childhood education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Victoria who commenced early childhood education programs delivered in Victoria grew 845% between 2006 (n=126) and 2016 (n=1,191), and then fell 16% to 1,003 in 2017.

The number of interstate and overseas students who commenced early childhood education programs delivered in Victoria increased by 3075% between 2006 (n=20) and 2017 (n=635).

The number of students living in Victoria who commenced early childhood education programs delivered outside of Victoria fell overall by 37% between 2006 (n=139) and 2017 (n=88).

This suggests that while the number of students commencing early childhood education programs delivered in Victoria grew by 1022% between 2006 (n=146) and 2017 (n=1,638), the number of students living in Victoria who entered the early childhood education pipeline increased by an overall 312% from 265 in 2006 to 1,091 in 2017.

Completions

The number of students living in Victoria who completed early childhood education programs in Victoria grew 576% between 2006 (n=75) and 2015 (n=507), and then fell 16% to 427 in 2017.

The number of interstate and overseas students who completed early childhood education programs delivered in Victoria increased by 544% between 2006 (n=34) and 2017 (n=219).

The number of students living in Victoria who completed early childhood education programs delivered outside of Victoria ranged between 40 in 2006 and 61 in 2015 (53% increase), and then fell to 39 in 2017.

This suggests that while the number of students completing early childhood education programs delivered in Victoria grew by an overall 493% between 2006 (n=109) and 2017 (n=646), the number of students living in Victoria who completed early childhood education programs increased by an overall 305% between 2006 (n=115) and 2017 (n=466).

Primary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Victoria who commenced primary education programs delivered in Victoria grew 53% between 2006 (n=2,188) and 2017 (n=3,348).

The number of interstate and overseas students who commenced primary education programs delivered in Victoria fell by 61% between 2006 (n=281) and 2014 (n=110), before rising sharply to 1004 in 2015, and falling to 784 in 2017.

The number of students living in Victoria who commenced primary education programs delivered outside of Victoria grew by 875% between 2006 (n=56) and 2012 (n=546), and then fell by 65% to 191 in 2017.

This suggests that while the number of students commencing primary education programs delivered in Victoria grew by 67% between 2006 (n=2,469) and 2017 (n=4,132), the number of students who entered the Victorian primary education pipeline increased by an overall 58% from 2,244 in 2006 to 3,539 in 2017.

Completions

The number of students living in Victoria who completed primary education programs delivered in Victoria grew 37% between 2006 (n=1,291) and 2010 (n=1,766), and then fell 18% to 1,443 in 2017.

The number of interstate and overseas students who completed primary education programs delivered in Victoria fell by 73% between 2006 (n=319) and 2009 (n=86), and then increased by 231% to 199 in 2017.

The number of students living in Victoria who completed primary education programs delivered outside of Victoria doubled between 2006 (n=46) and 2017 (n=94).

This suggests that while the number of students completing primary education programs delivered in Victoria grew by an overall 2% between 2006 (n=1,610) and 2017 (n=1,642), the number of students living in Victoria who completed primary education programs increased by an overall 15% from 1,337 in 2006 to 1,537 in 2017.

Secondary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Victoria who commenced secondary education programs delivered in Victoria grew 72% between 2006 (n=1,567) and 2014 (n=2,693), and then fell 22% to 2,110 in 2017.

The number of interstate and overseas students who commenced secondary education programs delivered in Victoria fell by 61% between 2006 (n=253) and 2008 (n=99), and then increased by 199% to 296 in 2017.

The number of students living in Victoria who commenced secondary education programs delivered outside of Victoria increased by 151% between 2006 (n=55) and 2014 (n=138) and then fell by 20% to 111 in 2017.

This suggests that while the number of students commencing secondary education programs delivered in Victoria grew by 32% between 2006 (n=1,820) and 2017 (n=2,406), the number of students living in Victoria who entered the secondary education pipeline increased by an overall 37% from 1,622 in 2006 to 2,221 in 2017.

Completions

The number of students living in Victoria who completed secondary education programs delivered in Victoria grew 27% between 2006 (n=1,199) and 2015 (n=1,527) and then fell 13% to 1,323 in 2017.

The number of interstate and overseas students who completed secondary education programs delivered in Victoria decreased by 71% between 2006 (n=317) and 2010 (n=93), and then rose by 78% to 166 in 2017.

The number of students living in Victoria who completed secondary education programs delivered outside of Victoria grew by an overall 57% between 2006 (n=37) and 2017 (n=58).

This suggests that while the number of students completing secondary education programs delivered in Victoria fell by an overall 2% between 2006 (n=1,516) and 2017 (n=1,489), the number of students living in Victoria who completed secondary education programs increased by an overall 12% from 1,236 in 2006 to 1,381 in 2017.

Queensland

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Queensland who commenced ITE programs delivered in Queensland grew 24% between 2006 (n=4,364) and 2017 (n=5,398).

The number of interstate and overseas students who commenced ITE programs delivered in Queensland increased by an overall 7% between 2006 (n=359) and 2017 (n=384).

The number of students living in Queensland who commenced ITE programs delivered outside of Queensland grew by 354% between 2006 (n=214) and 2017 (n=971).

This suggests that while the number of students commencing ITE programs delivered in Queensland grew by an overall 22% between 2006 (n=4,723) and 2017 (n=5,782), the number of students living in Queensland who entered the ITE pipeline increased by 39% from 4,578 in 2006 to 6,369 in 2017.

Table 4-5: Queensland—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	Qld students studying in Qld	4,364	5,398
	Qld students studying outside Qld	214	971
	Interstate and international students studying in Qld	359	384
Early Childhood Education	Qld students studying in Qld	505	357
	Qld students studying outside Qld	28	196
	Interstate and international students studying in Qld	35	44
Primary Education	Qld students studying in Qld	1,695	1,114
	Qld students studying outside Qld	73	524
	Interstate and international students studying in Qld	96	42
Secondary Education	Qld students studying in Qld	1,668	2,939
	Qld students studying outside Qld	69	144
	Interstate and international students studying in Qld	132	238

2017 Overview	
No. students - Qld resident	6,369
No. students in Qld Programs	5,782
	>>
+/- students in Qld pipeline	+587
No. students - Qld resident	553
No. students in Qld Programs	401
	>>
+/- students in Qld pipeline	+152
No. students - Qld resident	1,638
No. students in Qld Programs	1,156
	>>
+/- students in Qld pipeline	+482
No. students - Qld resident	3,083
No. students in Qld Programs	3,177
	>>
+/- students in Qld pipeline	-94

Completions

The number of students living in Queensland who completed ITE programs delivered in Queensland grew 7% between 2006 (n=2,886) and 2017 (n=3,085).

The number of interstate and overseas students who completed ITE programs delivered in Queensland fell 40% between 2006 (n=517) and 2017 (n=310).

The number of students living in Queensland who completed ITE programs delivered outside of Queensland grew by 101% between 2006 (n=124) and 2017 (n=249).

This suggests that while the number of students completing ITE programs delivered in Queensland fell by 28% between 2006 (n=3,403) and 2012 (n=2,442) and then rose by 39% to 3,395 in 2017, the number of students living in Queensland who completed ITE programs increased by an overall 11% from 3,010 in 2006 to 3,334 in 2017.

Table 4-6: Queensland—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017	2017 Overview	
All ITE	Qld students studying in Qld	2,886	3,085	No. students - Qld resident	3,334
	Qld students studying outside Qld	124	249	No. students in Qld Programs	3,395
	Interstate and international students studying in Qld	517	310	>>	
				+/- students in Qld pipeline	-61
Early Childhood Education	Qld students studying in Qld	355	251	No. students - Qld resident	304
	Qld students studying outside Qld	10	53	No. students in Qld Programs	274
	Interstate and international students studying in Qld	69	23	>>	
				+/- students in Qld pipeline	+30
Primary Education	Qld students studying in Qld	1,256	872	No. students - Qld resident	1,000
	Qld students studying outside Qld	59	128	No. students in Qld Programs	905
	Interstate and international students studying in Qld	184	33	>>	
				+/- students in Qld pipeline	+95
Secondary Education	Qld students studying in Qld	1,048	1,797	No. students - Qld resident	1,841
	Qld students studying outside Qld	41	44	No. students in Qld Programs	2,036
	Interstate and international students studying in Qld	180	239	>>	
				+/- students in Qld pipeline	-195

Early childhood education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Queensland who commenced early childhood education programs delivered in Queensland fell by an overall 29% between 2006 (n=505) and 2017 (n=357).

The number of interstate and overseas students who commenced early childhood education programs delivered in Queensland increased by an overall 26% between 2006 (n=35) and 2017 (n=44).

The number of students living in Queensland who commenced early childhood education programs delivered outside of Queensland increased by 600% between 2006 (n=28) and 2017 (n=196).

This suggests that while the number of students commencing early childhood education programs delivered in Queensland fell by an overall 26% between 2006 (n=540) and 2017 (n=401), the number of students living in Queensland who entered the early childhood education pipeline increased by an overall 4%, from 533 in 2006 to 553 in 2017.

Completions

The number of students living in Queensland who completed early childhood education programs delivered in Queensland fell by 29% between 2006 (n=355) and 2017 (n=251).

The number of interstate and overseas students who completed early childhood education programs delivered in Queensland fell by 67% between 2006 (n=69) and 2017 (n=23).

The number of students living in Queensland who completed early childhood education programs delivered outside of Queensland increased by 430%, from 10 in 2006 to 53 in 2017.

This suggests that while the number of students completing early childhood education programs delivered in Queensland fell by an overall 35% between 2006 (n=424) and 2017 (n=274), the number of students living in Queensland who completed early childhood education programs fell by an overall 17%, from 365 in 2006 to 304 in 2017.

Primary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Queensland who commenced primary education programs delivered in Queensland fell by 34% between 2006 (n=1,695) and 2017 (n=1,114).

The number of interstate and overseas students who commenced primary education programs delivered in Queensland grew by 51% between 2006 (n=96) and 2010 (n=145), and then fell by 71% to 42 in 2017.

The number of students living in Queensland who commenced primary education programs delivered outside of Queensland grew by 618%, from 73 in 2006 to 524 in 2017.

This suggests that while the number of students commencing primary education programs delivered in Queensland fell by 35% between 2006 (n=1,791) and 2017 (n=1,156), the number of students living in Queensland who entered the primary education pipeline fell by an overall 7%, from 1,768 in 2006 to 1,638 in 2017.

Completions

The number of students living in Queensland who completed primary education programs delivered in Queensland fell by 31% between 2006 (n=1,256) and 2017 (n=872).

The number of interstate and overseas students who completed primary education programs delivered in Queensland fell by 82% between 2006 (n=184) and 2017 (n=33), with fluctuations in this range during that period.

The number of students living in Queensland who completed primary education programs delivered outside of Queensland increased by 117% between 2006 (n=59) and 2017 (n=128).

This suggests that while the number of students completing primary education programs delivered in Queensland fell by an overall 37% between 2006 (n=1,440) and 2017 (n=905), the number of students living in Queensland who completed primary education programs fell by an overall 24% from 1,315 in 2006 to 1,000 in 2017.

Secondary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Queensland who commenced secondary education programs delivered in Queensland grew 76% between 2006 (n=1,668) and 2017 (n=2,939).

The number of interstate and overseas students who commenced secondary education programs delivered in Queensland increased by 80% between 2006 (n=132) and 2017 (n=238).

The number of students living in Queensland who commenced secondary education programs delivered outside of Queensland increased by 109% between 2006 (n=69) and 2017 (n=144).

This suggests that while the number of students commencing secondary education programs delivered in Queensland grew by 77% between 2006 (n=1,800) and 2017 (n=3,177), the number of students living in Queensland who entered the secondary education pipeline increased by an overall 77%, from 1,737 in 2006 to 3,083 in 2017.

Completions

The number of students living in Queensland who completed secondary education programs delivered in Queensland grew 71% between 2006 (n=1,048) and 2017 (n=1,797).

The number of interstate and overseas students who completed secondary education programs delivered in Queensland increased by 33% between 2006 (n=180) and 2017 (n=239).

The number of students living in Queensland who completed secondary education programs delivered outside of Queensland grew by an overall 7% between 2006 (n=41) and 2017 (n=44).

This suggests that while the number of students completing secondary education programs delivered in Queensland fell by an overall 66% between 2006 (n=1,228) and 2017 (n=2,036), the number of students living in Queensland who completed secondary education programs increased by an overall 69% from 1,089 in 2006 to 1,841 in 2017.

Western Australia

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Western Australia who commenced ITE programs delivered in Western Australia grew 64% between 2006 (n=2,339) and 2017 (n=3,841).

The number of interstate and overseas students who commenced ITE programs delivered in Western Australia varied greatly from year to year. For example, it increased from 584 in 2006 to 1,948 in 2012, and then fell to 310 in 2016, before increasing to 1,146 in 2017. This represents an overall increase of 96% between 2006 and 2017.

The number of students living in Western Australia who commenced ITE programs delivered outside of Western Australia grew by an overall 229% between 2006 (n=52) and 2017 (n=171).

This suggests that while the number of students commencing ITE programs delivered in Western Australian grew by an overall 71% between 2006 (n=2,923) and 2017 (n=4,987), the number of students living in Western Australia who entered the ITE pipeline increased by 68%, from 2,391 in 2006 to 4,012 in 2017.

Table 4-7: Western Australia—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017	2017 Overview	
All ITE	WA students studying in WA	2,339	3,841	No. students - WA resident	4,012
	WA students studying outside WA	52	171	No. students in WA Programs	4,987
	Interstate and international students studying in WA	584	1,146		>>
				+/- students in WA pipeline	-975
Early Childhood Education	WA students studying in WA	213	525	No. students - WA resident	562
	WA students studying outside WA	7	37	No. students in WA Programs	814
	Interstate and international students studying in WA	17	289		>>
				+/- students in WA pipeline	-252
Primary Education	WA students studying in WA	1,356	1,680	No. students - WA resident	1,763
	WA students studying outside WA	20	83	No. students in WA Programs	2,385
	Interstate and international students studying in WA	337	705		>>
				+/- students in WA pipeline	-622
Secondary Education	WA students studying in WA	688	1,383	No. students - WA resident	1,426
	WA students studying outside WA	12	43	No. students in WA Programs	1,515
	Interstate and international students studying in WA	226	132		>>
				+/- students in WA pipeline	-89

Completions

The number of students living in Western Australia who completed ITE programs delivered in Western Australia grew 39% between 2006 (n=1,459) and 2017 (n=2,033).

The number of interstate and overseas students who completed ITE programs delivered in Western Australia rose by an overall 94% between 2006 (n=325) and 2017 (n=632).

The number of students living in Western Australia who completed ITE programs delivered outside of Western Australia grew 400% between 2006 (n=19) and 2017 (n=95).

This suggests that while the number of students completing ITE programs delivered in Western Australia increased by 49% between 2006 (n=1,784) and 2017 (n=2,665), the number of students living in Western Australia who completed ITE programs increased by an overall 44%, from 1,478 in 2006 to 2,128 in 2017.

Table 4-8: Western Australia—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	WA students studying in WA	1,459	2,033
	WA students studying outside WA	19	95
	Interstate and international students studying in WA	325	632
Early Childhood Education	WA students studying in WA	148	304
	WA students studying outside WA	n.p.	21
	Interstate and international students studying in WA	32	165
Primary Education	WA students studying in WA	792	762
	WA students studying outside WA	5	24
	Interstate and international students studying in WA	142	364
Secondary Education	WA students studying in WA	490	880
	WA students studying outside WA	8	37
	Interstate and international students studying in WA	150	83

2017 Overview	
No. students - WA resident	2,128
No. students in WA Programs	2,665
	>>
+/- students in WA pipeline	-537
No. students - WA resident	325
No. students in WA Programs	469
	>>
+/- students in WA pipeline	-144
No. students - WA resident	786
No. students in WA Programs	1,126
	>>
+/- students in WA pipeline	-340
No. students - WA resident	917
No. students in WA Programs	963
	>>
+/- students in WA pipeline	-46

Early childhood education programs

Completion and commencement trends 2006–2017

Commencements

The number of students living in Western Australia who commenced early childhood education programs delivered in Western Australia increased by an overall 146% between 2006 (n=213) and 2017 (n=525).

The number of interstate and overseas students who commenced early childhood education programs delivered in Western Australia varied greatly, increasing from 17 in 2006 to 150 in 2011, and 431 in 2012, then decreasing to 93 in 2014, before increasing to 289 in 2017. This represents an increase of 1,600% between 2006 and 2017.

The number of students living in Western Australia who commenced early childhood education programs delivered outside of Western Australia increased by an overall 429% between 2006 (n=7) and 2017 (n=37).

This suggests that while the number of students commencing early childhood education programs delivered in Western Australia increased by an overall 254% between 2006 (n=230) and 2017 (n=814), the number of students living in Western Australia who entered the early childhood education pipeline increased by an overall 155%, from 220 in 2006 to 562 in 2017.

Completions

The number of students living in Western Australia who completed early childhood education programs delivered in Western Australia rose by an overall 105% between 2006 (n=148) and 2017 (n=304).

The number of interstate and overseas students who completed early childhood education programs delivered in Western Australia grew by an overall 416% between 2006 (n=32) and 2017 (n=165).

The number of students living in Western Australia who completed early childhood education programs delivered outside of Western Australia was below reportable levels between 2006 and 2014, and grew to 21 in 2017.

This suggests that while the number of students completing early childhood education programs delivered in Western Australia grew by an overall 161% between 2006 (n=180) and 2017 (n=469), the number of students living in Western Australia who completed early childhood education programs grew by an overall 118%, from 149 in 2006 to 325 in 2017.

Primary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Western Australia who commenced primary education programs delivered in Western Australia increased by an overall 24% between 2006 (n=1,356) and 2017 (n=1,680).

The number of interstate and overseas students who commenced primary education programs delivered in Western Australia varied greatly, increasing between 2006 (n=337) and 2012 (n=1,410), before decreasing to 705 in 2017. This represents an overall increase of 109% between 2006 and 2017.

The number of students living in Western Australia who commenced primary education programs delivered outside of Western Australia grew by an overall 315% between 2006 (n=20) and 2017 (n=83).

This suggests that while the number of students commencing primary education programs delivered in Western Australia increased by 41% between 2006 (n=1,693) and 2017 (n=2,385), the number of students living in Western Australia who entered the primary education pipeline increased by an overall 28%, from 1,376 in 2006 to 1,763 in 2017.

Completions

The number of students living in Western Australia who completed primary education programs delivered in Western Australia grew 5% between 2006 (n=792) and 2007 (n=835), and then fell 32% to 569 in 2010, before rising 34% to 762 in 2017.

The number of interstate and overseas students who completed primary education programs delivered in Western Australia rose by an overall 156% between 2006 (n=142) and 2017 (n=364).

The number of students living in Western Australia who completed primary education programs delivered outside of the state increased by 380% between 2006 (n=5) and 2017 (n=24).

This suggests that while the number of students completing primary education programs delivered in Western Australia grew by an overall 21% between 2006 (n=934) and 2017 (n=1,126), the number of students living in Western Australia who completed primary education programs fell by an overall 1%, from 797 in 2006 to 786 in 2017.

Secondary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Western Australia who commenced secondary education programs delivered in Western Australia grew by 101% between 2006 (n=688) and 2017 (n=1,383).

The number of interstate and overseas students who commenced secondary education programs delivered in Western Australia fell by an overall 42% between 2006 (n=226) and 2017 (n=132).

The number of students living in Western Australia who commenced secondary education programs delivered outside of Western Australia increased by 258% between 2006 (n=12) and 2017 (n=43).

This suggests that while the number of students commencing secondary education programs delivered in Western Australia grew by an overall 66% between 2006 (n=914) and 2017 (n=1,515), the number of students living in Western Australia who entered the primary education pipeline increased by an overall 104%, from 700 in 2006 to 1,426 in 2017.

Completions

The number of students living in Western Australia who completed secondary education programs delivered in Western Australia grew by 80% between 2006 (n=490) and 2017 (n=880).

The number of interstate and overseas students who completed secondary education programs delivered in Western Australia fell by an overall 45% between 2006 (n=150) and 2017 (n=83).

The number of students living in Western Australia who completed secondary education programs delivered outside of the state grew by an overall 363% between 2006 (n=8) and 2017 (n=37).

This suggests that while the number of students completing secondary education programs delivered in Western Australia increased by an overall 50% between 2006 (n=640) and 2017 (n=963), the number of students living in Western Australia who completed secondary education programs increased by an overall 84%, from 498 in 2006 to 917 in 2017.

South Australia

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in South Australia who commenced ITE programs delivered in South Australia grew 24% between 2006 (n=1,646) and 2015 (n=2,049), and then fell 12% to 1,795 in 2017.

The number of interstate and overseas students who commenced ITE programs delivered in South Australia varied greatly from year to year, decreasing from 143 in 2006 to 73 in 2009, increasing to 162 in 2016, before decreasing to 151 in 2017. This represents an overall change of 6% between 2006 and 2017.

The number of students living in South Australia who commenced ITE programs delivered outside of South Australia grew by an overall 346% between 2006 (n=99) and 2017 (n=442).

This suggests that while the number of students commencing ITE programs delivered in South Australia grew by an overall 21% between 2006 (n=1,789) and 2014 (n=2,172) before falling 10% to 1,946 in 2017, the number of students living in South Australia who entered the ITE pipeline increased by 45%, from 1,745 in 2006 to 2,525 in 2014, before falling 11% to 2,237 in 2017.

Table 4-9: South Australia—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017	2017 Overview	
All ITE	SA students studying in SA	1,646	1,795	No. students - SA resident	2,237
	SA students studying outside SA	99	442	No. students in SA Programs	1,946
	Interstate and international students studying in SA	143	151		>>
				+/- students in SA pipeline	+291
Early Childhood Education	SA students studying in SA	228	285	No. students - SA resident	394
	SA students studying outside SA	5	109	No. students in SA Programs	348
	Interstate and international students studying in SA	17	63		>>
				+/- students in SA pipeline	+46
Primary Education	SA students studying in SA	537	599	No. students - SA resident	802
	SA students studying outside SA	25	203	No. students in SA Programs	625
	Interstate and international students studying in SA	20	26		>>
				+/- students in SA pipeline	+177
Secondary Education	SA students studying in SA	339	723	No. students - SA resident	818
	SA students studying outside SA	26	95	No. students in SA Programs	782
	Interstate and international students studying in SA	57	59		>>
				+/- students in SA pipeline	+36

Completions

The number of students living in South Australia who completed ITE programs delivered in South Australia grew 44% between 2006 (n=820) and 2014 (n=1,179), and then fell 5% to 1,115 in 2017.

The number of interstate and overseas students who completed ITE programs delivered in South Australia varied from 174 in 2006 to 41 in 2009, then increased to 117 in 2016, before falling to 78 in 2017. This represents an overall 55% decrease between 2006 and 2017.

The number of students living in South Australia who completed ITE programs delivered outside of South Australia grew 552% between 2006 (n=29) and 2017 (n=189).

This suggests that while the number of students completing ITE programs delivered in South Australia increased by 32% between 2006 (n=994) and 2016 (n=1,314), and then fell 9% to 1,193 in 2017, the number of students living in South Australia who completed ITE programs increased by an overall 65% from 849 in 2006 to 1,402 in 2014, before falling 7% to 1,304 in 2017.

Table 4-10: South Australia—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017	2017 Overview	
All ITE	SA students studying in SA	820	1,115	No. students - SA resident	1,304
	SA students studying outside SA	29	189	No. students in SA Programs	1,193
	Interstate and international students studying in SA	174	78		>>
				+/- students in SA pipeline	+111
Early Childhood Education	SA students studying in SA	91	161	No. students - SA resident	194
	SA students studying outside SA	n.p.	33	No. students in SA Programs	191
	Interstate and international students studying in SA	26	30		>>
				+/- students in SA pipeline	+3
Primary Education	SA students studying in SA	330	324	No. students - SA resident	397
	SA students studying outside SA	16	73	No. students in SA Programs	338
	Interstate and international students studying in SA	52	14		>>
				+/- students in SA pipeline	+59
Secondary Education	SA students studying in SA	185	428	No. students - SA resident	472
	SA students studying outside SA	11	44	No. students in SA Programs	459
	Interstate and international students studying in SA	55	31		>>
				+/- students in SA pipeline	+13

Early childhood education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in South Australia who commenced early childhood education programs delivered in South Australia increased by an overall 49% between 2006 (n=228) and 2014 (n=339), before falling 16% to 285 in 2017.

The number of interstate and overseas students who commenced early childhood education programs delivered in South Australia increased by 271% between 2006 (n=17) and 2017 (n=63).

The number of students living in South Australia who commenced early childhood education programs delivered outside of South Australia increased by an overall 2,080% between 2006 (n=5) and 2017 (n=109).

This suggests that while the number of students commencing early childhood education programs delivered in South Australia increased by an overall 56% between 2006 (n=245) and 2014 (n=383), before falling by 9% to 348 in 2017, the number of students living in South Australia who entered the early childhood education pipeline increased by an overall 69%, from 233 in 2006 to 394 in 2017.

Completions

The number of students living in South Australia who completed early childhood education programs delivered in South Australia rose by an overall 77% between 2006 (n=91) and 2017 (n=161).

The number of interstate and overseas students who completed early childhood education programs delivered in South Australia grew by an overall 15% between 2006 (n=26) and 2017 (n=30).

The number of students living in South Australia who completed early childhood education programs delivered outside of South Australia was below reportable levels between 2006 and 2009, and grew to 33 in 2017.

This suggests that while the number of students completing early childhood education programs delivered in South Australia grew by an overall 63% between 2006 (n=117) and 2017 (n=191), the number of students living in South Australia who completed early childhood education programs grew by an overall 111%, from 92 in 2006 to 194 in 2017.

Primary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in South Australia who commenced primary education programs delivered in South Australia increased by an overall 12% between 2006 (n=537) and 2017 (n=599).

The number of interstate and overseas students who commenced primary education programs delivered in South Australia increased by 30% between 2006 (n=20) and 2017 (n=26).

The number of students living in South Australia who commenced primary education programs delivered outside of South Australia grew by an overall 712% between 2006 (n=25) and 2017 (n=203).

This suggests that while the number of students commencing primary education programs delivered in South Australia increased by 12% between 2006 (n=557) and 2017 (n=625), the number of students living in South Australia who entered the primary education pipeline increased by an overall 43%, from 562 in 2006 to 802 in 2017.

Completions

The number of students living in South Australia who completed primary education programs delivered in South Australia fell by 16% between 2006 (n=330) and 2013 (n=276), and then rose by 17% to 324 in 2017.

The number of interstate and overseas students who completed primary education programs delivered in South Australia fell by an overall 73% between 2006 (n=52) and 2017 (n=14).

The number of students living in South Australia who completed primary education programs delivered outside of South Australia increased by 356% between 2006 (n=16) and 2017 (n=73).

This suggests that while the number of students completing primary education programs delivered in South Australia fell by an overall 12% between 2006 (n=382) and 2017 (n=338), the number of students living in South Australia who completed primary education programs grew by an overall 15%, from 346 in 2006 to 397 in 2017.

Secondary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in South Australia who commenced secondary education programs delivered in South Australia grew by 163% between 2006 (n=339) and 2015 (n=890), then fell by 19% to 723 in 2017.

The number of interstate and overseas students who commenced secondary education programs delivered in South Australia decreased by 56% between 2006 (n=57) and 2009 (n=25), before increasing by 136% to 59 in 2017.

The number of students living in South Australia who commenced secondary education programs delivered outside of South Australia increased by 265% between 2006 (n=26) and 2017 (n=95).

This suggests that while the number of students commencing secondary education programs delivered in South Australia grew by an overall 136% between 2006 (n=396) and 2015 (n=935), and then fell 16% to 782 in 2017, the number of students living in South Australia who entered the secondary education pipeline increased by an overall 162%, from 365 in 2006 to 958 in 2015, before falling 15% to 818 in 2017.

Completions

The number of students living in South Australia who completed secondary education programs delivered in South Australia grew by 172% between 2006 (n=185) and 2016 (n=503), before falling by 15% to 428 in 2017.

The number of interstate and overseas students who completed secondary education programs delivered in South Australia fell by an overall 76% between 2006 (n=55) and 2010 (n=13), before increasing by 138% to 31 in 2017.

The number of students living in South Australia who completed secondary education programs delivered outside of South Australia grew by an overall 300% between 2006 (n=11) and 2017 (n=44).

This suggests that while the number of students completing secondary education programs delivered in South Australia increased by an overall 126% between 2006 (n=240) and 2016 (n=542), before falling by 15% to 459 in 2017, the number of students living in South Australia who completed secondary education programs increased by an overall 170%, from 196 in 2006 to 530 in 2016, before falling 11% to 472 in 2017.

Australian Capital Territory

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in the Australian Capital Territory who commenced ITE programs delivered in the Australian Capital Territory grew 48% between 2006 (n=333) and 2014 (n=494), and then fell 6% to 462 in 2017.

The number of interstate and overseas students who commenced ITE programs delivered in the Australian Capital Territory grew by 82% between 2006 (n=132) and 2010 (n=240), and then fell by an overall 21% to 189 in 2017.

The number of students living in the Australian Capital Territory who commenced ITE programs delivered outside of the Australian Capital Territory grew by an overall 150% between 2006 (n=62) and 2015 (n=155), and then fell 12% to 136 in 2017.

This suggests that while the number of students commencing ITE programs delivered in the Australian Capital Territory grew by 47% between 2006 (n=465) and 2014 (n=683) before falling 5% to 651 in 2017, the number of students living in the Australian Capital Territory who entered the ITE pipeline increased by 58%, from 395 in 2006 to 625 in 2014, before falling 4% to 598 in 2017.

Table 4-11: Australian Capital Territory—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	ACT students studying in ACT	333	462
	ACT students studying outside ACT	62	136
	Interstate and international students studying in ACT	132	189
Early Childhood Education	ACT students studying in ACT	30	17
	ACT students studying outside ACT	10	43
	Interstate and international students studying in ACT	13	0
Primary Education	ACT students studying in ACT	157	250
	ACT students studying outside ACT	11	60
	Interstate and international students studying in ACT	58	113
Secondary Education	ACT students studying in ACT	130	195
	ACT students studying outside ACT	25	26
	Interstate and international students studying in ACT	58	76

2017 Overview	
No. students - ACT resident	598
No. students in ACT Programs	651
	>>
+/- students in ACT pipeline	-53
No. students - ACT resident	60
No. students in ACT Programs	17
	>>
+/- students in ACT pipeline	+43
No. students - ACT resident	310
No. students in ACT Programs	363
	>>
+/- students in ACT pipeline	-53
No. students - ACT resident	221
No. students in ACT Programs	271
	>>
+/- students in ACT pipeline	-50

Completions

The number of students living in the Australian Capital Territory who completed ITE programs delivered in the Australian Capital Territory grew 18% between 2006 (n=221) and 2007 (n=260), and then fell 25% to 194 in 2016 before rising by 19% to 231 in 2017.

The number of interstate and overseas students who completed ITE programs delivered in the Australian Capital Territory varied from 123 in 2006, to 59 in 2008, to 113 in 2012 and 83 in 2017. This represents an overall decrease of 33% between 2006 and 2017.

The number of students living in the Australian Capital Territory who completed ITE programs delivered outside of the Australian Capital Territory grew 129% between 2006 (n=31) and 2015 (n=71), and then fell by an overall 13% to 62 in 2017.

This suggests that while the number of students completing ITE programs delivered in the Australian Capital Territory varied from year to year with an overall decrease of 9% between 2006 (n=344) and 2017 (n=314), the number of students living in the Australian Capital Territory who completed ITE increased by an overall 19%, from 252 in 2006 to 300 in 2007, and then fell by 20% to 240 in 2016 before increasing by 22% to 293 in 2017.

Table 4-12: ACT—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	ACT students studying in ACT	221	231
	ACT students studying outside ACT	31	62
	Interstate and international students studying in ACT	123	83
Early Childhood Education	ACT students studying in ACT	17	16
	ACT students studying outside ACT	n.p.	11
	Interstate and international students studying in ACT	16	0
Primary Education	ACT students studying in ACT	115	120
	ACT students studying outside ACT	10	21
	Interstate and international students studying in ACT	42	48
Secondary Education	ACT students studying in ACT	89	62
	ACT students studying outside ACT	14	24
	Interstate and international students studying in ACT	65	23

2017 Overview	
No. students - ACT resident	293
No. students in ACT Programs	314
	>>
+/- students in ACT pipeline	-21
No. students - ACT resident	27
No. students in ACT Programs	16
	>>
+/- students in ACT pipeline	+11
No. students - ACT resident	141
No. students in ACT Programs	168
	>>
+/- students in ACT pipeline	-27
No. students - ACT resident	86
No. students in ACT Programs	85
	>>
+/- students in ACT pipeline	+1

Early childhood education programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in the Australian Capital Territory who commenced early childhood education programs delivered in the Australian Capital Territory increased by an overall 173% between 2006 (n=30) and 2010 (n=82), before falling 79% to 17 in 2017.

The number of interstate and overseas students who commenced early childhood education programs delivered in the Australian Capital Territory increased by 92% between 2006 (n=13) and 2010 (n=25), and then fell to zero by 2013, where it remained until 2017.

The number of students living in the Australian Capital Territory who commenced early childhood education programs delivered outside of the Australian Capital Territory increased by an overall 330% between 2006 (n=10) and 2017 (n=43).

This suggests that while the number of students commencing early childhood education programs in the Australian Capital Territory increased by an overall 149% between 2006 (n=43) and 2010 (n=107), before falling by 84% to 17 in 2017, the number of students living in the Australian Capital Territory who entered the early childhood education pipeline increased by an overall 150% from 40 in 2006 to 100 in 2010, before falling 40% to 60 in 2017.

Completions

The number of students living in the Australian Capital Territory who completed early childhood education programs delivered in the ACT rose by an overall 118% between 2006 (n=17) and 2014 (n=37), and then fell 57% to 16 in 2017.

The number of interstate and overseas students who completed early childhood education programs delivered in the Australian Capital Territory varied from year to year but fell from 16 in 2006 to zero in 2017.

The number of students from the Australian Capital Territory who completed early childhood education programs delivered outside of the Australian Capital Territory was below reportable levels in 2006, and the number grew to 11 in 2017.

This suggests that while the number of students completing early childhood education programs delivered in the Australian Capital Territory grew by an overall 45% between 2006 (n=33) and 2012 (n=48) and then fell 67% to 16 in 2017, the number of students living in the Australian Capital Territory who completed early childhood education programs grew by an overall 143%, from 21 in 2006 to 51 in 2014, and then fell 47% to 27 in 2017.

Primary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students from the Australian Capital Territory who commenced primary education programs in the Australian Capital Territory increased by an overall 59% from 157 in 2006 to 250 in 2017.

During this time, the number of students from interstate and overseas who commenced primary education programs in the Australian Capital Territory varied from year to year, but increased by an overall 148%, from 58 in 2006 to 144 in 2012, and then fell by an overall 22% to 113 in 2017.

The number of students from the Australian Capital Territory who commenced primary education programs outside of the Australian Capital Territory grew by an overall 491%, from 11 in 2006 to 65 in 2015, and then fell 8% to 60 in 2017.

This suggests that while the number of students commencing primary education programs delivered in the Australian Capital Territory increased by an overall 69% between 2006 and 2017 (from 215 to 363), the number of students who entered the Australian Capital Territory pipeline fluctuated from year to year but increased by an overall 85%, from 168 in 2006 to 310 in 2017.

Completions

The number of students from the Australian Capital Territory who completed primary education programs delivered in the Australian Capital Territory fell by 26%, from 115 in 2006 to 85 in 2009, before increasing by an overall 41% to 120 in 2017.

The number of students from interstate and overseas who completed primary education programs delivered in the Australian Capital Territory varied from year to year, but increased by an overall 36%, from 42 in 2006 to 57 in 2016, and then fell by 16% to 48 in 2017.

The number of students from the Australian Capital Territory who completed primary education programs delivered outside of the Australian Capital Territory grew by an overall 110%, from 10 in 2006 to 21 in 2017.

This suggests that while the number of students completing primary education programs delivered in the Australian Capital Territory increased by an overall 7% between 2006 and 2017 (from 157 to 168), the number of students from the Australian Capital Territory who completed any ITE program fluctuated from year to year, but increased by an overall 13%, from 125 in 2006 to 141 in 2017.

Secondary education programs

Commencement and completion trends 2006–2017

Commencements

The number of students from the Australian Capital Territory who commenced secondary education programs delivered in the Australian Capital Territory grew by 68%, from 130 in 2006 to 218 in 2016, then fell by 11% to 195 in 2017.

During this time, the number of students from interstate and overseas who commenced secondary education programs in the Australian Capital Territory varied from year to year, but increased by 67%, from 58 in 2006 to 97 in 2010, then decreased by 73% to 26 in 2015 before rising by 192% to 76 in 2017.

The number of students from the Australian Capital Territory who commenced secondary education programs delivered outside of the territory increased by 116%, from 25 in 2006 to 54 in 2014, and then fell by 52% to 26 in 2017.

This suggests that while the number of students commencing secondary education programs delivered in the Australian Capital Territory grew by an overall 52% between 2006 and 2016 (from 188 to 286) and then fell 5% to 271 in 2017, the number of students who entered the Australian Capital Territory pipeline increased by an overall 64%, from 155 in 2006 to 254 in 2016, before falling 13% to 221 in 2017.

Completions

The number of students from the Australian Capital Territory who completed secondary education programs delivered in the Australian Capital Territory grew by 37%, from 89 in 2006 to 122 in 2007, before falling by an overall 49% to 62 in 2017.

During this time, the number of students from interstate and overseas who completed secondary education programs delivered in the Australian Capital Territory fell by an overall 65%, from 65 in 2006 to 23 in 2017.

The number of students from the Australian Capital Territory who completed secondary education programs delivered outside of the Australian Capital Territory grew by an overall 71%, from 14 in 2006 to 24 in 2017.

This suggests that while the number of students completing secondary education programs delivered in the Australian Capital Territory increased by 10%, from 154 in 2006 to 170 in 2007 and then fell by an overall 50% to 85 in 2017, the number of students from the Australian Capital Territory who completed any secondary education programs increased by 38%, from 103 in 2006 to 142 in 2007, and then fell by an overall 39% to 86 in 2017.

Tasmania

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in Tasmania who commenced ITE programs delivered in Tasmania varied from year to year, but grew an overall 66% between 2006 (n=401) and 2010 (n=667), and then fell 51% to 326 in 2017.

The number of interstate and overseas students who commenced ITE programs delivered in Tasmania increased by 485% between 2006 (n=40) and 2013 (n=234), and then fell 74% to 60 in 2017.

The number of students living in Tasmania who commenced ITE programs delivered outside of Tasmania grew by 125% between 2006 (n=36) and 2017 (n=81).

This suggests that while the number of students commencing ITE programs delivered in Tasmania grew overall by 92% between 2006 (n=441) and 2010 (n=847), and then fell 54% to 386 in 2017, the number of students living in Tasmania who entered the ITE pipeline increased by 67%, from 437 in 2006 to a peak of 728 in 2010, and then fell by 44% to 407 in 2017.

Table 4-13: Tasmania—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	Tas. students studying in Tas.	401	326
	Tas. students studying outside Tas.	36	81
	Interstate and international students studying in Tas.	40	60

2017 Overview	
No. students - Tas resident	407
No. students in Tas Programs	386
	>>
+/- students in Tas pipeline	+21

Completions

The number of students living in Tasmania who completed ITE programs delivered in Tasmania fell by an overall 35% between 2006 (n=295) and 2012 (n=193), and then rose 23% to 237 in 2017.

The number of interstate and overseas students who completed ITE programs delivered in Tasmania varied from year to year, from 38 in 2006 to 5 in 2010, 73 in 2015, and 58 in 2017. This represents overall growth of 53% between 2006 and 2017.

The number of students living in Tasmania who completed ITE programs delivered outside of Tasmania grew by an overall 246% between 2006 (n=13) and 2017 (n=45).

This suggests that while the number of students completing ITE programs delivered in Tasmania fell by an overall 34% between 2006 (n=333) and 2012 (n=220) before rising by 34% to 295 in 2017, the number of students living in Tasmania who completed ITE programs decreased by an overall 25% from 308 in 2006 to 231 in 2012, before rising by 22% to 282 in 2017.

Table 4-14: Tasmania—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	Tas. students studying in Tas.	295	237
	Tas. students studying outside Tas.	13	45
	Interstate and international students studying in Tas.	38	58

2017 Overview	
No. students - Tas resident	282
No. students in Tas Programs	295
	>>
+/- students in Tas pipeline	-13

Detailed field of education trend analysis

The majority of ITE programs delivered in Tasmania were classified as either early childhood education or secondary education programs between 2006 and 2009, and as mixed programs and primary programs from 2010 onwards.

Trends observed in the different detailed fields of education categories from 2006–2017 are affected by the data classification rather than changes in commencements and completions, therefore no trend analysis by detailed field of education is provided for Tasmania.

Northern Territory

All ITE programs

Commencement and completion trends 2006–2017

Commencements

The number of students living in the Northern Territory who commenced ITE programs delivered in the Northern Territory grew by 103% between 2006 (n=144) and 2012 (n=292), and then fell 44% to 163 in 2017.

The number of interstate and overseas students who commenced ITE programs delivered in the Northern Territory grew 649% between 2006 (n=112) and 2014 (n=839), before falling by 64% to 298 in 2017.

The number of students living in the Northern Territory who commenced ITE programs delivered outside of the Northern Territory grew by an overall 53% between 2006 (n=36) and 2017 (n=55).

This suggests that while the number of students commencing ITE programs delivered in the Northern Territory grew by an overall 310% from 256 in 2006 to 1,049 in 2014, before falling 56% to 461 in 2017, the number of students living in the Northern Territory who entered the ITE pipeline increased by an overall 21% between 2006 (n=180) and 2017 (n=218).

Table 4-15: Northern Territory—ITE commencements by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	NT students studying in NT	144	163
	NT students studying outside NT	36	55
	Interstate and international students studying in NT	112	298

2017 Overview	
No. students - NT resident	218
No. students in NT Programs	461
	>>
+/- students in NT pipeline	-243

Completions

The number of students living in the Northern Territory who completed ITE programs delivered in the Northern Territory grew 77% between 2006 (n=75) and 2010 (n=133), and then fell 61% to 52 in 2017.

The number of interstate and overseas students who completed ITE programs delivered in the Northern Territory increased by 620% between 2006 (n=59) and 2014 (n=425), then fell 70% to 128 in 2017.

The number of students living in the Northern Territory who completed ITE programs delivered outside of the Northern Territory grew by an overall 61% between 2006 (n=18) and 2017 (n=29), although the numbers fluctuated from year to year during this period.

This suggests that while the number of students completing ITE programs delivered in the Northern Territory increased by 305% between 2006 (n=134) and 2014 (n=543) before falling 67% to 180 in 2017, the number of students living in the Northern Territory who completed ITE programs increased by an overall 63%, from 93 in 2006 to 152 in 2010, before falling by 47% to 81 in 2017.

Table 4-16: Northern Territory—ITE completions by detailed field of education for 2006 and 2017

Program Type	Number of Students	2006	2017
All ITE	NT students studying in NT	75	52
	NT students studying outside NT	18	29
	Interstate and international students studying in NT	59	128

2017 Overview	
No. students - NT resident	81
No. students in NT Programs	180
	>>
+/- students in NT pipeline	-99

Detailed field of education trend analysis

The majority of ITE programs delivered in the Northern Territory were classified as ‘education other’ between 2006 and 2014.

Trends observed in the different detailed fields of education categories from 2006–2017 are affected by the data classification rather than changes in commencements and completions, therefore no trend analysis by detailed field of education is provided for the Northern Territory.

4.4 Mode of attendance segmented by home state/territory

This section provides an analysis of the proportion of ITE commencements through external or multi-modal attendance segmented by detailed field of education. By 2017, most external studies were undertaken online, although this was not necessarily the case in the previous decades.

This information is provided for all states and territories except for Tasmania and the Northern Territory, where only overall ITE mode of attendance is provided.

All ITE

In 2017

Of all ITE commencing students, 40% (n=12,676) attended their ITE program via external or multi-modal means. This included 49% of students commencing early childhood education programs, 39% of students commencing primary education programs, and 35% of students commencing secondary education programs.

Trends 2006–2017

The proportion of ITE commencing students attending via external or multi-modal means has grown from 23% (n=5,826) in 2006 to 41% (n=12,197) in 2016 and 40% (n=12,676) in 2017. This is largely due to increases in students commencing studies externally. See **Table 4-17** below for more detail.

The growth in the proportion of students attending via external or multi-modal means has been more pronounced in undergraduate students due to it being far less common in 2006 for undergraduate studies; 19% (n=3,591) of students studied externally or via multi-modal access in 2006 compared to 40% (n=8,775) in 2017. This compares with 37% (n=2,235) of postgraduate students attending via external or multi-modal means in 2006, rising to 40% (n=3,901) in 2017.

A higher proportion of students commencing early childhood education programs attended via external or multi-modal means compared with those commencing primary and secondary education programs between 2006 and 2017.

Table 4-17: Proportion of students studying via external and multi-modal means, 2006–2017

External Mode	2006	2017	Proportional change
Early Childhood education	26%	41% (following peak of 42% in 2015)	15%
Primary education	8%	28% (following peak of 29% in 2015)	20%
Secondary education	11%	15%	3%
Multi-modal	**2006**	**2017**	**Proportional change**
Early Childhood education	7%	8%	1%
Primary education	8%	10%	2%
Secondary education	10%	20%	10%

Growth in external and multi-modal study has occurred since 2014 across all ITE, but was most evident in undergraduate, early childhood education and primary education program students:

- Undergraduate students grew from 29% (n=5,948) in 2014 to 39% (n=8,394) in 2015.
- Early childhood education students grew from 42% (n=2,051) in 2014 to 51% (n=2,535) in 2015.
- Primary education students grew from 28% (n=3,135) in 2014 to 41% (n=5,007) in 2015.

New South Wales

In 2017

Of all ITE students living in New South Wales, 39% (n=3,447) commenced their ITE program via external or multi-modal attendance. This included 60% (n=679) of students commencing early childhood education programs, 35% (n=1,416) of students commencing primary education programs and 33% (n=1,114) of students commencing secondary education programs.

Trends 2006 to 2017

Overall, the proportion of New South Wales students commencing ITE via external and multi-modal attendance increased from 27% (n=2,214) in 2006 to a peak of 42% (n=3,633) in 2016 and then fell slightly to 39% in 2017. This was predominantly due to increases in studying externally.

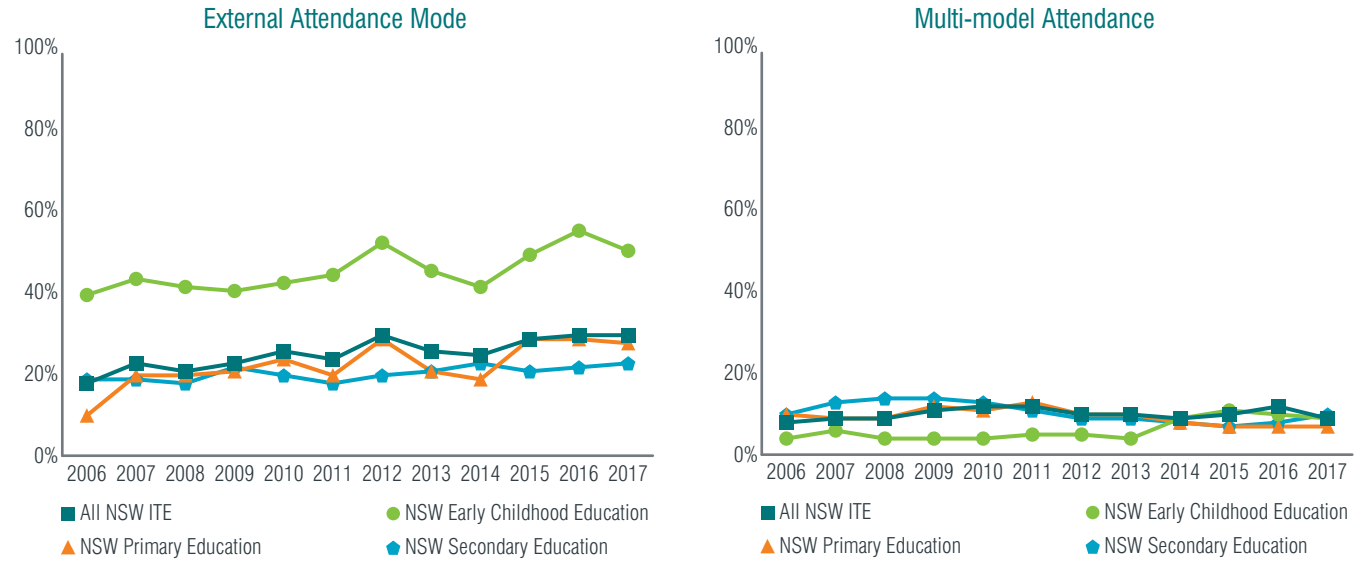
- The percentage of students studying externally moved from 18% in 2006 to 30% in 2017.
- The percentage of students studying via multi-modal means moved from 8% in 2006 to 9% in 2017, but fluctuated by 9% and 12% in the intervening years.

New South Wales students commencing early childhood education programs showed an increasing preference towards external and multi-modal attendance, which grew from 44% in 2006 (n=486) to 66% in 2016 (n=766), and then fell to 60% (n=679) in 2017.

The proportion of New South Wales students commencing primary education programs via external or multi-modal attendance grew from 19% (n=523) in 2006 to 39% (n=1,772) in 2012, and then fell to 35% (n=1,416) in 2017.

The proportion of New South Wales students commencing secondary education programs via external or multi-modal attendance grew from 29% (n=794) in 2006 to 36% (n=1,171) in 2009, and then fell to 33% (n=1,114) in 2017.

Figure 4-1: Proportion of New South Wales students commencing ITE programs via external and multi-modal attendance, 2006–2017



Victoria

In 2017

Of all ITE students living in Victoria, 40% (n=2,953) commenced their ITE program via external or multi-modal attendance. This included 53% (n=573) of students commencing early childhood education programs, 46% (n=1,618) of students commencing primary education programs, and 32% (n=700) of students commencing secondary education programs.

Trends 2006 to 2017

Overall, the proportion of Victorian students commencing ITE via external and multi-modal attendance increased from 13% (n=545) in 2006 to a peak of 41% (n=3,268) in 2015, and then fell slightly to 40% (n=2,953) in 2017.

- The percentage of students studying externally moved from 9% in 2006 to 27% in 2017.
- The percentage of students studying via multi-modal means moved from 4% in 2006 to 13% in 2017, with a peak at 17% in 2016.

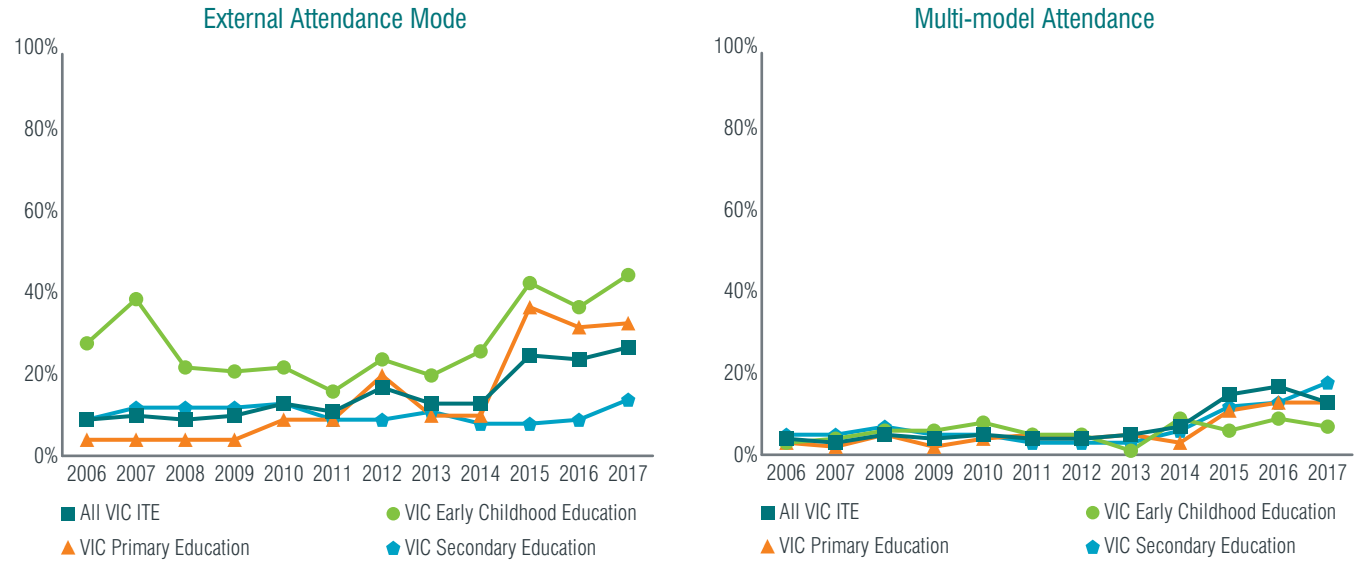
Victorian students commencing early childhood education programs showed a consistently higher preference towards external and multi-modal attendance, which grew from 32% (n=84) in 2006 to 44% in 2007 (n=140), and then fell to 22% (n=175) in 2011, before rising to 53% (n=573) in 2017.

The proportion of Victorian students commencing primary education programs via external or multi-modal attendance grew from 7% (n=164) in 2006 to 49% (n=1,580) in 2015, and then fell slightly to 46% (n=1,618) in 2017.

The proportion of commencing primary education program students choosing external or multi-modal attendance increased very sharply between 2014 and 2015, when it rose from 14% to 49%.

The proportion of Victorian students commencing secondary education programs via external or multi-modal attendance grew from 15% (n=242) in 2006 to 32% (n=700) in 2017. The proportion of commencing secondary education program students choosing external or multi-modal attendance rose sharply in 2015 (from 13–20%) and then again in 2017 (from 22–32%).

Figure 4-2: Proportion of Victorian students commencing ITE programs via external and multi-modal attendance, 2006–2017



Queensland

In 2017

Of all ITE students living in Queensland, 57% (n=3,632) commenced their ITE program via external or multi-modal attendance. This included 71% (n=392) of students commencing early childhood education programs, 53% (n=865) of students commencing primary education and 51% (n=1,569) of students commencing secondary education programs.

Trends 2006 to 2017

Overall, the proportion of Queensland students commencing ITE via external and multi-modal attendance increased from 18% (n=810) in 2006 to 57% (n=3,632) in 2017. The biggest increase occurred in 2014, when the proportion of commencing students choosing external or multi-modal attendance doubled (24–48%). This pattern is observed across all detailed fields of education.

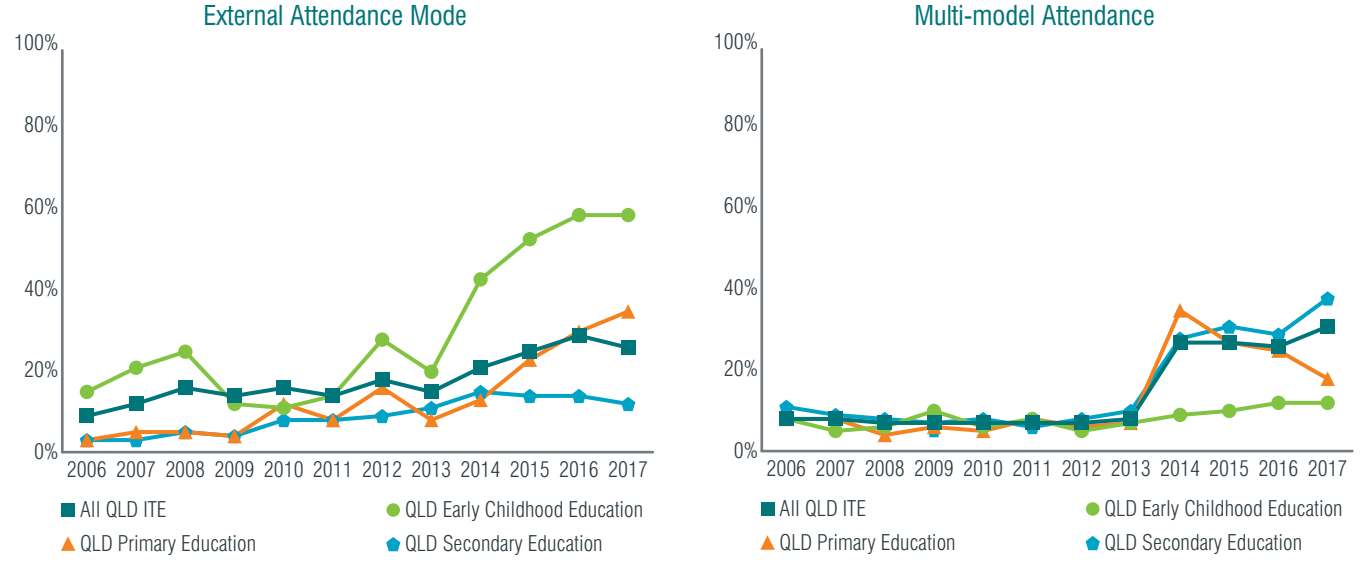
- The percentage of students studying externally rose from 9% in 2006 to 26% in 2017.
- The percentage of students studying via multi-modal means moved from 8% in 2006 to 31% in 2017.

Queensland students commencing early childhood education programs showed a consistently higher preference towards external and multi-modal attendance, which grew from 23% (n=120) in 2006 to 31% in 2008 (n=152), and then fell to 17% (n=87) in 2010, before rising to 71% (n=392) in 2017.

The proportion of Queensland students commencing primary education programs via external or multi-modal attendance grew from 11% (n=195) in 2006 to 22% (n=369) in 2012, and then fell slightly before rising to 53% (n=865) in 2017.

The proportion of Queensland students commencing secondary education programs via external or multi-modal attendance grew from 14% (n=238) in 2006 to 51% (n=1,569) in 2017.

Figure 4-3: Proportion of Queensland students commencing ITE programs via external and multi-modal attendance, 2006–2017



Western Australia

In 2017

Of all students living in Western Australia, 23% (n=905) commenced their ITE program via external or multi-modal attendance. This included 36% (n=204) of students commencing early childhood education programs, 20% (n=354) of students commencing primary education programs, and 19% (n=266) of students commencing secondary education programs.

Trends 2006 to 2017

Overall, the proportion of Western Australian students commencing ITE via external and multimodal attendance increased from 15% (n=357) in 2006 to 21% (n=605) in 2009, and remained relatively flat before a slight rise to 23% (n=905) in 2017.

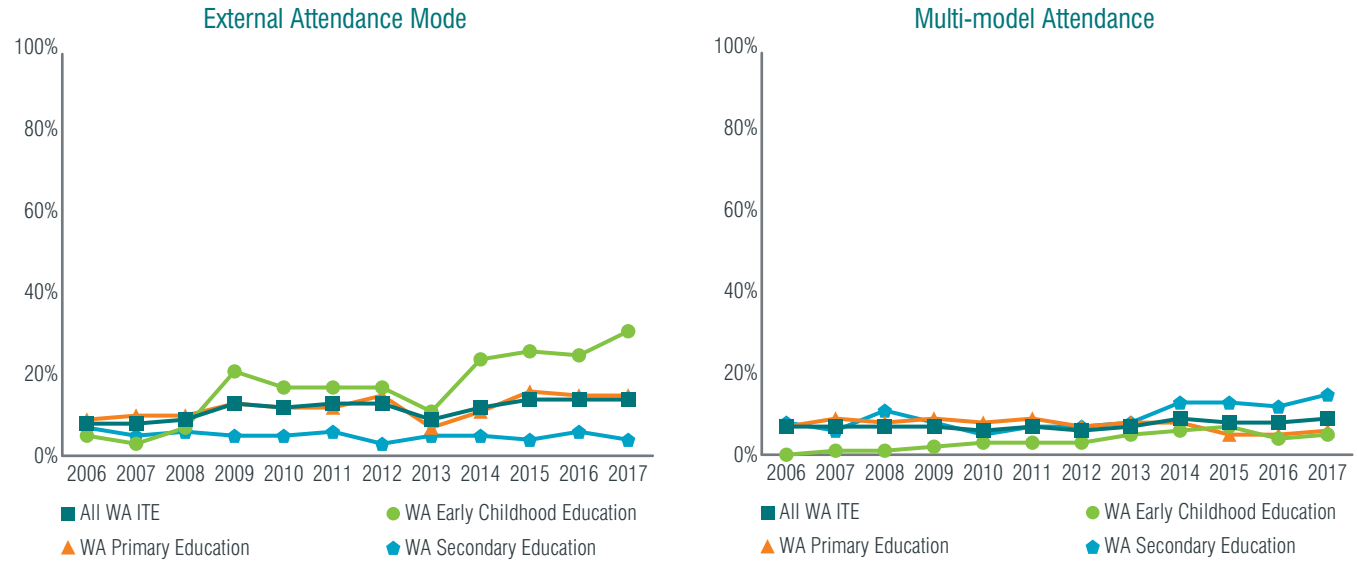
- The percentage of students studying externally rose from 8% in 2006 to 14% in 2017.
- The percentage of students studying via multi-modal means moved from 7% in 2006 to 9% in 2017.

The proportion of Western Australian students commencing early childhood education programs via external and multi-modal attendance grew from 6% (n=13) in 2006 to 36% (n=204) in 2017.

The proportion of Western Australian students commencing primary education programs via external or multi-modal attendance ranged from 16% (n=225) in 2006 to 22% (n=283) in 2009, and then to 20% (n=354) in 2017.

The proportion of Western Australian students commencing secondary education programs via external or multi-modal attendance fell from 14% (n=100) in 2006 to 10% (n=93) in 2010, and then rose to 19% (n=266) in 2017.

Figure 4-4: Proportion of West Australian students commencing ITE programs via external or multi-modal attendance, 2006–2017



South Australia

In 2017

Of all students living in South Australia, 36% (n=803) commenced their ITE program via external or multi-modal attendance. This included 46% (n=183) of students commencing early childhood education programs, 37% (n=300) of students commencing primary education programs, and 29% (n=241) of students commencing secondary education programs.

Trends 2006 to 2017

Overall, the proportion of South Australian students commencing ITE via external and multi-modal attendance fell from 32% (n=560) in 2006 to 21% (n=393) in 2009, and rose to 36% (n=803) in 2017.

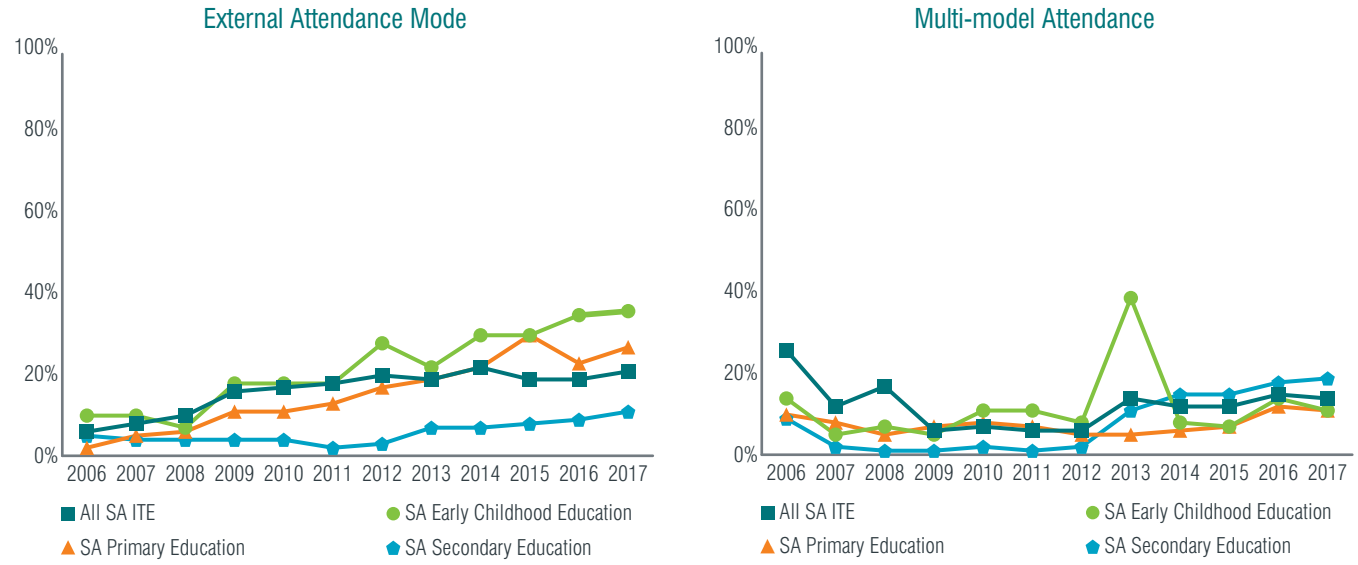
- The percentage of students studying externally rose from 6% in 2006 to 21% 2017.
- The percentage of students studying via multi-modal means fell from 26% in 2006 to 6% in 2009, and then rose to 14% in 2017.

The proportion of South Australian students commencing early childhood education programs via external and multi-modal attendance grew from 24% (n=56) in 2006 to 49% (n=176) in 2016, and then fell slightly to 46% (n=183) in 2017.

The proportion of South Australian students commencing primary education programs via external or multi-modal attendance ranged from 12% (n=70) in 2006 to 37% (n=300) in 2017.

The proportion of South Australian students commencing secondary education programs via external or multi-modal attendance fell from 14% (n=52) in 2006 to 4% (n=27) in 2011, and then rose to 29% (n=241) in 2017.

Figure 4-5: Proportion of South Australian students commencing ITE programs via external or multi-modal attendance, 2006–2017



Australian Capital Territory

In 2017

Of all students from the Australian Capital Territory, 41% (n=243) commenced their ITE program via external or multi-modal attendance. This included 75% (n=45) of students commencing early childhood education programs, 22% (n=69) of students commencing primary education programs, and 56% (n=123) of students commencing secondary education programs.

Trends 2006 to 2017

Overall, the proportion of Australian Capital Territory students commencing ITE via external and multi-modal attendance decreased from 76% (n=301) in 2006 to 58% (n=325) in 2010, and then rose to 78% (n=462) in 2013 before falling to 41% (n=243) in 2017.

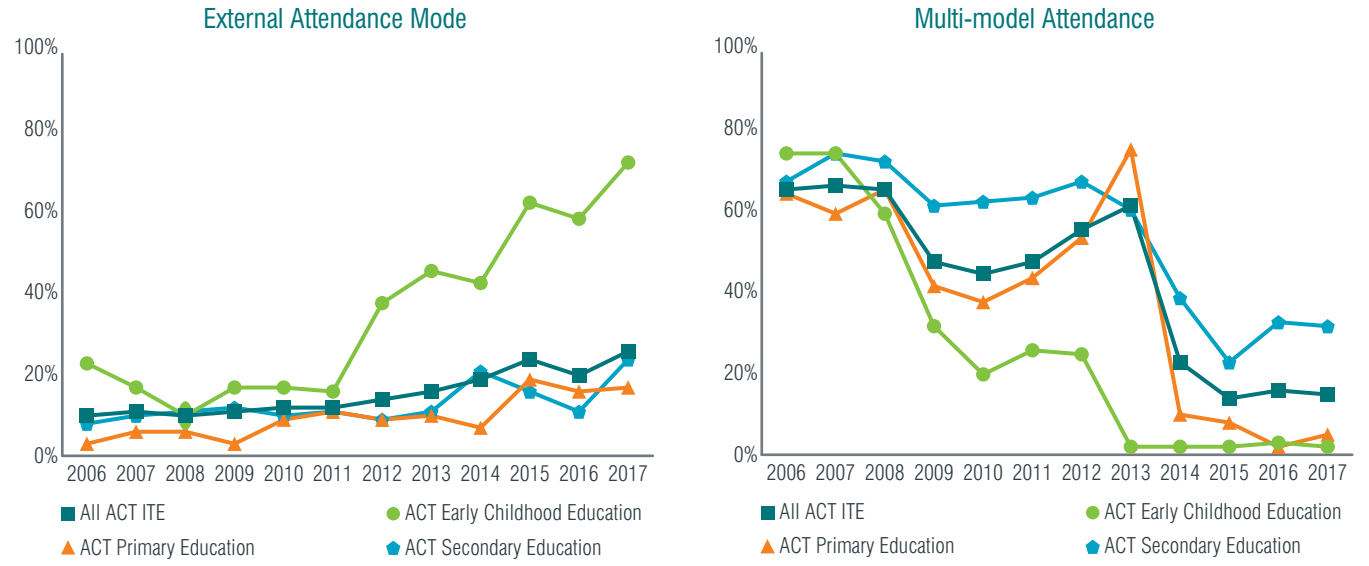
- The percentage of students studying externally rose from 10% in 2006 to 26% 2017.
- The percentage of students studying via multi-modal means fell from 66% in 2006 to 15% in 2017.

The proportion of Australian Capital Territory students commencing early childhood education programs via external and multi-modal attendance fell from 98% (n=39) in 2006 to 37% (n=37) in 2010, then rose to 63% (n=61) in 2012 and fell to 45% (n=26) in 2014, before rising to 75% (n=45) in 2017.

The proportion of Australian Capital Territory students commencing primary education programs via external or multi-modal attendance fell from 68% (n=115) in 2006 to 45% (n=86) in 2009, then rose to 86% (n=240) in 2013 before falling to 22% (n=69) in 2017.

The proportion of Australian Capital Territory students commencing secondary education programs via external or multi-modal attendance rose from 76% (n=118) in 2006 to 85% (n=156) in 2007, then fell to 40% (n=64) in 2015 before rising to 56% (n=123) in 2017.

Figure 4-6: Proportion of Australian Capital Territory students commencing ITE programs via external or multi-modal attendance, 2006–2017



Tasmania

In 2017

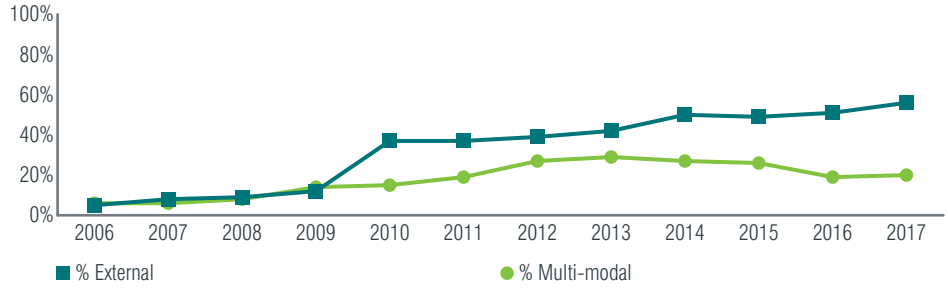
Of all ITE students living in Tasmania, 76% (n=310) commenced their ITE program via external or multi-modal attendance.

Trends 2006 to 2017

Overall, the proportion of Tasmanian students commencing ITE via external and multi-modal attendance increased from 11% (n=46) in 2006 to 76% (n=310) in 2017.

- The percentage of students studying externally rose from 5% in 2006 to 56% in 2017.
- The percentage of students studying via multi-modal means rose from 6% in 2006 to 20% in 2017, with a peak of 29% in 2013.

Figure 4-7: Proportion of Tasmanian students commencing ITE programs via external or multi-modal attendance, 2006–2017



Northern Territory

In 2017

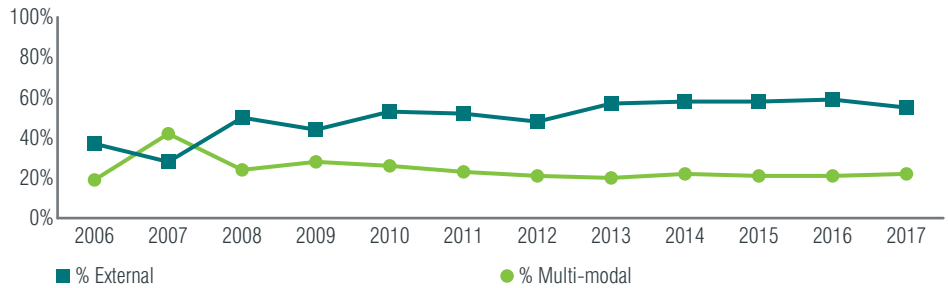
Of all ITE students living in the Northern Territory, 76% (n=166) commenced their ITE program via external or multi-modal attendance.

Trends 2006 to 2017

Overall, the proportion of Northern Territory students commencing ITE via external and multi-modal attendance increased from 57% (n=102) in 2006 to 79% (n=199) in 2010, then decreased to 69% (n=232) in 2012 and rose to a peak of 81% (n=171) in 2016, before falling slightly to 76% (n=166) in 2017.

- The percentage of students studying externally rose from 37% in 2006 to 55% in 2017.
- The percentage of students studying via multi-modal means fell from 19% in 2006 to 22% in 2017, with a high of 42% in 2007—otherwise, the proportion remained steady at just above 20%.

Figure 4-8: Proportion of Northern Territory students commencing ITE programs via external or multi-modal attendance, 2006–2017



5 Who has completed ITE?

5.1 Introduction

'Completions' refer to the number of initial teacher education (ITE) students who graduate in any given year. Completion rates analyse the changes in the numbers of students completing as a proportion of those commencing ITE programs.

This chapter provides an analysis of trends in the number of students completing ITE (completions). It also provides a longitudinal cohort analysis of the completion rates of all undergraduate and postgraduate students who commenced ITE programs between 2006 and 2017. It provides:

- the characteristics of students who completed an ITE program in 2017 (completions)
- trends in the number of completions in each year
- trends in completion rates of all undergraduate and postgraduate students by detailed field of education
- first-to-second-year retention rates of undergraduate students by detailed field of education
- early career graduate outcomes.

Unit level of analysis – completion rates

Analysis provided in the Australian Institute for Teaching and School Leadership's *ITE Data Report 2019* relied on the selection of six-year cohorts and examination of their completion rates—that is, the analysis assumes that almost all students will complete their program within six years, then takes the number of commencements for 2006 and calculates how many have completed at the end of the six-year period.

The analysis provided in this chapter tracks the completion trajectory of each cohort of students grouped by their commencement year. That is, for all students who commenced in 2006, how many of them completed the program they commenced in the same year (i.e. their first year), the next year (i.e. their second year) and so on.

The results of this analysis allow detailed analysis of segment differences in completion rates.

5.2 Chapter summary

Completions by year

The total number of completions grew by an average of less than 1% per year between 2006 and 2017. Of all completions in 2017, the greatest proportion of students completed a secondary education program (40%), followed by primary (36%) and early childhood (13%) education programs; 10% completed a mixed program and 1% completed an 'education other' ITE program.

Completion rates for cohorts

Completion rates assess the number of completions as a proportion of commencements and are useful for predicting the number of students who could be expected to complete ITE at the program level or by detailed field of education, based on trends in completions over time.

Completion rates have declined across all detailed fields of education during the last 12 years.

Undergraduate programs

For primary education programs, completion rates within six years of commencement dropped markedly from 62% (2006 cohort) to 48% (2012 cohort). Early childhood education completion rates fell from 52% (2006 cohort) to 49% (2012 cohort). Secondary education program completion rates fell from 51% (2006 cohort) to 47% (2012 cohort).

Postgraduate programs

Completion rates for primary and secondary education programs within four years of commencing have shown a downward trend across all fields of education. However, completion rates in early childhood programs reversed this trend from 2010 to 2014. Primary education program completion rates ranged between 86% (2006 cohort) and 76% (2014 cohort), and secondary education program completion rates ranged between 84% (2006 cohort) and 77% (2014 cohort). Early childhood education program completion rates ranged between 74% (2006 cohort) and 71% (2014 cohort), including a decrease to 55% for the 2010 cohort.

First- to second-year retention rates

Retention rates refer to the proportion of commencing students who proceed to the second year. Overall, there has been a downward trend in first- to-second year retention rates, which fell from 78% in 2006 to 72% in 2016.

Across all primary, secondary and early childhood fields of education, retention rates were higher for those studying full-time and via multi-modal attendance delivery.

Female and international students showed the highest retention rates in both primary and secondary education programs.

Graduate outcomes

In 2017, more than two-thirds of graduates from both undergraduate (73%) and postgraduate (67%) ITE programs were employed in a primary, secondary, combined primary and secondary school, or in early childhood education, within four to six months of graduation.

5.3 ITE completions and student populations

The number of students completing ITE grew by 5% overall, at an average growth of 0.4% per year, from 16,545 in 2006 to 17,338 in 2017 (see **Table 5.1**). The number of students completing ITE by detailed field of education for each year between 2006 and 2017 is provided in **Appendix 1**.

Table 5-1: Growth in the number of completing ITE students and corresponding school student population

Number of ITE students completing	2006	2017	Annual Growth
All ITE	16,545	17,338	0.4%
Early Childhood Education	1,562	2,206	2.9%
Primary Education	6,783	6,328	-1.0%
Secondary Education	6,233	6,947	0.9%

Student Population	2007	2018	Annual Growth
3-18 years	4,365,474	4,929,915	1.0%
3-4 years	519,250	636,614	1.7%
5-12 years	2,151,588	2,540,172	1.4%
13-18 years	1,694,636	1,753,129	0.3%

The greatest growth in number of completions was seen for early childhood education programs, which grew by 41% overall, at an average annual growth of 2.9% per year, from 1,562 in 2006 to 2,206 in 2017. The number of completions in secondary education programs also grew by 11% overall from 6,233 in 2006 to 6,947 in 2017, at an average annual growth of 0.9% per year.

The number of completions in primary education programs fell by 7% overall, from 6,783 in 2006 to 6,328 in 2017, after rising to a peak of 6,855 in 2013, with an average decrease of 0.6% per year.

Students who completed an ITE program between 2006 and 2017 will have been eligible to commence teaching from 2007 to 2018. In order to understand the growth in demand for teachers over this time, it is appropriate to analyse the growth in the school student population between 2007 and 2018.

Nationally,[32] the number of children/teenagers aged 3–18 years grew 14% between 2007 (n=4,365,474) and 2018 (n=4,929,915), at an average annual growth of 1% per year. The overall annual growth in the number of ITE completions of 0.4% is less than the overall annual growth of 1% in student population across all age groups over the period 2007–2018.

32 Australian Bureau of Statistics 2019, *Australian Demographic Statistics, Jun 2019,* ABS, viewed 20 January 2020, <https://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/3101.0Jun%202019?OpenDocument#Data>.

Over this time, the Australian population of:

- children aged 3 to 4 years grew 24% (by an average 1.7% per year), from 519,250 in 2006 to 636,614 in 2018
- children aged 5 to 12 years grew 18% (by an average 1.4% per year), from 2,151,588 in 2006 to 2,540,172 in 2018
- teenagers aged 13 to 18 years grew 5% (by an average 0.3% per year), from 1,694,636 in 2006 to 1,753,129 in 2018.

This suggests that the number of students completing early childhood education programs was growing faster than the population of 3- to 4-year-old children between 2007 and 2018.[33]

On the other hand, the number of students completing primary education programs fell compared with the growing population of primary-aged children (5- to 12-year-olds) during this time.

The number of students completing secondary education programs grew at a slightly higher rate than the growth in the population of students aged 13 to 18 years.

Further analysis of this data will be undertaken as part of the *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2* to determine if growth in the number of completions is enough to match the growth in both the learner/student population and changes in the teacher workforce population due to attrition, retirement and other factors affecting teacher movement.

33 This trend may reflect the impact of changes to policy regarding early childhood qualifications and the overall demand for early childhood qualified teachers, as highlighted in Chapter 3.

5.4 Completion rates by detailed field of education

This section shows the cumulative completion rates for all undergraduate and postgraduate ITE students, segmented by detailed field of education, between 2006 and 2017 (**Table 5-2** to **Table 5-9**).

Cumulative completion rate refers to the total number of students who have completed a program each year after their year of commencement, as a proportion of the total number of students who commenced in ITE in that year.

Each table provides the number of students who commenced in a given year, and the cumulative proportion of the commencing students who completed their studies after the first year, second year, third year and each year thereafter.

Undergraduate programs

All ITE programs

The length of full-time undergraduate ITE programs is four years. Overall, completion of undergraduate ITE programs is usually achieved within six years. Thereafter, completion rates rise by only 1–2 percentage points.

Analysis of the completion rates for each individual revealed that the six-year completion rate for ITE students is comparable to the similar aggregate analysis provided in the ITE Data Report[34] for the 2010 to 2012 commencement cohorts.

Undergraduate completion rates in ITE are decreasing. Of the students who commenced an ITE program in 2006, 57% had completed their studies after six years. For the cohort commencing in 2012, this decreased by ten percentage points to 47%.

Extrapolating these trends to the students who commenced in 2017, assuming the completion rate does not drop further, of the 22,009 undergraduate commencements, some 10,300 will be available to teach by 2023.

Detailed field of education

Students who commenced a primary education program between 2006–2009 had higher six-year completion rates than those completing early childhood and secondary education programs.

From 2006–2009, 62% (2006) to 60% (2009) of students in undergraduate primary education programs had completed their studies within six years of commencement. This is slightly higher than undergraduate students in early childhood education programs (50–54% of students) and secondary education programs (46–51% of students).

After 2010, however, six-year completion rates across the fields of education narrowed to around 48% for all undergraduate fields of education. By the 2012 commencement cohort, 48% had completed primary education programs, 47% had completed secondary education programs and 49% had completed early childhood programs.

Six-year completion rates for undergraduate primary education programs showed the largest decline between 2009 and 2012, with a decrease of 12 percentage points, from 60% for the students commencing in 2009, to 48% for the students commencing in 2012.

34 Australian Institute for Teaching and School Leadership 2019, ITE Data Report 2019, AITSL, viewed 20 January 2020, <https://www.aitsl.edu.au/docs/default-source/research-evidence/ite-data-report/2019/aitsl-ite-data-report-2019.pdf>.

Postgraduate programs

All ITE programs

The length of full-time postgraduate ITE programs is two years. Overall, completion of postgraduate ITE programs is usually achieved within four years, and the completion rate is much higher than undergraduate program completion rates. For the 2012 commencing cohort:

- 75% of postgraduate students had completed within four years and 77% had completed within six years
- 36% of the commencing cohort for undergraduate programs had completed after four years and 47% had completed after six years.

Postgraduate completion rates are decreasing, but not as markedly as for undergraduate programs. After four years, of all ITE students commencing in 2006, 82% had completed their program. In eight years, this decreased by six percentage points to 76% for the 2014 commencement cohort. After six years, of all ITE students who commenced postgraduate programs in 2006, 82% had completed. This decreased by five percentage points to 77% in 2012.

Extrapolating these trends to the students who commenced in 2017— assuming the completion rate does not drop further—of the 9,679 postgraduate commencements, some 7,350 will be available to teach by 2021.

This analysis also suggests that postgraduate completions will comprise a larger proportion of total completions over time. For example, postgraduates comprised 32% of the 2006 commencing cohort who had completed by 2011 (within six years of commencing). This proportion grew to 39% for the 2012 cohort who had completed by 2017. If this trend is applied to the 2023 completion cohort, postgraduates will comprise about 42% of all students who are expected to complete from this cohort.

Detailed field of education

For students commencing between 2006 and 2014, across all years, a higher proportion of postgraduate primary education program students (86–76%) and secondary education program students (84–77%) had completed their studies within four years of commencement, compared to early childhood education program students (74–71%), which included a fall to 55% for the 2010 commencing early childhood cohort.[35]

However, since the 2006 commencing cohort, postgraduate completion rates have decreased at a far greater rate in primary education and secondary education programs, with a 10-percentage point drop in primary education program completions, and a seven-percentage point drop in secondary education program completions.

35 The drop is attributed to the large drop-out rate for a Masters program which stopped running after 2010.

Table 5-2: All undergraduate ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate										
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	≥9 Years
2006	18,742	2%	12%	19%	48%	55%	57%	58%	58%	59%
2007	19,397	1%	8%	14%	45%	52%	54%	55%	56%	56%
2008	18,011	1%	8%	14%	45%	53%	55%	56%	56%	57%
2009	18,440	1%	6%	10%	41%	50%	53%	54%	55%	55%
2010	19,971	1%	5%	10%	39%	48%	51%	52%	52%	
2011	19,561	1%	5%	9%	40%	48%	51%	52%		
2012	21,899	0%	3%	8%	36%	45%	47%			
2013	19,929	1%	4%	8%	38%	46%				
2014	20,468	1%	4%	8%	34%					
2015	21,280	0%	2%	6%						
2016	20,633	0%	2%							
2017	22,009	0%								

Table 5-3: Undergraduate early childhood education ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate										
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	≥9 Years
2006	2,428	1%	9%	22%	44%	50%	52%	53%	54%	54%
2007	2,905	0%	9%	21%	42%	48%	50%	51%	52%	52%
2008	2,610	2%	11%	23%	45%	52%	54%	55%	56%	56%
2009	2,950	1%	8%	16%	40%	49%	52%	53%	54%	54%
2010	3,676	1%	10%	19%	41%	49%	53%	54%	55%	
2011	3,594	1%	9%	17%	43%	51%	53%	54%		
2012	4,449	0%	6%	16%	39%	46%	49%			
2013	3,735	1%	7%	15%	39%	47%				
2014	3,965	1%	6%	14%	34%					
2015	4,390	1%	4%	9%						
2016	3,750	0%	2%							
2017	3,855	1%								

Table 5-4: Undergraduate primary education ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate										
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	≥9 Years
2006	8,379	3%	12%	19%	53%	60%	62%	62%	63%	63%
2007	8,323	1%	8%	13%	50%	57%	59%	60%	61%	61%
2008	7,442	1%	6%	12%	49%	57%	59%	60%	61%	61%
2009	7,446	1%	6%	10%	48%	57%	60%	61%	61%	61%
2010	8,340	0%	4%	8%	42%	51%	53%	54%	55%	
2011	7,772	1%	4%	8%	43%	52%	54%	56%		
2012	9,098	1%	3%	7%	37%	45%	48%			
2013	7,887	0%	3%	6%	39%	48%				
2014	8,119	0%	4%	7%	36%					
2015	8,916	0%	2%	5%						
2016	8,498	0%	1%							
2017	9,510	0%								

Table 5-5: Undergraduate secondary education ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate										
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	≥9 Years
2006	4,873	2%	11%	15%	40%	49%	51%	52%	53%	53%
2007	4,855	2%	6%	9%	36%	44%	46%	47%	48%	48%
2008	4,923	1%	8%	12%	40%	49%	51%	52%	52%	52%
2009	4,970	1%	5%	8%	36%	46%	49%	50%	51%	51%
2010	5,329	2%	5%	8%	35%	45%	48%	49%	50%	
2011	5,960	1%	3%	6%	33%	43%	46%	47%		
2012	6,120	0%	2%	5%	34%	44%	47%			
2013	6,286	2%	4%	7%	34%	44%				
2014	6,623	1%	3%	7%	32%					
2015	6,123	0%	1%	4%						
2016	6,177	0%	1%							
2017	6,714	0%								

Table 5-6: All postgraduate ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate										
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	8 Years	≥9 Years
2006	6,255	59%	76%	80%	82%	82%	82%	82%	82%	82%
2007	6,643	54%	73%	78%	79%	80%	80%	80%	80%	81%
2008	6,738	48%	71%	75%	76%	77%	77%	77%	77%	77%
2009	7,884	41%	69%	76%	78%	79%	79%	79%	79%	79%
2010	8,702	38%	66%	73%	76%	77%	78%	78%	78%	
2011	8,691	35%	66%	74%	76%	77%	78%	78%		
2012	8,618	35%	66%	73%	75%	76%	77%			
2013	9,760	34%	66%	73%	76%	76%				
2014	10,162	30%	66%	73%	76%					
2015	9,693	19%	55%	65%						
2016	9,459	17%	50%							
2017	9,679	19%								

Table 5-7: Postgraduate early childhood education ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate						
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	≥5 Years
2006	171	26%	64%	74%	74%	76%
2007	177	28%	60%	69%	72%	76%
2008	222	12%	65%	73%	75%	75%
2009	231	17%	57%	66%	70%	71%
2010	266	21%	39%	51%	55%	58%
2011	319	24%	63%	71%	73%	74%
2012	340	15%	61%	69%	71%	73%
2013	361	25%	64%	70%	74%	76%
2014	544	14%	61%	69%	71%	
2015	472	7%	43%	56%		
2016	567	6%	44%			
2017	583	8%				

Table 5-8: Postgraduate primary education ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate							
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	≥6 Years
2006	1,390	61%	81%	84%	86%	87%	87%
2007	1,531	52%	71%	79%	82%	82%	83%
2008	2,052	45%	72%	77%	78%	78%	79%
2009	2,337	38%	72%	80%	82%	83%	83%
2010	2,517	33%	69%	75%	78%	79%	79%
2011	2,493	31%	72%	78%	80%	81%	81%
2012	2,425	32%	68%	76%	78%	78%	78%
2013	2,988	31%	68%	75%	77%	77%	
2014	2,841	26%	68%	75%	76%		
2015	2,968	8%	47%	57%			
2016	2,882	10%	44%				
2017	3,143	9%					

Table 5-9: Postgraduate secondary education ITE cumulative completion rates for each commencing cohort year

Overall Completion Rate									
Commencing Year	Total Commencements	1 Year	2 Years	3 Years	4 Years	5 Years	6 Years	7 Years	≥8 Years
2006	3,702	62%	78%	82%	84%	84%	84%	84%	84%
2007	3,889	59%	77%	81%	82%	82%	82%	82%	82%
2008	3,297	54%	74%	77%	78%	79%	79%	80%	80%
2009	4,144	46%	71%	76%	78%	79%	80%	80%	80%
2010	4,436	47%	71%	77%	79%	80%	80%	81%	81%
2011	4,335	44%	69%	76%	78%	79%	79%	80%	
2012	4,333	42%	69%	75%	77%	78%	78%		
2013	4,587	40%	70%	76%	78%	79%			
2014	5,256	35%	67%	75%	77%				
2015	5,144	27%	60%	70%					
2016	4,946	22%	53%						
2017	5,201	29%							

5.5 Completion rates by demographic segment

This section shows the completion rates within six years of commencing for all undergraduate ITE students, and within four years of commencing for postgraduate ITE students, segmented by demographic elements including:

- gender
- identification as Aboriginal and Torres Strait Islander
- socio-economic status based on residential postcode
- location of residential postcode (metropolitan or regional, rural or remote)
- disability identified
- citizenship indicator (domestic or international student).

The **Tables 5-10** to **5-17** include the number of students commencing in each year, by each demographic segment. They also include the completion rates for each of these commencing cohorts between 2006 and 2012 for undergraduate students, and between 2006 and 2014 for postgraduate students.

Undergraduate programs

There was a downward trend in completion within six years of commencing ITE across the board for all demographic segments in all commencing cohorts between 2006 and 2012, except for Aboriginal and Torres Strait Islander students. Marked differences between the completion rates were noted within the following segments:

- The proportion of males commencing in undergraduate programs is much lower than commencing females, and they have lower completion rates. The proportion of men commencing undergraduate ITE programs fell from 25% in 2006 to 22% in 2011, and it remained at this level in 2012. Completion rates for females fell from 59% for the 2006 cohort to 49% for the 2012 cohort. This compares with 51% for males in the 2006 cohort and 42% for males in the 2012 cohort.
- The proportion of commencing students who identified as Aboriginal and Torres Strait Islander ranged between 2% and 3% between 2006 and 2012. The completion rates for Aboriginal and Torres Strait Islander students was lower than for non-Aboriginal and Torres Strait Islander students, but trended upwards between 2006 and 2012: the completion rate for Aboriginal and Torres Strait Islander students ranged between 33% for the 2006 and 36% for the 2012 cohorts, compared with 58% for the 2006 and 48% for the 2012 non-Aboriginal and Torres Strait Islander commencing cohorts.
- Students from regional and remote locations had lower completion rates than those from metropolitan regions: 51% for those from regional and remote locations, compared with 59% for those from metropolitan regions in the 2006 cohort. Additionally, 44% for those from regional and remote locations compared with 48% for those from metropolitan locations in the 2012 cohort.
- Students with disabilities had lower completion rates than those without a disability: 53% for students with disabilities, compared with 57% for those without a disability in the 2006 cohort, and 40% for students with disabilities compared with 46% for students without a disability in the 2012 cohort.
- Students from low socio-economic status (SES) backgrounds based on residential location had lower completion rates than those from high SES: 55% for those from low SES compared with 60% for those from high SES in the 2006 cohort, and 48% for those from low SES compared with 53% for those from high SES in the 2012 cohort. Students from medium SES, which comprised the largest proportion of commencing students during this period, had completion rates which fell from 59% for the 2006 cohort to 51% for the 2012 cohort.

Table 5-10: Number of students commencing undergraduate ITE by gender, Aboriginal and Torres Strait Islander status, SES and location, 2006–2012

No. undergraduate students	Gender		Aboriginal and Torres Strait Islander Status		Socio Economic Status			Location of Home Residence	
Commencement Year	Females	Males	Non-Indigenous	Indigenous	High SES	Medium SES	Low SES	Metro	Regional and Remote
2006	14,031	4,711	18,088	335	4,306	9,788	3,856	13,293	4,705
2007	14,707	4,690	18,845	469	4,260	10,383	4,157	13,612	5,264
2008	13,894	4,117	17,543	421	3,968	9,567	3,832	12,550	4,860
2009	14,149	4,291	17,868	515	4,053	9,971	3,816	12,886	4,989
2010	15,305	4,666	19,353	439	4,290	10,689	4,305	13,639	5,679
2011	15,179	4,382	18,842	447	3,920	10,726	4,289	13,272	5,675
2012	17,047	4,852	20,986	540	4,376	11,999	4,972	15,196	6,176

Table 5-11: Number of students commencing undergraduate ITE by disability and citizenship indicator, 2006–2012

No. undergraduate students	Disability Indicator		Citizenship Indicator	
Commencement Year	Has Disability	No Disability	Domestic	International
2006	799	7,134	18,086	656
2007	800	8,465	18,937	460
2008	811	8,610	17,507	504
2009	927	8,426	17,972	468
2010	980	10,041	19,412	559
2011	1,053	10,315	19,018	543
2012	1,178	12,389	21,480	419

Table 5-12: Completion rates (six years) undergraduate ITE by gender, Aboriginal and Torres Strait Islander status, SES and location, 2006–2012

Completion Rate (6 year)	Gender		Aboriginal and Torres Strait Islander Status		Socio Economic Status			Location of Home Residence	
Commencement Year	Females	Males	Non-Indigenous	Indigenous	High SES	Medium SES	Low SES	Metro	Regional and Remote
2006	59%	51%	58%	33%	60%	59%	55%	59%	51%
2007	56%	48%	55%	32%	58%	57%	53%	55%	49%
2008	56%	50%	55%	36%	56%	54%	50%	56%	51%
2009	55%	45%	53%	36%	56%	55%	51%	53%	52%
2010	53%	44%	51%	40%	52%	53%	50%	52%	47%
2011	54%	42%	51%	33%	51%	51%	48%	53%	46%
2012	49%	42%	48%	36%	53%	51%	48%	48%	44%

Table 5-13: Completion rates (six years) undergraduate ITE by disability and citizenship indicator, 2006–2012

Completion Rate (6 year)	Disability Indicator		Citizenship Indicator	
Commencement Year	Has Disability	No Disability	Domestic	International
2006	53%	57%	57%	71%
2007	48%	56%	54%	67%
2008	51%	53%	54%	77%
2009	46%	52%	52%	75%
2010	45%	47%	50%	64%
2011	44%	48%	51%	65%
2012	40%	46%	47%	72%

Postgraduate programs

There was a downward trend in completion within four years of commencing ITE across the board for all demographic segments in all commencing cohorts between 2006 and 2012, except for Aboriginal and Torres Strait Islander students. Marked differences between the completion rates were noted within the following segments:

- The proportion of males commencing in postgraduate programs is much lower than commencing females, and they have lower completion rates. The proportion of males commencing undergraduate ITE programs fell from 33% in 2006 to 29% in 2008, before rising to 31% in 2014. Completion rates for females fell from 83% for the 2006 cohort to 76% for the 2014 cohort. This compares with 79% for males in the 2006 cohort and 74% for males in the 2014 cohort.
- The proportion of commencing students who identified as Aboriginal and Torres Strait Islander was 1% between 2006 and 2014. The completion rates for Aboriginal and Torres Strait Islander students rose from 69% for the 2006 cohort to 79% for the 2008 cohort, then fell to 52% for the 2012 cohort before rising to 70% for the 2014 cohort. The completion rate for non-Aboriginal and Torres Strait Islander students fell from 81% for the 2006 cohort to 76% for the 2014 cohort.
- Students from regional and remote locations had lower completion rates than those from metropolitan regions: 78% for those from regional and remote locations, compared with 81% for those from metropolitan regions in the 2006 cohort. The completion rate was 72% for those from regional and remote locations compared with 75% for those from metropolitan locations, in the 2014 cohort.
- Students with disabilities had lower completion rates than those without a disability: 75% for students with disabilities compared with 87% for those without a disability in the 2006 cohort, and 67% for students with disabilities compared with 77% for students without a disability in the 2014 cohort.
- Students from low socio-economic status (SES) backgrounds based on residential location had lower completion rates than those from high SES: 78% for those from low SES compared with 82% for those from high SES in the 2006 cohort, and 73% for those from low SES compared with 74% for those from high SES in the 2014 cohort. Students from medium SES, which comprised the largest proportion of commencing students during this period, had completion rates which fell from 80% for the 2006 cohort to 76% for the 2014 cohort.

Table 5-14: Number of students commencing postgraduate ITE by gender, Aboriginal and Torres Strait Islander status, SES and location, 2006–2014

No. postgraduate students	Gender		Aboriginal and Torres Strait Islander Status		Socio Economic Status			Location of Home Residence	
Commencement Year	Females	Males	Non-Indigenous	Indigenous	High SES	Medium SES	Low SES	Metro	Regional Remote
2006	4,200	2,055	5,954	32	1,922	2,847	809	4,230	1,362
2007	4,613	2,030	6,561	47	1,843	3,080	912	4,501	1,359
2008	4,805	1,933	6,638	43	1,856	3,206	928	4,731	1,278
2009	5,510	2,374	7,812	47	2,399	3,607	1,139	5,744	1,422
2010	6,083	2,619	8,567	70	2,576	4,009	1,337	6,217	1,727
2011	6,251	2,440	8,579	51	2,640	4,000	1,298	6,266	1,676
2012	6,076	2,542	8,436	58	2,662	4,042	1,231	6,358	1,585
2013	6,908	2,852	9,590	85	2,949	4,697	1,436	7,226	1,864
2014	6,994	3,168	9,981	101	3,145	4,737	1,516	7,680	1,731

Table 5-15: Number of students commencing postgraduate ITE by disability and citizenship indicators, 2006–2014

No. postgraduate students	Disability Indicator		Citizenship Indicator	
Commencement Year	Has Disability	No Disability	Domestic	International
2006	202	2,367	5,627	628
2007	249	2,908	5,926	717
2008	268	3,360	6,060	678
2009	302	4,285	7,236	648
2010	355	4,581	8,030	672
2011	364	4,721	8,045	646
2012	396	4,813	8,011	607
2013	469	5,554	9163	597
2014	500	6,014	9480	682

Table 5-16: Postgraduate completion rates (four years), by gender, Aboriginal and Torres Strait Islander status, SES and location, 2006–2014

Completion Rate (4 year)	Gender		Aboriginal and Torres Strait Islander Indicator		Socio Economic Status			Location of Home Residence	
Commencement Year	Females	Males	Non-Indigenous	Indigenous	High SES	Medium SES	Low SES	Metro	Regional and Remote
2006	83%	79%	81%	69%	82%	80%	78%	81%	78%
2007	81%	76%	80%	64%	78%	79%	75%	79%	75%
2008	77%	74%	76%	79%	71%	76%	77%	75%	76%
2009	79%	75%	78%	60%	75%	78%	75%	78%	74%
2010	76%	74%	76%	56%	73%	76%	74%	75%	73%
2011	77%	73%	76%	71%	75%	76%	73%	77%	70%
2012	76%	74%	76%	52%	73%	76%	74%	76%	70%
2013	77%	72%	76%	65%	74%	76%	75%	76%	73%
2014	76%	74%	76%	70%	74%	76%	73%	75%	72%

Table 5-17: Postgraduate completion rates (four years) by disability and citizenship indicators, 2006–2014

Completion Rate (4 year)	Disability Indicator		Citizenship Indicator	
Commencement Year	Has Disability	No Disability	Domestic	International
2006	75%	87%	80%	95%
2007	72%	85%	78%	91%
2008	66%	75%	75%	89%
2009	66%	81%	77%	89%
2010	62%	78%	75%	88%
2011	66%	79%	75%	89%
2012	60%	78%	75%	86%
2013	62%	77%	75%	83%
2014	67%	77%	75%	86%

5.6 Completion rates by attendance

This section shows the completion rates within six years of commencing for all undergraduate ITE students, and within four years of commencing for postgraduate ITE students, segmented by attendance mode including:

- part-time, full-time or mixed type of attendance
- internal, external or mixed mode of attendance.

The **Tables 5-18** to **5-21** include the number of students commencing in each year by each attendance type, and the completion rates for each of these commencing cohorts, between 2006 and 2012 for undergraduate students, and between 2006 and 2014 for postgraduate students.

Undergraduate students

Students who studied part-time only throughout their enrolment were less likely to complete their studies: completion rates for part-time only students commencing in 2006 were 25%. This fell to 12% for the 2012 cohort. This compares with students who studied full-time only throughout their enrolment, with completion rates of 62% for the 2006 cohort and 52% for the 2012 cohort. Students who completed their studies through both full-time and part-time enrolments had completion rates of 57% for both the 2006 and 2012 cohorts.

Students who studied via a combination of both internal and external modes of attendance (multi-modal) achieved the highest completion rates: 71% and 69% for those who commenced in 2006 and 2012 respectively. The proportion of students studying via multi-modal attendance grew from 27% in 2006 to 29% in 2012. While fewer students study via external mode of attendance, this segment has grown markedly, from 9% in 2006 to 21% in 2012. However, completion rates have dropped from 45% to 27% for the commencing 2006 and 2012 cohorts respectively. Students who studied via internal mode only achieved completion rates of 53% and 43% for the 2006 and 2012 commencing cohorts respectively.

Table 5-18: Number of students commencing undergraduate ITE by type and mode of attendance, 2006–2012

No. undergraduate students	Type of Attendance	Mode of Attendance	Type of Attendance	Mode of Attendance	Type of Attendance	Mode of Attendance
Commencement Year	Part-Time Only	Full-time Only	Mixed Type	Internal Mode	External Mode	Mixed Mode
2006	1,981	13,581	3,180	12,009	1,724	5,009
2007	2,233	13,906	3,258	12,311	2,034	5,052
2008	2,145	12,593	3,273	10,932	2,226	4,853
2009	2,301	12,549	3,590	10,845	2,497	5,098
2010	2,521	13,510	3,940	11,192	3,212	5,567
2011	2,371	13,353	3,837	11,071	2,849	5,641
2012	3,320	14,249	4,330	10,893	4,605	6,401

Table 5-19: Completion rates (six years) for undergraduate ITE by type and mode of attendance, 2006–2012

Completion Rate (6 year)	Type of Attendance	Mode of Attendance	Type of Attendance	Mode of Attendance	Type of Attendance	Mode of Attendance
Commencement Year	Part-Time Only	Full-time Only	Mixed Type	Internal Mode	External Mode	Mixed Mode
2006	25%	62%	57%	53%	45%	71%
2007	23%	59%	55%	51%	39%	68%
2008	22%	60%	56%	53%	38%	68%
2009	22%	58%	56%	50%	37%	67%
2010	22%	55%	55%	46%	37%	68%
2011	21%	55%	57%	45%	37%	70%
2012	12%	52%	57%	43%	27%	69%

Postgraduate students

Students who studied part-time only throughout their enrolment were less likely to complete their studies: completion rates for part-time only students were 54% and 38% for 2006 and 2014 commencing cohorts respectively. Students who studied full-time only had the highest completion rates: 92% and 83% for 2006 and 2014 commencing cohorts respectively. Students who studied via multi-modal attendance had completion rates of 79% and 78% for the 2006 and 2014 commencing cohorts respectively.

Students who studied via external only mode of attendance had the lowest completion rates, and these have decreased over time: 65% and 59% for the 2006 and 2014 commencing cohorts respectively. Students who studied via multi-modal attendance had the highest completion rates, rising slightly from 85% in 2006 to 89% for both the 2013 and 2014 commencing cohorts. Students who studied via internal mode of attendance had completion rates which fell from 87% for the 2006 commencing cohort to 78% for the 2014 commencing cohort.

Table 5-20: Number of students commencing postgraduate ITE by type and mode of attendance, 2006–2014

No. postgraduate students	Type of Attendance			Mode of Attendance		
Commencement Year	Part-Time Only	Full-time Only	Mixed FT/PT	Internal Mode	External Mode	Mixed Mode
2006	1,489	4,256	510	3,845	1,476	934
2007	1,543	4,497	603	4,349	1,635	659
2008	1,311	4,733	694	4,554	1,395	789
2009	1,420	5,436	1,028	5,380	1,660	844
2010	1,620	5,858	1,224	5,781	2,012	909
2011	1,628	5,866	1,197	5,617	2,013	1,061
2012	1,394	5,801	1,423	5,727	1,906	985
2013	1,672	6,533	1,555	6,069	2,254	1,437
2014	1,502	6,765	1,895	5,609	2,459	2,094

Table 5-21: Completion rates (four year) for postgraduate ITE by type and mode of attendance, 2006–2014

Completion Rate, (4 year)	Type of Attendance			Mode of Attendance		
Commencement Year	Part-Time Only	Full-time Only	Mixed FT/PT	Internal Mode	External Mode	Mixed Mode
2006	54%	92%	79%	87%	65%	85%
2007	50%	90%	78%	86%	60%	83%
2008	46%	85%	72%	78%	64%	86%
2009	45%	87%	73%	83%	58%	83%
2010	41%	86%	73%	82%	57%	79%
2011	41%	86%	75%	81%	55%	88%
2012	41%	84%	74%	80%	58%	83%
2013	40%	84%	78%	79%	59%	89%
2014	38%	83%	78%	78%	59%	89%

5.7 Completion rates by student characteristics

This section provides the characteristics of all ITE students who completed their ITE program in 2017, including a breakdown by detailed field of education. Given the individual level of analysis, this includes all completing students in 2017 regardless of the commencement year or number of years taken to complete.

To understand the factors which may covary and contribute to completion, the analysis identifies the differences between various segments of commencing students. For example, whether students attending via external mode have higher or lower completion rates than those attending via internal mode. Further analysis will be conducted using the linked data sets, to better understand the nature of the relationship(s) between completion and other factors.

All ITE

Table 5-22 shows that of all ITE students who completed ITE programs in 2017:

- students completing primary education programs comprised the highest proportions of students from all states and territories except in Queensland (secondary education programs) and Tasmania (mixed programs and education other)
- 40% completed secondary education programs, 36% primary education programs, and 13% early childhood education programs. Student completion rates for mixed programs were 10% and 'education other' programs 1%.

Early childhood education programs

Table 5-23 shows that of all students who completed early childhood education programs in 2017:

- 97% were female
- 53% studied full-time
- the average age of these students was 29 years
- the mean duration of undergraduate programs was 4.3 years, and postgraduate programs 2.2 years
- 58% (n=210) of postgraduate students were international students,[36] compared with 3% (n=63) of undergraduate students
- 29% (n=532) of undergraduate students were admitted on the basis of their secondary education qualification, and of these, 62% (n=328) had a recorded Australian Tertiary Admission Rank (ATAR). The median ATAR for these students was 73
- 28% (n=517) of undergraduate students were admitted on the basis of vocational education and training (VET) qualifications and 9% (n=159) on an 'other basis'
- 18% of all undergraduate students and 1% of postgraduate students studied outside their state or territory of residence
- 34% of undergraduate students and 5% of postgraduate students studied via external attendance.

36 'International students' refer to students who did not have Australian or New Zealand citizenship or who were not permanent or temporary residents of Australia.

Primary education programs

Table 5-24 shows that of all students who completed primary education programs in 2017:

- 82% were female
- 70% studied full-time
- the average age of these students was 27 years
- the mean duration of undergraduate programs was 4.3 years and postgraduate programs 2.1 years
- 2% of postgraduate students were international students and all completing undergraduate students were domestic
- 38% (n=1,724) of undergraduate students were admitted on the basis of their secondary education qualification, and of these, 66% (n=1,143) had a recorded ATAR. The median ATAR was 74
- 24% (n=1,063) of all undergraduate students were admitted on the basis of higher education qualifications, 10% (n=452) via VET qualifications and 6% (n=278) on an 'other basis'
- 15% of undergraduate and 9% of postgraduate students studied outside of their state or territory of residence
- 17% of both undergraduate and postgraduate students studied via external attendance.

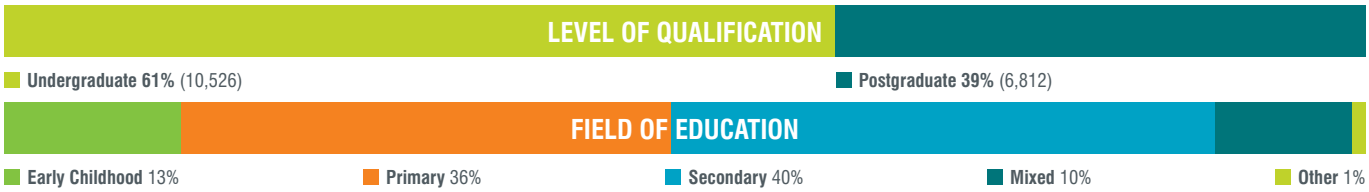
Secondary education

Table 5-25 shows that of all students completing secondary education programs in 2017:

- 62% were female
- 72% studied full-time
- the average age of these students was 27 years
- the mean duration of undergraduate programs was 4.4 years and postgraduate programs 1.9 years
- 7% of postgraduate students were international students
- 50% (n=1,531) of undergraduate students were admitted on the basis of their secondary education qualification, and of these, 69% (1,057) had a recorded ATAR. The median ATAR was 78
- 25% (n=778) were admitted on the basis of higher education qualifications, 7% (n=224) via VET qualifications, and 4% (n=133) on an 'other basis'
- 16% of postgraduate students studied via external attendance compared with 8% of undergraduate students.

Completed in 2017

Table 5-22: All students completing ITE in 2017: Residential state/territory breakdown by detailed field of education, mode of attendance and level of qualification



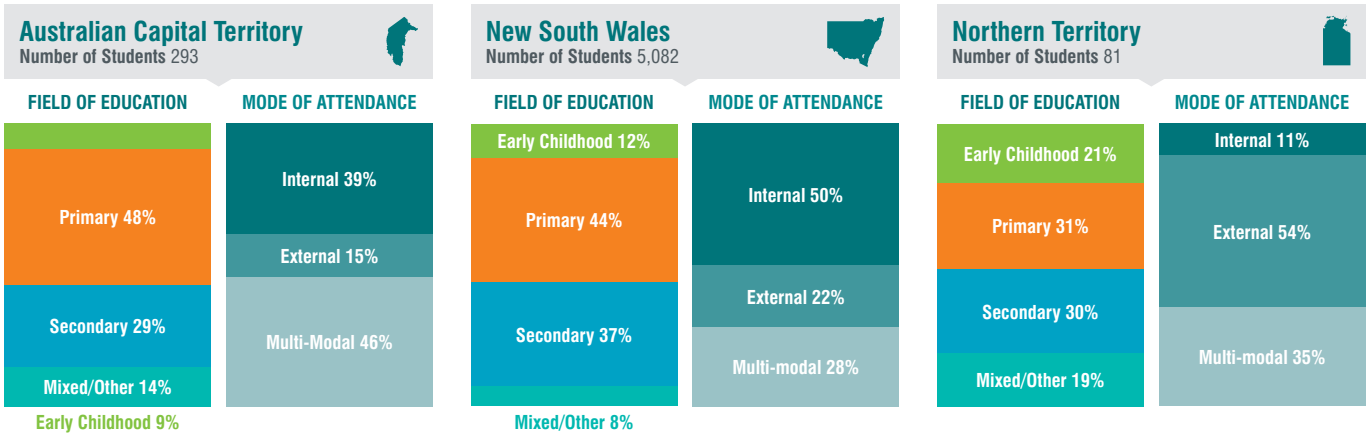


Table 5-23: Characteristics of early childhood education students completing ITE in 2017

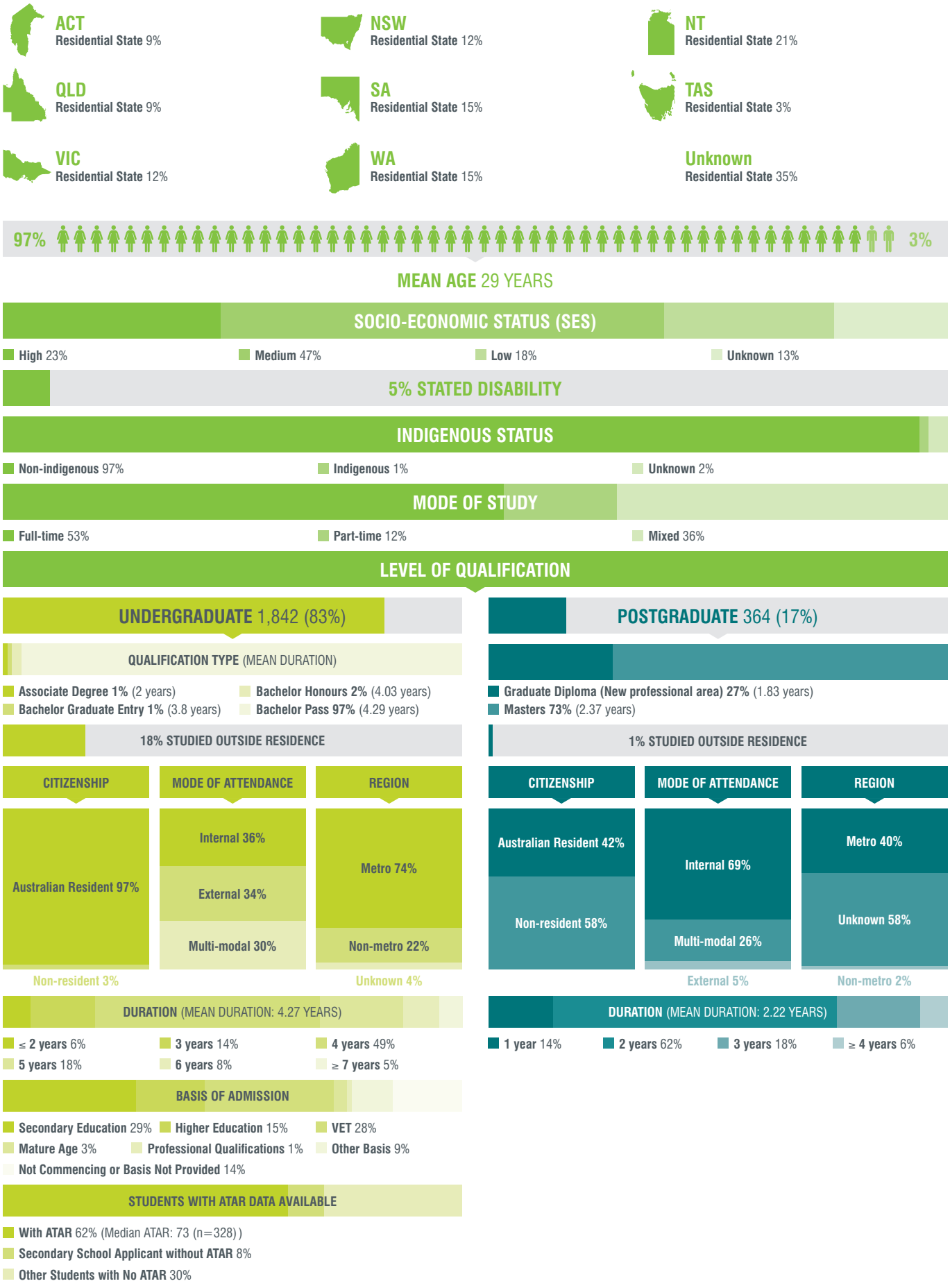
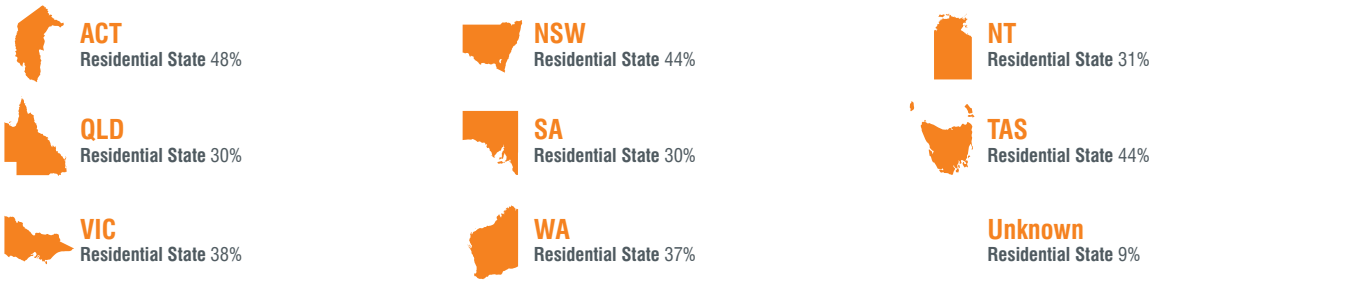


Table 5-24: Characteristics of primary education students completing ITE in 2017



MEAN AGE 27 YEARS

SOCIO-ECONOMIC STATUS (SES)

High 26% **Medium** 54% **Low** 19% **Unknown** 1%

5% STATED DISABILITY

INDIGENOUS STATUS

Non-indigenous 96% **Indigenous** 2% **Unknown** 2%

MODE OF STUDY

Full-time 70% **Part-time** 5% **Mixed** 24%

LEVEL OF QUALIFICATION

UNDERGRADUATE 4,506 (71%)

QUALIFICATION TYPE (MEAN DURATION)

Bachelor Graduate Entry 2% (2.62 years)
Bachelor Honours 5% (3.81 years)
Bachelor Pass 93% (4.42 years)

15% STUDIED OUTSIDE RESIDENCE

CITIZENSHIP

Australian Resident 100%

MODE OF ATTENDANCE

Internal 39%
External 17%
Multi-modal 45%

REGION

Metro 75%
Non-metro 25%

DURATION (MEAN DURATION: 4.34 YEARS)

≤ 2 years 3% **3 years** 7% **4 years** 61%
5 years 18% **6 years** 6% **≥ 7 years** 5%

BASIS OF ADMISSION

Secondary Education 38% **Higher Education** 24% **VET** 10%
Mature Age 7% **Other Basis** 6%
Not Commencing or Basis Not Provided 14%

STUDENTS WITH ATAR DATA AVAILABLE

With ATAR 66% (Median ATAR: 74 (n=1,143)
Secondary School Applicant without ATAR 6%
Other Students with No ATAR 27%

POSTGRADUATE 1,822 (29%)

QUALIFICATION TYPE (MEAN DURATION)

Graduate Diploma (New professional area) 20% (1.58 years)
Graduate Diploma (Extending skills) 9% (3 years)
Masters 71% (2.2 years)

9% STUDIED OUTSIDE RESIDENCE

CITIZENSHIP

Australian Resident 98%
Non-resident 2%

MODE OF ATTENDANCE

Internal 67%
External 17%
Multi-modal 16%

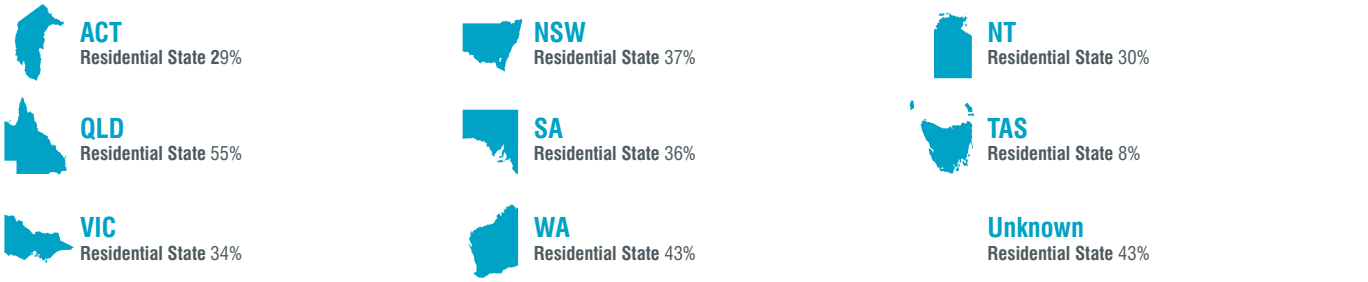
REGION

Metro 85%
Non-metro 13%
Unknown 2%

DURATION (MEAN DURATION: 2.11 YEARS)

1 year 17% **2 years** 61% **3 years** 17% **≥ 4 years** 5%

Table 5-25: Characteristics of secondary education students completing ITE, 2017



5.8 First- to second-year retention rates

The AITSL *ITE Data Report 2019* uses first- to second-year retention in ITE programs as a measure of retention in ITE. This section discusses the first- to second-year retention rate for undergraduate early childhood, primary and secondary education programs for student cohorts that commenced between 2006 and 2016.

The data presented focuses on the bachelor degree (the most common undergraduate qualification type for ITE programs) and includes only students who undertook a program of longer than one-year duration. As a result, the data represents between approximately 68% of students commencing ITE in 2006, and 59% of students commencing ITE in 2016.

ALL ITE

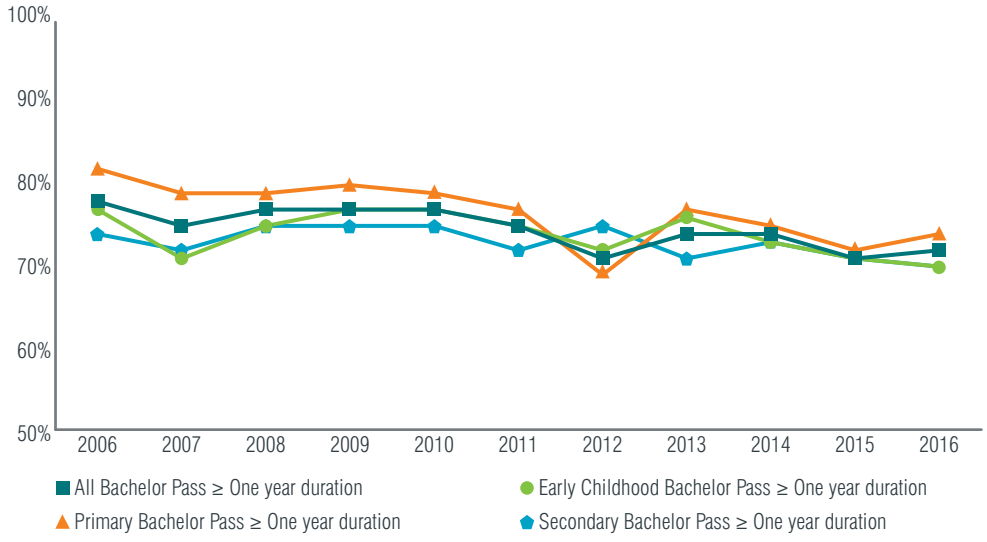
Figure 5-1 shows the retention rate of all students commencing a bachelor degree program by commencement year, segmented by detailed field of education between 2006 and 2016.

Overall, retention across the detailed fields of education trended downwards by an average of seven percentage points from 2006 to 2016.

Detailed fields of education

- Early childhood education program retention rates fell from 77% (2006) to 70% (2016).
- Primary education program retention rates fluctuated between 82% (2006), 69% (2012), and 77% (2013), but had decreased by eight percentage points to 74% in 2016.
- Secondary education program retention rates fell from 74% (2006) to 70% (2016).

Figure 5-1: Bachelor degree program first- to second-year retention by detailed field of education and commencing year



Early childhood education programs

Retention rates within early childhood education programs were higher for full-time students. Retention from first to second year fluctuated between 71% and 80% for cohorts commencing between 2006 and 2016, and were at 76% for full-time students who commenced in 2016.

Students studying part-time showed a greater decline in retention rates, which fell from 74% (2006) to 58% (2016).

Retention rates for students who entered on the basis of a VET or secondary education qualification were similar, generally fluctuating between 70% and 80%. Variations included lower VET pathway retention rates in the 2015 and 2016 cohorts (69% compared with 77% and 74%), and lower secondary education pathway rates in the 2007 cohort (66% compared with 73%).

Retention rates were typically higher for students admitted via a secondary education pathway with a recorded ATAR over 70, than for those with an ATAR less than or equal to 70. For example, for students who commenced in 2016, 79% of students with an ATAR over 70 continued from first year to second year, compared to 69% of students with an ATAR less than or equal to 70.

Students studying by multi-modal attendance generally had higher retention rates, and these have improved, ranging between 78% (2006) and 82% (2016).

The lowest retention rates were for students studying by external mode of attendance, and these have decreased over the last 10 years, ranging between 76% (2006) and 66% (2016).

However, retention rates for students studying by internal mode of attendance also decreased, from 77% (2006) to 71% (2016).

Primary education programs

Retention rates within primary education programs were higher for female students, ranging between 83% (2006) and 75% (2016), compared with males, which ranged between 78% (2006) and 71% (2016).

Retention rates were greater for students who studied full-time, and ranged between 84% (2006) and 79% (2016).

There was a greater decline in retention rates for part-time students over the period 2006–2016, where rates fell by nine percentage points from 63% (2006) to 54% (2016).

The 2012 cohort had the lowest retention rates for both groups (76% for full-time students and 36% for part-time students).

Retention rates for students admitted via VET pathways fell from 80% (2006) to 70% (2016). This compares with rates for students admitted via a secondary education pathway, which fell from 82% (2006) to 77% (2016).

Retention rates for students admitted via a secondary education pathway decreased over the period 2006–2016. However, retention rates were higher for students with an ATAR above 70. Retention rates for these students increased from 67% (2006) to 68% (2016). This compares with those with an ATAR below or equal to 70, where rates increased from 49% (2006) to 50% (2016), with troughs at 37% (2008) and 38% (2011).

Retention rates were higher and stable for students studying by multi-modal attendance; they ranged between 82% (2006) and 80% (2016).

Retention rates were lowest for students studying by external mode of attendance and decreased by 11 percentage points from 77% (2006) and 63% (2016), with an unusually low rate of 35% in 2012.

Retention rates of students studying via internal mode of attendance also decreased, ranging between 82% (2006) and 77% (2016).

Retention rates within secondary education programs were higher for international students[37] were higher for all cohorts except in 2015 and 2016. Rates fluctuated between 97% (2006) and 92% (2014), and then fell to 68% (2016). Rates for domestic students ranged between 81% (2006) and 74% (2014), then remained at 74% through to 2016.

Secondary education programs

Retention rates were higher for students studying full-time, ranging between 76% (2006) and 74% (2016), compared with part-time students, which ranged between 54% (2006) and 45% (2016).

Retention rates for international students were higher than domestic students for the following cohorts:

- 2007 (84% compared with 72%)
- 2012 (82% compared with 75%)
- 2013 (84% compared with 71%)
- 2014 (86% compared with 73%)

Retention rates for students studying by internal and multi-modal attendance ranged between 77% and 72% for all cohorts, while rates for students studying via external attendance ranged between 73% (2006) and 57% (2016).

Retention rates for students admitted on the basis of VET qualifications fell from 78% (2006) to 65% (2016), following a peak of 81% in 2008. Rates for students admitted via a secondary education pathway ranged between 75% (2006) and 71% (2016), and for students admitted on the basis of higher education qualifications, rates ranged between 70–77% for all cohorts.

Retention rates for students admitted via a secondary education pathway with an ATAR above 70 were generally higher, ranging between 72% and 80%, compared with those with an ATAR below 70, whose retention rates ranged between 65% and 73%.

37 'International students' refers to students with citizenship other than Australian, New Zealand or Australian permanent resident.

5.9 Graduate outcomes

This section presents the preliminary employment outcomes for graduates of undergraduate and postgraduate ITE programs, by detailed field of education, approximately four to six months after their program completion date. A more detailed analysis of graduate outcomes will be reported in the *National Teacher Workforce Characteristics Report: Australian Teacher Workforce Data Report 2*.

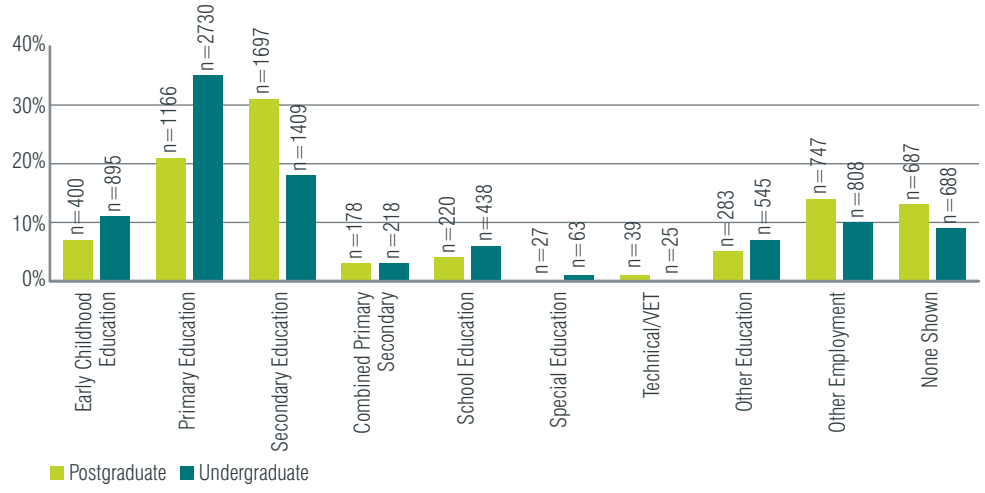
The employment outcomes data are drawn from the 2016 and 2017 Graduate Outcomes Survey (GOS),[38] which includes domestic student respondents who completed programs in 2015 and 2016. Overall, 34% of 2015, and 41% of 2016 ITE graduates completed the survey. Of all ITE respondents, 36% had studied early childhood education programs, 37% had studied primary education programs and 39% had studied secondary education programs.

In this analysis, employment is shown in both education and non-education employer categories. Categories within the education sector are listed separately, and non-education employment categories are grouped together in one 'other' category. As role descriptions were unavailable, it is assumed that school-based roles are teaching roles.

Figure 5-2 shows employment outcomes for GOS respondents by program level and employer category.[39]

- Of all respondents, 7,819 (59%) completed an undergraduate ITE program and 5,444 (41%), completed a postgraduate ITE program.
- Employment rates in an education role are higher for students from undergraduate programs. 73% of undergraduate and 67% of postgraduate program graduates were employed in an education-based role, including primary education, secondary education, combined primary and secondary education, or early childhood education, within in four to six months of completing their ITE program.
- 19% of undergraduate and 26% of postgraduate program graduates were employed outside of the education sector or not employed.
- This is in comparison to the overall (87%) and full-time (72%) employment rates for recent graduates from all undergraduate programs, and the overall (92%) and full-time (85%) employment rate for recent graduates from all postgraduate programs.

Figure 5-2: Graduate outcomes by employer category, four months after graduation, GOS 2016 and 2017



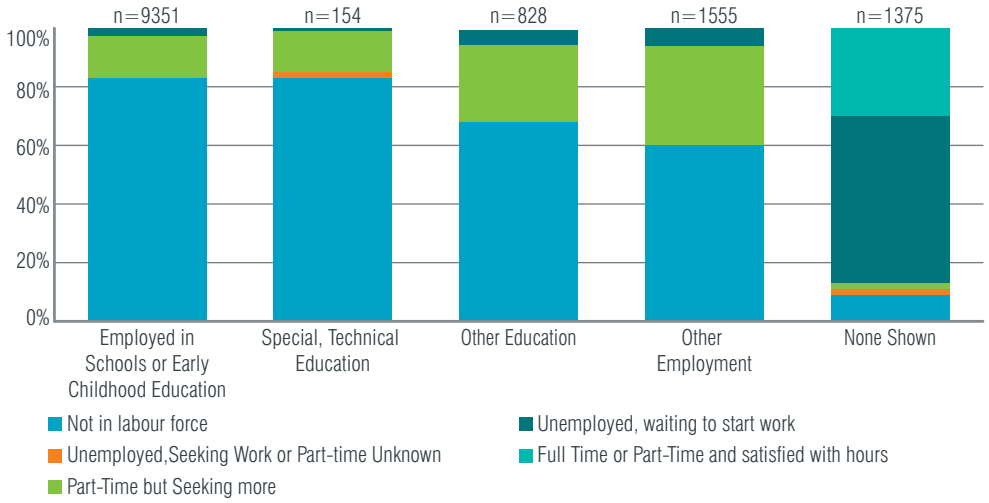
38 2016–17 Graduate Outcome Survey data is drawn from domestic student respondents completing programs in 2015–16 respectively.

39 Employer category is provided as an ANZSIC code (Australian and New Zealand Standard Industry Classification code) as maintained by the Australian Bureau of Statistics.

Figure 5-3 shows the proportion of respondents by employment category and employment status.

- 71% were employed in schools or in early childhood education in some capacity.
- 22% were not working in the education sector or were unemployed.
- Of those working in schools or in early childhood education, 83% were employed full-time or part-time and were satisfied with their hours of employment.

Figure 5-3: Graduate outcomes by employment status, GOS 2016 and 2017



Employer category and gender

Figure 5-4 shows the number of male and female early childhood education, primary education and secondary education program graduates employed four to six months after graduation.

There are proportionately more female respondents who were working in early childhood and primary education compared with the population of early childhood and primary education school students.

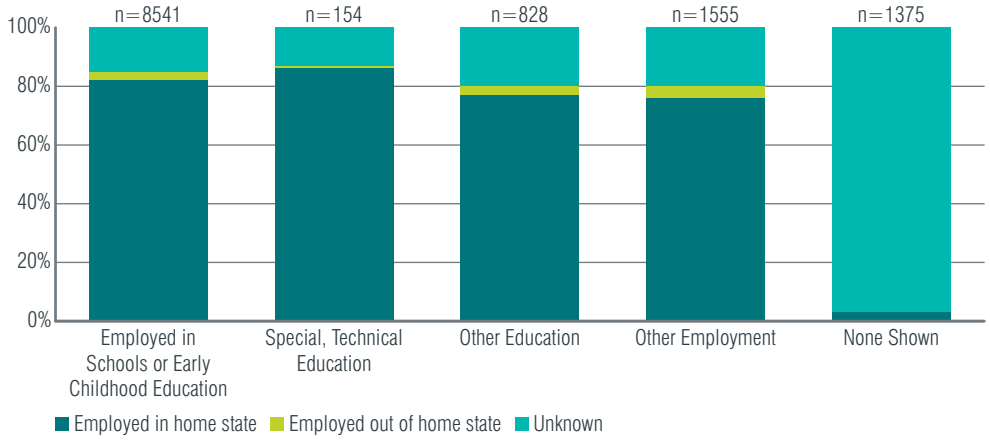
Figure 5-4: Graduate outcomes by employer category and gender, GOS 2016 and 2017

Proportion working in same state/territory as home residence

Figure 5-5 shows whether graduates were employed in their home state or territory by employer category.

- Of the graduates who were employed in schools and early childhood centres, 82% were employed in their home same state or territory, and 3% were employed outside of it. Only the home state OR employment state is known, thus preventing a comparison for the remaining 15%.
- 86% of graduates employed in 'special' or 'technical' education and 77% of those employed in 'other' education categories were also based in their home state or territory.

Figure 5-5: Employment location compared with home state/territory by employer category, GOS 2016 and 2017

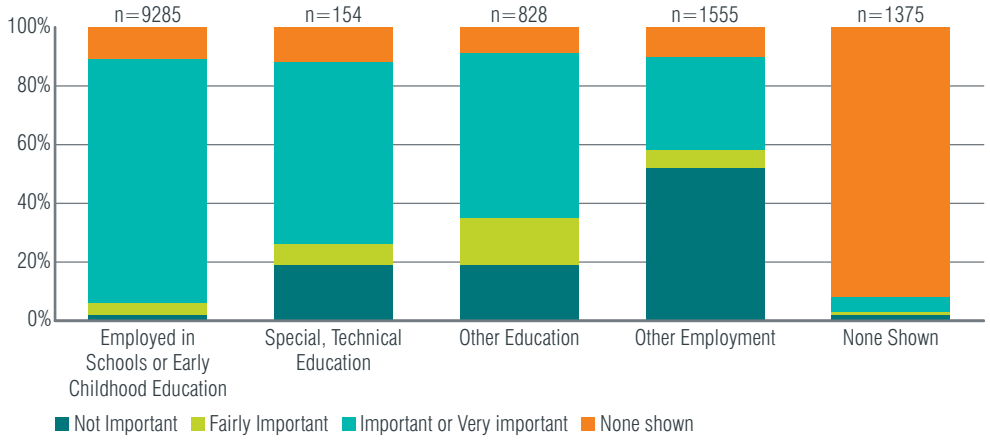


Relevance of ITE qualification to current employment

Figure 5-6 shows the level of importance respondents placed on their ITE qualification to be able to do their current job[40], by employer category.

- 87% of those employed in schools or early childhood education considered their qualification was fairly important, important or very important. This compared with 69% employed in 'special' or 'technical' education, 72% employed in 'other' education categories and 38% employed outside the education sector.

Figure 5-6: How important qualification is to current job by employer category, GOS 2016 and 2017



40 The question in the Graduate Outcomes Survey *'To what extent is it important for you to have an <Course>, or similar qualification, to be able to do your job?'* was asked to those who were working or away from job and working for employer for less than 12 months. The question was personalised to include the name of the course that the respondent had just completed.

6 What are ITE students preparing to teach?

6.1 Introduction

Understanding the pipeline of potential teachers coming through initial teacher education (ITE), in accordance with the curriculum areas they are being prepared to teach, is of critical importance to understanding supply trends and potential workforce shortages or oversupply. For example, the supply of teachers able to teach science, technology, engineering and mathematics (STEM) in the coming years.

Previously, there has been no national data on teachers coming through the ITE pipeline, based on the subjects they have been trained to teach. For the first time, data in the Australian Teacher Workforce Data (ATWD) offers an opportunity to re-code and analyse program data to develop a process for examining future supply at the granular level of subject expertise. However, this novel process is in preliminary stages and the data, at this stage, is indicative only.

Technical report

The Technical Report that accompanies this Pipeline Report details the process and analysis used to determine the units studied by students completing their ITE secondary education program in 2017, in relation to what they were being prepared to teach. To follow is an assessment of the viability and potential for this process to inform future analysis of the ITE pipeline.

6.2 Chapter summary

To date, only 51% of students completing their studies in secondary education in 2017 could be accurately identified in terms of what they will be qualified to teach. Full analysis of the data will necessitate working with ITE providers to secure additional information about program content.

Of the 51% for whom accurate data are available, the curriculum areas that students were clearly being prepared to teach were:

- STEM (n=1,409)
- Humanities/studies of society and environment (SOSE) (n=994)
- English (n=813)
- Health/physical education (n=543)
- Creative arts (n=474).

These figures are the beginning of an invaluable comparative baseline for future analysis. As we move forward, this information will provide important insights and allow for a much greater understanding of the pipeline of specialist teachers. A joint project between the ATWD project team and ITE providers is continuing to secure and develop the usefulness of this data for understanding supply at the curriculum level into the future.

Refer to the Technical Report for details of the process and analysis used to determine what subjects students were being prepared to teach.

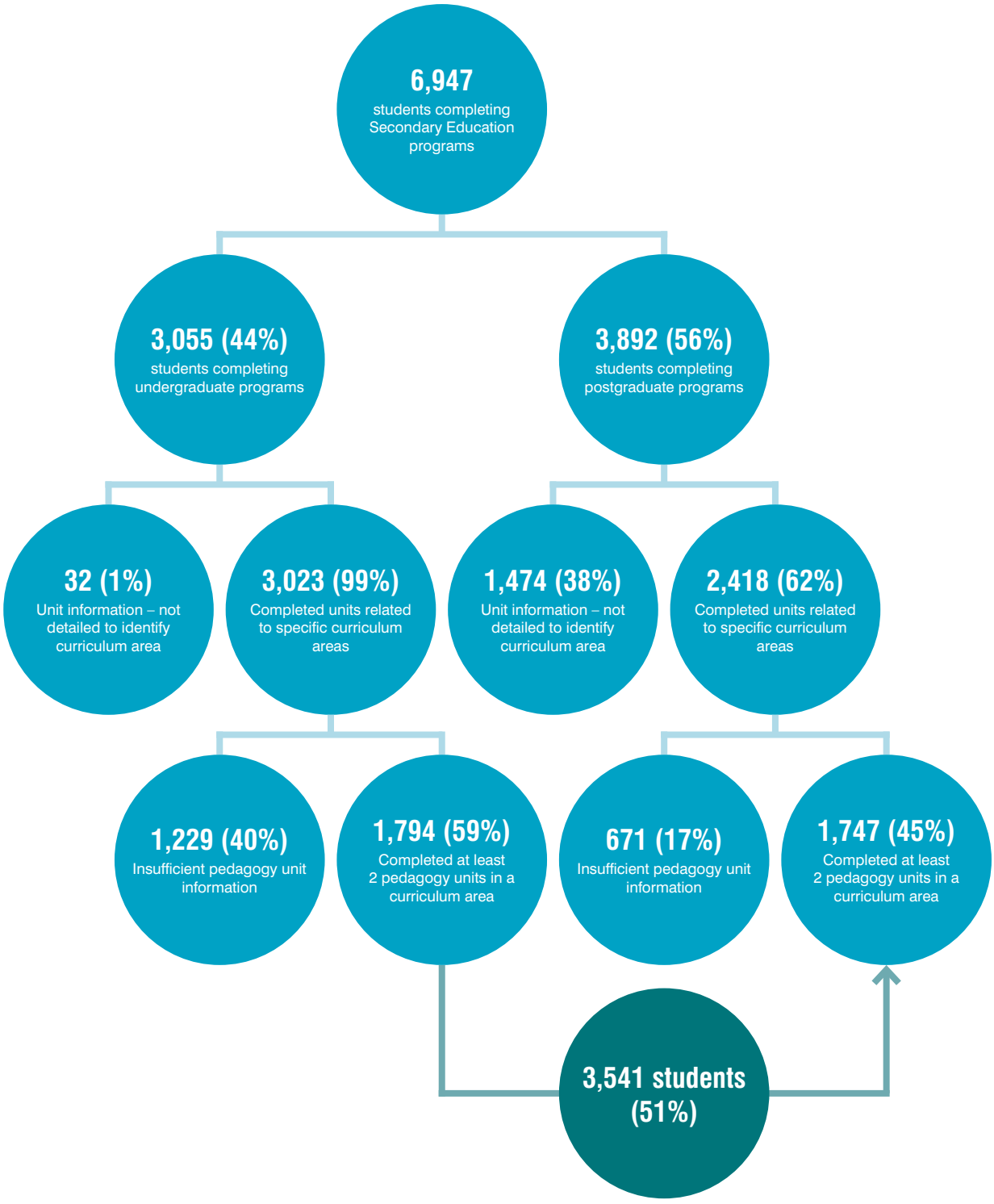
6.3 Outcomes of the process and viability for future analysis

There were 6,947 students who completed studies in secondary education programs in 2017.

Figure 6-1 shows, for 51% of the cohort for whom accurate data are available, the curriculum areas the students had been prepared to teach.

- Based on the requirements for registration as a teacher in Australia, an algorithm based on number of identifiable pedagogy units was employed to identify areas of the curriculum a student was being prepared to teach. This is detailed further in the Technical Report.
- 59% of students completing undergraduate programs and 45% of students completing postgraduate programs could be identified as having completed at least two pedagogy units in a curriculum area during their ITE program.
- 40% of undergraduate students and 17% of postgraduate students could be identified as having completed at least one unit in at least one curriculum area. However, the units these students completed throughout their program either did not match the mapping file during the recoding process, or the unit information available in the handbook did not relate to a specific curriculum area.
- The remaining 1% of undergraduate students and 38% of postgraduate students were enrolled in units that could not be related to a specific curriculum area.

Figure 6-1: Process for identifying students from the completing secondary education cohort in 2017 prepared to teach in at least one curriculum area



Recoding rates

Units studied in 2017

Of the units undertaken by students completing secondary education ITE programs in 2017, 22% (n=3,297) of undergraduate and 16% (n=4,039) of postgraduate units could be accurately recoded as curriculum area subjects, by using program handbook and website information from ITE providers. The remaining units could not be recoded, either due to unavailable information from university handbooks, or because the information available was not sufficient to accurately identify if a unit was specifically related to a particular curriculum area.

Units studied prior to 2017

Only 9% (n=16,395) of undergraduate and 6% (n=17,909) of postgraduate units undertaken prior to 2017 could be recoded as curriculum area subjects. As the subject information from university handbooks was obtained for 2017 only, many of the units undertaken before 2017 did not match the mapping profile.

Viability for future analysis of the supply chain by curriculum

Using this process, even with the relatively low rates of unit recodes across all years of study for the cohort of students completing in 2017, 51% of students completing their secondary education program in 2017 could be accurately identified in terms of what they had been prepared to teach. This process is therefore a viable approach to classifying studies undertaken by ITE students in a secondary education program, and to determining the subjects they are being prepared to teach.

However, to fully realise the potential of the data, it will be necessary to work with ITE providers to secure additional information about program content as it relates to project codes in the Higher Education Student Data Collection (HESDC) data.

The ATWD Project Team is working with Universities Australia and an ATWD Oversight Board-appointed working group to develop a more streamlined process to obtain program information from ITE providers. This will enable program code information to be recoded for prospective additions to the ATWD, and will provide a more comprehensive basis for determining the subjects that completing ITE students are qualified to teach.

Improved information about the units studied during 2018 is anticipated. Additional information about the units undertaken in and prior to 2017 will considerably increase the proportion of ITE students and units studied included in the analysis of subjects being prepared to teach and the usability of the data to predict supply at the curriculum level.

As this process matures, the ATWD initiative will look to undertaking the recoding process for primary education and early childhood data, to enable longitudinal analysis of the pipeline of generalist and specialist qualifications.

6.4 Secondary education curriculum area pipeline

Known pipeline

The following analysis applies only to the 51% of ITE students completing a secondary education program in 2017 who were identified as having been prepared to teach in one or more curriculum areas.

The extent to which this 51% of known students accurately reflects the full supply pipeline is currently unknown. There is currently no information on the study characteristics of the 49% of those with incomplete data. This should be taken into account when interpreting these data.

Table 6-1 and **Table 6-2** list the subjects within each curriculum area studied by ITE students completing undergraduate and postgraduate secondary education programs in 2017 respectively, and the number of students who completed one and two pedagogy units in each subject. For a complete list of all subjects included in each curriculum area please refer to **Appendix 2** in the Technical Report.

Table 6-1: Subjects studied by completing undergraduate secondary education ITE students in 2017

Curriculum Area	Subject	Total pool identifiable as studying the curriculum area	Potentially being prepared to teach this curriculum area	Clearly being prepared to teach this curriculum area
		Students with at least one unit	Students with at least one pedagogy unit	Students with at least two pedagogy units
English (n=360)	English	1238	720	353
	EALD	75	50	1
	Language and Literature	74	0	0
Humanities/SOSE (n=516)	Humanities	1663	667	160
	History	777	286	185
	Indigenous Studies	1136	453	30
	Geography	182	22	11
	Economics	106	31	24
	Business and Management	128	21	14
	Religious Studies	249	33	18
STEM (n=511)	Other Science	428	259	151
	Mathematics	959	401	162
	Biology	721	44	25
	Chemistry	333	15	15
	Earth and Environmental Science	188	22	10
	Physics	211	8	1
	Psychology	642	144	47
	ICT	695	388	109
Health/Physical Education (n=401)	Health	1063	287	150
	PE	873	576	307
LOTE (n=23)	LOTE	169	24	23
Creative Arts (n=196)	Creative Arts	1040	154	36
	Music	128	64	54
	Dance	35	16	10
	Drama	174	87	40
	Film/TV	35	5	0
	Media Studies	458	6	5
	Audio/Visual	113	1	0
	Visual Arts	180	77	40
Agriculture/Environment (n=25)	Agriculture and Environmental Studies	225	34	25

Table 6-2: Subjects studied by completing postgraduate secondary education ITE students in 2017

Curriculum Area	Subject	Total pool identifiable as studying the curriculum area	Potentially being prepared to teach this curriculum area	Clearly being prepared to teach this curriculum area
		Students with at least one unit	Students with at least one pedagogy unit	Students with at least two pedagogy units
English (n=458)	English	764	715	402
	EALD	208	136	89
	Language and Literature	0	0	0
Humanities/SOSE (n=478)	Humanities	995	819	198
	History	210	195	131
	Indigenous Studies	749	283	14
	Geography	44	36	26
	Economics	49	43	13
	Business and Management	78	68	42
	Religious Studies	268	94	41
STEM (n=898)	Other Science	602	598	417
	Mathematics	601	592	241
	Biology	143	127	52
	Chemistry	132	114	67
	Earth and Environmental Science	87	84	17
	Physics	68	49	6
	Psychology	270	100	74
	ICT	593	592	76
Health/Physical Education (n=142)	Health	230	216	62
	PE	188	142	126
LOTE (n=6)	LOTE	9	6	6
Creative Arts (n=279)	Creative Arts	215	134	109
	Music	68	68	57
	Dance	23	2	2
	Drama	61	59	29
	Film/TV	0	0	0
	Media Studies	41	29	28
	Audio/Visual	1	0	0
	Visual Arts	76	76	65
Agriculture/Environment (n=4)	Agriculture and Environmental Studies	26	4	4

Note: The groupings of students are not mutually exclusive, as students can meet the pedagogy unit test in more than one curriculum area. However, the number of students within each grouping are unique individuals.

- Of the 51% for whom fully accurate data are available (i.e. studied at least two pedagogy areas), the curriculum areas that students were clearly being prepared to teach are summarised in **Table 6-3**.
- The STEM and humanities/SOSE curriculum areas include the broadest range of subjects and hence include the largest number of students.

Table 6-3: Curriculum areas secondary education students are being prepared to teach

Curriculum Area	Undergraduate	Postgraduate	Total
STEM	511	898	1,409
Humanities/SOSE	516	478	994
English	360	458	818
Health/Physical Education	401	142	543
Creative Arts	195	279	474
LOTE	23	6	29
Agriculture/Environment	25	4	29

Of the 51% for whom fully accurate data are available (completed two pedagogy units), the subjects that students were clearly being prepared to teach were:

- English (n=755)
- general science (n=568)
- physical education (n=433)
- mathematics (n=403)
- humanities/SOSE (n=358)
- history (n=316)
- creative arts (n=165)
- health (n=212).

Possible pipeline

While we have identified curriculum studies for 51% of 2017 completions in secondary education using the analysis process detailed above, it is interesting to note the potential of this data if higher rates of recoding can be achieved.

Table 6-4 and **Table 6-5** list the curriculum areas studied by ITE students completing undergraduate and postgraduate secondary education programs in 2017 respectively, including the number of students who completed both one and two pedagogy units in each curriculum area. They also show the size of the pool of students who had any subject units in the curriculum areas.

When students enrol in pedagogy units in a particular curriculum area, they are required to demonstrate appropriate levels of content knowledge in that curriculum area. Therefore, it is possible to assume that one unit of pedagogy suggests that a sufficient number of content units have been undertaken (that is, two units of content have been undertaken) even if we were unable to detect them over the years studied. The number of students with one pedagogy unit shows the potential pool of students in each curriculum area.

Table 6-4: Curriculum areas studied by completing undergraduate secondary education ITE students, 2017

Curriculum Area	Total pool identifiable as studying the curriculum area	Potentially being prepared to teach this curriculum area	Clearly being prepared to teach this curriculum area
	Students with at least one unit	Students with at least one pedagogy unit	Students with at least two pedagogy units
English	1,308	762	365
Humanities/SOSE	2,412	1,307	529
STEM	2,045	1,010	520
Health/Physical Education	1,138	599	404
LOTE	171	24	23
Creative Arts	1,471	390	196
Agriculture/Environment	230	34	25

Table 6-5: Curriculum areas studied by completing postgraduate secondary education ITE students, 2017

Curriculum Area	Total pool identifiable as studying the curriculum area	Potentially being prepared to teach this curriculum area	Clearly being prepared to teach this curriculum area
	Students with at least one unit	Students with at least one pedagogy unit	Students with at least two pedagogy units
English	889	776	457
Humanities/SOSE	1,752	1,183	479
STEM	1,614	1,501	898
Health/Physical Education	363	306	142
LOTE	9	6	6
Creative Arts	415	340	282
Agriculture/Environment	26	n.p.	n.p.

7 Appendices

Appendix 1: Total number of students 2006–2017

Enrolments by detailed field of education

Year	Early childhood education	Primary education	Secondary education	Mixed programs	Education other
2006	7323	27877	20105	5681	3509
2007	8095	28536	20367	6339	4821
2008	8170	28172	19735	6637	4919
2009	8557	28213	20792	6567	5148
2010	9684	29566	22263	6618	4663
2011	10313	29717	23562	6592	4291
2012	11783	31049	24648	6694	4026
2013	11988	30568	26408	7009	3643
2014	12670	30765	28301	7167	2483
2015	14044	33470	28655	7553	1661
2016	14111	33785	29210	7727	2298
2017	14497	37406	31077	6826	2284

Commencements by detailed field of education

Year	Early childhood education	Primary education	Secondary education	Mixed program	Education other
2006	2753	9910	8557	1036	2741
2007	3247	10046	8559	906	3282
2008	3013	9402	7977	983	3374
2009	3403	9642	8885	855	3539
2010	4038	11118	9664	1112	2741
2011	3982	10728	10166	837	2539
2012	4871	11894	10299	954	2499
2013	4290	11233	10722	1074	2370
2014	4920	11195	11864	1111	1540
2015	5018	12209	11158	1678	910
2016	4437	11484	11005	1757	1409
2017	4438	12653	11915	1571	1111

Completions by detailed field of education

Year	Early childhood education	Primary education	Secondary education	Mixed program	Education other
2006	1562	6783	6233	1171	796
2007	1576	6603	5931	1442	969
2008	1715	6563	5380	1537	1007
2009	1675	6390	5525	1550	1201
2010	1789	6717	5928	1466	1150
2011	1738	6494	5842	1369	960
2012	1926	6610	5859	1408	913
2013	2096	6855	6317	1505	966
2014	2420	6642	6827	1635	852
2015	2481	6529	6752	1474	534
2016	2317	6294	6624	1815	390
2017	2206	6328	6947	1701	156

Appendix 2: List of tables

Appendix 3: List of figures

Appendix 4: Glossary

Term	Definition
Australian Tertiary Admission Rank	A percentile score that summarises the overall achievement of final year secondary students relative to all students in their age group within a given state or territory. Its values range from 0.00 to 99.95, though ranks under 30.00 are reported as 'less than 30'.
Basis of admission	The main criterion on which an applicant was granted an offer to enrol in a higher education program. Bases of admission are secondary education qualification, higher education qualification, vocational education and training (VET) qualification, professional qualification, mature age, or 'other basis'.
Commencement	Enrolment in a program for the first time at a higher education provider (HEP) between 1 January and 31 December of the collection year. The students are identified as commencing students by the commencing student indicator flag (variable e922) in the data. If the flag value is 1 then the student is a commencing student in that year.
Completion	The successful completion of all the academic requirements of a program which includes any required attendance, assignments, examinations, assessments, dissertations, practical experience and work experience in industry.
Completion rate	All students who completed an initial teacher education (ITE) program between the year they commenced and the end of 2017, and presented as a percentage of the total number of students in their commencement year.
Continuing student	A student who is not a commencing student and is enrolled in an ITE program.
Cumulative completion rate	Cumulative completion rate refers to the total number of students who have completed a program each year after their commencement year as a proportion of the total number of students who commenced in that particular cohort.
Early childhood education	Educational programs for students between birth and the age of eight years, prior to and in the early years of primary school. In the context of ITE programs, it refers to programs that qualify students to teach this age group.
Detailed field of education	Refers to the categorisation of higher education programs based on specialisations and units of study. In this report it refers to early childhood, primary, secondary, mixed and 'education other' ITE programs.
Education other	'Education other' programs refer to ITE programs where the detailed field of education is not specified (e.g. general education) or that could not be identified as early childhood, primary, secondary or mixed programs.
Enrolment	When a person has been admitted to a program at the HEP at the census date, is still entitled to continue with their studies before the census date, and has not formally indicated before the census date that they have withdrawn from or deferred their studies.
Higher education	Refers to study in undergraduate and postgraduate programs.
Higher education provider	An organisation that is registered by the Tertiary Education Quality and Standards Agency to offer higher education qualifications in or from Australia.
Higher Education Student Data Collection	Census of all higher education students in Australia. Provides information about units a student is enrolled in, including a classification based on the field of education for each unit using the Australian Standard Classification of Education.
Initial teacher education	Accredited teacher preparation programs offered by certain higher education providers in Australia.

International student	Student who does not have Australian or New Zealand citizenship or permanent residency status.
Number of students enrolled	Total number of students enrolled in any ITE program during an academic year.
Number of enrolments	The overall number of ITE program enrolments (collected each semester). A student may enrol in more than one program in an academic year—for example, if they choose to transfer to a different program. For the purpose of this report, enrolments are calculated on the last enrolment in the academic year. This may result in the number of enrolments being higher than the actual number of students enrolled in a given year.
Mature age	Refers to special entry provisions in higher education which apply to adults who return to study or where age and experience are considered as part of the application, as determined by the higher education provider.
Mixed program	An ITE program in which more than one detailed field of education is studied, e.g. both primary and secondary education. These programs have been identified either by the program name or the nature of the units undertaken by students enrolled in the program.
Other basis	Any basis of admission that cannot be classified as secondary qualifications, higher education qualifications, VET qualifications or mature age.
Postgraduate	A program of study that leads to the award of a Graduate Certificate (higher education), Graduate Diploma (higher education), Masters Degree or Doctoral Degree. Postgraduate programs usually involve a prerequisite Bachelor Degree for entry.
Primary education	Educational programs for students between the ages of 5 and 12 years in primary schools. In the context of ITE programs, it refers to programs that qualify students to teach this age group.
Professional studies in education	Discipline-specific curriculum and pedagogical studies, general education studies and professional experience.
Program level	Whether an ITE program leads to the award of an undergraduate or postgraduate qualification.
Program pipeline	The total number of students enrolled in an ITE program delivered by higher education providers located in a given jurisdiction, regardless of where they reside.
Qualification type	Refers to the broad discipline-free nomenclature used in the Australian Qualifications Framework to describe each category of qualification. Qualification types referred to in this report include Bachelor Degree, Bachelor Honours Degree, Graduate Certificate, Graduate Diploma and Masters Degree.
Reportable levels	A cell size of less than five is not considered reportable for privacy reasons.
Resident pipeline	The total number of students residing in a given jurisdiction and enrolled in an ITE program, regardless of where the higher education provider is located.
Secondary education	Educational programs for students between the ages of 13 and 18 years in secondary schools. In the context of ITE programs, it refers to programs that qualify students to teach this age group.
Undergraduate	A program of study that leads to the award of a Diploma (higher education), Advanced Diploma (higher education), Associate Degree, Bachelor Degree, or Bachelor Honours Degree.
Unit record data	Refers to information relating to an individual in a disaggregated format, including ITE programs and units enrolled in, year of enrolment, jurisdiction of home residence, gender, etc. All unit record data in the ATWD are deidentified.
Vocational education and training	A training program that leads to the award of a Certificate I-IV, Diploma (VET), Advanced Diploma (VET), Graduate Certificate (VET) or Graduate Diploma (VET).

Appendix 5: Acronyms

Acronym	Term
ABS	Australian Bureau of Statistics
AESOC	Australian Education Senior Officials Committee
AIHW	Australian Institute of Health and Welfare
AITSL	Australian Institute for Teaching and School Leadership
ATAR	Australian Tertiary Admissions Rank
ATWD	Australian Teacher Workforce Data
AQF	Australian Qualifications Framework
ESS	Employer Satisfaction Survey
GOS	Graduate Outcomes Survey
HEIMS	Higher Education Information Management System
HEP	Higher education provider
HESDC	Higher Education Student Data Collection
ITE	Initial teacher education
LOTE	Language other than English
NQF	National Quality Framework
QILT	Quality Indicators for Learning and Teaching
SES	Socio-economic status
SES	Student Experience Survey
SOSE	Studies of society and environment
STEM	Science, technology, engineering, mathematics
TEMAG	Teacher Education Ministerial Advisory Group
TRA	Teacher Registration Authority
TWG	Technical Working Group
VET	Vocational education and training

Appendix 6: Bibliography

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Higher education provider	Source
Alphacrucis College	ac.edu.au/documents/student-handbooks/
Australian Catholic University	handbook.acu.edu.au/handbooks/handbook_2017
Australian College of Physical Education	acpe.edu.au/future-students/study/courses/education/
Avondale College of Higher Education	avondale.edu.au/courses/education/
Central Queensland University	my-courses.cqu.edu.au/pub/profiles/search
Charles Darwin University	stapps.cdu.edu.au/f?p=100%3A30%3A0%3A%3ANO%3A%3A%3A
Charles Sturt University	csu.edu.au/handbook/handbook17/courses/ugindex.html
Christian Heritage College	chc.edu.au/wp-content/uploads/2019/11/CHC_Course_Guide_2017_WEB.pdf
Curtin University	archive.handbook.curtin.edu.au/may2017/courseSearch.html
Deakin University	deakin.edu.au/students/enrolment-fees-and-money/university-handbook/2017-handbook
Eastern College Australia	eastern.edu.au/study/courses
Edith Cowan University	ecu.edu.au/handbook/lookup?daat=20000&profile=collapsing&collection=ecu-hb-meta&query=&clive=ecu-hb-courses,ecu-hbh-courses&f.Year|m=2020&f.Year%7Cm=2017
Excelsia College	excelsia.edu.au/courses/education/
Federation University	study-2017.federation.edu.au/#/
Flinders University	flinders.edu.au/courses/rules-2017/
Griffith University	app.griffith.edu.au/course-profile-search/
Holmesglen Institute	holmesglen.edu.au/Courses/English-Education-and-Teacher-Training/
James Cook University	secure.jcu.edu.au/app/studyfinder/index.cfm?year=2017
La Trobe University	latrobe.edu.au/handbook/2017/
Macquarie University	handbook.mq.edu.au/2017/
Melbourne Polytechnic	melbournepolytechnic.edu.au/study/education/
Monash University	monash.edu/pubs/2017handbooks/units/index.html
Montessori World Education Institute	mwei.edu.au/
Morling College	morling.edu.au/module_resources/uploads/downloads/Student-Handbook-2017.pdf

Murdoch University	handbook.murdoch.edu.au/
Queensland University of Technology	qut.edu.au/about/governance-and-policy/handbooks-course-lists-and-award-abbreviations/handbook
Southern Cross University	course-search.scu.edu.au/
Swinburne University of Technology	swinburne.edu.au/study/options/find/units/
University of Adelaide	adelaide.edu.au/course-outlines/
University of Canberra	search.canberra.edu.au/s/search.html?collection=courses&form=course-search&profile=_default&query=!padre&course-search-widget__submit=&meta_C_and=COURSE&sort=metaH&f.Year|O=2017
University of Melbourne	handbook.unimelb.edu.au/search
University of New England	my.une.edu.au/courses/2017/
University of New South Wales	legacy.handbook.unsw.edu.au/vbook2017/bs.jsp
University of Newcastle	newcastle.edu.au/course
University of Notre Dome	notredame.edu.au/about/schools
University of Queensland	my.uq.edu.au/programs-courses/
University of South Australia	study.unisa.edu.au/education/#top
University of Southern Queensland	usq.edu.au/programscourses/version
University of Sydney	sydney.edu.au/handbooks/archive/
University of Tasmania	utas.edu.au/courses
University of Technology Sydney	handbook.uts.edu.au/archives.html
University of the Sunshine Coast	usc.edu.au/
University of Western Australia	year2017.handbooks.uwa.edu.au/
University of Wollongong	documents.uow.edu.au/handbook/yr2017/ug/index.html
Victoria University	vu.edu.au/about-vu/publications/college-handbooks
Western Sydney University	handbook.westernsydney.edu.au/hbook/DOWNLOAD.ASPX

Note: Handbook information for a number of higher education providers did not match information available in HEIMS, and has not been listed in this table.

Appendix 7: ATWD Oversight Board members

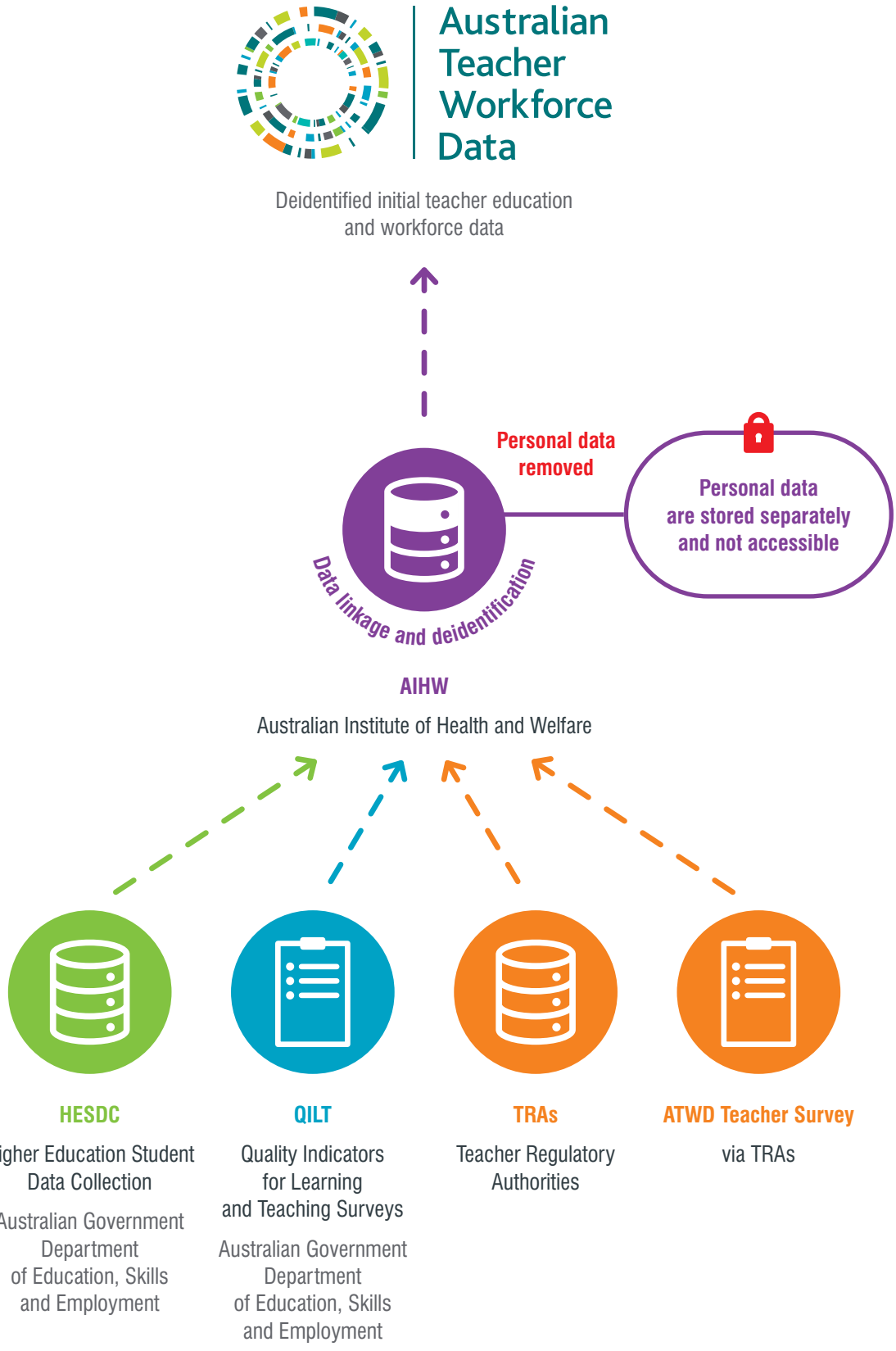
Representing	Member	Nominated by
Chair	**Mr Rick Persse** Chief Executive Department for Education South Australia	AESOC
Deputy Chair	**Professor Bill Louden** Emeritus Professor of Education, University of WA	
State and territory education departments	**Ms Gene Reardon** Executive Director and Training, Professional Practice and Workforce Reform Department of Education Victoria	
	Ms Jodee Wilson Deputy Secretary, Support and Development Department of Education Tasmania	
	Mr Damien Stewart Executive Director, Workforce Department of Education Western Australia	
	Mr Dion Coghlan Assistant Director-General Human Resources Department of Education Queensland	
Australian Government	**Ms Kim Ulrick** Assistant Secretary, Teaching Policy and Standards Branch	Department of Education, Skills and Employment
Non-government Sector	**Mr David Robertson** Executive Director, Independent Schools Queensland	Independent Schools Australia
	Ms Yvonne Ries Director – Education, Queensland Catholic Education Commission	National Catholic Education Commission
Teacher Regulatory Authorities	**Ms Anne Ellis** Chief Executive Officer, ACT Teacher Quality Institute	Australasian Teacher Regulatory Authorities
	Mr David Cranmer Director – Teacher Quality Policy, NSW Education Standards Authority	
Initial teacher education providers	**Professor John Williamson** Emeritus Professor, Faculty of Education, University of Tasmania	Australian Council of Deans of Education
	Mr Mike Teece Policy Director Academic, Universities Australia	Universities Australia
AITSL	**Mr Rob Nairn** Director	AITSL Board

Appendix 8: ATWD Technical Working Group members

Member	Representing
Ms Amanda Stevenson (Chair) AITSL Manager – Evidence and Impact	Chair
Dr Russell Reid (Deputy Chair) Project Manager – Justice and Education Team	Australian Institute of Health and Welfare (AIHW)
Mr Michael Michaelides ATWD Senior Data Strategist	Australian Institute for Teaching and School Leadership (AITSL)
Mr Wayne Shippley Director of the University Statistics Team	Australian Government Department of Education, Skills and Employment
Mr Tushan Wickramariyaratne Assistant Manager, Strategic Data and Digital Services	ACT Teacher Quality Institute
Mr Sean Conkey Data Support Officer	NSW Education Standards Authority
Mr Jason Rees IT Manager	Queensland College of Teachers
Ms Jackie Crawley Senior Registration Officer	Teacher Registration Board of the Northern Territory
Ms Cathy Lewis Manager Corporate Services	Teachers Registration Board of South Australia
Ms Julie Herbert Manager Registration and IT Systems	Teacher Registration Board Tasmania
Mr Graham Grossman Manager, Registration	Teacher Registration Board of Western Australia
Mr Geoff Coates Manager, Governance	Victorian Institute of Teaching
Dr Siwei Goo (Observer) Senior Economist	Universities Australia
Dr Anthony Flint (Observer) Assistant Manager	Australian Government Department of Education, Skills and Employment

Appendix 9: The ATWD model

A comprehensive and supplementary Technical Report, showing which data was used and how the data was transformed and summarised, is available separately.



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