

# NATIONAL TEACHING WORKFORCE DATASET

## DATA ANALYSIS REPORT

JUNE 2014

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**Australian Government**

Produced on behalf of the AEEYSOC National Teaching Workforce Dataset Working Group

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This report is one of a series of three on the National Teaching Workforce Dataset. The other reports are:

- Project Report
- Data Dictionary



# Executive Summary

## Background

This report is one of three that represent the culmination of nearly three years of dedicated effort. This effort has been led and championed by numerous individuals working across Australia with a passion and commitment to improving teacher quality through the provision of nationally consistent data. The work undertaken as represented in this report is motivated to support those who teach, support and inspire Australia's school children every day.

The outcome from the effort has been to develop an initial National Teaching Workforce Dataset (NTWD). The NTWD has been designed to provide understanding and insight into school teachers across Australia. Though the initial NTWD itself represents a three year effort, the antecedents for a teacher level data collection and understanding have been discussed for many years prior. This Data Analysis Report represents a very tangible output from the development of the NTWD, however the knowledge gained through the process of data collection will yield future benefits in the design and execution of any future collections. The discussion of methodology, benefits and future options are outlined in depth in the NTWD Project Report.

## Process

To produce this analysis required engagement with more than one hundred stakeholder organisations. After a process of evaluating data held by employers and regulators around Australia, twenty one organisations were able to provide teacher level data for the initial NTWD and six provided aggregate data. Addressing and managing data protection and privacy concerns was critical to custodians having comfort in releasing their data for classification and integration to form the initial NTWD.

The initial NTWD differs from other collections in a number of key areas that are critical in understanding and interpreting the findings of this report. These include:

- Teacher level collection, rather than collection of pre-summarised information, enabling greater depth in the questions that can be asked of the data
- Leverages existing data stores, rather than creating a new collection mechanism for an already data fatigued sector

- Alignment of jurisdictional data definitions to defined national standards, which enables more extensive comparisons but does flatten the richness of jurisdictional differences and experience
- Data integration across regulator and employer data to provide a richer level of understanding of each teacher

## The initial National Teaching Workforce Dataset

With data collected from all regulators around Australia, there is confidence that the teaching workforce has been captured in the initial NTWD with the exception of currently active NSW non-government teachers employed before 2005. Limitations that do exist relate to the availability of employer data, which is driven by access to sector data held systemically. In this regard, the Government sector was able to provide data, whereas this was limited to some jurisdictions for the Catholic sector and not at all for the Independent sector. Differences across data custodians in how and what data is collected also drive gaps in the completeness and accuracy of some data items within the initial NTWD.

This report presents analysis of all the 45 data items initially specified to be included in the initial NTWD. Each data item, where data is available, is profiled and presented. Further in depth analysis is then presented into six areas of focus. The intention of these is to provide a more thorough investigation of areas that are of higher value in understanding the teaching workforce. These six areas are:

- Teacher age
- Aboriginal and Torres Strait Islander (Indigenous) status
- Principals
- Teachers in low SES schools
- Teacher qualifications
- Registered teachers that are not employed

This report provides insight into the nature of Australia's largest profession. Understanding the complexity and diversity of Australia's teaching workforce through a teacher level data collection can support improved and informed decision making and provide direction for future research questions. The data in this report suggests areas for further investigation and represents a further critical step in understanding and supporting teachers.

## Key observations

The initial NTWD holds data on 440,313 members of the teaching workforce across the country, consisting of 313,791 'known employed' teachers and 126,522 'additional registrants'.

As could be expected, within such a large workforce, there is incredible diversity in the demographics, qualifications and employment amongst teachers.

From a demographic perspective, the median age across the teaching workforce is 44 and three quarters of teachers are female. Teachers in Australia were born in 193 different countries. In addition to education qualifications, the teaching workforce most commonly has qualifications in the fields of Society and Culture, and the Natural and Physical Sciences. These qualifications are at all levels from Certificate I to Doctoral degrees. From an employment perspective, teachers work all across Australia from major cities to very remote communities. They work differing hours per week under differing employment instruments. The teaching workforce includes early service teachers who have just started their career to teachers with more than 60 years experience with their current employer.

In some jurisdictions the challenge to address an ageing workforce is more pointed than others. Younger teachers make more of the fixed term and casual workforce. This may be indicative of a desire for greater workplace flexibility but it may also indicate difficulties in finding ongoing employment. Teachers who desire greater employment stability may look outside education to meet this need.

The high female ratio indicates that the challenge of return to work after starting a family is likely to be felt more acutely in teaching. 13% of teachers aged 30 – 39 are on extended leave and females make up 92% of this number.

The data also suggests that younger teachers, with additional qualifications, have a higher proportion in Creative Arts, and lower in the Sciences, than their older peers. Attracting the desired skill sets into the teaching workforce will be essential to deliver the desired curriculum and outcomes in the future.

Aboriginal and Torres Strait Islander teachers make up less than 2% of the teaching workforce. The teacher to student ratio of these teachers remains well below that of the general population. Increasing these teacher numbers is already a strategic imperative for Federal and jurisdictional governments.

The data suggests an additional 62,000, or 14% of qualified and registered teachers are not in a teaching position. This pool has equally broad ranging qualifications though these are often to a higher level. Determining how to appropriately leverage this cohort of people who remain committed to education through maintaining registration, could provide valued insight into achieving educational outcomes.

Teachers in low SES located schools have a very similar demographic profile to those in higher SES located schools. There are though some differences in the qualifications reported by teachers in low SES school locations when compared to high SES school locations.. Teachers in higher SES schools are more likely to have additional non-education qualifications and the qualifications they do hold, are to a higher level. Though these differences are not marked, finding an appropriate method to equitably distribute skill and qualification across teachers could support uplift in lower SES areas.

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# PART I

## OVERVIEW



# Background

The quality of education provided in Australian schools is a key determinant of the nation's future prosperity. Success in this area will require a motivated, trained and productive teaching workforce to engage the student population and deliver effective education outcomes.

The Council of Australian Governments (COAG) National Partnership Agreement for Improving Teacher Quality commenced in January 2009 to implement a range of significant reforms, under the Smarter Schools - Teacher Quality National Partnership (TQNP), to improve the quality of the Australian teaching workforce. Amongst its facilitation reforms is the need to improve the quality and availability of teacher workforce data. Development of a National Teaching Workforce Dataset (NTWD) is one of two projects implementing this facilitation reform, aiming to improve teacher quality through a national collection of workforce data, and is the subject of this report. The other project implementing this reform is a longitudinal teacher study.

The need to capture reliable and granular data on the national teaching workforce is critical to enable evidence and facts to underpin policy decisions and evaluate program and policy effectiveness. This will become more prevalent as the demand for greater transparency into decision making increases to ensure equitable service delivery.

The objectives of the NTWD include:

- development of a robust, responsive system for the consistent classification, collection, storage, analysis and reporting of national and jurisdictional data pertaining to the Australian teaching workforce
- availability of quality teacher workforce data to monitor and report on workforce trends and to inform decision-making nationally and within and across jurisdictions and sectors on a range of workforce planning issues

The NTWD is expected to provide the following benefits:

- Proactive strategic management of the teaching workforce at national and jurisdictional levels
- Informing policy to provide equitable education opportunities and to evaluate policy effectiveness
- Providing direction to teacher education providers on gaps in the workforce and types of graduates required
- Informing prospective teachers on areas of demand
- Informing other national teacher reforms to improve teacher quality (eg. national consistency in teacher training, registration and professional standards)

The work required for the NTWD was approved by the Australian Education, Early Childhood Development and Youth Affairs Senior Officials Committee (AEEYSOC), and has been overseen by the AEEYSOC Teaching Workforce Dataset Working Group (the "Working Group"). The Working Group includes representation from the Australian Government Department of Education, State and Territory government education departments, National Catholic Education Commission (NCEC), Independent Schools Council of Australia (ISCA) and Australasian Teacher Regulatory Authorities (ATRA), and reports to AEEYSOC periodically. The Working Group is chaired by the Victorian Department of Education and Early Childhood Development (DEECD).

Preliminary work was undertaken by the Australian Council for Education Research (ACER) through development of a framework which provided direction for establishment of the NTWD. The framework report:

- identified that a collection of related data is more likely than a single set of data
- emphasised the importance of common data definitions and data protocols
- recommended capture data at a unit (e.g. teacher) level
- considered the options of pooling existing data vs. initiating a new data collection method
- considered the IT requirements and challenges
- proposed 40 core data items for inclusion addressing demographics, the teacher life cycle (ie. qualifications, registration, employment and exiting from teaching) and aggregated supply and demand data items

EY (formally Ernst & Young) was contracted by the Australian Government Department of Education to deliver the initial NTWD, including:

- engagement of the broader education community
- investigation into the availability and suitability of teaching workforce data sources existing nationwide
- collection of data items in line with privacy requirements
- classification of data into nationally consistent structures
- linking and enrichment of data
- aggregation of data in line with privacy requirements
- analysis and reporting of the teaching workforce

The following deliverables have been fulfilled:

- Collection of core workforce data items
- Establishment of an initial NTWD
- Communication to and engagement of stakeholders
- Analysis and reporting on the teaching workforce

# Methodology

The following section outlines the key steps undertaken to build the National Teaching Workforce Dataset.

Working Group members advised on appropriate contacts or organisations that may have held data that was appropriate for the NTWD. In total, more than one hundred organisations were identified but it became readily apparent that only thirty six (36) may have access to necessary data. This included the jurisdictional employer for each sector as well as each jurisdictional regulator. In addition, national organisations were also identified, including the Australian Government Department of Education, Department of Immigration and Citizenship (DIAC), the Australian Bureau of Statistics (ABS) and ACER as holder of the 'Staff in Australia's Schools' (SIAS) data.

Each of the 36 potential custodians was issued with a data questionnaire that sought to understand the availability of data and its appropriateness for inclusion in the NTWD. The questionnaire sought to understand and evaluate the attributes of the data held by custodians. The attributes used to assess the data were:

- Accuracy
- Completeness
- Timely
- Unique
- Depth
- Access
- Extraction
- Compatibility
- Consistency

Once assessed, summaries were produced to understand the availability of data across jurisdictions. In some cases it was possible that data from the regulator may be able to be used where that data is not available from the employer. In particular this was used in jurisdictions where Catholic or Independent sector data was not available, and where the regulator has comfort in its sector data, based on a regular audit programme.

Once data was assessed, this was presented to the Working Group for decision on which data to formally request. The Working Group adopted an approach whereby even if data had limitations, based on the attribute evaluation, that it still be captured for the NTWD.

Data requests for specific data items were issued to individual data custodians. In parallel to issuing a data request to custodians, a Data Management Framework was defined. This framework, developed in conjunction with privacy commissioners around the country, outlined the processes and controls in place, within EY, to minimise the risk of identification of any one individual teacher within the NTWD. The below steps in collection of the NTWD summarise the approach documented in that framework.

Data was extracted by custodians. In some cases, EY provided support with the extraction in terms of specific fields that were sought for capture. In addition to the data items requested, each custodian was requested to extract, if available, three specific data items for each teacher:

- Surname and Date of Birth
- Employee Number
- Registration Number

EY provided an executable that took the three data items above and used the SHA-512 hashing algorithm to provide a unique value for each of these items. The algorithm is such that for the same input, the same output will be produced. This then would enable later integrating of data across custodians without the need to reveal the underlying data. Custodians tagged their teacher data with the "hashed" values and provided this to EY.

Each data custodian signed a confidentiality agreement with EY, which was supported by a letter from the Australian Government Department of Education. This outlined the processes taken below and stated that nothing could be released outside what was agreed to in the confidentiality agreement.

Upon receipt of the data, EY loaded this into an area labelled, a "quarantine environment". Data here was only accessible to EY employees working on the engagement. Within the quarantine environment, the following key tasks were performed:

- **Data classification:** one of the key strategic decisions made by the Working Group was that data would be normalised to a national standard within the quarantine environment, rather than requiring custodians to perform this. This relieved some burden on the custodians and also reduced the risk of different approaches to national consistency. Data received from custodians was classified to, where possible, existing national data standards. In some instances, this leveraged data standards established by the ABS, in others this used standards outlined by ACER in the Framework Report, and in others EY created a standard, based on data captured. The classification proved particularly challenging for items captured in free text by custodians. In many cases, numerous forms of essentially the same data item were provided, with qualifications presenting the greatest amount of variation across the country.
- **Data linkage:** with the hashed value captured for each teacher, matching was possible across different custodians. With an intention to get as rich a record as possible about each teacher, the integration of employer data with regulator data presented a method to achieve this. Linkage was done across the three hashed values as a method to identify records in each dataset.
- **Data aggregates:** within the quarantine environment, EY was able to prepare summaries of the available data. The confidentiality agreement states that these summary aggregates must have a minimum size of ten (10) teachers before data can be released.

In addition, the quarantine environment also included data received from the Australian Government Department of Education, ACER, DIAC and the ABS. Public data from the ABS population census was also included.

Data was analysed for the purposes of this report. Analysis was provided of individual data items collected. In addition, the Working Group outlined a series of focus areas for further detailed analysis to identify trends and insights.

A key objective of the NTWD was to provide data back to custodians to support their own analysis and benchmarking. To that effect, four releases of data have been agreed as below:

- **Release 1A:** A national release that may include geographic identification to SA4 with no sector information. This release is intended for employer custodians and the Australian Government Department of Education.
- **Release 1B:** A national release that provides no geographic data other than remoteness, and has a sector identifier. This release is intended for employer custodians and the Australian Government Department of Education.
- **Release 2:** An employer specific release with data only for that employer enriched with regulator data.
- **Release 3:** A to-be-defined release of data for ATRA members. This release is not included in the current confidentiality agreement but is committed to by the Australian Government Department of Education and EY.

# Data collected

The table below lists each core data item originally proposed for inclusion in the NTWD, including the data item category, name and definition. The table also indicates whether each proposed data item was available and suitable for collection and inclusion in the initial NTWD. Source of collection is included below.

Category	Data Item	Short Definition	Included	Source
<b>Demographics</b>	Gender	The biological distinction between male and female	Yes	Employers/Regulators
	Year of birth +	Year the individual was born	Yes	Employers/Regulators
	Aboriginal & Torres Strait Islander status	Australian Aboriginal and/or Torres Strait Islander origin status	Yes	Employers/Regulators
	Country of birth	The country in which the individual was born	Yes	Employers/Regulators
	Year of arrival in Australia	Year in which the individual first arrived in Australia (if applicable)	*	SIAS
	Previous occupation group	Occupation group previously undertaken by individual (if applicable)	*	SIAS
<b>Qualifications</b>	Level	The level of qualification awarded	Yes	Employers/Regulators
	Field	The field of qualification awarded	Yes	Employers/Regulators
	Institution	Tertiary education institution where qualification gained	Yes	Employers/Regulators
	Year	Year in which individual graduated with qualification	Yes	Employers/Regulators
	Specialisations	Fields of specialisation studied in qualification	*	SIAS
<b>Professional Development</b>	Type	The form of professional development undertaken	No	N/A
	Area	Main field in which professional development was undertaken	*	SIAS
<b>Teacher Registration</b>	Regulatory authority	The body responsible for registering the individual as a teacher	Yes	Regulators
	Conferral year +	Year in which individual gained registration as a teacher	Yes	Regulators
	Teaching restrictions	Any special conditions or restrictions placed on registration	Yes	Regulators
	Specialisations	Field of specialisation or specific subject areas noted on registration	No	N/A
	Registration level	Level or stage of professional teaching standard individual has attained	Yes	Regulators
<b>Current Employment</b>	Employment status	Active status of employment (eg. active, paid/unpaid leave)	Yes	Employers
	Year started +	Year individual commenced employment with current employer	Yes	Employers
	Time fraction employed	Usual working load as a decimal of a full-time working load (1.0)	Yes	Employers
	Type of employment	Nature of employment in relation to expected continuity and eligibility for basic leave entitlements (eg. permanent, casual, fixed)	Yes	Employers
	Employee classification	Level employed with respect to employment structure	Yes	Employers
	Salary range	The individual's total salary/remuneration package value per annum	Yes	Employers
	Salary increment level	The increment level/salary band associated with the individual	No	N/A
<b>Current School</b>	School type	Type of school of teacher, in terms of year levels represented	Yes	Employers/Regulators
	School sector	Sector of school of teacher (eg. Gov, Cath, Ind)	Yes	Employers/Regulators
	School location	Location of the school of teacher with respect to remoteness	Yes	Employers/Regulators
<b>Current Teaching</b>	Subject area(s)	All subject areas currently taught by the individual	*	SIAS
	Year level(s)	All year groups currently taught by the individual	No	N/A
	Other duties	Additional duties performed in addition to role or classification	No	N/A
<b>Exit from Teaching</b>	Year of leaving	Year at which individual separated or exited the teaching profession	#	Regulators
	Reason for leaving	Reason for individual's permanent exit from the teaching profession	*	SIAS
	Destination	Occupation group undertaken after exiting teaching profession	*	SIAS
<b>Teacher Supply</b>	Teacher graduates	Counts of enrolments and completions by specialist area	^	DIISTRE / Australian Government Department of Education
	Teacher pools	Counts of persons on regulatory authority and employment lists	^	Regulators/ABS
	Net migration	Counts of teachers registered from overseas and residing overseas	^	Regulators/DiAC
<b>Teacher Need</b>	Adequacy	Counts of shortages/ vacancies by learning area	^	SIAS
	Current requirements	Extent of current teacher need for each of the main learning areas	^	SIAS
	Future requirements	Teacher career intentions and teacher projections	^	SIAS

^ Data collected in aggregate form, unsuitable to collect at unit level.

# Based on counts of unit level data provided by regulators representing registrants who left the profession in the year preceding data extraction. This unit level data was not otherwise used in the NTWD which includes active members only. In some instances, counts were provided directly by regulators rather than providing unit level data.

\* Not consistently collected by teacher employers or regulators to enable inclusion at unit level. As an interim measure, substitute data for this data item has been collected in aggregate form from alternative source.

+ Data item name and definition indicate collection of calendar year from source data custodians for these data items for development of the NTWD. However names and definitions for these data items have been altered for releases of data from the NTWD to represent number of years (or age), as noted in the Data Dictionary.

Data has been collected for 440,313 members of the teaching workforce across the country, consisting of 313,791 'known employed' teachers and 126,522 'additional registrants'.

**'Known employed'** is a term used to describe teachers who exist in data collected from employer data custodians or exist in data collected from regulatory authorities who inquire whether their registrants are currently employed.

**'Additional registrants'** describe the remaining members of the teaching workforce that exist in regulatory authority data but not employer data. As data has not been collected from all employers in the independent and Catholic sectors, and not all regulatory authorities inquire (or validate) employment status, it is not possible to determine whether 'additional teacher registrants' in the NTWD are, or are not, currently employed.

The table below summarises representation of known employed teachers and additional teacher registrants from each jurisdiction to derive the total teaching workforce. The table also provides NSSC 2012 counts for comparative purposes, however variances are expected due to definition and timing differences. For example, the reference point for NSSC 2012 is August 2011, whilst NTWD data has been collected from data custodians at various points in time between mid 2012 to mid 2013. In addition, NSSC 2012 excludes casual teachers, teachers on leave for at least 4 weeks, and replacement teachers where replacement period is less than 4 weeks, whereas the NTWD includes casual and replacement teachers, except for the Government sectors in Victoria and Northern Territory where data for casual teachers is not centrally collected.

Teacher Population	Jurisdiction	NTWD head count*	NSSC 2012 head count	Variance
Government Sector Teachers	NSW	84,088	56,474	27,614
	VIC	49,143	43,911	5,232
	QLD	49,617	38,819	10,798
	WA	23,313	20,128	3,185
	SA	15,773	12,973	2,800
	TAS	8,121	5,007	3,114
	ACT	4,152	2,894	1,258
	NT	3,328	2,782	546
	<b>Total</b>	<b>237,535</b>	<b>182,988</b>	<b>54,547</b>
Catholic Sector Teachers	NSW	6,117	18,958	-12,841
	VIC	15,930	16,629	-699
	QLD	10,292	10,107	185
	WA	6,933	5,262	1,671
	SA	4,101	3,952	149
	TAS	1,408	1,204	204
	ACT	1,020	1,239	-219
	NT	580	427	153
	<b>Total</b>	<b>46,381</b>	<b>57,778</b>	<b>-11,397</b>
Independent Sector Teachers	NSW	6,508	14,081	-7,573
	VIC	12,811	13,885	-1,074
	QLD	9,359	8,942	417
	WA	Not collected	5,776	-5,776
	SA	Not collected	4,169	-4,169
	TAS	Not collected	1,050	-1,050
	ACT	1,197	838	359
	NT	Not collected	527	-527
	<b>Total</b>	<b>29,875</b>	<b>49,268</b>	<b>-19,393</b>
<b>Known Employed</b>		<b>313,791</b>	<b>290,034</b>	<b>23,757</b>
Additional Registrants	NSW	18,003		
	VIC	38,172		
	QLD	27,597		
	WA	18,607		
	SA	17,408		
	TAS	2,102		
	ACT	1,883		
	NT	2,750		
	<b>Additional Registrants</b>	<b>126,522</b>		
<b>Teaching Workforce</b>		<b>440,313</b>		

\* Refer 'Data gaps and limitations' section to assist with interpreting NTWD counts

## Data gaps and limitations

The initial NTWD has been built through pooling and integrating existing teacher workforce datasets held by data custodian organisations across the country. This approach was recommended in the framework report, and endorsed by the Working Group. The quality of the initial NTWD is therefore dependent on the existence, availability, completeness, accuracy, consistency and comparability of each data item collected from custodians across each sector and jurisdiction.

The initial phase of this project, which involved detailed investigation into the existence and suitability of existing teacher workforce data nationwide, identified a lack of national consistency in the collection of teaching workforce data, both in terms of existence and availability of data items collected as well as completeness, accuracy and comparability of data items where collected. This investigation included a comprehensive suitability assessment for each data item existing in each data source to determine whether any limitations existed for that data item which should preclude it from being included in the NTWD. Data items with minor limitations were accepted for the initial NTWD, with limitations to be detailed in the Data Analysis Report and Data Dictionary, whilst data items with significant limitations were excluded. This exercise highlighted gaps in the initial NTWD at a global level, impacting an entire data item and/or segment of the teaching population, as well limitations at a local level around the completeness and/or accuracy on data collected from a specific source, impacting a specific sector within a specific jurisdiction.

Section 2 of this report defines each data item, including commentary on gaps and limitations, however a summary of gaps and limitations is provided below.

The following data items proposed in the ACER Framework report were generally not available from data custodians:

- Demographics: Year of Arrival, Previous Occupation
- Qualifications: Specialisation
- Professional Development: Type, Area
- Registration: Specialisations
- Current Employment: Salary Increment Level
- Current Teaching: Subject Area, Year Level, Other Duties
- Exit from Teaching Profession: Reason, Destination
- Teacher Need: Adequacy, Current/Future Requirements

Some of the above are addressed in SiAS 2013. Where so, supplementary observations have been included in Section 2 of this report using a distinctive green colour scheme.

Approximately half of NSW teachers are not represented in regulatory authority data items (refer section 2) as accreditation of NSW teachers, and corresponding collection of data, commenced from 2005 for new teachers only. Whilst most other data items were sourced from the Government employer for NSW teachers employed in the Government sector, those employed in the Catholic and Independent sectors are missing from all other data items as such data was unavailable centrally for collection.

The following segments of teachers are not represented in employment data items (refer section 2) due to lack of central collection and availability of data from employers:

- Independent sector teachers nationwide
- Catholic sector teachers in Qld, NSW and VIC
- Casual teachers in the Government sector in VIC and NT

Further gaps exist in the representation of teachers for some data items where not collected by a specific employer or regulatory authority (eg. country of birth, Aboriginal or Torres Strait Islander Status).

Some data items are incomplete in data custodian collections. For example, in some jurisdictions, regulatory authorities have collected only those qualifications received since creation of the regulatory authority. In addition, non teaching qualifications are typically self reported and optional to provide to regulatory authorities.

Considerable variation was noted around how data custodians define and store data items, including both free form and coding structures, resulting in significant work to best map and align custodian data to the nationally consistent NTWD coding structures.

Timing of data collection from each data custodian was dependent on internal competing priorities, resource availability, legal processes and other factors, resulting in variation to the timing of data extraction and release.

The ability to join employer and regulatory authority data was dependent on custodians holding one of three proposed matching keys (in de-identified format). A high match rate was achieved through this means, however where data custodians did not hold the required matching keys, or where matching keys differed (eg. maiden name existing in one source but married name in another), it is possible that unmatched employer and regulator records in fact relate to the same teacher, resulting in a small number of teachers being represented twice in the NTWD.



# PART II

## DESCRIPTION OF INDIVIDUAL DATA ITEMS



## Description of individual data items

This section of the report presents analysis of all 45 data items proposed to be included in the initial NTWD.

Each data item is presented individually with the following detail:

- Definition of the data item
- Classification scheme used to define the data item structure, format and permissible values
- Summary of collection, including an indication of custodian groups collecting the data item, how it is stored and whether it has been released
- Summary of data preparation, including an overview of key transformations performed on the data item once received to prepare the data item for inclusion in the NTWD, including application of rules
- Summary of limitations associated with the data item to ensure appropriate application and interpretation of data item values
- Where data has been collected, a distribution of unique values is presented in both visual and tabular formats, providing the reader with a summary representation of the data item and how it describes the teaching workforce. Observations are also provided in narrative form.
- Where unit level data was not available for collection from employer or regulatory authority data custodians, substitute data has been collected in aggregate form from alternative sources, most notably the SiAS 2013 survey main report. A distinctive green colour scheme has been used to present this data.

# Demographics

## Gender

### Data Item 01

#### Data description

##### Definition

- The physical and biological distinction between male and female

##### Classification Structure

- 1 = Male
- 2 = Female
- 9 = Unknown

##### Collection

- Gender is collected centrally by all employer and regulatory authority data custodians supplying data for the NTWD.
- Gender is stored by most data custodians using coded values in accordance with local classification structures, although is stored in free text by some.
- Gender was released directly by all data custodians, except in the ACT where employers requested that all demographic data items be sourced from the regulatory authority.

##### Data preparation

- Once released by data custodians, coded and free text values for gender were classified or mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where coded or free text values were not easily interpretable and assistance was required to classify or map to the NTWD classification structure.
- The value “unknown” was assigned where gender was not captured for a member of the teaching workforce by the relevant employer or regulatory authority. Note that the value “EmpOrphan” was instead assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.
- Where gender was collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

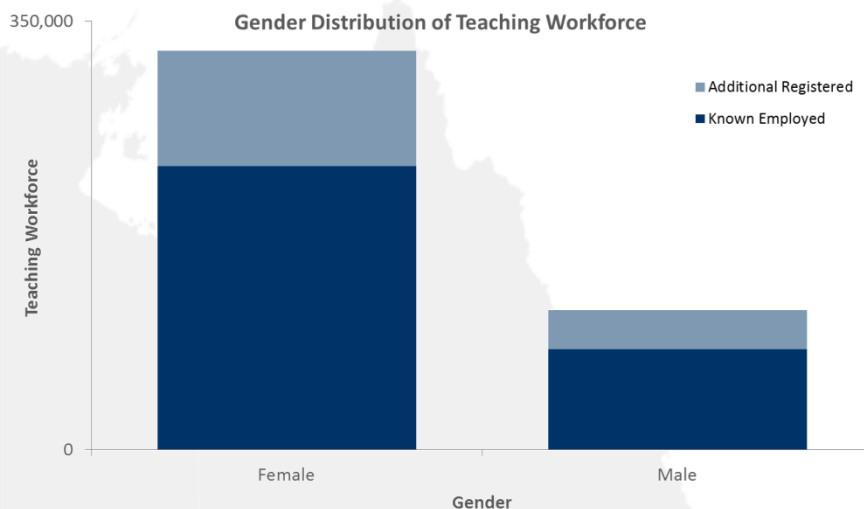
##### Limitations

- Gender is unknown for 631 (0.1%) members of the teaching workforce, 626 of whom are employer orphans unable to be matched to regulatory authority records containing this data item.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

# Demographics

## Gender

### Data Item 01



#### Observations

- 74.1% of the teaching workforce with a known gender is female, including 73.8% of known employed teachers and 74.9% of additional registrants.

Gender	Known Employed	Additional Registered	Teaching Workforce	%
Female	231,180	94,720	325,900	74.12%
Male	81,983	31,799	113,782	25.88%
<b>Total (excluding unknown)</b>	<b>313,163</b>	<b>126,519</b>	<b>439,682</b>	<b>100.00%</b>
Unknown	628*	3	631	0.1%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* Includes 626 'employer orphans' unable to be matched to regulatory authority records containing this data item

# Demographics

## Age

### Data Item 02

#### Data description

##### Definition

- The length of time (in years) that an individual has lived

##### Classification Structure

N/A

##### Collection

- Year of birth was collected from data custodians to derive the 'age' data item for the NTWD.
- Year of birth is collected centrally by all employer and regulatory authority data custodians supplying data for the NTWD.
- Year of birth has been released directly by all data custodians, except in the ACT where employers requested that all demographic data items be sourced from the regulatory authority.

##### Data preparation

- Once released by data custodians, year of birth was converted to an age value through subtracting the year of birth from the year 2012.
- The value "unknown" was assigned where year of birth was not captured by either the employer or regulatory authority relevant to each member of the teaching workforce, or where the year of birth captured was clearly invalid or inaccurate (eg. 2032). Note that the value "EmpOrphan" was instead assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.
- Where year of birth was collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

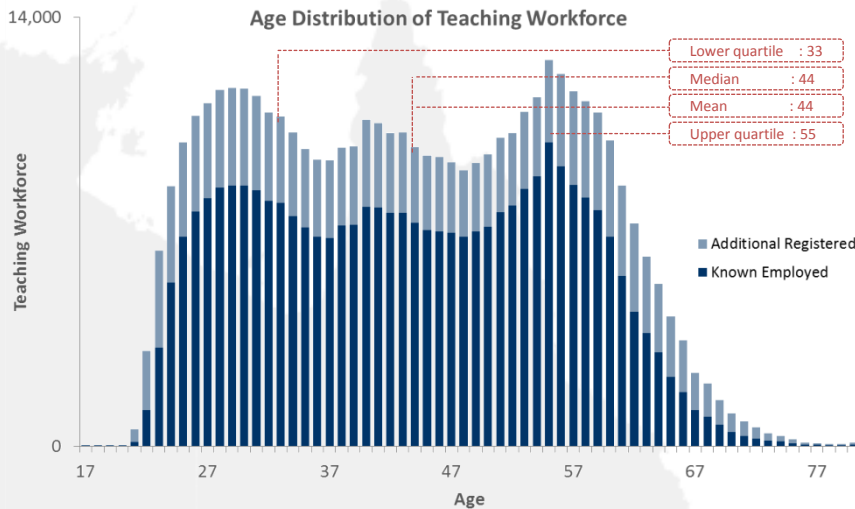
##### Limitations

- Age is unknown for 843 (0.2%) members of the teaching workforce, including 626 employer orphans unable to be matched to regulatory authority records containing this data item.
- Date and month of birth were not collected from data custodians (for privacy reasons), therefore age was calculated based on year of birth only.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

# Demographics

## Age

### Data Item 02



#### Observations

- The mean age of known employed teachers is 43.7 years, slightly lower than the 44.4 year mean age of additional registrants.
- 26% of the teaching workforce is 55 years or older, including 24% of known employed teachers and 30% of additional registrants.
- Ages have been categorised into ranges in the adjacent table for presentation purposes.

Age Range	Known Employed	Additional Registered	Teaching Workforce	%
< 20	9	1	10	0.00%
20-24	9,857	8,639	18,496	4.21%
25-29	39,525	15,652	55,177	12.56%
30-34	40,271	14,668	54,939	12.50%
35-39	35,177	12,666	47,843	10.89%
40-44	38,063	13,321	51,384	11.69%
45-49	34,844	11,569	46,413	10.56%
50-54	39,836	12,226	52,062	11.85%
55-59	43,379	15,065	58,444	13.30%
60-64	23,535	13,668	37,203	8.47%
65-69	6,840	6,764	13,604	3.10%
70-74	1,363	1,867	3,230	0.73%
75-79	234	311	545	0.12%
>79	42	78	120	0.03%
<b>Total (excluding unknown)</b>	<b>312,975</b>	<b>126,495</b>	<b>439,470</b>	<b>100.00%</b>
Unknown	816*	27	843	0.2%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* Includes 626 'employer orphans' unable to be matched to regulatory authority records containing this data item

## Demographics

### Aboriginal and Torres Strait Islander (Indigenous) Status

#### Data Item 03

#### Data description

##### Definition

- Self reported identification as being of Australian Aboriginal or Torres Strait Islander origin

##### Classification Structure

- 1 = Aboriginal or Torres Strait Islander origin
- 2 = Neither Aboriginal nor Torres Strait Islander origin
- 9 = Unknown

##### Collection

- Aboriginal or Torres Strait Islander status is collected centrally by 10 of 13 employer data custodians and 5 of 8 regulatory authority data custodians supplying data for the NTWD.
- Aboriginal or Torres Strait Islander status is stored by most data custodians using coded values in accordance with local classification structures, although is stored in free text by some.
- Aboriginal or Torres Strait Islander status has been released directly by all data custodians who collect this data item, except in the ACT where employers requested that all demographic data items be sourced from the regulatory authority.

##### Data preparation

- Once released by data custodians, coded and free text values for Aboriginal or Torres Strait Islander status were classified or mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where coded or free text values were not easily interpretable or where assistance was required to classify or map to NTWD classification structures.
- The value “unknown” was assigned where Aboriginal or Torres Strait Islander status was not captured by the relevant employer or regulatory authority. Note that the value “EmpOrphan” was instead assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.
- Where Aboriginal or Torres Strait Islander status was collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

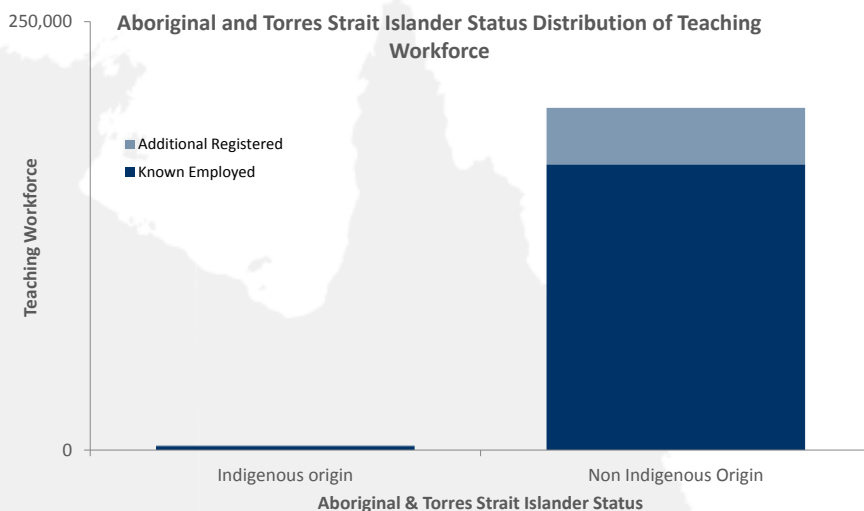
##### Limitations

- Aboriginal or Torres Strait Islander status is unknown for 237,942 (54%) members of the teaching workforce, including 914 employer orphans unable to be matched to regulatory authority records containing this data item.
- Aboriginal or Torres Strait Islander status is a self reported data item, impacting on its accuracy where teachers elect not to disclose their true status.
- Aboriginal or Torres Strait Islander status is generally not a mandatory data item to collect, impacting on its extent of completeness.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

## Demographics

### Aboriginal and Torres Strait Islander Status

#### Data Item 03



#### Observations

- 1.3% of the teaching workforce who have disclosed their Aboriginal or Torres Strait Islander status are of Aboriginal or Torres Strait Islander origin. This includes 1.3% of known employed teachers and 1.4% of additional registrants.

Aboriginal & Torres Strait Islander Status	Known Employed	Additional Registered	Teaching Workforce	%
Aboriginal & Torres Strait Islander Origin	2,195	466	2,661	1.31%
Not Aboriginal & Torres Strait Islander Origin	166,660	33,050	199,710	98.69%
<b>Total (excluding unknown)</b>	<b>168,855</b>	<b>33,516</b>	<b>202,371</b>	<b>100.00%</b>
Unknown	144,936*	93,006	237,942	54%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* Includes 914 'employer orphans' unable to be matched to regulatory authority records containing this data item

# Demographics

## Country of Birth

### Data Item 04

#### Data description

##### Definition

- The country in which the individual was born

##### Classification Structure

- ABS 1269.0 - Standard Australian Classification of Countries (SACC), 2011

##### Collection

- Country of birth is collected centrally by 4 of 13 employer data custodians and 7 of 8 regulatory authority data custodians supplying data for the NTWD.
- Country of birth is stored by most data custodians using coded values in accordance with local classification structures, although is stored in free text by some.

##### Data preparation

- Once released by data custodians, coded and free text values for country of birth were classified or mapped by the NTWD project team to the NTWD classification structure (ie. 4-digit SACC Second Edition Code).
- Guidance was sought from data custodians where coded or free text values were not easily interpretable or where assistance was required to classify or map to the NTWD classification structure.
- The SACC code representing “unknown” was assigned where country of birth was not captured by either the employer or regulatory authority relevant to each member of the teaching workforce. Note that the value “EmpOrphan” was instead assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.
- Where country of birth was collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

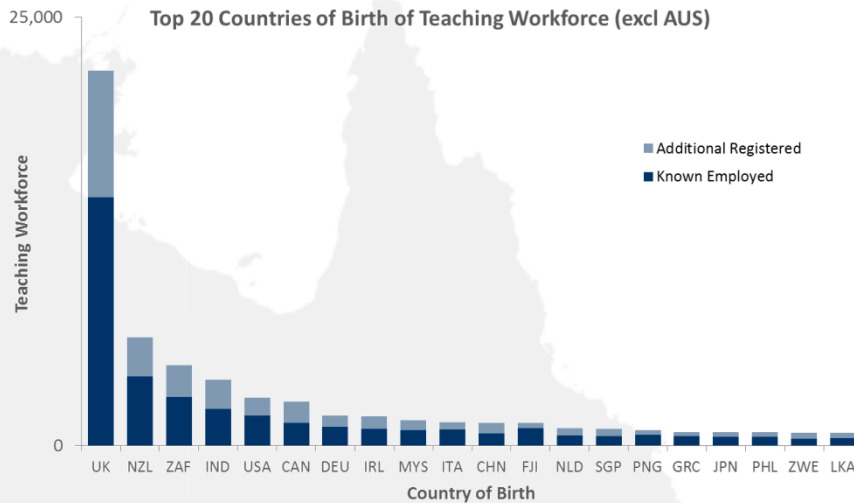
##### Limitations

- Country of birth is unknown for 49,578 (11%) members of the teaching workforce, including 2,208 employer orphans unable to be matched to regulatory authority records containing this data item.
- Some inconsistency exists across and within data custodians with regard to the level of granularity applied when data custodians have collected country of birth. For example, some teachers were assigned to countries within the UK (eg. England, Wales), whilst others were assigned the value “UK” and not its individual countries.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

# Demographics

## Country of Birth

### Data Item 04



#### Observations

- 82% of the teaching workforce with a known country of birth were born in Australia, with the remaining 18% born in 192 different countries.
- 89% of the teaching workforce with a known country of birth were born in a Commonwealth country (including those born in Australia).
- Of the 18% with a known country of birth born outside of Australia, 37% were born in another Commonwealth country.
- The UK, NZ, South Africa and India are the most common overseas countries of birth, all which are Commonwealth countries.

Top 20 Countries of Birth (excl Australia)	Known Employed	Additional Registered	Teaching Workforce	%
United Kingdom (UK)	14,461	7,392	21,853	5.59%
New Zealand (NZL)	4,028	2,293	6,321	1.62%
South Africa (ZAF)	2,820	1,865	4,685	1.20%
India (IND)	2,143	1,679	3,822	0.98%
United States (USA)	1,729	1,048	2,777	0.71%
Canada (CAN)	1,339	1,236	2,575	0.66%
Germany (DEU)	1,079	685	1,764	0.45%
Ireland (IRL)	983	717	1,700	0.44%
Malaysia (MYS)	878	585	1,463	0.37%
Italy (ITA)	919	437	1,356	0.35%
China (CHN)	716	594	1,310	0.34%
Fiji (FIJ)	1,021	283	1,304	0.33%
Netherlands (NLD)	593	407	1,000	0.26%
Singapore (SGP)	529	455	984	0.25%
Papua New Guinea (PNG)	620	284	904	0.23%
Greece (GRC)	565	233	798	0.20%
Japan (JPN)	499	290	789	0.20%
Philippines (PHL)	493	269	762	0.20%
Zimbabwe (ZWE)	392	356	748	0.19%
Sri Lanka (LKA)	419	312	731	0.19%
<b>Total Top 20 Countries of Birth (excl Australia)</b>	<b>36,226</b>	<b>21,420</b>	<b>57,646</b>	<b>14.75%</b>
Australia	237,698	82,921	320,619	82.06%
Other	7,964	4,506	12,470	3.19%
<b>Total (excluding unknown)</b>	<b>281,888</b>	<b>108,847</b>	<b>390,735</b>	<b>100.00%</b>
Unknown	31,903*	17,675	49,578	11.3%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* Includes 2,208 'employer orphans' unable to be matched to regulatory authority records containing this data item

# Demographics

## Year of Arrival in Australia

### Data Item 05

#### Data description

##### Definition

- The year in which the individual first arrived in Australia (if applicable)

##### Classification Structure

N/A

##### Collection

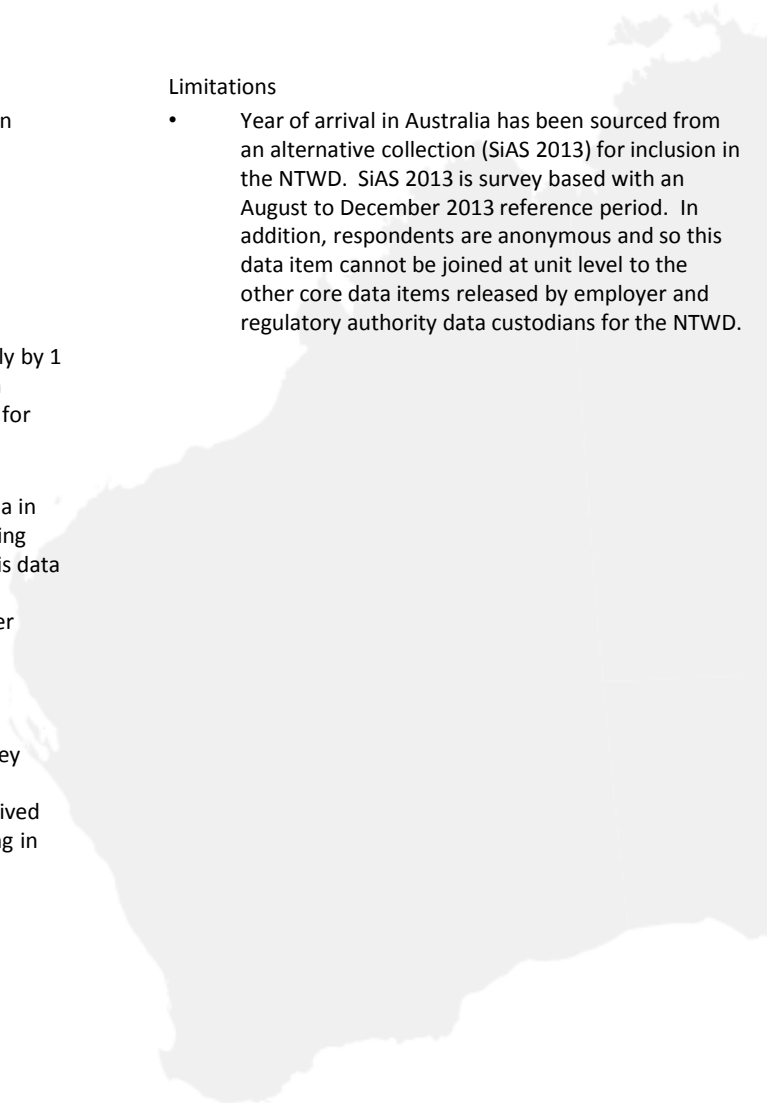
- Year of arrival in Australia is collected centrally by 1 of 8 employer data custodians, although with significant limitations rendering it unsuitable for the NTWD, and nil of 8 regulatory authorities supplying data for the NTWD.
- SiAS 2013 addresses year of arrival in Australia in its teacher and leader surveys through inquiring about number of years living in Australia. This data has been sourced from SiAS 2013 at survey respondent unit level to supplement the other core unit level data items.

##### Data preparation

- SiAS 2013 surveys its teacher and leader survey respondents “for how many years living in Australia?”. Year of arrival was therefore derived through subtracting the number of years living in Australia from 2013 (the SiAS survey period).

##### Limitations

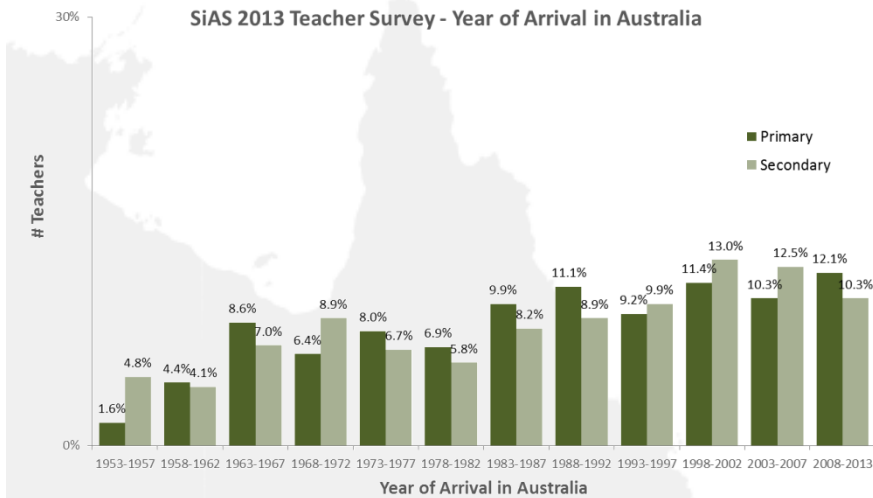
- Year of arrival in Australia has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with an August to December 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.



# Demographics

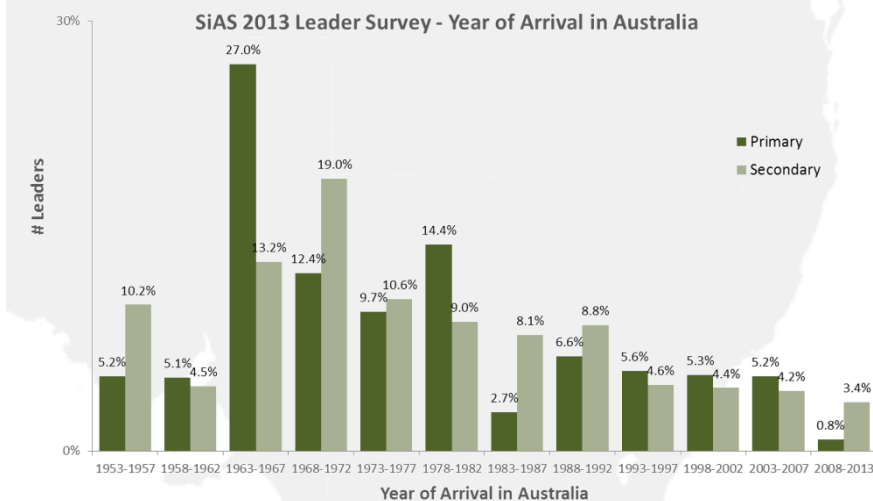
## Year of Arrival in Australia

### Data Item 05



#### Observations

- The adjacent charts identify the year of arrival of overseas-born teachers in percentage terms.
- These charts highlight that the majority of teachers have arrived in more recent years compared to leaders who have lived in Australia for a longer period. This indicates that new arrivals are employed as teachers for a number of years before obtaining leadership positions.
- This analysis is based on the SiAS 2013 main report which provided tables for teachers and leaders identifying number of years living in Australia.



# Demographics

## Previous Occupation Group

### Data Item 06

#### Data description

##### Definition

- The occupation group previously undertaken by the individual (if applicable)

##### Classification Structure

- 1220.0 - Australian and New Zealand Standard Classification of Occupations (ANZSCO), 2013, Version 1.2

##### Collection

- Previous occupation group is collected centrally by 2 of 8 employer data custodians, although with significant limitations rendering it unsuitable for the NTWD, and nil of 8 regulatory authorities supplying data for the NTWD.
- SiAS 2013 does not specifically address previous occupation group in its teacher or leader survey. However, SiAS 2013 does ask for main activity in the year before commencing teacher preparation. The responses to this question have been sourced from SiAS 2013 main report for inclusion in this report to supplement the other core unit level data items.

##### Data preparation

- Nil

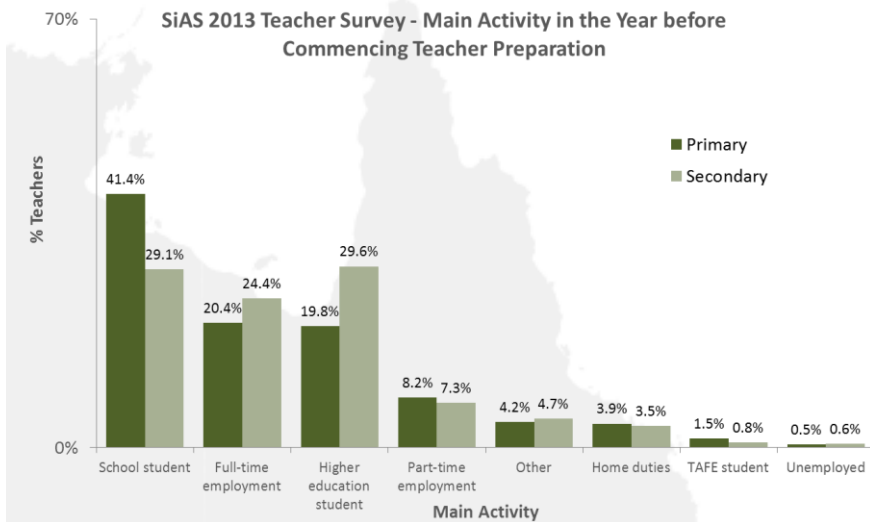
##### Limitations

- Previous occupation group has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with an August to December 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.

# Demographics

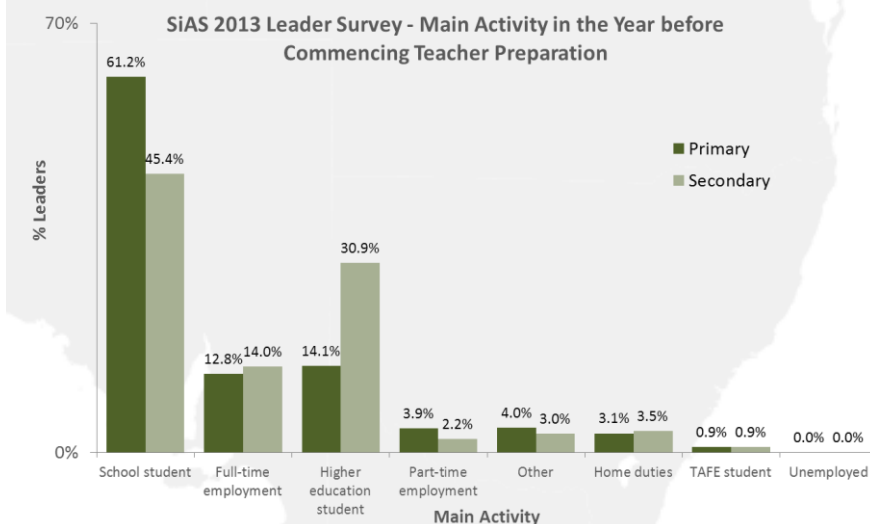
## Previous Occupation Group

### Data Item 06



#### Observations

- These charts identify the main activity performed in the year prior to commencing a teacher preparation program, based on responses from teachers and leaders to the SiAS 2013 survey. This is provided as an alternative to the original data item (previous occupation group), which is not consistently collected at unit level by teacher employers and regulatory authorities, nor is it specifically addressed in the SiAS 2013 survey.
- This analysis is based on the SiAS 2013 main report which provided tables for teachers and leaders identifying their main activity in the year before commencing a teacher preparation program.



# Qualifications

## Level

### Data Items 07 and 12

#### Data description

##### Definition

- The level of qualification awarded to an individual

##### Classification Structure

- ABS 1272.0 - Australian Standard Classification of Education (ASCED), 2001

##### Collection

- Qualifications, including level of qualification, are collected centrally by 6 of 13 employer data custodians and 8 of 8 regulatory authority data custodians supplying data for the NTWD.
- Level of qualification is stored as a distinct data item by only a small number of data custodians, however was otherwise derived from the qualification award title captured by all data custodians.
- Qualifications are captured in free text by most data custodians, with varying degrees of detail recorded. Some data custodians already classify level of qualification to recognised classifications standards (eg. AQF, ASCED).

##### Data preparation

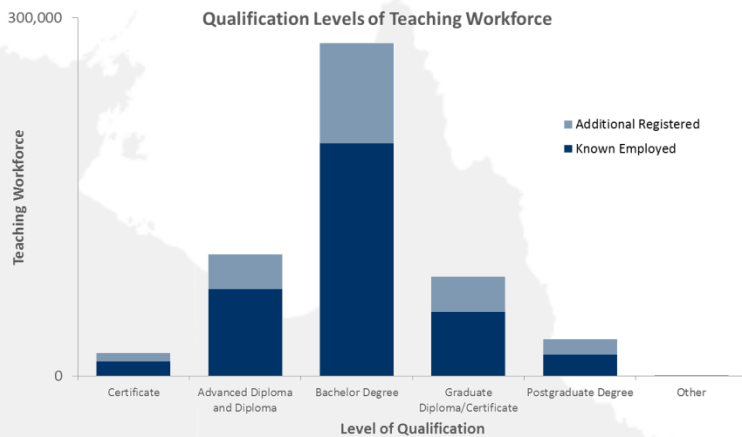
- Once released by data custodians, coded and free text values for level of qualification (or qualification award title where level of qualification was not stored as a separate data item by data custodians) were classified or mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where coded or free text values were not easily interpretable or where assistance was required to classify or map to the NTWD classification structure.
- Where qualifications were collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

##### Limitations

- Most regulatory authority data custodians capture qualifications to enable registration only, and therefore do not require subsequent qualifications or non teaching qualifications to be reported and collected, therefore impacting on completeness.
- The extent of qualifications captured is also impacted by the age of the data custodian or when electronic data storage commenced. For example, VIT have only collected qualifications data for teachers commencing since VIT creation in 2003, NSW DEC have stored qualifications electronically for teachers commencing since 1991, and SA TRB have captured qualifications data for registrants commencing since 1972.
- The extent of validation performed on qualifications data captured varies across data custodians and over time.
- The ability to classify to the narrow ASCED fields was limited by the granularity of qualifications data captured and released by data custodians.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

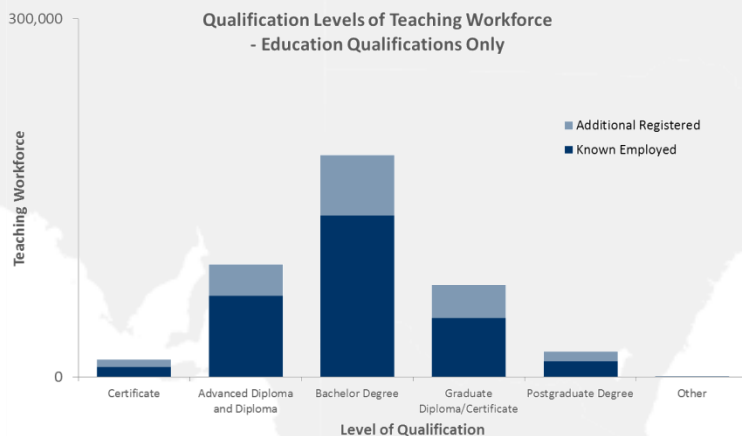
# Qualifications Level

## Data Items 07 and 12



Qualification - Level	Known Employed	Additional Registered	Teaching Workforce	%
Certificate	11,976	7,097	19,073	5.81%
Advanced Diploma and Diploma	72,905	28,854	101,759	30.98%
Bachelor Degree	194,727	83,724	278,451	84.78%
Graduate Diploma/ Certificate	53,519	29,783	83,302	25.36%
Postgraduate Degree	17,764	12,854	30,618	9.32%
Other	352	217	569	0.17%

\* The counts above represent individuals who may exist across multiple levels of qualification. The % values are based on the teaching workforce with qualifications included in the NTWD.



### Observations

- 328,433 (75%) members of the teaching workforce have at least one qualification captured in the NTWD. Additional qualifications may exist for these members but if not captured by regulatory authorities or employers will not be included in the NTWD.
- Qualifications for the remaining 111,880 (25%) members of the teaching workforce may exist but have not been captured by regulatory authorities or employers in their own data collections, and are therefore not included in the NTWD.
- Note that this data item is not limited to only those qualifications that have provided a pathway into the teaching profession. Rather all qualifications reported to, and captured by, data custodians have been included, consisting of initial teacher training courses as well as those taken for research or other purposes.
- The top chart and table identify that, of those members of the teaching workforce with at least one qualification captured in the NTWD, 85% have at least one qualification at Bachelor Degree level, 31% at Advanced Diploma and Diploma level and 25% at Grad Dip/Cert level. Note that members of the teaching workforce with multiple qualification levels (eg. Bachelor and Grad Dip) will be included in counts for each level in the chart and table opposite.
- The bottom chart and table include education qualifications only, including both initial teacher training courses as well as those taken for research or other purposes. Of those members of the teaching workforce with at least one education qualification included in the NTWD, 58% have at least one qualification at Bachelor Degree level, 29% at Advanced Diploma and Diploma level and 24% at Grad Dip/Cert level. Note that members of the teaching workforce with multiple education qualification levels (eg. Bachelor and Grad Dip) will be included in counts for each level in the chart and table opposite.

Education Qualification – Level	Known Employed	Additional Registered	Teaching Workforce	%
Certificate	8,410	6,126	14,536	4.55%
Advanced Diploma and Diploma	67,927	26,121	94,048	29.44%
Bachelor Degree	135,178	50,629	185,807	58.16%
Graduate Diploma/ Certificate	49,454	27,490	76,944	24.08%
Postgraduate Degree	12,988	8,439	21,427	6.71%
Other	98	82	180	0.06%

\* The counts above represent individuals who may exist across multiple levels of qualification. The % values are based on the teaching workforce with education qualifications included in the NTWD.

# Qualifications

## Field

### Data Items 08 and 13

#### Data description

##### Definition

- The field of education studied by the individual

##### Classification Structure

- ABS 1272.0 - Australian Standard Classification of Education (ASCED), 2001

##### Collection

- Qualifications, including field of qualification, are collected centrally by 6 of 13 employer data custodians and 8 of 8 regulatory authority data custodians supplying data for the NTWD.
- Field of education is stored as a distinct data item by only a small number of data custodians, however was otherwise derived from the qualification award title captured by all data custodians.
- Qualifications are captured in free text by most data custodians, with varying degrees of detail recorded. Some data custodians also code level of qualification to recognised classifications standards (eg. ASCED).

##### Data preparation

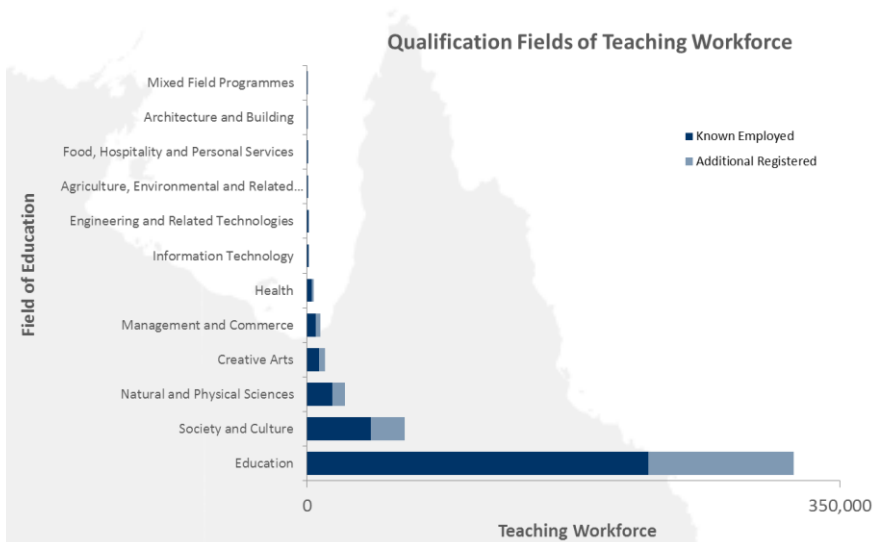
- Once released by data custodians, coded and free text values for field of education (or qualification award title where field of education was not stored as a separate data item by data custodians) were classified or mapped by the NTWD project team to the NTWD classification structure.
- 95% of fields of education were classified to the NTWD classification structure, with the remaining values being null, blank or inadequately described, and which were therefore assigned the ASCED code representing "unknown".
- Where qualifications were collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

##### Limitations

- Field of education is unknown for 28,335 (5%) captured qualifications awarded to 25,810 members of the teaching workforce.
- Most regulatory authority data custodians capture qualifications to enable registration only, and therefore do not require subsequent qualifications or non teaching qualifications to be reported and collected, therefore impacting on completeness.
- The extent of qualifications captured is also impacted by the age of the data custodian or when electronic data storage commenced. For example. VIT have only collected qualifications data for teachers commencing since VIT creation in 2003, NSW DEC have stored qualifications electronically for teachers commencing since 1991, and SA TRB have captured qualifications data for registrants commencing since 1972.
- The extent of validation performed on qualifications data captured varies across data custodians and over time.
- The ability to classify to the narrow and detailed ASCED fields was limited by the granularity of qualifications data captured and released by data custodians.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

# Qualifications Field

## Data Items 08 and 13



Qualification - Field of Education	Known Employed	Additional Registered	Teaching Workforce	%
Education	224,026	95,461	319,487	97.28%
Society and Culture	41,852	22,175	64,027	19.49%
Natural and Physical Sciences	16,697	8,325	25,022	7.62%
Creative Arts	7,652	4,170	11,822	3.60%
Management and Commerce	5,490	3,095	8,585	2.61%
Health	3,155	1,419	4,574	1.39%
Information Technology	920	501	1,421	0.43%
Engineering and Related Technologies	960	481	1,441	0.44%
Agriculture, Environmental and Related Technologies	609	395	1,004	0.31%
Food, Hospitality and Personal Services	531	18	549	0.17%
Architecture and Building	156	65	221	0.07%
Mixed Field Programmes	173	10	183	0.06%
Unknown	14,821	10,989	25,810	7.9%

\* The counts above represent individuals who may exist across multiple fields of education. The % values are based on the teaching workforce with qualifications included in the NTWD.

Refer ABS 1272.0 - Australian Standard Classification of Education (ASCED) for narrow and detailed fields of education associated with each of the broad categories included in the table and chart above. For example, Society and Culture includes political science, humanities, law, language, philosophy and religious studies

### Observations

- 328,433 (75%) members of the teaching workforce have at least one qualification captured in the NTWD. Additional qualifications may exist for these members but if not captured by regulatory authorities or employers will not be included in the NTWD.
- Qualifications for the remaining 111,880 (25%) members of the teaching workforce may exist but have not been captured by regulatory authorities or employers in their own data collections, and are therefore not included in the NTWD.
- Of those members of the teaching workforce with at least one qualification captured in the NTWD, 319,487 (97%) have at least one education related qualification included and 131,011 (40%) have at least one non education related qualification included. Note that education related qualifications include both initial teacher training courses as well as those taken for research or other purposes.
- Note that members of the teaching workforce with multiple qualifications across different fields will be included in counts for each field in the chart and table opposite.

# Qualifications

## Institution

### Data Items 09 and 14

#### Data description

##### Definition

- The education institution where the qualification was studied

##### Classification Structure

- Tertiary Education Quality and Standards Agency (TEQSA): National Register

##### Collection

- Qualifications, including institution, are collected centrally by 6 of 13 employer data custodians and 8 of 8 regulatory authority data custodians supplying data for the NTWD.
- Institution is stored as a distinct data item by most of data custodians, and is captured in free text by all data custodians.

##### Data preparation

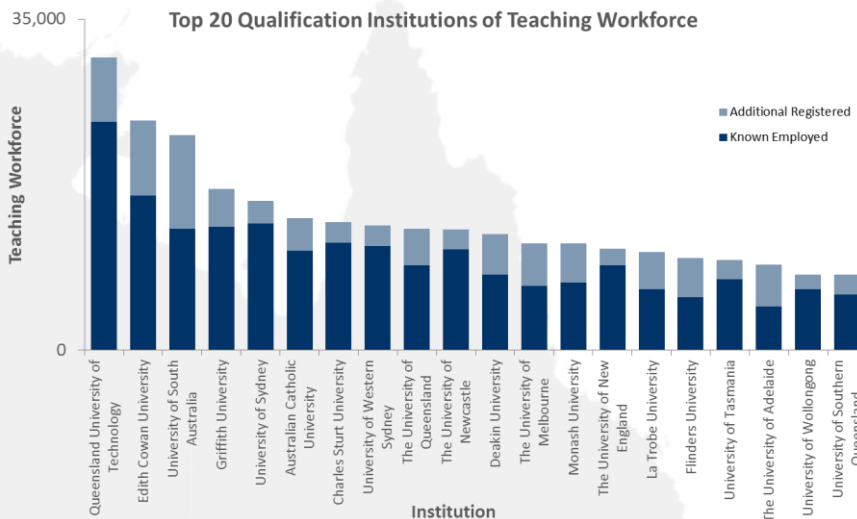
- Once released by data custodians, free text values for institution were classified by the NTWD project team to the NTWD classification structure. Where possible, this included mapping of legacy institutions, which have since been acquired or merged with other institutions, to their current form to enable mapping to the current list of institutions on the TEQSA list (eg. Toorak Teacher's College became the State College of Victoria which became Victoria College CAE Toorak Campus which became Deakin University).
- Where the institution name did not align to the list of institutions on the TEQSA register, it was classified as 'other'. The value 'overseas' was assigned instead if this was evident in data provided by data custodians.
- Guidance was sought from data custodians where free text values were not easily interpretable or where assistance was required to classify to the NTWD classification structure.
- Null, blank, uninterpretable or inadequately recorded institutions were assigned the value "unknown".
- Where qualifications were collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

##### Limitations

- Institution is unknown for 47,757 (8%) captured qualifications awarded to 28,754 members of the teaching workforce.
- Most regulatory authority data custodians capture qualifications to enable registration only, and therefore do not require subsequent qualifications or non teaching qualifications to be reported and collected, therefore impacting on completeness.
- The extent of qualifications captured is also impacted by the age of the data custodian or when electronic data storage commenced. For example, VIT have only collected qualifications data for teachers commencing since VIT creation in 2003, NSW DEC have stored qualifications electronically for teachers commencing since 1991, and SA TRB have captured qualifications data for registrants commencing since 1972.
- The ability to classify institutions is limited to the quality of free text data collected and released by data custodians.
- A number of institutions in Australia and overseas share the same name (eg. University of New England), for which the Australian university was assumed unless the data suggested otherwise.
- The accuracy of distinguishing between, and classifying to, 'other' or 'overseas' institutions was limited by the quality of data provided by data custodians to enable this differentiation. Where no such data was available, 'other' was used in preference to 'overseas'. For example ABC Training would be classified to 'other' unless the data suggested that this is in fact an overseas institution.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.

# Qualifications Institution

## Data Items 09 and 14



Qualification – Institution (Top 20)	Known Employed	Additional Registered	Teaching Workforce	%
Queensland University of Technology	24,136	6,797	30,933	9.42%
Edith Cowan University	16,359	7,881	24,240	7.38%
University of South Australia	12,817	9,904	22,721	6.92%
Griffith University	13,022	4,037	17,059	5.19%
University of Sydney	13,415	2,361	15,776	4.80%
Australian Catholic University	10,495	3,468	13,963	4.25%
Charles Sturt University	11,329	2,212	13,541	4.12%
University of Western Sydney	10,992	2,191	13,183	4.01%
The University of Queensland	8,974	3,839	12,813	3.90%
The University of Newcastle	10,618	2,164	12,782	3.89%
Deakin University	7,973	4,305	12,278	3.74%
The University of Melbourne	6,766	4,533	11,299	3.44%
Monash University	7,173	4,109	11,282	3.44%
The University of New England	8,953	1,788	10,741	3.27%
La Trobe University	6,438	3,907	10,345	3.15%
Flinders University	5,584	4,162	9,746	2.97%
University of Tasmania	7,488	2,053	9,541	2.91%
The University of Adelaide	4,599	4,431	9,030	2.75%
University of Wollongong	6,456	1,534	7,990	2.43%
University of Southern Queensland	5,875	2,087	7,962	2.42%
University of Canberra**	4,221	1,506	5,727	1.74%
Charles Darwin University**	2,013	1,272	3,285	1.00%
<b>Other Australian institutions</b>	<b>77,229</b>	<b>30,123</b>	<b>107,352</b>	<b>26.15%</b>
<b>Overseas institutions</b>	<b>14,499</b>	<b>11,383</b>	<b>25,882</b>	<b>7.88%</b>
Unknown	13,776	14,978	28,754	9%

\* The counts above represent individuals who may exist across multiple institutions. The % values are based on the teaching workforce with qualifications included in the NTWD

\*\* Not in the Top 20 by count but is included as the largest ACT or NT institution

### Observations

- 328,433 (75%) members of the teaching workforce have at least one qualification captured in the NTWD. Additional qualifications may exist for these members but if not captured by regulatory authorities or employers will not be included in the NTWD.
- Qualifications for the remaining 111,880 (25%) members of the teaching workforce may exist but have not been captured by regulatory authorities or employers in their own data collections, and are therefore not included in the NTWD.
- Of those teachers with at least one qualification captured in the NTWD, 8% received at least one qualification from an overseas institution.
- The top 20 institutions represented in the NTWD is influenced by the availability and completeness of data collected for qualifications by regulatory authorities and employers in each jurisdiction.
- Note that members of the teaching workforce with qualifications from multiple institutions will be included in counts for each institution in the chart and table opposite.

# Qualifications

## Year of Graduation

### Data Items 10 and 15

#### Data description

##### Definition

- Year in which the individual completed their qualification

##### Classification Structure

N/A

##### Collection

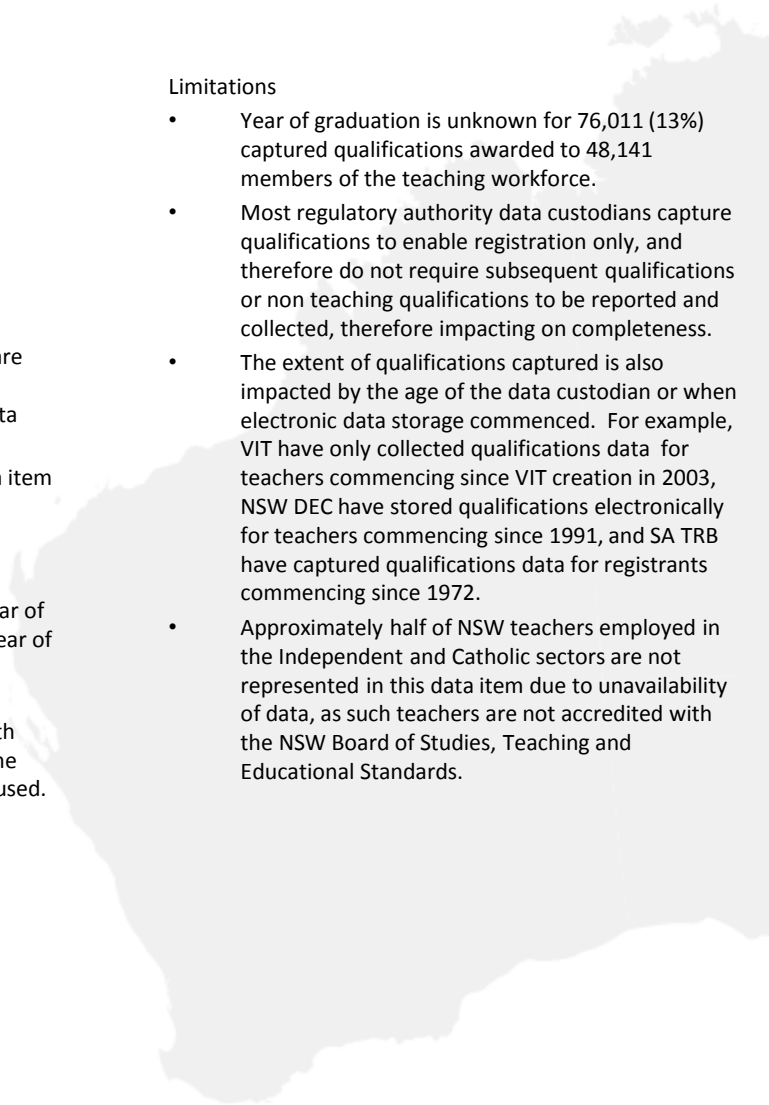
- Qualifications, including year of graduation, are collected centrally by 6 of 13 employer data custodians and 8 of 8 regulatory authority data custodians supplying data for the NTWD.
- Year of completion is stored as a distinct data item by most data custodians.

##### Data preparation

- The value “unknown” was assigned where year of graduation was not captured, or where the year of graduation captured was clearly invalid or inaccurate (eg. 2032).
- Where qualifications were collected from both employer and regulatory authority in the same jurisdiction, the more complete dataset was used.

##### Limitations

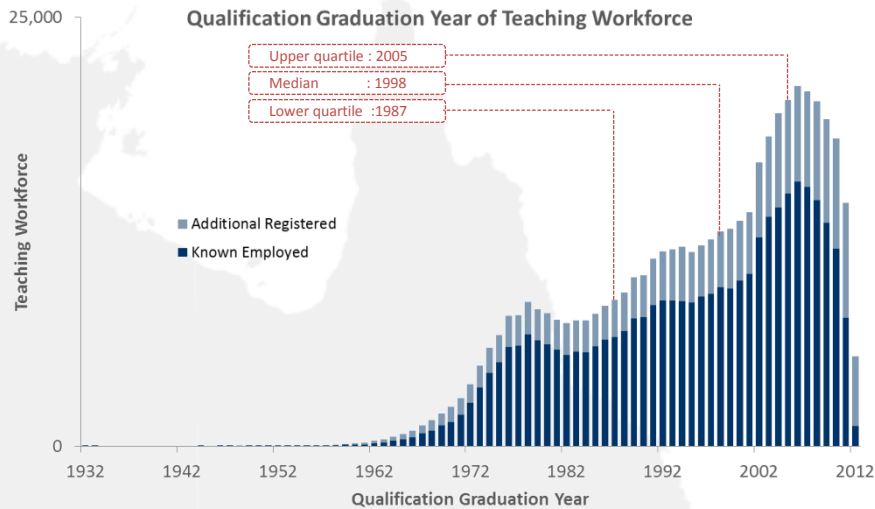
- Year of graduation is unknown for 76,011 (13%) captured qualifications awarded to 48,141 members of the teaching workforce.
- Most regulatory authority data custodians capture qualifications to enable registration only, and therefore do not require subsequent qualifications or non teaching qualifications to be reported and collected, therefore impacting on completeness.
- The extent of qualifications captured is also impacted by the age of the data custodian or when electronic data storage commenced. For example, VIT have only collected qualifications data for teachers commencing since VIT creation in 2003, NSW DEC have stored qualifications electronically for teachers commencing since 1991, and SA TRB have captured qualifications data for registrants commencing since 1972.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.



# Qualifications

## Year of Graduation

Data Items 10 and 15



Year of Graduation	Known Employed	Additional Registered	Teaching Workforce	%
< 1951	9	7	16	0.00%
1951 - 1955	42	24	66	0.02%
1956 - 1960	249	204	453	0.14%
1961 - 1965	1,168	964	2,132	0.65%
1966 - 1970	4,769	3,035	7,804	2.38%
1971 - 1975	16,911	6,400	23,311	7.10%
1976 - 1980	30,171	9,191	39,362	11.98%
1981 - 1985	27,702	9,151	36,853	11.22%
1986 - 1990	34,230	11,229	45,459	13.84%
1991 - 1995	41,961	14,662	56,623	17.24%
1996 - 2000	45,651	16,346	61,997	18.88%
2001 - 2005	64,135	23,614	87,749	26.72%
2006 - 2010	69,274	29,466	98,740	30.06%
> 2010	8,639	10,766	19,405	5.91%
Unknown	22,052	26,089	48,141	15%

\* The counts above represent individuals who may exist across multiple graduation years. The % values are based on the teaching workforce with qualifications included in the NTWD

### Observations

- 328,433 (75%) members of the teaching workforce have at least one qualification captured in the NTWD. Additional qualifications may exist for these members but if not captured by regulatory authorities or employers will not be included in the NTWD.
- Qualifications for the remaining 111,880 (25%) members of the teaching workforce may exist but have not been captured by regulatory authorities or employers in their own data collections, and are therefore not included in the NTWD.
- Of those teachers with at least one qualification captured in the NTWD, 59% completed at least one qualification since 2002. This reflects the increase in qualification data captured by data custodians during that time. For example, the regulatory authority in VIC has collected qualifications only for new registrants since VIT creation in 2003.
- The decrease in qualifications completed in 2011 and 2012 in the NTWD is due to the timing of data release by data custodians to the NTWD throughout 2012 and 2013. For example, data released in 2012 generally excluded graduates from that year who may register in 2013.
- Note that members of the teaching workforce with multiple qualifications with different years of graduation will be included in counts for each year of graduation in the chart and table opposite.
- Years have been categorised into ranges in the adjacent table for presentation purposes.

# Qualifications

## Specialisations

### Data Items 11 and 16

#### Data description

##### Definition

- Fields of specialisation (eg. 'majors' and 'minors') studied in qualification

##### Classification Structure

- ABS 1272.0 - Australian Standard Classification of Education (ASCED), 2001

##### Collection

- Qualification specialisations are collected centrally by 4 of 13 employer data custodians and 1 of 8 regulatory authority data custodians supplying data for the NTWD, which was considered insufficient for inclusion at unit level for the NTWD.
- As specialisations data is not consistently collected or readily available from employer and regulatory authority data custodians supplying data for the NTWD, an alternative source has been sought to supplement the other core data items.
- Specialisations data is not strictly captured by the SiAS 2013 teacher and leader surveys, however as an alternative, the SiAS 2013 survey does capture subject areas completed. SiAS 2013 teacher survey respondents were asked which subjects they studied as part of their tertiary studies, and in which year the subject was studied, with the maximum year available being 3+. Those subjects studied at 3+ years have been used as a proxy for specialising in that subject area for the purpose of this data item for the NTWD.

##### Data preparation

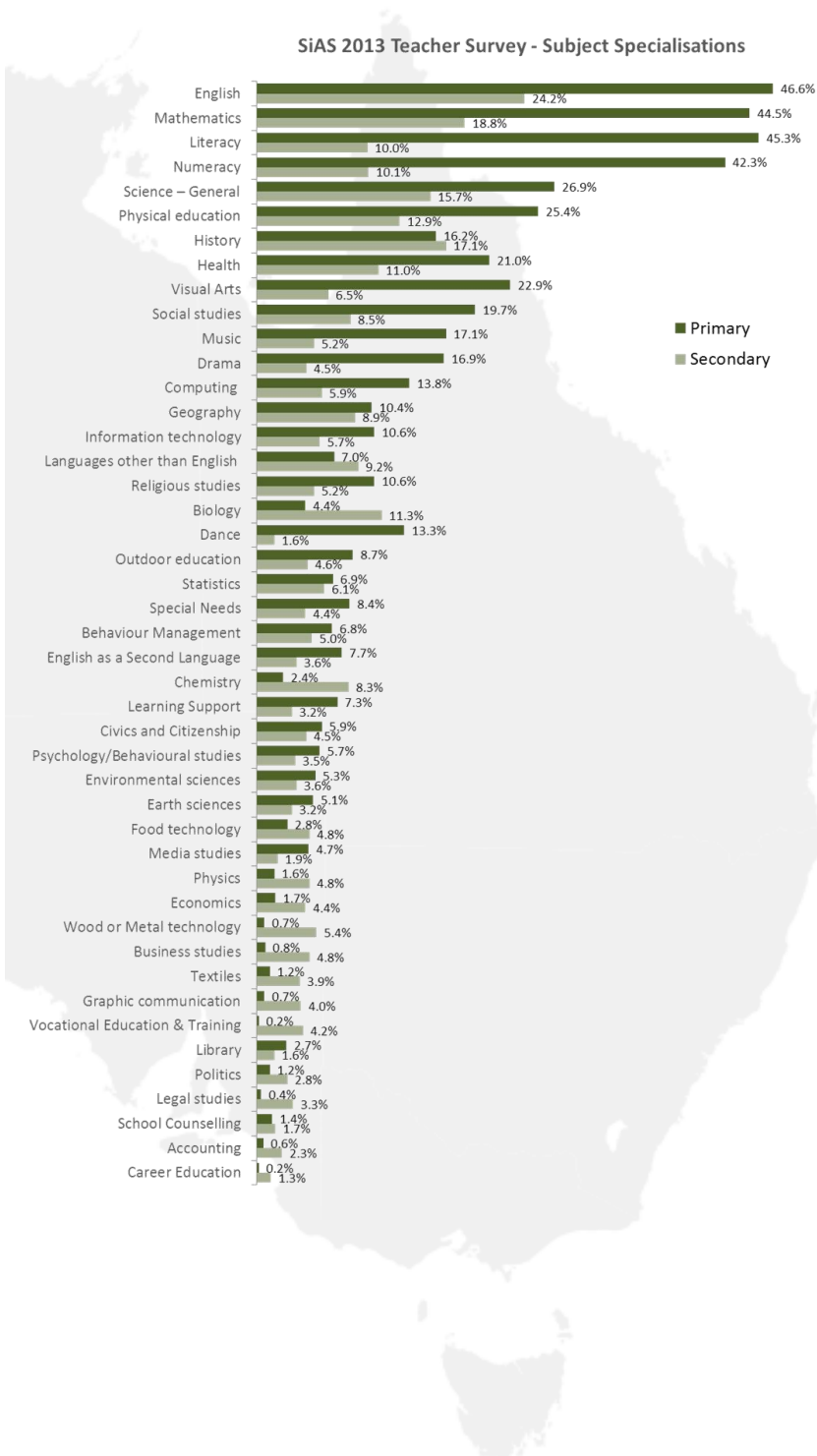
- Nil

##### Limitations

- Specialisations has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with an August to December 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.
- A teacher is assumed to have specialised in a subject area if that subject was studied at 3+ years.

# Qualifications Specialisations

Data Items 11 and 16



## Observations

- This chart identifies the proportion of teachers responding to the SiAS 2013 survey that studied a major subject area in year 3+ of their tertiary studies, by primary and secondary teacher. A teacher responding to the survey may be included in more than one category.
- This analysis is based on the SiAS 2013 main report which provided a table highlighting the proportion of teachers studying each subject area as part of their tertiary studies, including at which year the subject area was studied.
- Studying a subject at year 3+ is deemed to be a proxy for specialising in that subject area for the purpose of this analysis.

# Professional Development

## Type

### Data Item 17

#### Data description

##### Definition

- The form of professional development undertaken

##### Limitations

- N/A – data item not available for collection

##### Classification Structure

- 1 = Conference
- 2 = Workshop
- 3 = Short Course
- 4 = Activity leading to qualification
- 5 = Other
- 9 = Unknown

##### Collection

- Professional development type is collected centrally by 2 of 13 employer data custodians and 2 of 8 regulatory authority data custodians supplying data for the NTWD, which was considered insufficient for inclusion at unit level for the NTWD.
- SiAS 2013 does not address the form of professional development undertaken.

##### Data preparation

- N/A – data item not available for collection



# Professional Development

## Type

Data Item 17

N/A – data item not collected



# Professional Development

## Area

### Data Item 18

#### Data description

##### Definition

- The main field in which professional development activity was undertaken

##### Classification Structure

- 1 = Knowledge of teacher's main subject field(s)
- 2 = Knowledge of instructional practices in teacher's main subject field(s)
- 3 = Content and performance standards in teacher's main subject field(s)
- 4 = Student assessment practices
- 5 = Classroom management
- 6 = ICT skills for Teaching
- 7 = Teaching students with special learning needs
- 8 = Student discipline and behaviour problems
- 9 = School management and administration
- 10 = Teaching in a multicultural setting
- 11 = Student counselling
- 12 = Other
- 99 = Unknown

##### Collection

- Professional development area is collected centrally by 3 of 13 employer data custodians and 2 of 8 regulatory authority data custodians supplying data for the NTWD, which was considered insufficient for inclusion at unit level for the NTWD.
- As professional development area is not consistently collected or readily available from employer and regulatory authority data custodians supplying data for the NTWD, an alternative source has been sought to supplement the other core data items.
- SiAS 2013 does address area of professional development by asking respondents in its teacher survey for the types of professional development activities undertaken in the past 12 months, although using its own classification structure.

##### Data preparation

- Nil

##### Limitations

- Professional development area has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with an August to December 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.

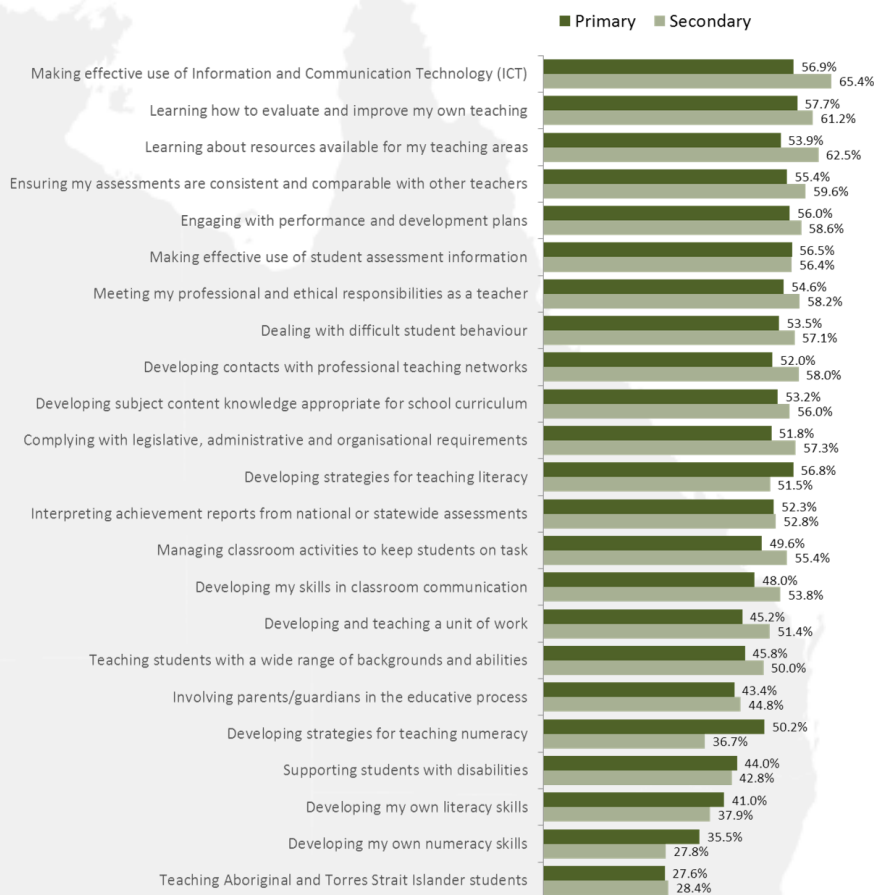


# Professional Development

## Area

### Data Item 18

SiAS 2013 Teacher Survey - Professional Development Undertaken



#### Observations

- This chart identifies the proportion of teachers responding to the SiAS 2013 survey that undertook professional development activity in the prior 12 months across 18 PD areas, split into primary and secondary teachers. A teacher responding to the survey may be included in more than one category.
- This analysis is based on the SiAS 2013 main report which provided a table highlighting the proportion of teachers undertaking professional development by PD area.

# Teacher Registration

## Regulatory Authority

### Data Item 19

#### Data description

##### Definition

- The body responsible for registering (or accrediting) an individual as a teacher

##### Classification Structure

- 1 = NSW Board of Studies, Teaching and Educational Standards
- 2 = Victorian Institute of Teaching
- 3 = Queensland College of Teachers
- 4 = South Australian Teachers' Registration Board
- 5 = Western Australian Teachers' Registration Board
- 6 = Tasmanian Teachers' Registration Board
- 7 = Northern Territory Teachers' Registration Board
- 8 = ACT Teacher Quality Institute

##### Collection

- Regulatory Authority is not a data item collected or captured centrally by data custodians, rather it is a data item created by the NTWD project team based on the source data custodian organisation releasing registration data items for inclusion in the NTWD.

##### Data preparation

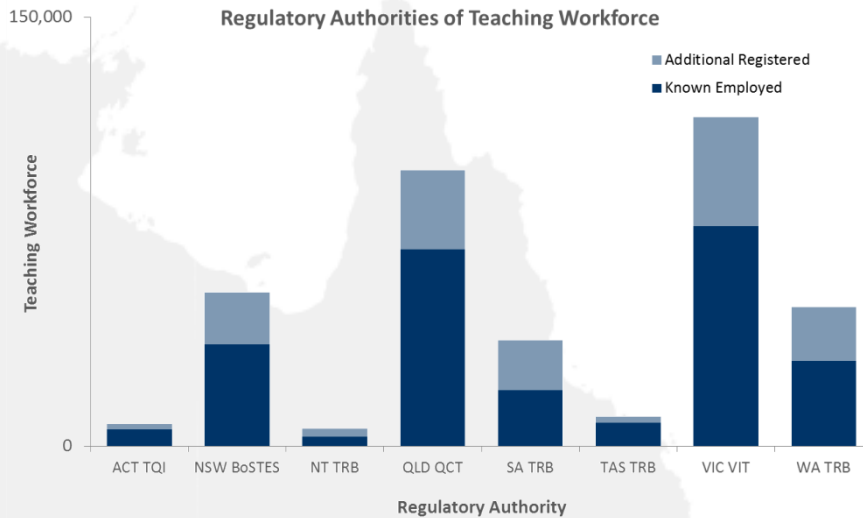
- Created based on data custodian organisation releasing registration data items for inclusion in the NTWD.
- The value "EmpOrphan" was assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.

##### Limitations

- Regulatory Authority is unknown for 66,045 (15%) members of the teaching workforce, all of whom are employer orphans unable to be matched to regulatory authority records containing this data item. This includes 61,046 known employed teachers in the NSW Government sector.
- NSW has a teacher accreditation authority, the NSW Board of Studies, Teaching and Educational Standards, and has an accreditation rather than registration process. However, for the purpose of collecting data for the NTWD, the terms accreditation and registration will be treated as the same.
- Approximately half of NSW teachers are not represented in regulatory authority data items as accreditation of NSW teachers, and corresponding collection of data, commenced from 2005 for new teachers only. As noted, this includes 61,046 known employed teachers in the NSW Government sector.

# Teacher Registration Regulatory Authority

## Data Item 19



### Observations

- The Victorian Institute of Teachers regulates 31% of the national teaching workforce, followed by the Queensland College of Teachers (26%). Note that approximately half of NSW teachers are not accredited with the NSW regulator, which has a significant influence on the percentages noted adjacent.

Regulatory Authority	Known Employed	Additional Registered	Teaching Workforce	%
ACT Teacher Quality Institute (ACT TQI)	5,743	1,883	7,626	2.04%
NSW Board of Studies, Teaching and Educational Standards (NSW BoSTES)	35,667	18,003	53,670	14.34%
Teacher Registration Board of the Northern Territory (NT TRB)	3,397	2,750	6,147	1.64%
Queensland College of Teachers (QLD QCT)	68,789	27,597	96,386	25.75%
Teacher Registration Board of South Australian (SA TRB)	19,462	17,408	36,870	9.85%
Teacher Registration Board of Tasmania (TAS TRB)	8,049	2,102	10,151	2.71%
Victorian Institute of Teaching (VIC VIT)	76,787	38,172	114,959	30.72%
Teacher Registration Board of Western Australia (WA TRB)	29,852	18,607	48,459	12.95%
<b>Total (excluding unknown)</b>	<b>247,746</b>	<b>126,522</b>	<b>374,268</b>	<b>100.00%</b>
Unknown	66,045*		66,045	15%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* all are 'employer orphans' unable to be matched to regulatory authority records containing this data item

# Teacher Registration

## Years Since Conferral

### Data Item 20

#### Data description

##### Definition

- Years since individual gained registration as a teacher

##### Classification Structure

N/A

##### Collection

- Conferral year was collected from data custodians to derive the 'years since conferral' data item for the NTWD.
- Conferral year is collected centrally by 8 of 8 regulatory authority data custodians supplying data for the NTWD.

##### Data preparation

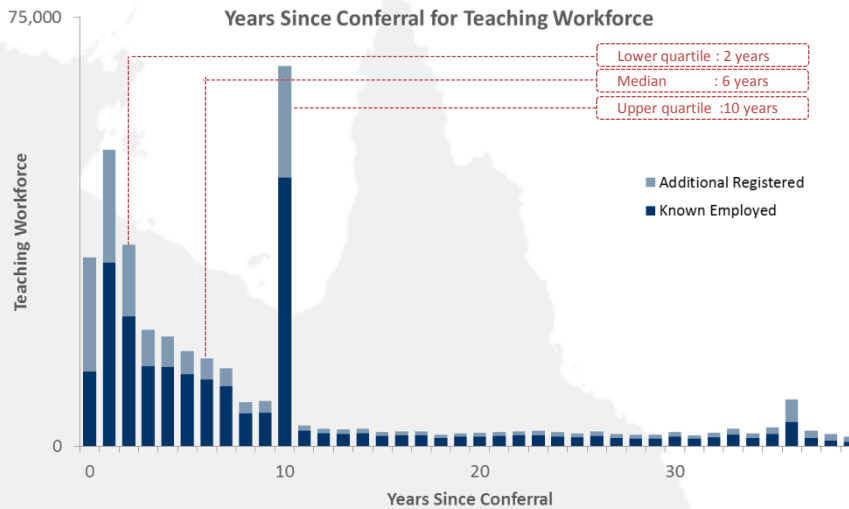
- Once released by data custodians, conferral year was converted to years since conferral by subtracting the conferral year from the year 2012
- The value "unknown" was assigned where conferral year was not captured (eg. the Tasmania regulatory authority has only recently commenced capturing conferral year), or was clearly invalid or inaccurate (eg.1900). The value "EmpOrphan" was instead assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.
- The value "N/A" was assigned to a small number of Limited Authority to Teach registrants in Tasmania who are yet to confer.

##### Limitations

- Years since conferral is unknown for 75,925 (17%) members of the teaching workforce, including 66,045 employer orphans unable to be matched to regulatory authority records containing this data item. This includes 61,046 known employed teachers in the NSW Government sector.
- NSW has a teacher accreditation authority, the NSW Board of Studies, Teaching and Educational Standards, and has an accreditation rather than registration process. However, for the purpose of collecting data for the NTWD, the terms accreditation and registration will be treated as the same.
- Approximately half of NSW teachers are not represented in regulatory authority data items as accreditation of NSW teachers, and corresponding collection of data, commenced from 2005 for new teachers only. As noted, this includes 61,046 known employed teachers in the NSW Government sector.
- Date and month of conferral were not collected from data custodians (for privacy reasons), therefore years since conferral was calculated based on conferral year only.

# Teacher Registration Years Since Conferral

## Data Item 20



### Observations

- The large spike at 10 years is due to the creation of the Victorian Institute of Teachers in 2003, at which time all qualifying teachers in the state were registered.
- Years have been categorised into ranges in the adjacent table for presentation purposes.

Years Since Conferral	Known Employed	Additional Registered	Teaching Workforce	%
0 - 4	95,542	63,916	159,458	43.77%
5 - 9	46,180	14,970	61,150	16.79%
10 - 14	56,253	22,716	78,969	21.68%
15 - 19	8,474	3,391	11,865	3.26%
20 - 24	8,821	3,604	12,425	3.41%
25 - 29	7,301	3,475	10,776	2.96%
30 - 34	7,884	3,970	11,854	3.25%
35 - 39	9,478	8,323	17,801	4.89%
<b>Total (excluding unknown)</b>	<b>239,933</b>	<b>124,365</b>	<b>364,298</b>	<b>100.00%</b>
Unknown	73,807*	2,118	75,925	17.2%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* includes 66,045 'employer orphans' unable to be matched to regulatory authority records containing this data item. In addition years since conferral is not applicable to 90 Limited Authority to Teach registrants in Tasmania who are yet to confer.

# Teacher Registration

## Teaching Restrictions

### Data Item 21

#### Data description

##### Definition

- Any special restriction or condition placed on registration

##### Classification Structure

- 1 = Yes
- 2 = No

##### Collection

- Restrictions and conditions placed on registration are collected centrally by 8 of 8 regulatory authorities supplying data for the NTWD. 'Restrictions' may include being limited to teaching specific subjects, year levels or schools, whilst 'conditions' may include the requirement to undertake a criminal check where this has yet to be completed or may be related to health or disciplinary matters.
- To maintain confidentiality, data custodians were requested to advise whether any restriction/condition exists, rather than to provide the actual values for this data item.

##### Data preparation

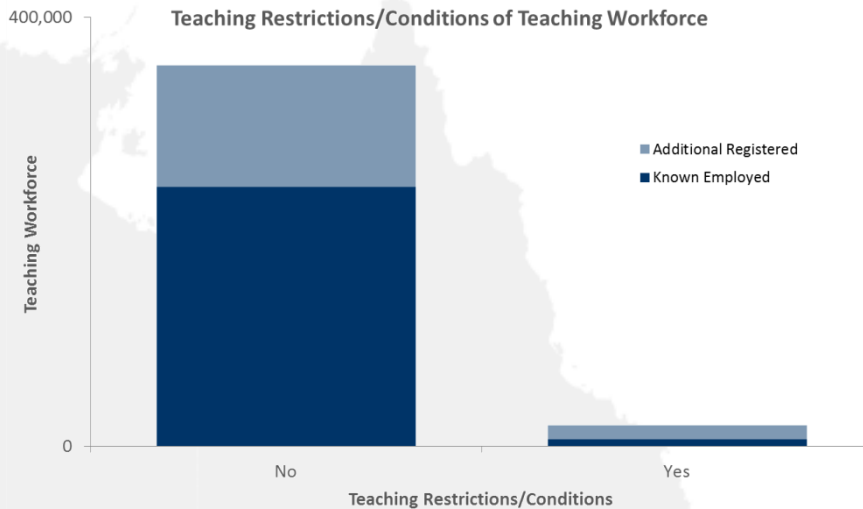
- Once released by data custodians, values were mapped by the NTWD project team to the NTWD classification structure.
- In addition, where a teacher registrant is not fully or partially registered, but rather has limited authority or 'authorisation to teach', the value "yes" has been assigned.
- The value "EmpOrphan" was assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.

##### Limitations

- Teaching restrictions/conditions is unknown for 66,045 (15%) members of the teaching workforce, all of whom are employer orphans unable to be matched to regulatory authority records containing this data item. This includes 61,046 known employed teachers in the NSW Government sector.
- NSW has a teacher accreditation authority, the NSW Board of Studies, Teaching and Educational Standards, and has an accreditation rather than registration process. However, for the purpose of collecting data for the NTWD, the terms accreditation and registration will be treated as the same.
- Approximately half of NSW teachers are not represented in regulatory authority data items as accreditation of NSW teachers, and corresponding collection of data, commenced from 2005 for new teachers only. As noted, this includes 61,046 known employed teachers in the NSW Government sector.
- Differences in policy and definition of what constitutes a teaching restriction or condition may exist across each regulatory authority, impacting comparability across jurisdictions.

# Teacher Registration Teaching Restrictions

## Data Item 21



Teaching Restriction/Condition	Known Employed	Additional Registered	Teaching Workforce	%
No	241,656	113,272	354,928	94.83%
Yes	6,090	13,250	19,340	5.17%
<b>Total (excluding unknown)</b>	<b>247,746</b>	<b>126,522</b>	<b>374,268</b>	<b>100.00%</b>
Unknown	66,045*		66,045	15%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* all are 'employer orphans' unable to be matched to regulatory authority records containing this data item

### Observations

- 5% of the teaching workforce has a condition/restriction imposed on their teaching registration. This appears to be less prevalent amongst known employed teachers (2.5%) compared to additional registrants (10.5%).
- Differences in policy and definition of what constitutes a teaching restriction or condition may exist across each regulatory authority, impacting comparability across jurisdictions.

# Teacher Registration Specialisations

## Data Item 22

### Data description

#### Definition

- Field(s) of specialisation or specific subject areas noted on registration

#### Limitations

- N/A – data item not available for collection

#### Classification Structure

- ABS ASCED Field 4-digit Classification Level

#### Collection

- Fields of specialisation or specific subject areas noted on registration are not collected centrally by any employer or regulatory authority data custodians supplying data to the NTWD. Refer data item 11 for fields of specialisation (eg. 'majors' and 'minors') studied in qualification.
- SiAS 2013 does not address this data item.

#### Data preparation

- N/A – data item not available for collection



# Teacher Registration Specialisations

Data Item 22

N/A – data item not collected



# Teacher Registration

## Registration Level

### Data Item 23

#### Data description

##### Definition

- Level of registration individual has attained

##### Classification Structure

- 1 = Provisional
- 2 = Full
- 3 = Authorisation to Teach
- 4 = Other
- 9 = Unknown

##### Collection

- Registration level (or equivalent) is captured centrally by 8 of 8 regulatory authority data custodians supplying data for the NTWD. Note that the NSW Board of Studies, Teaching and Educational Standards captures the level of professional teaching standard an individual has attained, although this is considered to be comparable to registration levels for the purpose of developing the NTWD.
- Registration level is stored by all regulatory authorities using coded values in accordance with local classification structures.

##### Data preparation

- Once released by data custodians, coded values for registration level were mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where assistance was required to map to the NTWD classification structure. This included identifying the most suitable fit when custodian values did not directly align to the NTWD classification structure.
- The value “unknown” was assigned where registration level was not captured for a member of the teaching workforce by the regulatory authority. Note that the value “EmpOrphan” was instead assigned where an employer record for a member of the teaching workforce has no matching regulatory authority record and where this data item was expected to be obtained through regulatory authority data.

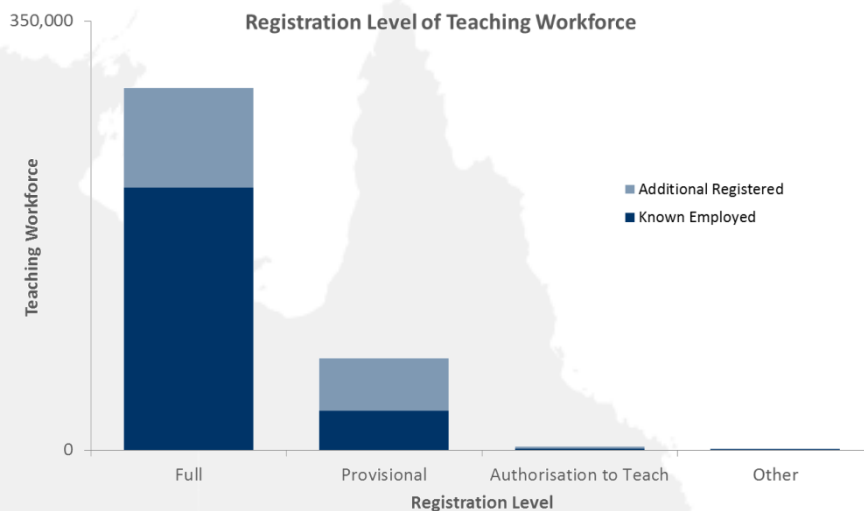
##### Limitations

- Registration level is unknown for 66,183 (15%) members of the teaching workforce, including 66,045 employer orphans unable to be matched to regulatory authority records containing this data item. This includes 61,046 known employed teachers in the NSW Government sector.
- NSW has a teacher accreditation authority, the NSW Board of Studies, Teaching and Educational Standards, and has an accreditation rather than registration process. However, for the purpose of collecting data for the NTWD, the terms accreditation and registration will be treated as the same.
- Approximately half of NSW teachers are not represented in regulatory authority data items as accreditation of NSW teachers, and corresponding collection of data, commenced from 2005 for new teachers only. As noted, this includes 61,046 known employed teachers in the NSW Government sector.
- Differences in policy over registration levels may exist across each regulatory authority, including timeframes and requirements governing provisional registration and authorisation to teach, resulting in lack of comparability across jurisdictions.
- Where custodian values do not directly align to the NTWD classification structure, guidance has been obtained from the data custodian to identify the most suitable fit.

# Teacher Registration

## Registration Level

### Data Item 23



Registration Level	Known Employed	Additional Registered	Teaching Workforce	%
Full	214,308	80,929	295,237	78.91%
Provisional	32,104	42,750	74,854	20.01%
Authorisation to Teach	1,038	1,581	2,619	0.70%
Other	288	1,132	1,420	0.38%
<b>Total (excluding unknown)</b>	<b>247,738</b>	<b>126,392</b>	<b>374,130</b>	<b>100.00%</b>
Unknown	66,053*	130	66,183	15%
<b>Total</b>	<b>313,791</b>	<b>126,522</b>	<b>440,313</b>	

\* includes 66,045 'employer orphans' unable to be matched to regulatory authority records containing this data item

#### Observations

- 79% of the teaching workforce with a known registration level has achieved full registration (or equivalent). This includes 87% of known employed teachers, but only 64% of additional registrants.
- The 'other' category includes levels of registration unique to individual regulatory authorities who advised did not appropriately align to full, provisional or authorisation to teach.
- Differences in policy over registration levels may exist across each regulatory authority, including timeframes and requirements governing provisional registration and authorisation to teach, impacting comparability across jurisdictions.

# Current Employment Employment Status

## Data Item 24

### Data description

#### Definition

- Active status of individual's employment, identifying whether an individual is currently active or on extended leave

#### Classification Structure

- 1 = Active (including leave < than 8 weeks)
- 2 = Absent on paid leave > 8 weeks
- 3 = Absent on unpaid leave > 8 weeks
- 9 = Unknown

#### Collection

- The employment active status of teachers is captured centrally by 9 of 13 employer data custodians supplying data for the NTWD, although the values describing the employment active status differ across data custodians.
- Employment active status is stored by most data custodians using coded values in accordance with local classification structures, although is stored in free text by some.

#### Data preparation

- Once released by data custodians, coded and free text values for employment active status were classified or mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where coded or free text values were not easily interpretable or where assistance was required to classify or map to the NTWD classification structure. This included identifying the most suitable fit when custodian values did not directly align to the NTWD classification structure.
- The value "unknown" was assigned where employment active status was not captured by the employer for a teacher, or does not align to the NTWD definition for this data item. Note that the value "RegOrphan" was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

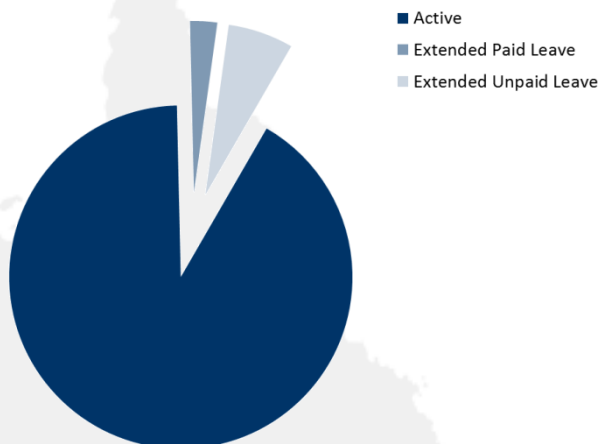
#### Limitations

- Employment active status is unknown for 278,933 (63%) members of the teaching workforce, including 188,736 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect their employment data items for inclusion in the NTWD. The latter includes employers in the Independent sector nationwide, Catholic sector in Qld, VIC and NSW and casual teachers employed in the Government sector in VIC or NT.
- Where custodian values do not directly align to the NTWD classification structure, guidance has been obtained from the data custodian to identify the most suitable fit.

# Current Employment Employment Status

Data Item 24

Employment Status of Known Employed Teachers



## Observations

- 91% of known employed teachers with a known employment status were active at the time of data collection.
- Close to three times as many teachers on extended leave were on unpaid leave compared to paid leave.

Employment Status	Known Employed	%
Active	147,344	91.30%
Extended Paid Leave	4,115	2.55%
Extended Unpaid Leave	9,921	6.15%
<b>Total (excluding unknown)</b>	<b>161,380</b>	<b>100.00%</b>
Unknown	278,933*	63.3%
<b>Total</b>	<b>440,313</b>	

\* includes 188,736 'regulatory authority orphans' unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

# Current Employment

## Years with Current Employer

### Data Item 25

#### Data description

##### Definition

- The length of time (in years) that an individual has been employed by its current employer

##### Classification Structure

N/A

##### Collection

- Year started with current employer was collected from data custodians to derive the 'years with current employer' data item for the NTWD.
- Year started with current employer is collected centrally by 13 of 13 employer data custodians supplying data for the NTWD.

##### Data preparation

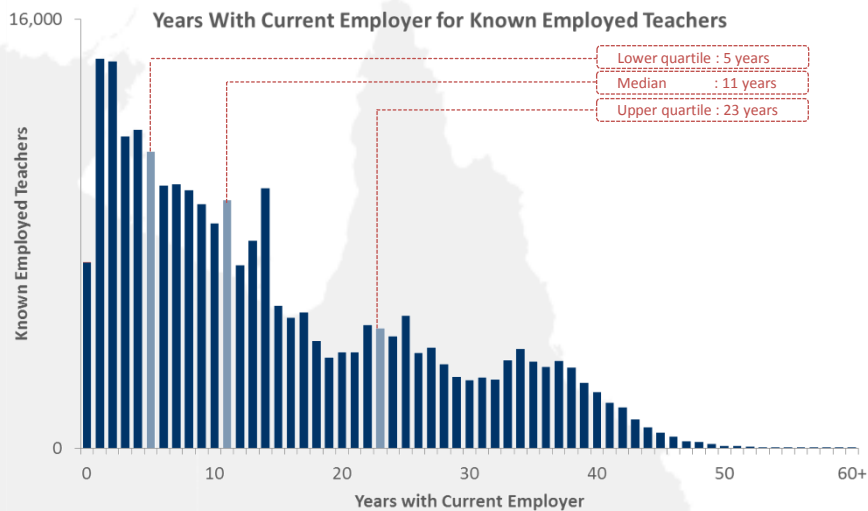
- Once released by data custodians, year started with current employer was converted to years with current employer by subtracting the year started from the year 2012.
- The value "unknown" was assigned where year started with current employer was not captured by an employer for a teacher, or where the year started with current employer captured was clearly invalid or inaccurate (eg. 112). Note that the value "RegOrphan" was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

##### Limitations

- Years with current employer is unknown for 190,130 (43%) members of the teaching workforce, including 188,736 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect their employment data items for inclusion in the NTWD. The latter includes employers in the Independent sector nationwide, Catholic sector in Qld, VIC and NSW and casual teachers employed in the Government sector in VIC or NT.
- Date and month started with current employer were not collected from data custodians (for privacy reasons), therefore years with current employer was calculated based on year started with current employer only.
- For some data custodians, years with current employer restarts upon return from extended leave (eg. maternity leave).
- Years with current employer is not representative of years of experience, as a teacher with a low number of years may have worked in another sector for a lengthy period prior to moving to their current sector.

# Current Employment Years with Current Employer

## Data Item 25



### Observations

- 24% of known employed teachers have been employed by their current employer for less than 5 years, whilst 40% have been employed by their current employer for at least 15 years.
- Years have been categorised into ranges in the adjacent table for presentation purposes.

Years With Current Employer	Known Employed	%
0 - 4	59,323	23.71%
5 - 9	49,381	19.74%
10 - 14	41,849	16.73%
15 - 19	22,610	9.04%
20 - 24	20,337	8.13%
25 - 29	17,963	7.18%
30 - 34	14,688	5.87%
35 - 39	14,950	5.98%
40 - 44	7,136	2.85%
45 - 49	1,629	0.65%
50 - 54	269	0.11%
55 - 59	42	0.02%
> 59	6	0.00%
<b>Total (excluding unknowns)</b>	<b>250,183</b>	<b>100.00%</b>
Unknown	190,130*	43.2%
<b>Total</b>	<b>440,313</b>	

\* includes 188,736 'regulatory authority' orphans unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

# Current Employment

## Time Fraction Employed

### Data Item 26

#### Data description

##### Definition

- The individual's usual working load represented as a decimal of a standard full-time working load (1.0)

##### Classification Structure

N/A

##### Collection

- Time fraction employed is collected centrally by 13 of 13 employer data custodians supplying data for the NTWD

##### Data preparation

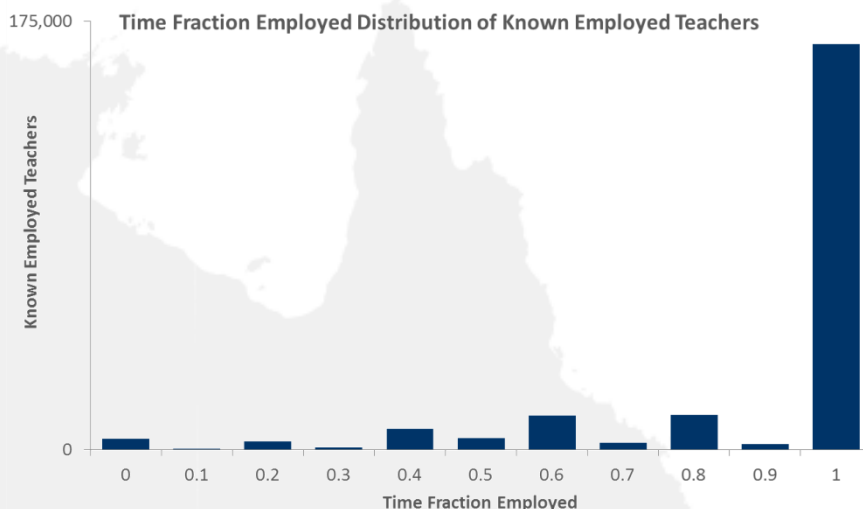
- Once released by data custodians, time fraction employed for each teacher was rounded to the closest 0.1.
- Some data custodians provided a time fraction employed for casual teachers based on the last pay period, whilst other data custodians provided a time fraction employed of 0 for casual teachers given that their time fraction employed is expected to fluctuate throughout the year. To ensure consistency, the NTWD project team removed time fraction employed for casual teachers and assigned the value "N/A – casual" in its place.
- Where time fraction employed was greater than 1, it was changed to 1.
- Where a teacher held more than one employment record, the time fraction employed was summed to derive a total time fraction employed. In some cases this resulted in a time fraction employed of greater than 1, which was then changed to 1.
- The value "unknown" was assigned where time fraction employed was not captured by an employer for a teacher. Note that the value "RegOrphan" was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

##### Limitations

- Time fraction employed is unknown for 189,637 (43%) members of the teaching workforce, including 188,736 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect their employment data items for inclusion in the NTWD. The latter includes employers in the Independent sector nationwide, Catholic sector in Qld, VIC and NSW and casual teachers employed in the Government sector in VIC or NT.
- For some data custodians, time fraction employed is based on the last pay period prior to data extraction, which may be influenced by factors such as unpaid leave (which could result in a time fraction employed of 0), and may not be representative of the full year. For other data custodians time fraction employed is based on the value in the teacher's contract. Therefore, the accuracy and consistency of time fraction employed data is impacted by the nature of data accessible to data custodians and made available for the NTWD.

# Current Employment Time Fraction Employed

## Data Item 26



### Observations

- 75% of known employed teachers with a known time fraction employed are full time. The remaining 25% are considered part time, with time fraction employed values of between 0 and 0.9. Casual teachers are excluded from this analysis.
- Note that time fraction employed values have been rounded to the closest 0.1, including to 0.0 if appropriate.

Time Fraction Employed	Known Employed	%
0	4,420	2.01%
0.1	319	0.14%
0.2	3,273	1.49%
0.3	954	0.43%
0.4	8,475	3.85%
0.5	4,578	2.08%
0.6	13,879	6.30%
0.7	2,686	1.22%
0.8	14,141	6.42%
0.9	2,151	0.98%
1	165,454	75.09%
<b>Total (excluding unknowns)</b>	<b>220,330</b>	<b>100.00%</b>
Unknown	189,637*	43.1%
<b>Total</b>	<b>440,313</b>	

\* includes 188,736 'regulatory authority' orphans unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

# Current Employment

## Type of Employment

### Data Item 27

#### Data description

##### Definition

- The nature of a person's employment in relation to his or her expected continuity of employment and eligibility for basic leave entitlements

##### Classification Structure

- 1 = Permanent
- 2 = Casual
- 3 = Temporary/Fixed Term
- 9 = Unknown

##### Collection

- Type of employment is collected centrally by 13 of 13 employer data custodians supplying data for the NTWD.
- Type of employment is stored by most data custodians using coded values in accordance with local classification structures, although is stored in free text by some.

##### Data preparation

- Once released by data custodians, coded values for type of employment were mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where assistance was required to map to the NTWD classification structure. This included identifying the most suitable fit when custodian values did not directly align to the NTWD classification structure.
- Where a teacher has more than one type of employment in the data provided by data custodians, the dominant record (based on time fraction employed) was used to determine the type of employment value to be used for the NTWD.
- The value "unknown" was assigned where type of employment was not captured by an employer for a teacher. Note that the value "RegOrphan" was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

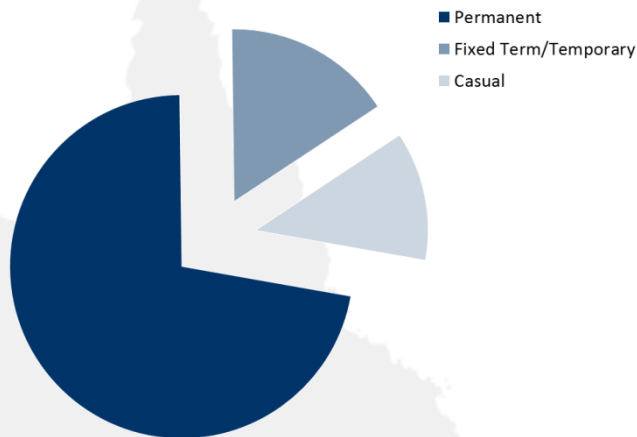
##### Limitations

- Type of employment is unknown for 188,824 (43%) members of the teaching workforce, including 188,736 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect their employment data items for inclusion in the NTWD. The latter includes employers in the Independent sector nationwide, Catholic sector in Qld, VIC and NSW and casual teachers employed in the Government sector in VIC or NT.
- Where custodian values do not directly align to the NTWD classification structure, guidance has been obtained from the data custodian to identify the most suitable fit.
- Definitions used to describe type of employment may differ across jurisdictions and sectors, impacting comparability.
- The dominant type of employment (based on time fraction employed) was assigned to the teacher for the NTWD if more than one type of employment existed for that teacher in the data provided by data custodians for the NTWD.

# Current Employment Type of Employment

Data Item 27

Employment Types of Known Employed Teachers



Employment Type	Known Employed	%
Permanent	181,120	72.02%
Fixed Term/Temporary	40,023	15.91%
Casual	30,346	12.07%
<b>Total (excluding unknowns)</b>	<b>251,489</b>	<b>100.00%</b>
Unknown	188,824*	42.9%
<b>Total</b>	<b>440,313</b>	

\* includes 188,736 'regulatory authority' orphans unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

## Observations

- 72% of known employed teachers with a known type of employment are permanent employees, whilst 16% are on fixed term/temporary arrangements and 12% are employed on a casual basis.
- Note that the distribution of type of employment is based on head count, and not FTE.
- The proportion of casual teachers is higher than reported in other collections (eg. SiAS 2013), which may due to some data custodians providing data that included all casual teachers employed in the extraction reference period (eg. full monthly pay period), rather than at a given point time.
- Guidance was sought from data custodians to map custodian values and definitions to the NTWD classification structure. For example, relief teachers were considered to best align to casual, whilst replacement, contract, end dated and limited tenure teachers were considered to best align to fixed term/temporary.

# Current Employment Employee Classification

## Data Item 28

### Data description

#### Definition

- Level at which individual is employed with respect to employment structure

#### Classification Structure

- 1 = Classroom Teacher
- 2 = Executive Teacher
- 3 = Principal
- 4 = Deputy/Assistant Principal
- 9 = Unknown

#### Collection

- Employee classification is collected centrally by 13 of 13 employer data custodians supplying data for the NTWD.
- Employee classification is stored by most data custodians using coded values in accordance with local classification structures, although is stored in free text by some.

#### Data preparation

- Once released by data custodians, coded values for employee classification were mapped by the NTWD project team to the NTWD classification structure.
- Guidance was sought from data custodians where assistance was required to map to the NTWD classification structure. This included identifying the most suitable fit when custodian values did not directly align to the NTWD classification structure.
- Where a teacher has more than one employee classification in the data provided by data custodians, the dominant record (based on time fraction employed) was used to determine the employee classification value to be used for the NTWD.
- The value “unknown” was assigned where employee classification was not captured by an employer for a teacher. Note that the value “RegOrphan” was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

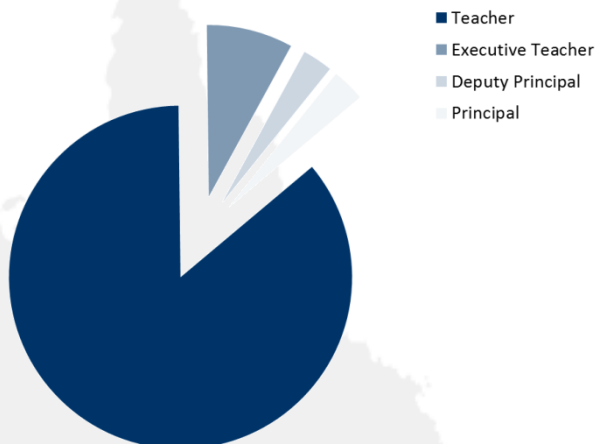
#### Limitations

- Employee classification is unknown for 188,782(43%) members of the teaching workforce, including 188,736 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect their employment data items for inclusion in the NTWD. The latter includes employers in the Independent sector nationwide, Catholic sector in Qld, VIC and NSW and casual teachers employed in the Government sector in VIC or NT.
- Where custodian values do not directly align to the NTWD classification structure, guidance has been obtained from the data custodian to identify the most suitable fit.
- Definitions used to describe employee classification may differ across jurisdictions and sectors, impacting comparability.
- The dominant employee classification (based on time fraction employed) was assigned to the teacher for the NTWD if more than one employee classification existed for that teacher in the data provided by data custodians for the NTWD.

# Current Employment Employee Classification

## Data Item 28

Employee Classification of Known Employed Teachers



Employee Classification	Known Employed	%
Teacher	216,133	85.93%
Executive Teacher	20,483	8.14%
Deputy Principal	7,132	2.84%
Principal	7,783	3.09%
<b>Total (excluding unknowns)</b>	<b>251,531</b>	<b>100.00%</b>
Unknown	188,782*	42.9%
<b>Total</b>	<b>440,313</b>	

\* includes 188,736 'regulatory authority orphans' unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

### Observations

- 86% of known employed teachers with a known employee classification are classroom teachers, whilst 8% are considered as executive teachers. The remaining 6% is nearly equally shared by deputy principals and principals.
- Guidance was sought from data custodians to map custodian values and definitions to the NTWD classification structure. For example, faculty and departmental heads, program coordinators and administrators were considered to best align to executive teacher, whilst vice and assistant principals were considered to best align to deputy principals.

# Current Employment

## Salary

### Data Item 29

#### Data description

##### Definition

- The individual's total salary/remuneration package value per annum

##### Classification Structure

N/A

##### Collection

- Salary is collected centrally by 12 of 13 employer data custodians supplying data for the NTWD
- The nature of salary data collected centrally varies. For example, 2 data custodians collect salary ranges only, whilst the remainder store salary based on the teacher's contract or derived an annual salary based on the pay cycle prior to data extraction. In addition, some data custodians adjusted the salary amount for time fraction employed, either based on the teacher's contract or based on the pay cycle prior to data extraction.

##### Data preparation

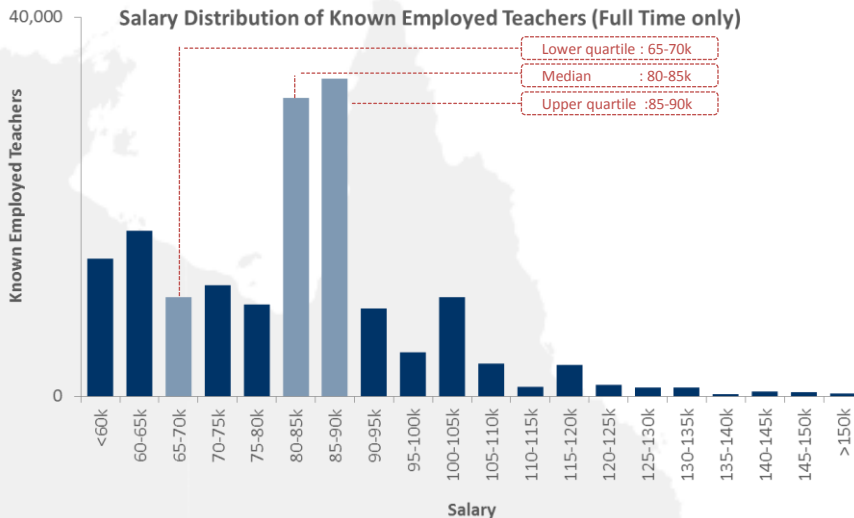
- Once released by data custodians, salary was adjusted by the time fraction employed, unless already performed by the data custodian prior to release, before rounding to the closest \$1000.
- Where a salary range was provided, the salary was assumed to be at the mid point.
- Some data custodians provided a salary for casual teachers based on the last pay period, whilst other data custodians provided a value of \$0 given that salary is expected to fluctuate throughout the year. To ensure consistency, the NTWD project team removed salary for casual teachers and assigned the value "N/A – casual" in its place.
- Where a teacher held more than one employment record with a separate salary component for each, salary was summed to derive a total value.
- The value "unknown" was assigned where salary was not captured by an employer for a teacher. Note that the value "RegOrphan" was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

##### Limitations

- Salary is unknown for 194,165 (44%) members of the teaching workforce, including 188,736 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect their employment data items for inclusion in the NTWD. The latter includes employers in the Independent sector nationwide, Catholic sector in Qld, VIC and NSW and casual teachers employed in the Government sector in VIC or NT.
- For some teachers, salary is based on the mid point of salary range, whilst for others is based on amount paid in the pay period prior to data extraction, which may be influenced by factors such as unpaid leave (which could result in a salary of \$0), and may not be representative of the full year. For other teachers, salary is based on the value in the teacher's contract. Therefore, the accuracy and consistency of salary is impacted by the nature of data accessible to data custodians and made available for the NTWD.

# Current Employment Salary

## Data Item 29



### Observations

- The adjacent chart and table represent members of the teaching workforce employed on a full time basis only. Those employed on a part time or casual basis are excluded to ensure consistency for comparison.
- The mean salary for full time known employed teachers is \$81,892.
- 9% of full time known employed teachers earn less than \$60k, 39% earn between \$80k and \$90k, and 14% earn at least \$100k.
- Note that salary values have been rounded to the closest \$1000.

Salary	Known Employed (FT only)	%	Salary	Known Employed (FT only)	%
<60k	14,529	8.79%	105-110k	3,436	2.08%
60-65k	17,426	10.54%	110-115k	986	0.60%
65-70k	10,463	6.33%	115-120k	3,285	1.99%
70-75k	11,685	7.07%	120-125k	1,182	0.71%
75-80k	9,693	5.86%	125-130k	911	0.55%
80-85k	31,491	19.05%	130-135k	929	0.56%
85-90k	33,455	20.24%	135-140k	250	0.15%
90-95k	9,278	5.61%	140-145k	534	0.32%
95-100k	4,643	2.81%	145-150k	451	0.27%
100-105k	10,415	6.30%	>150k	275	0.17%
			<b>Total (excl unknown)</b>	<b>165,317</b>	<b>100.00%</b>
			Unknown	137	0.08%
			<b>Total</b>	<b>165,454</b>	

# Current Employment Salary Increment Level

## Data Item 30

### Data description

#### Definition

- The increment level/salary band associated with the individual

#### Limitations

- N/A – data item not included in initial NTWD

#### Classification Structure

- Number of bands, steps within bands and salary/remuneration rates associated with each band/step vary by jurisdiction and sector

#### Collection

- This data item was not originally proposed in the initial framework report for inclusion in the NTWD. However, it was subsequently agreed to investigate its possible inclusion.
- Although salary increment level is collected (derived) by each employer data custodian providing data for development of the NTWD, salary bands and steps, and associated salary/remuneration rates, are unique to each jurisdiction and sector, impacting comparability and the ability to create a nationally consistent classification structure for this data item for the NTWD.
- As a result, it was agreed by the Working Group to exclude this data item from the initial NTWD, with data item 29 (salary) to be used as a consistent and comparable measure of remuneration.

#### Data preparation

- N/A – data item not included in initial NTWD

# Current Employment Salary Increment Level

Data Item 30

N/A – data item not included in initial NTWD



# Current School School Type

## Data Item 31

### Data description

#### Definition

- The type of school in which the individual is located, in terms of year levels represented

#### Classification Structure

- 1 = Primary
- 2 = Middle school
- 3 = Secondary
- 4 = Combined Primary-Secondary
- 5 = Other
- 9 = Unknown

#### Collection

- The Australian Government Department of Education School ID (or an alternative school identifier) for each teacher was collected from 13 of 13 employer data custodians supplying data for the NTWD to enable school type to be derived from a reference table, although school type was provided directly in some instances.
- School identifiers were also collected from 4 of 8 regulatory authority data custodians supplying data for the NTWD, enabling school type to be derived in some jurisdictions and sectors where employers were unable to release data for the NTWD (eg. Qld/Vic/NSW Catholic sector, Qld/Vic/NSW/ACT Independent sector).

#### Data preparation

- Once released by data custodians, the school identifier (eg. the Australian Government Department of Education School ID) and supporting reference tables were used to derive the school type for each teacher. Derived values were then mapped by the NTWD project team to the NTWD classification structure.
- Where a teacher has more than one school type in the data provided by data custodians, the dominant record (based on time fraction employed) was used to determine the school type value to be used for the NTWD.

- The value “unknown” was assigned for teachers where the Australian Government Department of Education School ID, or alternative identifier, or the school type data item itself, were not captured by an employer or regulatory authority for a teacher. Note that the value “RegOrphan” was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

#### Limitations

- School Type is unknown for 142,793 (32%) members of the teaching workforce, including 126,522 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect school data items for teachers for inclusion in the NTWD. Teachers working in the Independent sector in WA, SA, TAS and NT fit into this category.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards, who collect school identifier.
- The dominant school type (based on time fraction employed) was assigned to the teacher for the NTWD if more than one school type existed for that teacher in the data provided by data custodians for the NTWD.

# Current School School Type

## Data Item 31

School Type of Known Employed Teachers



### Observations

- 48% of known employed teachers with a known school type are employed in primary schools, whilst 34% are employed in secondary schools.

School Type	Known Employed	%
Primary	141,497	47.56%
Secondary	99,871	33.57%
Combined	51,961	17.46%
Other	4,191	1.41%
<b>Total (excluding unknowns)</b>	<b>297,520</b>	<b>100.00%</b>
Unknown	142,793*	32.4%
<b>Total</b>	<b>440,313</b>	

\* includes 126,522 'regulatory authority orphans' unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

# Current School

## School Sector

### Data Item 32

#### Data description

##### Definition

- The classification of school in which the individual is located, in terms of being in the government or non-government sector

##### Classification Structure

- 1 = Government
- 2 = Catholic
- 3 = Independent
- 9 = Unknown

##### Collection

- School sector was derived directly based on the employer supplying data for the NTWD.
- School identifiers were also collected from 4 of 8 regulatory authority data custodians supplying data for the NTWD, enabling school sector to be derived in some jurisdictions and sectors where employers were unable to release data for the NTWD (eg. Qld/Vic/NSW Catholic sector, Qld/Vic/NSW/ACT Independent sector).

##### Data preparation

- Derived school sector values were mapped by the NTWD project team to the NTWD classification structure.
- The value “RegOrphan” was assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

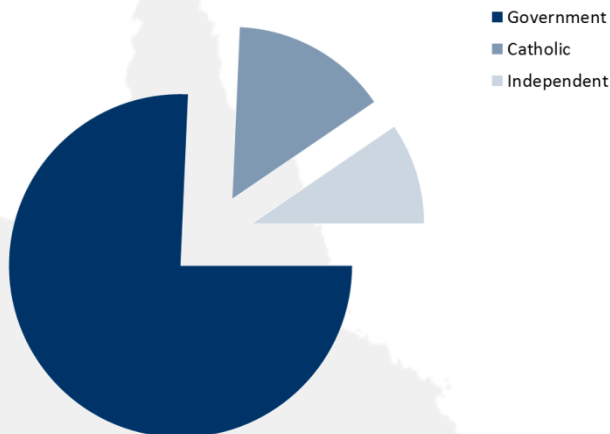
##### Limitations

- School Sector is unknown for 126,522 (29%) members of the teaching workforce, all of whom are regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect school data items for teachers for inclusion in the NTWD. Teachers working in the Independent sector in WA, SA, TAS and NT fit into this category.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards, who collect school identifier.

# Current School School Sector

Data Item 32

School Sector of Known Employed Teachers



## Observations

- 76% of known employed teachers with a known school sector are employed in the Government sector, whilst 14.8% are employed in the Catholic sector and 9.5% in the Independent sector.

School Sector	Known Employed	%
Government	237,535	75.70%
Catholic	46,381	14.78%
Independent	29,875	9.52%
<b>Total (excluding unknowns)</b>	<b>313,791</b>	<b>100.00%</b>
Unknown	126,522*	28.7%
<b>Total</b>	<b>440,313</b>	

\* all are 'regulatory authority orphans' unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

# Current School School Location (Remoteness)

## Data Item 33

### Data description

#### Definition

- The geographic classification of the school in which the individual is located, in terms of remoteness

#### Classification Structure

- 1270.0.55.005 - Australian Statistical Geography Standard (ASGS): Remoteness Structure, 2011

#### Collection

- The Australian Government Department of Education School ID (or an alternative school identifier) for each teacher was collected from 13 of 13 employer data custodians supplying data for the NTWD to enable school remoteness to be derived based on the school address recorded in a reference table. School remoteness was provided directly in some instances.
- School identifiers were also collected from 4 of 8 regulatory authority data custodians supplying data for the NTWD, enabling school remoteness to be derived in some jurisdictions and sectors where employers were unable to release data for the NTWD (eg. Qld/Vic/NSW Catholic sector, Qld/Vic/NSW/ACT Independent sector).

#### Data preparation

- Once released by data custodians, the school identifier (eg. the Australian Government Department of Education School ID) and supporting reference tables were used to derive the school address for each teacher. The address latitude and longitude was then derived and joined to the ABS ASGS Remoteness Structure digital boundaries to derive and map the remoteness classification to the NTWD classification structure. The ASGS is defined on the Australian Bureau of Statistics (ABS) website as a hierarchical classification system of geographical regions and consists of a number of interrelated structures. The ASGS provides a common framework of statistical geography and enables the production of statistics which are comparable and can be spatially integrated. The Remoteness Structure provides a geographical standard for the publication of statistics by relative remoteness. For further detail refer to: <http://www.abs.gov.au/ausstats/abs@.nsf/mf/1270.0.55.005>

#### Data preparation (cont.)

- Where a teacher has more than one school location in the data provided by data custodians, the dominant record (based on time fraction employed) was used to determine the school remoteness value to be used for the NTWD.
- The value “unknown” was assigned for teachers where the Australian Government Department of Education School ID, or alternative identifier, or the school remoteness data item itself, were not captured by an employer or regulatory authority for a teacher. Note that the value “RegOrphan” was instead assigned where teacher registrants included in data provided by regulatory authority data custodians were unable to be matched to an employer record sourced from employer data custodians and where this data item was expected to be obtained through employer data.

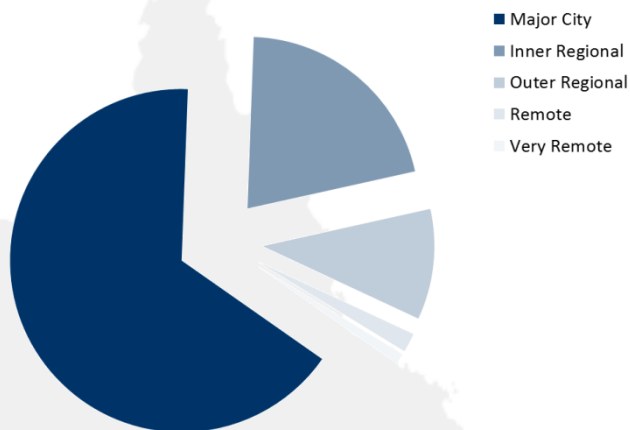
#### Limitations

- School remoteness is unknown for 134,705 (31%) members of the teaching workforce, including 126,522 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans include registrants who may not be currently employed, for which this data item is not applicable, or employed by an employer who does not centrally collect school data items for teachers for inclusion in the NTWD. Teachers working in the Independent sector in WA, SA, TAS and NT fit into this category.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in this data item due to unavailability of data, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards, who collect school identifier.
- The dominant school remoteness (based on time fraction employed) was assigned to the teacher for the NTWD if more than one school remoteness existed for that teacher in the data provided by data custodians for the NTWD.

# Current School School Location (Remoteness)

Data Item 33

School Remoteness of Known Employed Teachers



## Observations

- 66% of known employed teachers with a known remoteness classification are located in schools in major cities, whilst 31% are based in regional locations and 3% in remote locations.

School Remoteness	Known Employed	%
Major City	201,267	65.86%
Inner Regional	64,003	20.94%
Outer Regional	31,815	10.41%
Remote	5,459	1.79%
Very Remote	3,064	1.00%
<b>Total (excluding unknowns)</b>	<b>305,608</b>	<b>100.00%</b>
Unknown	134,705*	30.6%
<b>Total</b>	<b>440,313</b>	

\* includes 126,522 regulatory authority orphans unable to be matched to employer records containing this data item. Regulatory authority orphans may include teachers not currently employed, for whom this data item is not applicable.

# Current Teaching Subject Area(s)

## Data Item 34

### Data description

#### Definition

- All subject areas currently taught by the individual

#### Classification Structure

- 1 = English
- 2 = Languages other than English
- 3 = Mathematics
- 4 = Science
- 5 = Society and Environment Studies (SOSE)
- 6 = The Creative and Performing Arts
- 7 = Computing
- 8 = Technology
- 9 = Health and Physical Education
- 10 = Special Needs
- 11 = Vocational Education and Training
- 12 = Primary
- 13 = Other
- 99 = Unknown

#### Collection

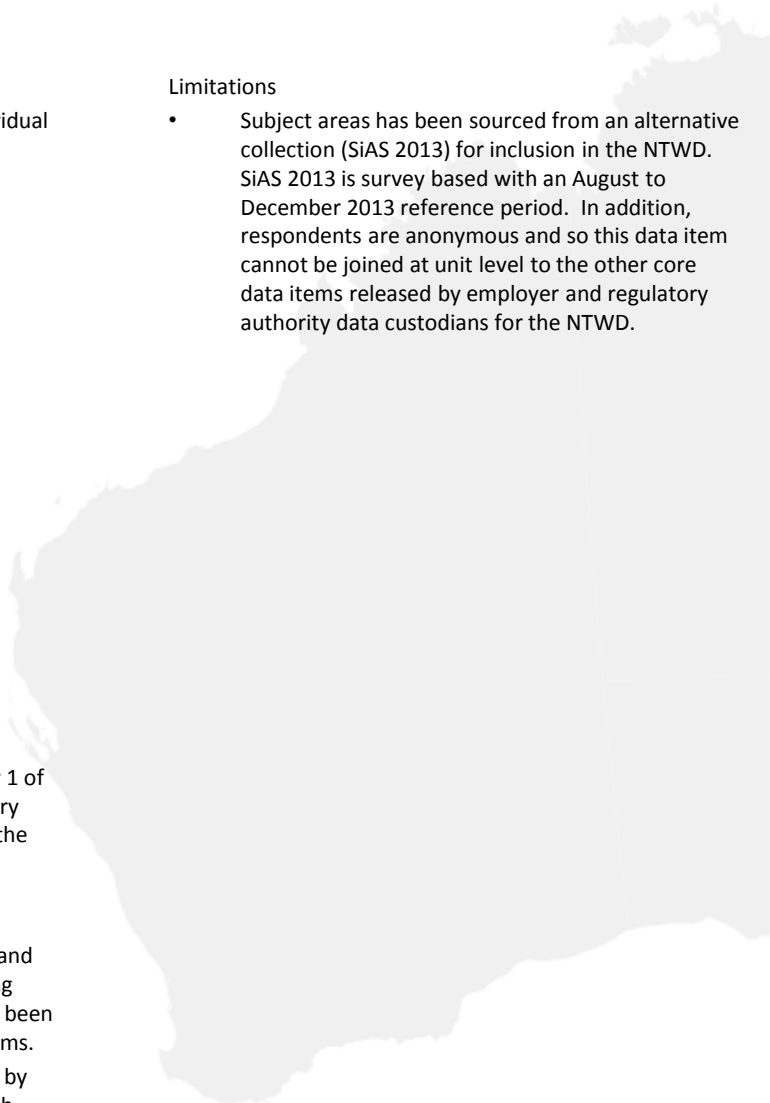
- Current subject areas is collected centrally by 1 of 13 employer data custodians and nil regulatory authority data custodians supplying data for the NTWD, which was considered insufficient for inclusion at unit level for the NTWD.
- As current subject areas is not consistently collected or readily available from employer and regulatory authority data custodians supplying data for the NTWD, an alternative source has been sought to supplement the other core data items.
- SiAS 2013 does address current subject areas by asking respondents in its teacher survey which subject areas the respondent is currently teaching as a generalist (if a primary teacher), or as a subject specialist (if either a primary or secondary teacher).

#### Data preparation

- Nil

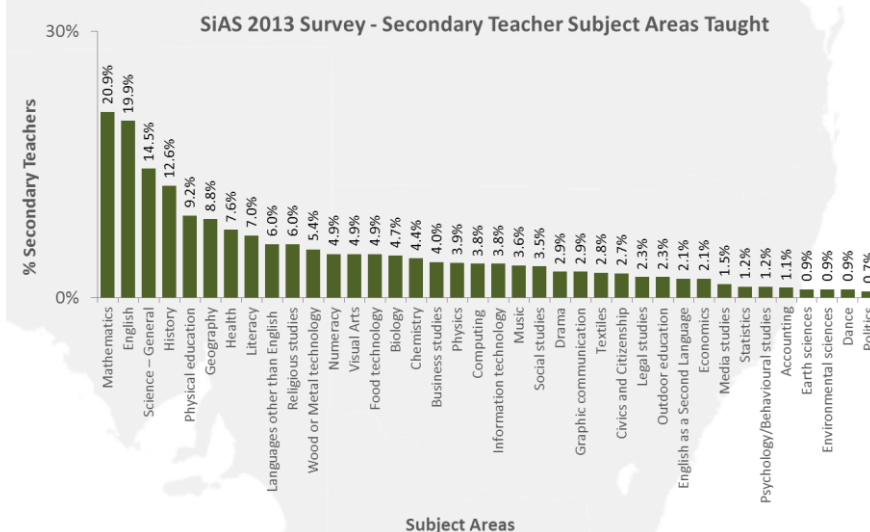
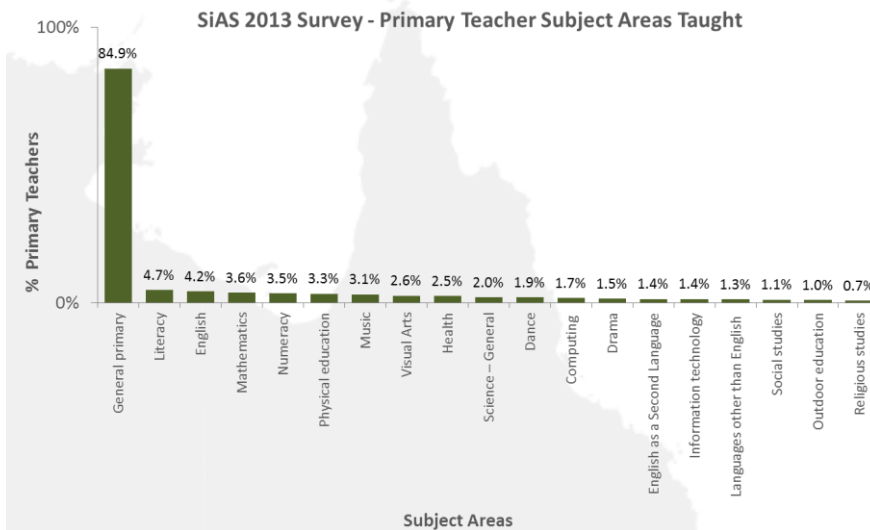
#### Limitations

- Subject areas has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with an August to December 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.



# Current Teaching Subject Area(s)

## Data Item 34



### Observations

- These charts identify the proportion of teachers, who responded to the SiAS 2013 survey, teaching each of the main subject areas. A teacher responding to the survey may be included in more than one category, except for generalists primary teachers who are excluded from the other categories.
- 85% of primary teachers were teaching general classroom teaching at the time of the survey, followed by literacy (5%) and English (4%).
- 21% of secondary teachers were teaching mathematics at the time of the survey, followed by English (20%) and general science (15%).
- This analysis is based on the SiAS 2013 main report which provided a table highlighting the proportion of teachers teaching each subject area.

# Current Teaching Year Level(s)

## Data Item 35

### Data description

#### Definition

- All year groups currently taught by the individual

#### Limitations

- N/A – data item not available for collection

#### Classification Structure

- 0 = Kindergarten/pre-school
- 1 = Year 1
- 2 = Year 2
- 3 = Year 3
- 4 = Year 4
- 5 = Year 5
- 6 = Year 6
- 7 = Year 7
- 8 = Year 8
- 9 = Year 9
- 10 = Year 10
- 11 = Year 11
- 12 = Year 12
- 99 = Unknown

#### Collection

- Year level is collected centrally by 1 of 13 employer data custodians and nil regulatory authority data custodians supplying data for the NTWD, which was considered insufficient for inclusion at unit level for the NTWD.
- As year level is not consistently collected or readily available from employer and regulatory authority data custodians supplying data for the NTWD, an alternative source has been sought to supplement the other core data items.
- SiAS 2013 does not directly ask respondents which year level they are currently teaching, with reference only to whether secondary teachers are teaching their current subjects to years 7/8-10 or years 11/12. No data is captured breaking down year levels taught into categories across the full spectrum of year levels.

#### Data preparation

- N/A – data item not available for collection



# Current Teaching Year Level(s)

Data Item 35

N/A – data item not collected



# Current Teaching Other Duties

## Data Item 36

### Data description

#### Definition

- Additional duties performed by the individual in addition to their role or classification

#### Limitations

- N/A – data item not available for collection

#### Classification Structure

- 1 = teaching related
- 2 = non teaching related

#### Collection

- Other duties are not collected centrally by any employer or regulatory authority data custodians supplying data to the NTWD.
- SiAS 2013 does not address other duties.

#### Data preparation

- N/A – data item not available for collection



# Current Teaching Other Duties

Data Item 36

N/A – data item not collected



# Exit from Teaching

## Year of Leaving

### Data Item 37

#### Data description

##### Definition

- Year at which individual separated from, or exited, the teaching profession permanently

##### Classification Structure

N/A

##### Collection

- Year of leaving has been collected from 8 of 8 regulatory authority data custodians supplying data to the NTWD as the best representation of year of leaving the teaching profession. Year of leaving has not been requested from employer data custodians because leaving an employer does not imply leaving the profession and may represent a teacher moving between school sectors.
- Year of leaving has not been collected for the current active teaching workforce as this would not be applicable. Rather, year of leaving has been released by all regulatory authorities for all former registrants who left the profession within one year of the extraction date to provide an estimate of the number of teachers leaving the profession on a yearly basis.
- In some cases, a count of former registrants who lapsed registration in the 12 month period prior to date of extraction was provided instead of year of leaving at unit level, as the end result is the same for the purpose of this data item (to identify the number of registrants who left the profession in the 12 month period up until date of extraction). This provides an indication of additional supply required due to retirements from the profession.

##### Data preparation

- After release of data by regulatory authority data custodians for the NTWD, the NTWD project team performed a count of former registrants with a year of leaving within 12 months of the date of extraction. Alternatively, the count was performed by the regulatory authority.

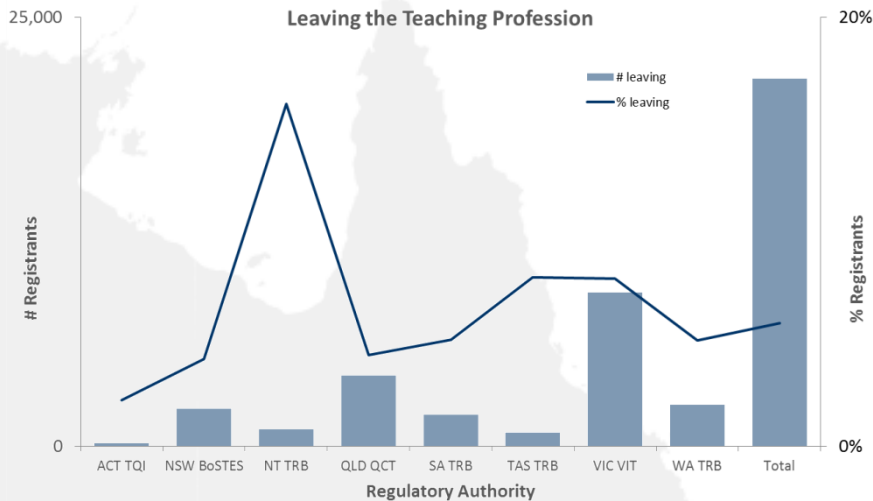
##### Limitations

- The count of former registrants who lapsed registration in the 12 month period prior to date of extraction (based on year of leaving) has been used as a proxy for number of teachers leaving the profession in a 12 month period. This provides an indication of additional supply required due to retirements from the profession.

# Exit from Teaching

## Year of Leaving

### Data Item 37



#### Observations

- Based on the data collected, 21,404 (5.7%) members of the teaching workforce left the profession during the year preceding data extraction.
- The number of teachers leaving the profession is based on the number of lapsed registrants in the 12 months prior to date of extraction, as provided by regulatory authorities.
- Lapsed registrants as a percentage of all registrants is based on dividing the number of lapsed registrants by the number of active registrants in the unit level data provided by each regulatory authority.

Regulatory Authority	# Leavers	% Leavers
ACT Teacher Quality Institute (ACT TQI)	164	2.15%
NSW Board of Studies, Teaching and Educational Standards (NSW BoSTES)	2,180	4.06%
Teacher Registration Board of the Northern Territory (NT TRB)	980	15.94%
Queensland College of Teachers (QLD QCT)	4,102	4.26%
Teacher Registration Board of South Australian (SA TRB)	1,828	4.96%
Teacher Registration Board of Tasmania (TAS TRB)	799	7.87%
Victorian Institute of Teaching (VIC VIT)	8,960	7.79%
Teacher Registration Board of Western Australia (WA TRB)	2,391	4.93%
<b>Total</b>	<b>21,404</b>	<b>5.72%</b>

# Exit from Teaching

## Reason for Leaving

### Data Item 38

#### Data description

##### Definition

- Reason for individual's permanent exit from the teaching profession

##### Classification Structure

- 1 = Retirement from paid work
- 2 = Resignation, teach interstate
- 3 = Resignation, teach overseas
- 4 = Resignation, other employment
- 5 = Resignation, family responsibilities
- 6 = Poor health or death
- 7 = Other
- 99 = Unknown

##### Collection

- Reason for leaving is collected centrally by 3 of 8 regulatory authority data custodians supplying data for the NTWD, which was considered insufficient for inclusion at unit level for the NTWD.
- As reason for leaving is not consistently collected or readily available from regulatory authority data custodians supplying data for the NTWD, an alternative source has been sought to supplement the other core data items.
- SiAS 2013 does address reason for leaving in the teacher survey, which asks teacher respondents, who intend to leave the profession prior to retirement, what the most important factors would be in their decision to leave the profession prior to retirement.

##### Data preparation

- Nil

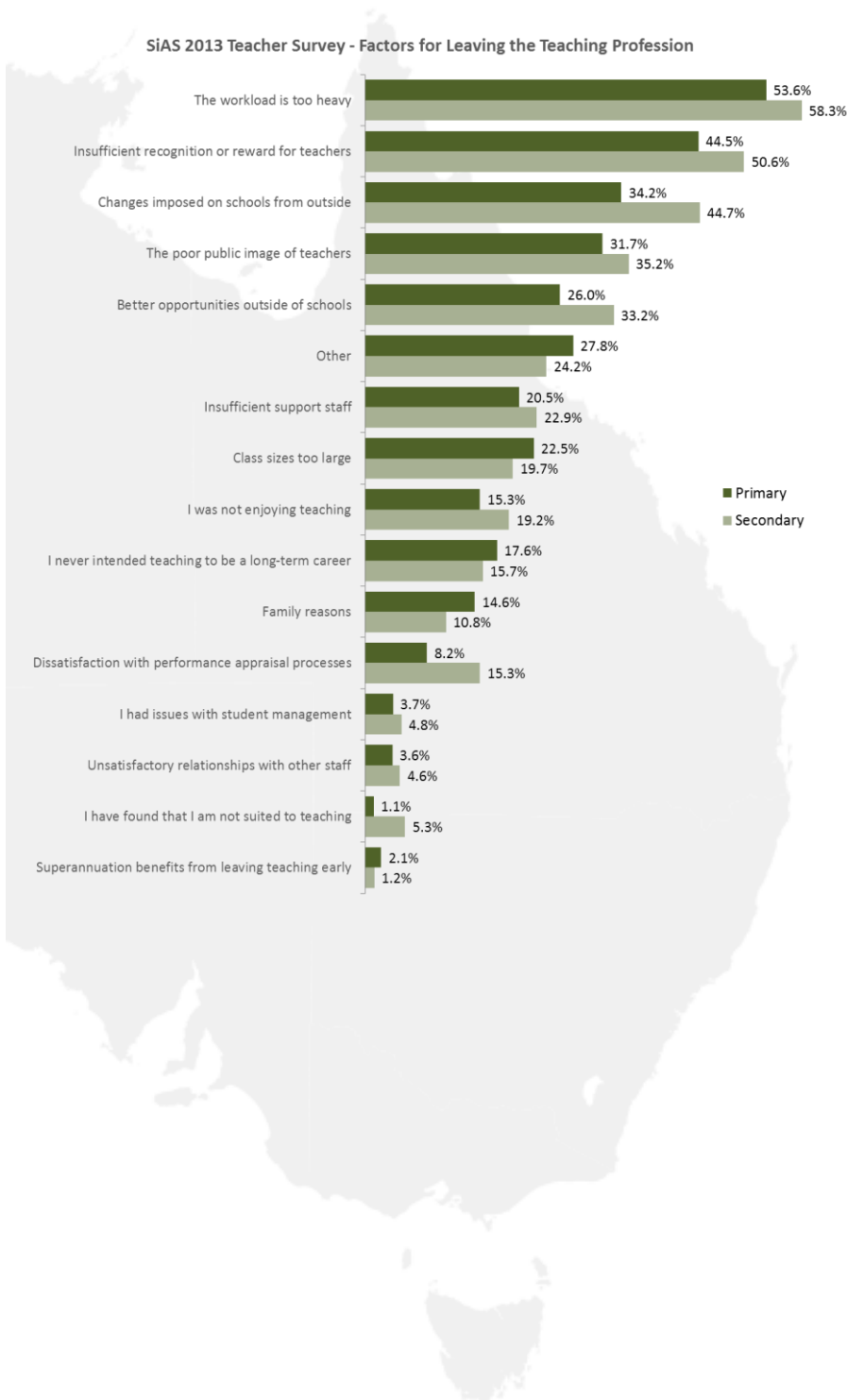
##### Limitations

- Reason for leaving has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with an August to December 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.

# Exit from Teaching

## Reason for Leaving

### Data Item 38



#### Observations

- The adjacent chart identifies the main factors which may influence teachers to leave the teaching profession.
- Heavy workload is the most common factor for leaving the teaching profession, for both primary and secondary teachers surveyed.
- This analysis is based on the SiAS 2013 main report which provided a table highlighting the proportion of teachers who intend to leave the profession by major factor influencing that decision. 5.1% of primary teachers and 7.7% of secondary teachers responded to this question, and respondents may respond in more than one category.

# Exit from Teaching Destination

## Data Item 39

### Data description

#### Definition

- The occupation group of main work undertaken by individual who exited the teaching profession

#### Classification Structure

- ABS ANZSCO 1-digit Major Group Level

#### Collection

- Destination is not collected centrally by any employer or regulatory authority data custodians supplying data to the NTWD.
- SiAS 2013 does address reason for leaving in the leader survey, in which principals are asked for the number of teachers who have left their schools in the past 12 months by destination category.

#### Data preparation

- Nil

#### Limitations

- Destination has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with a May to August 2013 reference period. In addition, respondents are anonymous and so this data item cannot be joined at unit level to the other core data items released by employer and regulatory authority data custodians for the NTWD.

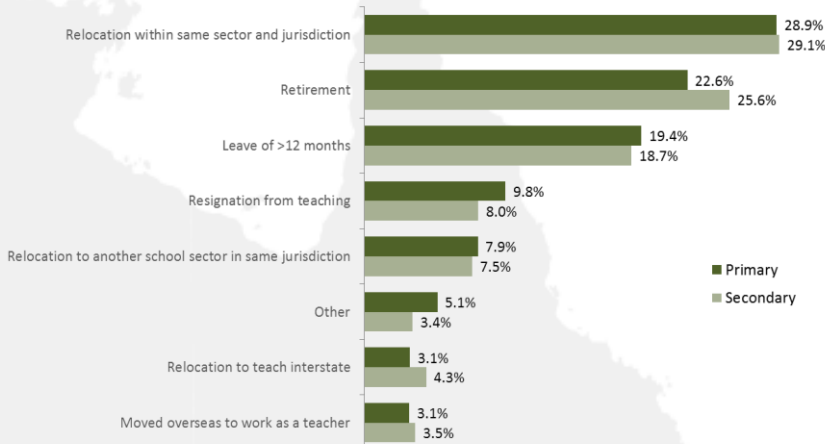


# Exit from Teaching

## Destination

Data Item 39

SiAS 2013 Leader Survey - Destination of Teachers Leaving in Prior Year



### Observations

- The adjacent identifies the proportion of teachers leaving their school by destination category.
- In both primary and secondary schools the most common destination for teachers leaving was relocation within the same sector and jurisdiction, followed by retirement and leave of greater than 12 months.
- This analysis is based on the SiAS 2013 main report which provided a table providing the estimated number of teachers leaving their school in the prior 12 month period by destination category. These estimates were derived through extrapolation based on average number of teachers leaving per each school surveyed (via the school principal).

# Teacher Supply

## Teacher Education Graduates

### Data Item 40

#### Data description

##### Definition

- Counts of individuals with intention to enter or actual entry to teaching; or counts enrolments and completions by specialist area, and proportion available for teaching employment

##### Collection

- Aggregated teacher education graduate data was released by 4 of 13 employer data custodians and 3 of 8 regulatory authority data custodians supplying data for the NTWD.
- The nature of data provided varied across these custodians, and included counts of graduates applying to teach, counts of graduates applying to teach by subject area and employed status, forecasts of graduate numbers by school level, and forecasts of graduate numbers by campus, qualification level, field of education and specialisation. Given that teacher education graduate data at the jurisdictional level is not consistently collected or readily available, it has not been included as a supplement to the unit level data in the NTWD.
- Teacher education data was previously collected by the Department of Industry, Innovation, Science, Research and Tertiary Education (DIISRTE), who have released teacher education data publicly through the Higher Education Statistics Data Cube (uCube). This data is now maintained by the Australian Government Department of Education.

##### Data preparation

- Filtering was performed using the Education Statistics Data Cube (uCube) to include only those counts for 2011, and for only those courses providing initial teacher training.

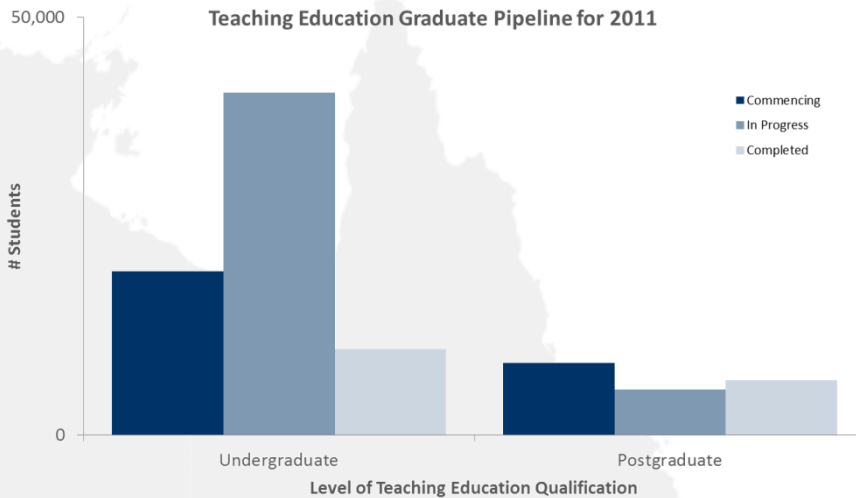
##### Limitations

- The Higher Education Statistics Data Cube (uCube) has been filtered to include only those courses providing initial teacher training. However this includes the Early Childhood field of education, which may not be applicable for identifying graduates looking to enter the teaching workforce.

# Teacher Supply

## Teacher Education Graduates

### Data Item 40



Teaching Education Graduate Pipeline	Undergraduate	Postgraduate	Total
Commencing	19,613	8,639	<b>28,252</b>
In Progress	40,947	5,426	<b>46,373</b>
Completed	10,266	6,546	<b>16,812</b>
<b>Total</b>	<b>70,826</b>	<b>20,611</b>	<b>91,437</b>

\* The above counts are based on data sourced from Higher Education Statistics Data Cube (uCube), originally sourced from DIISRTE but now maintained by the Australian Government Department of Education, and include only those courses providing initial teacher training. Note that this includes the Early Childhood field of education, which may not be applicable for identifying graduates looking to enter the teaching workforce.

#### Observations

- In 2011 there were 28,252 initial teaching training course enrolments, 46,373 in progress and 16,812 completions. These counts are consistent with those recently published by the Australian Institute for Teaching and School Leadership (AITSL).
- A large discrepancy exists between commencements and completions. However, consideration of commencement numbers associated with the 2011 completion count is required, as well as an understanding of changes to enrolment numbers in recent years.
- Based on these numbers, 16,812 qualified teachers may have entered the teaching workforce in 2012. A proportion would be expected to be unavailable for a variety of reasons, including moving overseas, delaying employment, taking further study and pursuing a different line of employment.

# Teacher Supply

## Teacher Pools

### Data Item 41

#### Data description

##### Definition

- Counts of qualified persons on State and Territory employment lists as available for teaching employment by specialist area

##### Collection

- Counts of teacher applicants (ie. qualified teachers applying for a position) by specialist area, as a proxy for calculating the teacher pool, were collected from 4 of 13 employer data custodians supplying data for the NTWD. Given that this data item is not available from all data custodians, it is not possible to determine total qualified persons available for teaching (ie. teacher pools) using counts of teacher applicants.
- An estimate of the teacher pool could be broadly achieved through comparing counts of registered teachers against counts of employed teachers, with counts derived by the NTWD project team using the unit level data provided by regulatory authority and employer data custodians for development of the NTWD. However, significant limitations exist, as noted adjacent, most notably that employment data for the Independent and Catholic sectors was not available for collection in some jurisdictions. In addition, approximately half of NSW teachers are not registered with the NSW regulatory authority.
- An alternative to estimating the teacher pool is through comparing counts of registered teachers to an external but complete source of data representing employed teachers, that being the ABS 2012 National Schools Statistics Collection (NSSC). However, limitations still exist with this approach, as noted adjacent, including exclusion of casual teachers in the NSSC counts as well as timing differences in reference periods for collection. In addition, the limitation around NSW teachers not being registered with the NSW regulatory authority remains.

##### Data preparation

- Non teaching staff were removed from the ABS NSSC data to derive counts of teaching staff only.

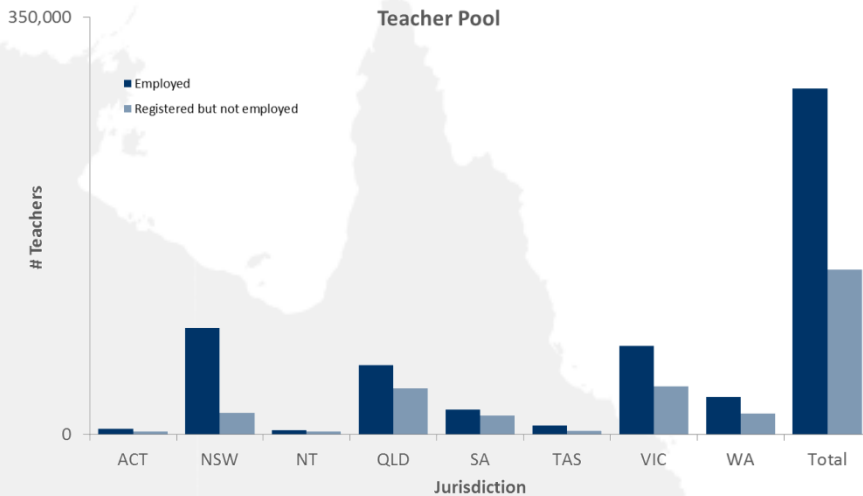
##### Limitations

- The reference point for NSSC 2012 is August 2011, whilst the NTWD data has been collected from data custodians at various points in time between mid 2012 to late 2013. Differences in timing of collections may impact on the accuracy of estimating teachers registered but not employed, as part of determining the total teacher pool available.
- In addition, the NSSC excludes casual teachers, teachers on leave for at least 4 weeks, and replacement teachers where replacement period is less than 4 weeks, whereas the NTWD includes casual and replacement teachers except where not collected centrally (Govt sector in VIC and NT).
- Approximately 50% of the teaching workforce in NSW is accredited, and as a result teachers in NSW may be employed but not accredited. Similarly, teachers in NSW may be unemployed and not accredited, however the count of such teachers is not readily identifiable.

# Teacher Supply

## Teacher Pools

### Data Item 41



Jurisdiction	Registered (NTWD)	ABS NSSC Headcount of Teachers				Variance
		Govt	Cath	Ind	Total	
ACT	7,626	2,894	1,239	838	4,971	2,655
New South Wales	53,670	56,474	18,958	14,081	89,513	18,003*
Northern Territory	6,147	2,782	427	527	3,736	2,411
Queensland	96,386	38,819	10,107	8,942	57,868	38,518
South Australia	36,870	12,973	3,952	4,169	21,094	15,776
Tasmania	10,151	5,007	1,204	1,050	7,261	2,890
Victoria	114,959	43,911	16,629	13,885	74,425	40,534
Western Australia	48,459	20,128	5,262	5,776	31,166	17,293
<b>Total</b>	<b>374,268</b>	<b>182,988</b>	<b>57,778</b>	<b>49,268</b>	<b>290,034</b>	<b>138,080</b>

\* The variance is calculated by subtracting ABS NSSC headcounts from registered teachers (per the NTWD). This calculation is not possible for NSW because approximately half of NSW teachers are not accredited with the NSW teacher regulator. The count of registered but not employed for NSW is based on unit level data provided by the NSW Board of Studies, Teaching and Educational Standards for development of the NTWD, without reference to the NSSC counts, and excludes those NSW teachers who are not currently accredited with NSW Board of Studies, Teaching and Educational Standard.

#### Observations

- The adjacent chart and table use regulatory authority data sourced for the NTWD and ABS NSSC 2012 counts of employed teachers to estimate the available teacher pool.
- According to the NTWD, there are 374,268 registered teachers in the country. This number excludes approximately half of NSW qualified teachers, who are not accredited with the NSW teacher regulator.
- According to the ABS NSSC, there are 290,034 employed teachers in the country. This number excludes casual teachers, teachers on leave for at least 4 weeks, and replacement teachers where replacement period is less than 4 weeks.
- Comparing counts of registered teachers to ABS NSSC counts identifies a variance of 138,080. The variance for NSW is calculated through an alternative method given that approximately half of NSW teachers are not registered with the NSW regulatory authority.
- As noted, the variance calculated excludes casual teachers, teachers on leave for at least 4 weeks, and replacement teachers where replacement period is less than 4 weeks. This variance also excludes NSW teachers who are not accredited with the NSW teacher regulator.

# Teacher Supply

## Net Migration

### Data Item 42

#### Data description

##### Definition

- Counts of teachers employed or registered in Australia from overseas; and Australian teachers employed or residing overseas

##### Collection

- Counts of teachers with overseas teaching qualifications have been sourced from 8 of 8 regulatory authorities as a proxy for counts of teachers from overseas employed or registered in Australia.
- Counts of teacher registrants with an overseas mailing address have been sourced from 8 of 8 regulatory authorities as a proxy for counts of teachers employed or residing overseas.
- Settler and departure data has been sourced from the Department of Immigration and Citizenship (DiAC), identifying movements into and out of the country during 2011, where the settler or departee has reported themselves as being in the teaching profession.

##### Data preparation

- Nil data preparation was required for counts of teachers with overseas teaching qualifications, as provided by all but 2 regulatory authorities. For the remaining 2 regulatory authorities, counts of teachers with overseas training qualifications were derived by the NTWD project team through filtering and aggregating on the unit level data provided.
- Nil data preparation was required for counts of teachers with overseas mailing addresses, as provided by all regulatory authorities.
- To derive counts of teacher movements into and out of the country during 2011, filters were applied by the NTWD project team on the raw data provided by DiAC, including filtering on travel year, visa group, travel reason and travel category.

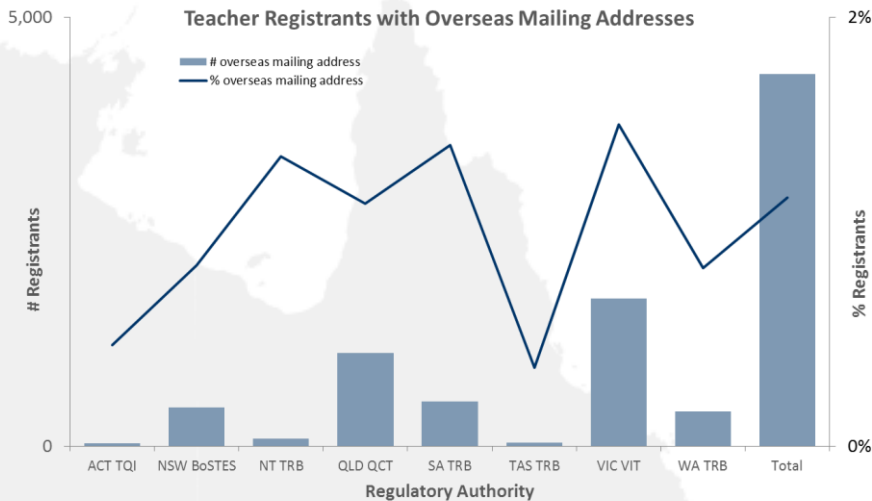
##### Limitations

- Teacher registrants with overseas teaching qualifications is a proxy only for teachers employed or registered in Australia, whilst teacher registrants with an overseas mailing address is a proxy only teachers employed or residing overseas.
- Approximately half of NSW teachers employed in the Independent and Catholic sectors are not represented in data sourced from the NSW regulatory authority containing overseas teaching qualifications and overseas mailing addresses, as such teachers are not accredited with the NSW Board of Studies, Teaching and Educational Standards.
- Aggregated and unit level data provided by the regulatory authorities provide total counts of teachers with overseas teaching qualifications and overseas mailing addresses. No data is collected or available to the NTWD project team to determine when each teacher registrant moved overseas or from overseas to Australia. Therefore it is not possible to derive an annual net migration amount for teachers based on this data.
- The settler and departure data sourced from DiAC is based on self reporting. Therefore the completeness and accuracy of counts of teacher movements is reliant on the completeness and accuracy of information recorded by incoming and outgoing passengers, including the occupation and reason for travel. In addition, the recorded incoming and outgoing movements do not necessarily indicate adding or removing to the teaching pool as travel may relate to a short holiday only, and the information collected by DiAC does not provide clarity around this.

# Teacher Supply

## Net Migration

### Data Item 42



#### Observations

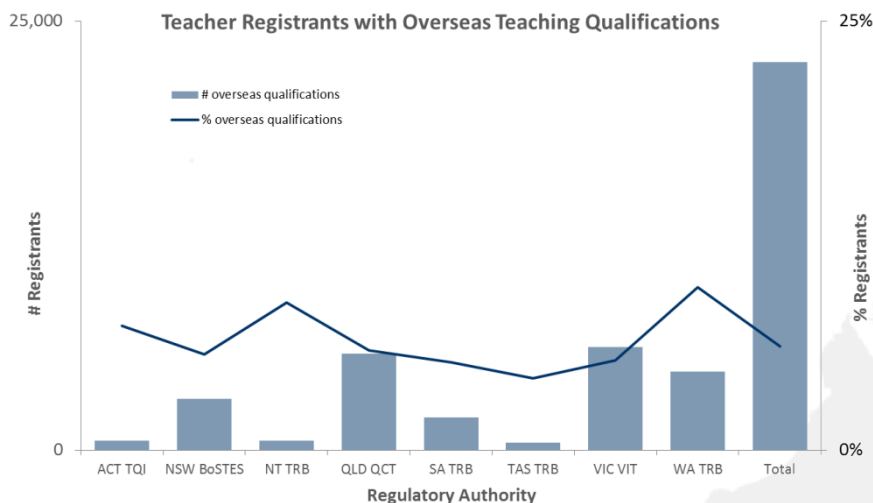
- Based on the data collected, 4,337 (1.2%) teacher registrants live overseas, limiting their availability to the total teaching pool.
- The extent moving overseas in the past year is unknown, therefore an annual outward migration number for teachers cannot be derived from this.
- The number of teacher registrants living overseas is based on counts of teacher registrants with an overseas mailing address, as provided by regulatory authorities.
- Registrants living overseas as a percentage of all registrants is based on dividing the number of overseas registrants by the number of active registrants in the unit level data provided by each regulatory authority.

Regulatory Authority	# registrants with overseas mailing address	% registrants with overseas mailing address
ACT Teacher Quality Institute (ACT TQI)	36	0.47%
NSW Board of Studies, Teaching and Educational Standards (NSW BoSTES)	452	0.84%
Teacher Registration Board of the Northern Territory (NT TRB)	83	1.35%
Queensland College of Teachers (QLD QCT)	1,088	1.13%
Teacher Registration Board of South Australian (SA TRB)	517	1.40%
Teacher Registration Board of Tasmania (TAS TRB)	37	0.36%
Victorian Institute of Teaching (VIC VIT)	1,722	1.50%
Teacher Registration Board of Western Australia (WA TRB)	402	0.83%
<b>Total</b>	<b>4,337</b>	<b>1.16%</b>

# Teacher Supply

## Net Migration (cont.)

### Data Item 42



#### Observations

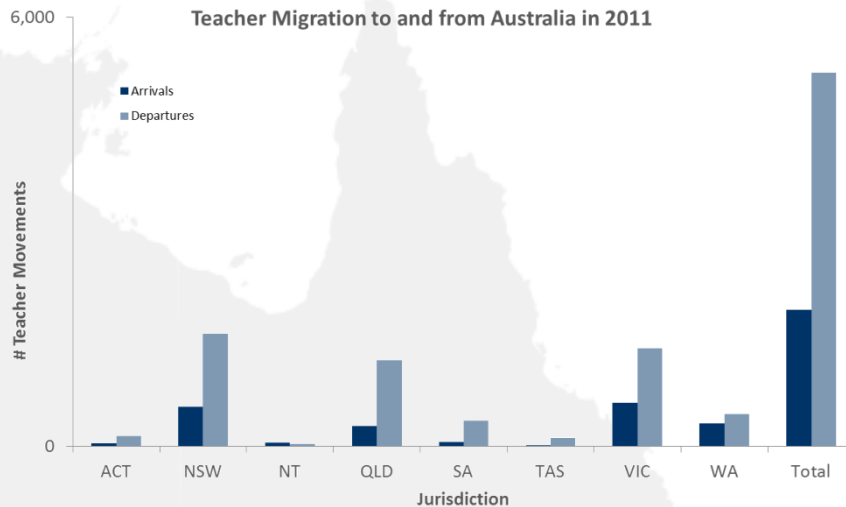
- Based on the data collected, 22,600 (6%) teacher registrants have overseas qualifications, which is a proxy for qualified teachers moving to Australia, and may not be available to the total teaching pool if they choose to return.
- The extent of teachers moving to Australia in the past year is unknown, therefore an annual inward migration number for teachers cannot be derived from this.
- The number of teacher registrants with overseas qualifications is based on counts of teacher registrants with overseas teaching qualifications, as provided by regulatory authorities.
- Registrants with overseas qualifications as a percentage of all registrants is based on dividing the number of registrants with overseas qualifications by the number of active registrants in the unit level data provided by each regulatory authority.

Regulatory Authority	# registrants with overseas qualifications	% registrants with overseas qualifications
ACT Teacher Quality Institute (ACT TQI)	553	7.25%
NSW Board of Studies, Teaching and Educational Standards (NSW BoSTES)	2,995	5.58%
Teacher Registration Board of the Northern Territory (NT TRB)	529	8.61%
Queensland College of Teachers (QLD QCT)	5,618	5.83%
Teacher Registration Board of South Australian (SA TRB)	1,891	5.13%
Teacher Registration Board of Tasmania (TAS TRB)	423	4.17%
Victorian Institute of Teaching (VIC VIT)	6,002	5.22%
Teacher Registration Board of Western Australia (WA TRB)	4,589	9.47%
<b>Total</b>	<b>22,600</b>	<b>6.04%</b>

# Teacher Supply

## Net Migration (cont.)

Data Item 42



### Observations

- Based on the data collected from DiAC, there were 7,119 movements of teachers into and out of the country in 2011, including 1,903 arrivals and 5,216 departures. Net movements for 2011 was therefore -3,313, with only NT recording more overseas arrivals than departures.
- These observations are based on filtering of DiAC data to best represent arrivals and departures for teaching employment. This included retaining all visa groups for arrivals in the data except for “student” and “visitor”. In addition, only “business” and “employment” travel reasons were retained for both departures and arrivals.

Jurisdiction	Arrivals	Departures	Net Movements	Total Movements
Australian Capital Territory	39	138	-99	177
New South Wales	550	1,571	-1,021	2,121
Northern Territory	49	34	15	83
Queensland	284	1,199	-915	1,483
South Australia	54	351	-297	405
Tasmania	5	109	-104	114
Victoria	602	1,371	-769	1,973
Western Australia	320	443	-123	763
<b>Total</b>	<b>1,903</b>	<b>5,216</b>	<b>-3,313</b>	<b>7,119</b>

\* Based on data sourced from DiAC

# Teacher Need

## Adequacy

### Data Item 43

#### Data description

##### Definition

- Counts of shortages/ vacancies by learning area

##### Collection

- Counts of shortages and vacancies were collected from by 2 of 13 employer data custodians supplying data for the NTWD.
- The nature of data provided varied across these custodians, and included counts of classroom teacher vacancies filled or being filled by primary/secondary and counts of FTE teacher shortages by the main learning areas. Given that aggregated data around shortages and vacancies at the jurisdictional level is not consistently collected or readily available, it has not been included as a supplement to the unit level data in the NTWD.
- SiAS 2013 does address shortages/vacancies by learning area in its leader survey, in which Principals were asked to record the number of unfilled teacher positions at the start of 2012, end of 2012 and start of 2013. This was intended to provide an indication of whether staffing difficulties had eased or worsened during the school year. An unfilled position was defined in the survey as any position that, at the time of the survey, had been vacant for 10 consecutive weeks or more which was not filled by a permanent teacher or long-term reliever.

##### Data preparation

- Nil

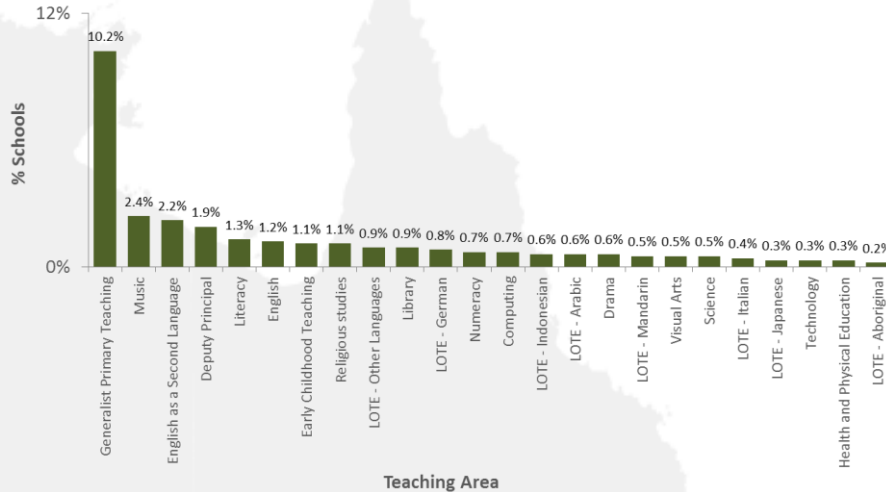
##### Limitations

- Adequacy has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with a May to August 2013 reference period.
- The number of unfilled teacher positions may not reflect the relative ease of filling vacant positions for each subject area. For example, whilst there may be more unfilled English teacher positions compared to Physics teacher positions, there may be a smaller pool of Physics teachers available.

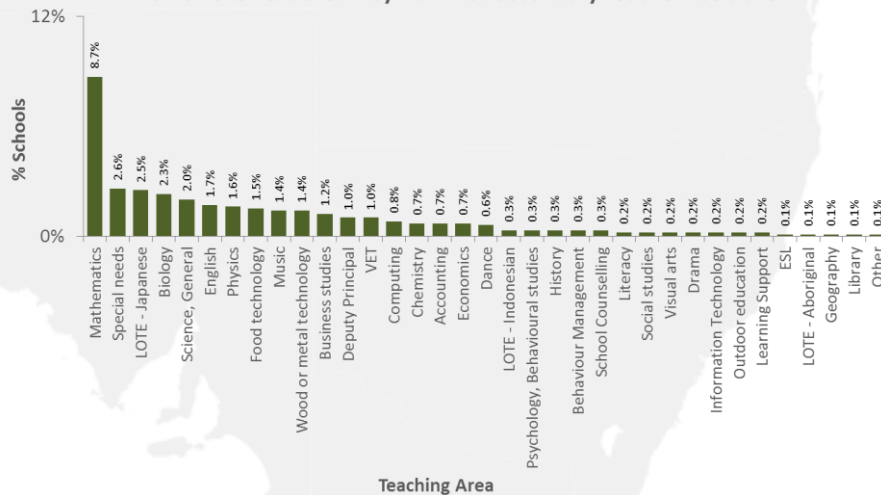
# Teacher Need Adequacy

## Data Item 43

SiAS 2013 Leader Survey - Unfilled Primary Teacher Positions



SiAS 2013 Leader Survey - Unfilled Secondary Teacher Positions



### Observations

- These charts show the percentage of schools with at least one unfilled teacher position at the start of 2013.
- An unfilled position was defined in the survey as any position that, at the time of the survey, had been vacant for 10 consecutive weeks or more which was not filled by a permanent teacher or long-term reliever.
- Note that the large percentage of schools with at least one unfilled generalist primary teaching position is reflective of the number of generalist primary teaching positions in schools compared to other primary teaching positions.
- This analysis is based on the SiAS 2013 main report which provided tables with percentages of schools with at least one unfilled teacher position at the start of 2013.

# Teacher Need

## Current Requirements

### Data Item 44

#### Data description

##### Definition

- The extent of current teacher need for each of the main learning areas (eg. 'Major', 'moderate', 'minor', 'none')

##### Collection

- The extent of current teacher for each main learning area was not available for collection from any of the employer data custodians supplying data for the NTWD.
- Alternative counts around current teacher needs were provided by only 1 of 13 employer data custodian supplying data for the NTWD, which consisted of total FTEs needed by primary/secondary only. Given that the extent of current teacher need for each of the main learning areas is not consistently collected or readily available, it has not been included as a supplement to the unit level data in the NTWD.
- SiAS 2013 does not collect data on current teacher need for each of the main learning areas. However SiAS 2013 does collect data on principal's perspectives on attracting and retaining staff in general, which can be considered a proxy for current requirements. However, perceptions of difficulties in filling and retaining staff are not surveyed for each of the main learning areas.

##### Data preparation

- Nil

##### Limitations

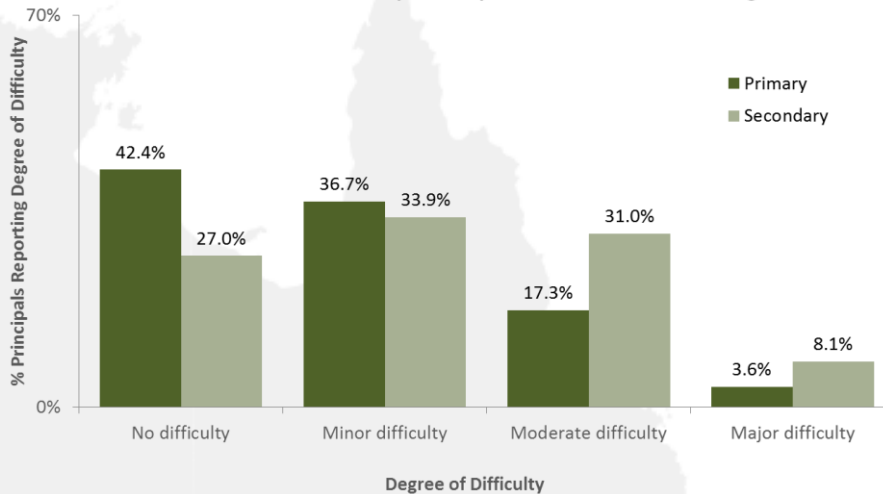
- Current requirements has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with a May to August 2013 reference period.
- Perceptions of difficulties in filling and retaining staff are not provided for each of the main learning areas, but rather at a general level.

# Teacher Need

## Current Requirements

### Data Item 44

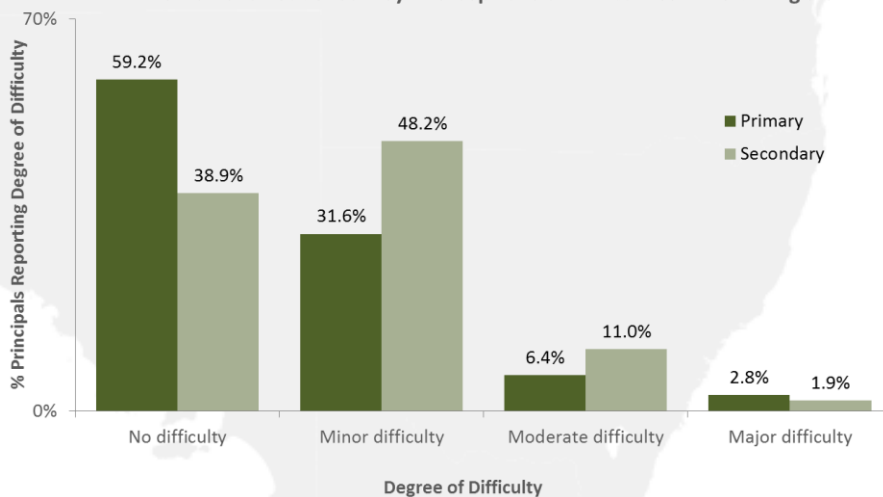
SiAS 2013 Leader Survey - Perception of Difficulties in Filling Vacancies



#### Observations

- The top chart represents the degree of difficulty in the 12 months prior to survey completion in suitably filling staff vacancies across all areas of curriculum, according to the principals surveyed.
- The bottom chart represents the degree of difficulty in the 12 months prior to survey completion in retaining suitable staff across all areas of curriculum, according to the principals surveyed.
- This analysis is based on the SiAS 2013 main report which provided tables highlighting the degree of difficulty in the 12 months prior to survey completion in suitably filling staff vacancies, and retaining suitable staff, across all areas of curriculum.

SiAS 2013 Leader Survey - Perceptions of Difficulties in Retaining Staff



# Teacher Need

## Future Requirements

### Data Item 45

#### Data description

##### Definition

- Teacher career intentions and teacher projections and other estimates where these are available from education authorities

##### Collection

- Future teacher requirements were provided by 3 of 13 employer data custodians supplying data for the NTWD.
- The nature of data provided varied across these custodians, and included forecasts of total teacher demand between 2013 and 2020 by primary/secondary, forecasts of separations by headcount and FTE between 2013 and 2017 by primary and secondary subject areas, and narratives of future projections for primary and secondary subject areas. Given that data around future requirements at the jurisdictional level is not consistently collected or readily available, it has not been included as a supplement to the unit level data in the NTWD.
- However, a number of Government departments have published teacher projections in recent years, which can be accessed at the following links:

##### **New South Wales:**

<https://www.det.nsw.edu.au/media/downloads/about-us/statistics-and-research/key-statistics-and-reports/workforce-plan-4-school-teachers.pdf>

##### **Victoria:**

<http://www.education.vic.gov.au/Documents/about/careers/teaching/TeacherSupplyDemandRpt.pdf>

##### **South Australia:**

[http://www.decd.sa.gov.au/hrdevelopment/files/links/Monograph\\_2.pdf](http://www.decd.sa.gov.au/hrdevelopment/files/links/Monograph_2.pdf)

- SiAS 2013 also addressed future requirements, in the form of career intentions, in both the teacher and leader surveys, most notably around how likely teachers and school leaders were to remain in teaching, and the factors influencing their decisions. However, future requirements in the form of teacher projections is not addressed.

##### Data preparation

- Nil

##### Limitations

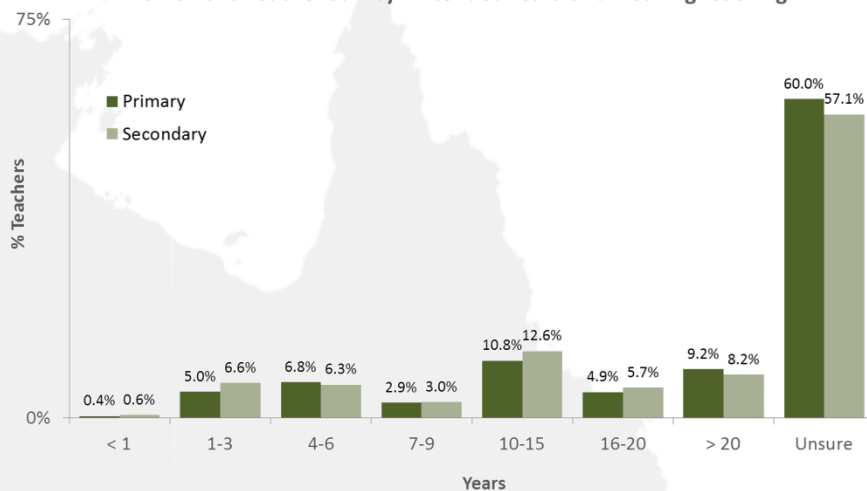
- Future requirements has been sourced from an alternative collection (SiAS 2013) for inclusion in the NTWD. SiAS 2013 is survey based with a May to August 2013 reference period.

# Teacher Need

## Future Requirements

### Data Item 45

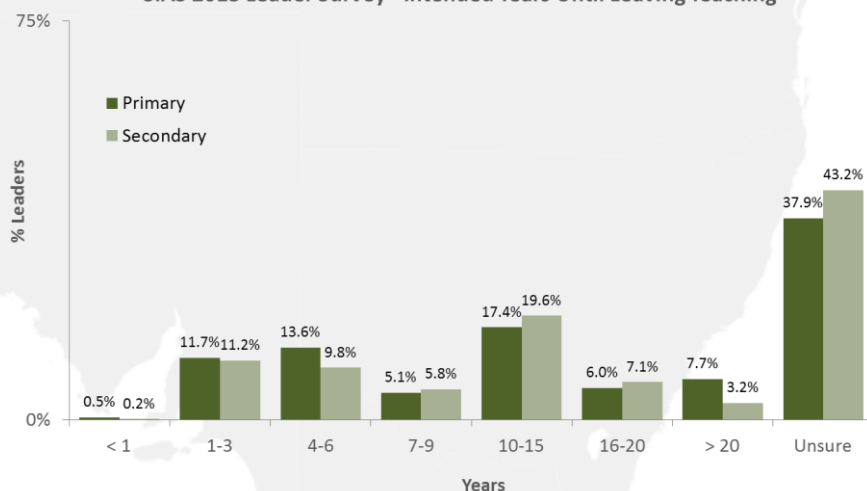
SiAS 2013 Teacher Survey - Intended Years Until Leaving Teaching



#### Observations

- These charts identify the length of time teachers and leaders intend to work in schools until leaving the teaching profession.
- This analysis is based on the SiAS 2013 main report which provided a table highlighting the number of years teachers and leaders intend to continue working in schools by primary and secondary.

SiAS 2013 Leader Survey - Intended Years Until Leaving Teaching





# PART III

## FOCUS AREAS





## Age of Teachers

Analysis of age enables an understanding of the qualities of teachers that are likely to be lost in the medium term as these teachers retire. It also enables an understanding of where and how younger teachers, as a proxy for experience, are employed, and whether there are any areas related to distribution of these teachers that may be leading to inequity.

The key findings from analysis, in this section, that warrant further investigation are:

- South Australia and Tasmania for both genders, and WA for male teachers, have a teaching workforce that is older than national medians.
- Younger teachers are more likely to be in fixed term or casual employment than teachers between ages 30 and 60. This may be a direct choice to allow greater work flexibility or may be imposed as employers seek a lower risk approach to determine suitability. Understanding the extent of motivation for this, and how it may impact longer term retention in the teaching workforce is an area for future study.
- A large number of female teachers aged 30 – 39 are on extended unpaid leave. Determining strategies to embrace this cohort back to teaching following their leave will be important to maintaining an appropriate workforce.
- Younger teachers with qualifications other than in education are more likely to have these in Creative Arts than Natural and Physical Sciences. The importance of the later field of study may require strategies to increase qualifications in this domain.

# Age Profile

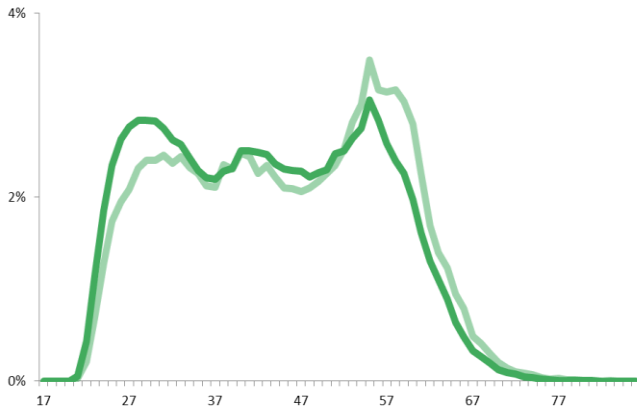
**43** is the median age for female teachers in Australia.

**46** is the median age for male teachers in Australia.

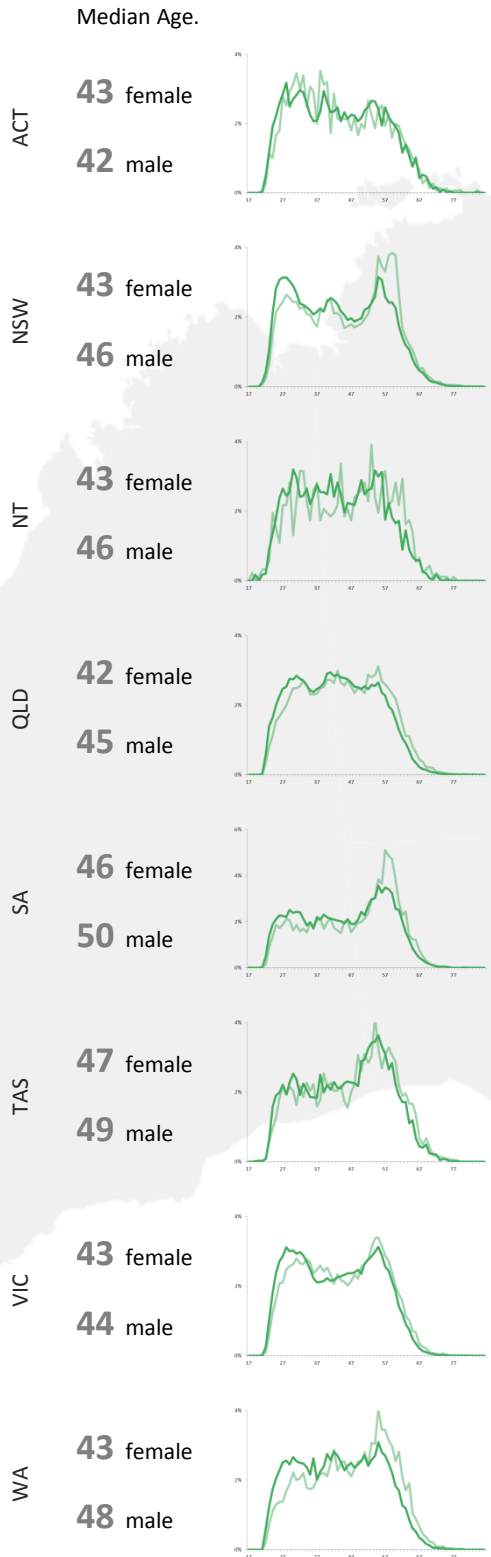
This is evident in the chart below which shows that nearly one third of female teachers are aged 35 or below. By contrast, nearly one third of male teachers are aged 54 or over.

From a jurisdictional perspective, South Australia and Tasmania have the highest median teacher age. Particularly male teachers in South Australia tend to be older with 39.4% aged 55 or over. This relative imbalance does not appear to be offset by a relatively high number of younger teachers. By contrast, in NSW and Victoria, the trend lines do show higher numbers of younger teachers (both male and female) teachers. NSW data though does indicate that one third of male teachers are aged 55 or over. The ACT is the only jurisdiction with a greater proportion of younger teachers (30 years of age or less) relative to older teachers (more than 56 years of age) as can be observed, in their chart, by the reduced percentage as age increases.

National Gender and Age profile



Legend: Female (green), Male (light green)



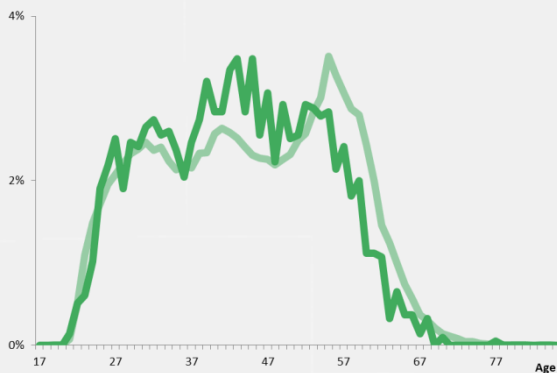
### Aboriginal & Torres Strait Islander and Age

Analysis of the self reported Aboriginal & Torres Strait Islander status of known employed teachers indicates that Aboriginal & Torres Strait Islander teachers have a higher median age than non Aboriginal & Torres Strait Islander teachers.

The more jagged appearance of the age profile of Aboriginal & Torres Strait Islander teachers represents the smaller total population of Aboriginal & Torres Strait Islander teachers which leads to more likelihood of peaks.

**43** is the median age for Aboriginal & Torres Strait Islander teachers.

**45** is the median age for non Aboriginal & Torres Strait Islander teachers .



Legend

Indigenous

Not  
Indigenous

### Age and Birth Country

Analysis indicates that teachers born in Australia tend to be younger than those born in other countries.

**43** is the median age for teachers born in Australia.

**46** is the median age for teachers born out of Australia.

Of the three overseas countries with the most teachers in the workforce:

**48** years is the median age of UK born teachers

33% of all foreign born teachers with age and birth country data available were born in the UK.

**45** years is the median age of New Zealand born teachers

9% of all foreign born teachers with age and birth country data available were born in New Zealand .

**45** years is the median age of South African born teachers

6% of all foreign born teachers with age and birth country data available were born in South Africa .

Of the 26 countries with a minimum of 250 teachers born in that country:

**40** is the youngest average age, and is the average age of teachers born in Ireland and Canada.

5 countries have an average age of over 50.

**54** is the oldest average age, and is the average age of teachers born in Italy and the Netherlands

# School Type: Primary School Level Teachers

**43** is the median age for female primary school teachers.

**45** is the median age for male primary school teachers .

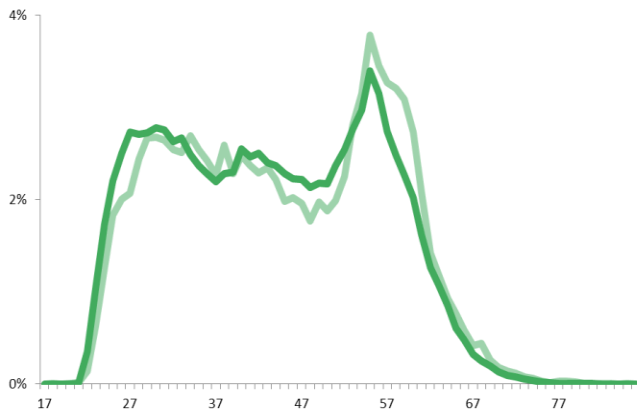
This national age profile of primary school level teachers aligns closely to the national perspective.

Across the jurisdictions, differences do exist. South Australia and Tasmania have the oldest median age for female teachers. ACT has the lowest median age for primary school teachers with a considerable five year gap to the Northern Territory and Victoria as the next youngest.

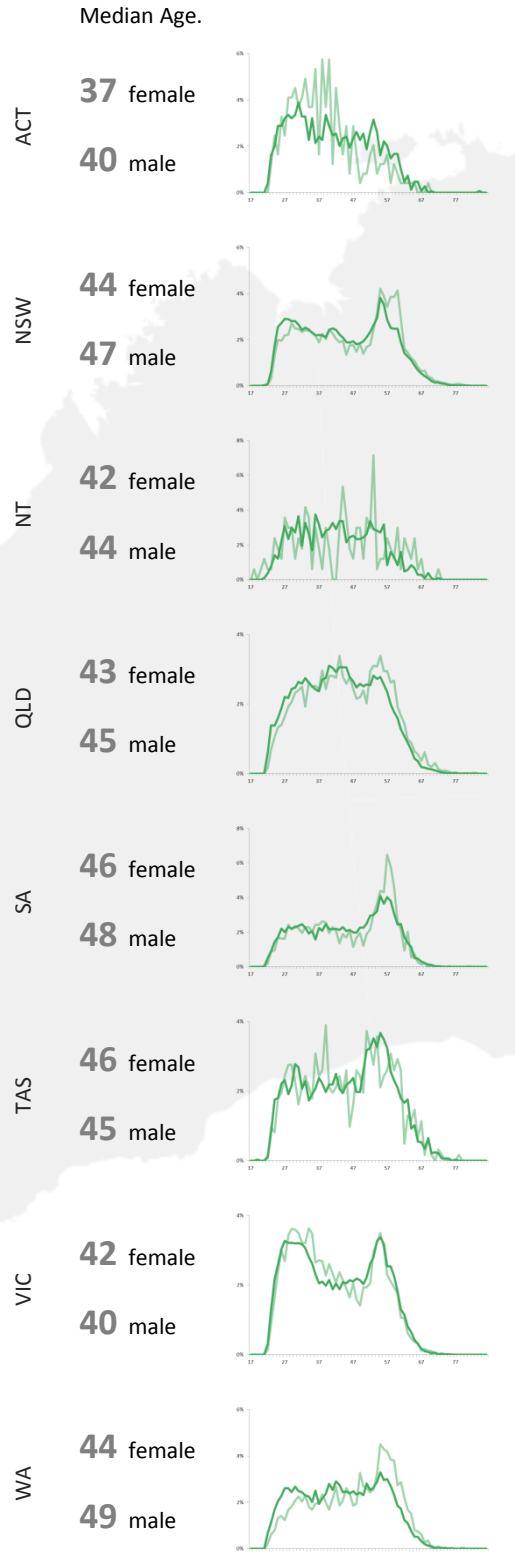
WA has the oldest median age male teachers, followed by South Australia and NSW. The youngest male teachers are in the ACT and Victoria.

In all states, aside from Tasmania and Victoria, the median age of female teachers is below that of male teachers.

National Gender and Age profile for Primary School Teachers



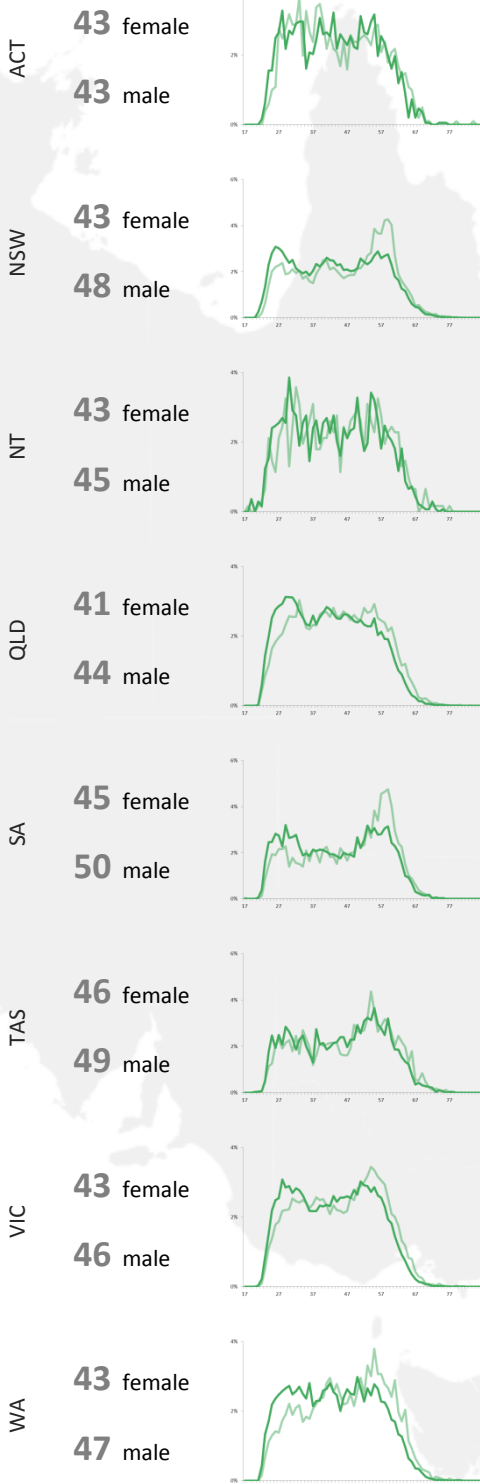
Median Age.



Legend: Female (darker green), Male (lighter green)

# Combined and Secondary School Level Teachers

Median Age.



**43** is the median age for female combined and secondary school level teachers in Australia.

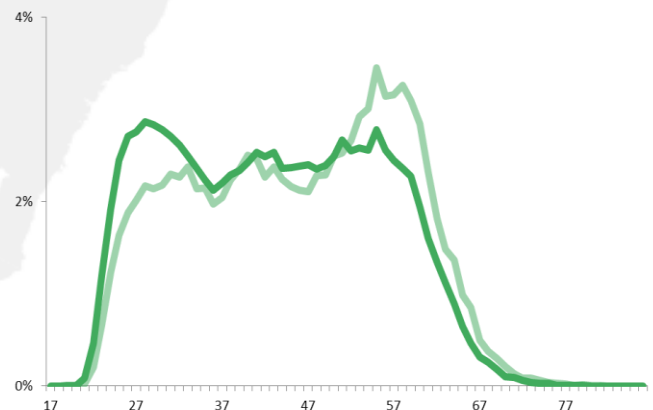
**46** is the median age for male combined and secondary school level teachers in Australia.

As with primary teacher, South Australia and Tasmania have the oldest median age for female teachers. Queensland has the lowest median age for combined and secondary school level teachers.

South Australia and Tasmania have the oldest median age for male teachers. The data suggests that within 10-12 years more male combined and secondary level teachers in these jurisdictions may start to consider retirement compared to now.

Aside from male and female teachers in Queensland, and female teachers in NSW and South Australia, the median age of combined and secondary level teachers is above that of primary teachers.

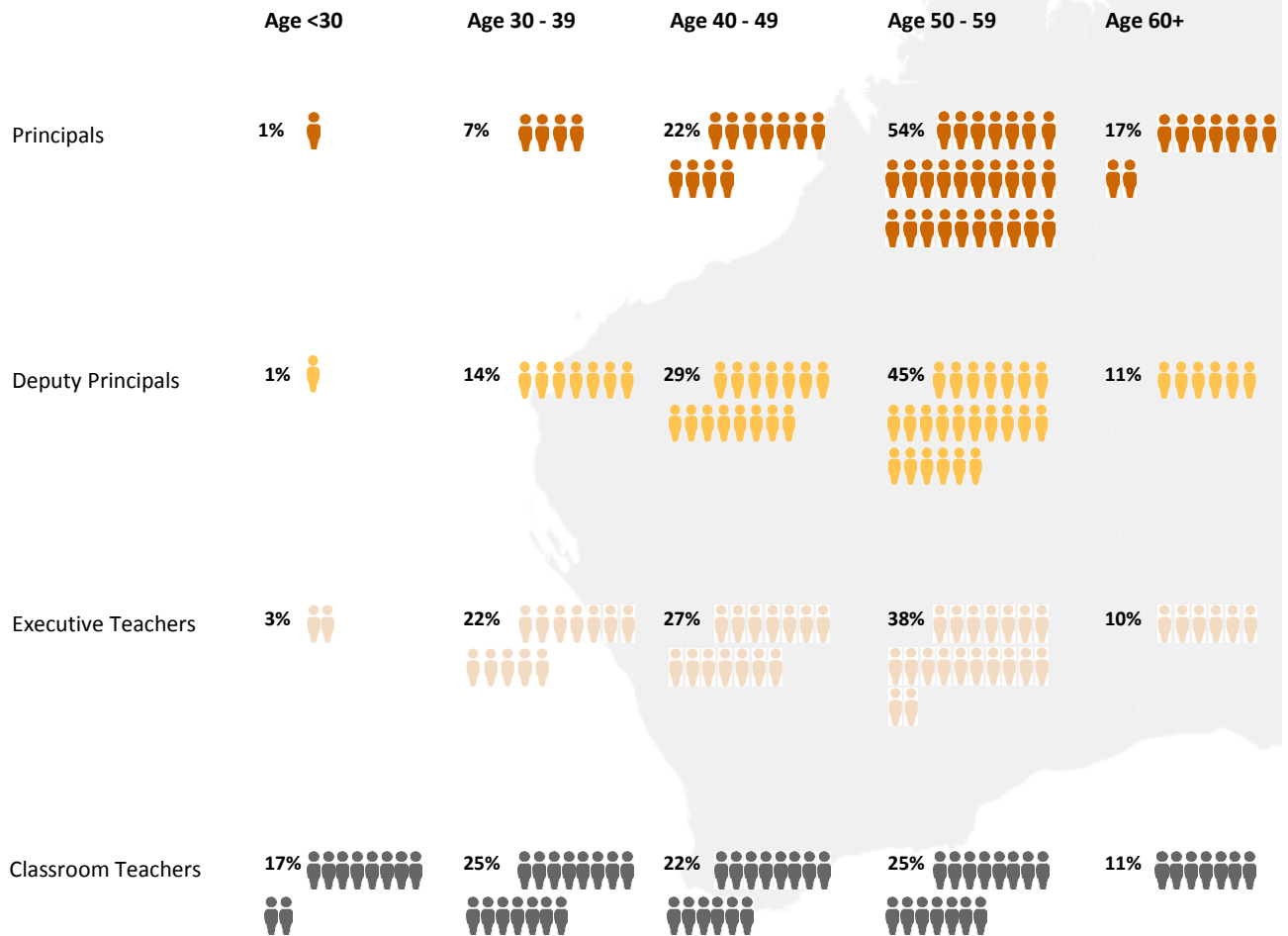
National Gender and Age profile for Combined and Secondary Level School Teachers



# Employment

## Employment Class

For each of the four employment classes used in the dataset, the percentage of that class for one of five age groupings was determined. The analysis aligns to anecdotal evidence that seniority of position and age broadly correlate. In interpreting the graphic below 7% of principals are aged between 30 and 39; not that 7% of teachers aged between 30 and 39 are principals.



## Employment Type

The age profile differs across the three employment types available. Ongoing employment broadly reflects the national perspective but with a more pronounced proportion of teachers over 55 years of age. Teachers on fixed term employment arrangements are skewed to the younger end of the age profile. This skew to have young teachers is also evident in casual teachers but there is also another noticeable increase in the relative number of teachers that peaks at age 62. There are many reasons why a teacher may choose casual employment including the flexibility it provides as well as meeting the needs of employers who require a teacher in a classroom for a short amount of time.

### Ongoing Employment

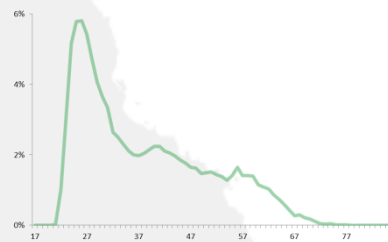


**46** is the median years of age of teachers in ongoing employment

**12%** of teachers in ongoing employment are 30 years of age and under

**27%** of teachers in ongoing employment are 55 years of age and over

### Fixed Term Employment

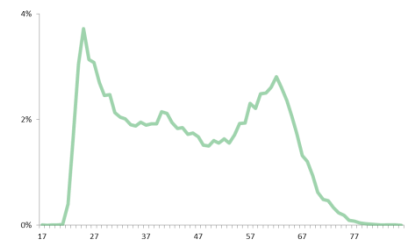


**35** is the median years of age of teachers in fixed term employment

**39%** of teachers in fixed term employment are 30 years of age and under

**14%** of teachers in fixed term employment are 55 years of age and under

### Casual Employment



**44** is the median years of age of teachers in casual employment

**23%** of teachers in casual employment are 30 years of age and under

**34%** of teachers in casual employment are 55 years of age and under

## Employment Status

The analysis was extended to investigate, across all roles, the proportion of teachers on extended leave, as shown in the table below. Of the 13.4% of teachers aged 30 – 39 that are on extended unpaid leave, 92.8% of these teachers are female. The data does not provide evidence but this cohort is thought to be starting a family at this age.

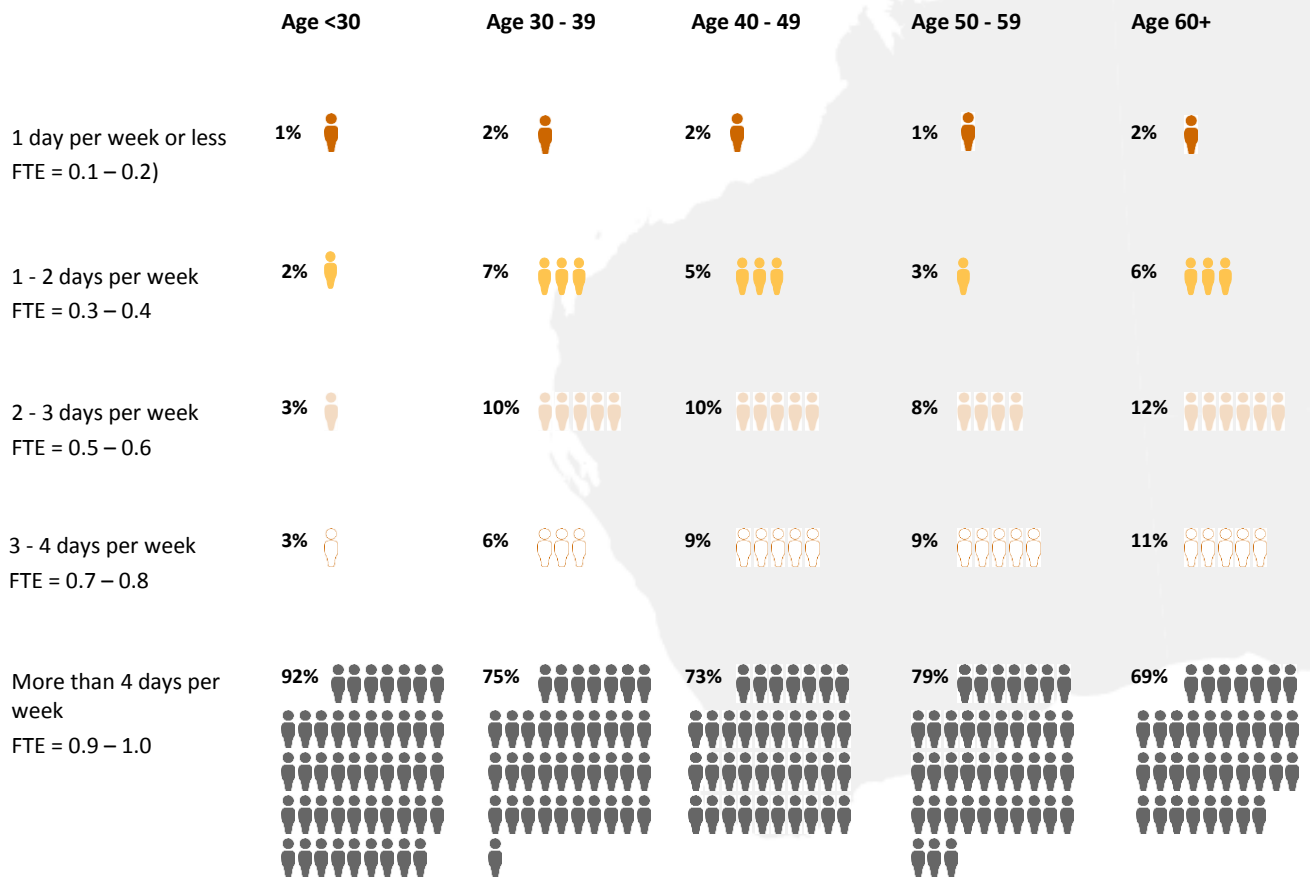
	Age <30	Age 30 - 39	Age 40 - 49	Age 50 - 59	Age 60+
All role % on extended <b>unpaid</b> leave	<b>4.6%</b>	<b>13.4%</b>	<b>5.2%</b>	<b>2.7%</b>	<b>2.2%</b>
All role % on extended <b>paid</b> leave	<b>1.6%</b>	<b>4.0%</b>	<b>1.1%</b>	<b>2.2%</b>	<b>4.6%</b>

# Employment

## Time Fraction Employed for Permanent and Fixed Term Teachers

For each teacher, the time fraction employed, where available, was placed into five categories. Then for each of the five age categories, the percentage of teachers in that time fraction category was determined. For example, 1% of teachers aged under 30 work less than 1 day per week, rather than 1% of teachers working 1 day per week are aged under 30. This analysis did not consider casual teachers as time fraction employed was inconsistently reported.

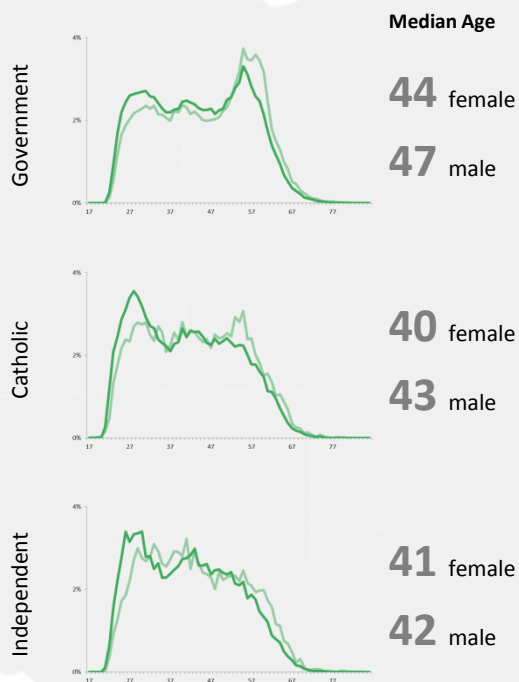
The analysis shows that the proportion of fixed term and permanent (ongoing employment) teachers who are working four and half days or more is highest amongst the youngest teachers.



# School Sector and Location

## School Sector

Noting the limitations in sector data, analysis of age by school sector indicates that teachers in the non Government sectors (Catholic and Independent) have a younger median age for both male and female teachers than those in the Government sector.

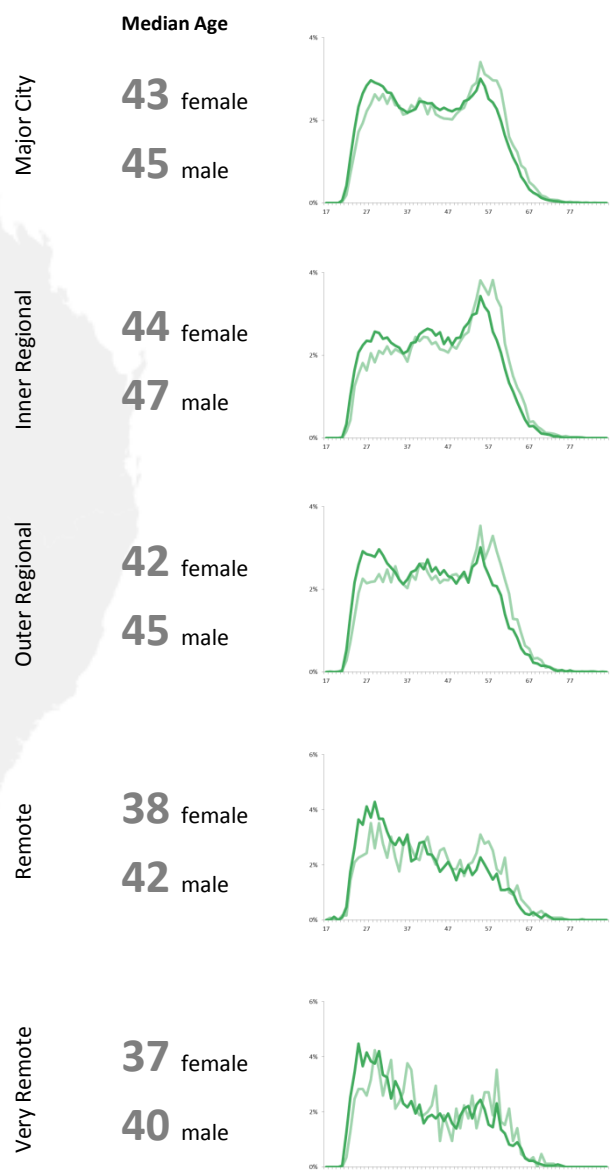


## School Remoteness

As school location becomes more remote, median age tends to reduce.

In Inner Regional schools, there is a spike of older teachers, with 32% of male teachers being aged 55 or over. In outer regional schools, though 28% of male teachers are aged 55 or over, there is an opposing effect, with 29% of female teachers aged 33 or below.

Remote and very remote schools are the only areas without an observable spike of teachers around 60 years of age.



Legend

Female

Male

# Qualifications

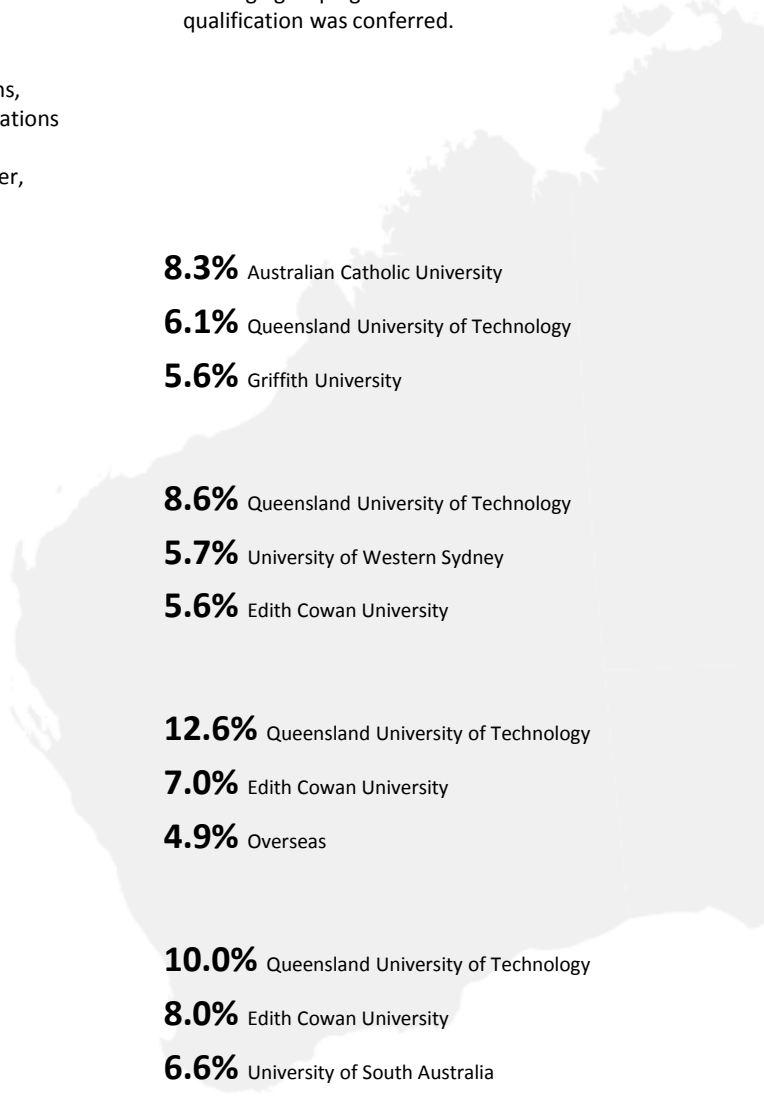
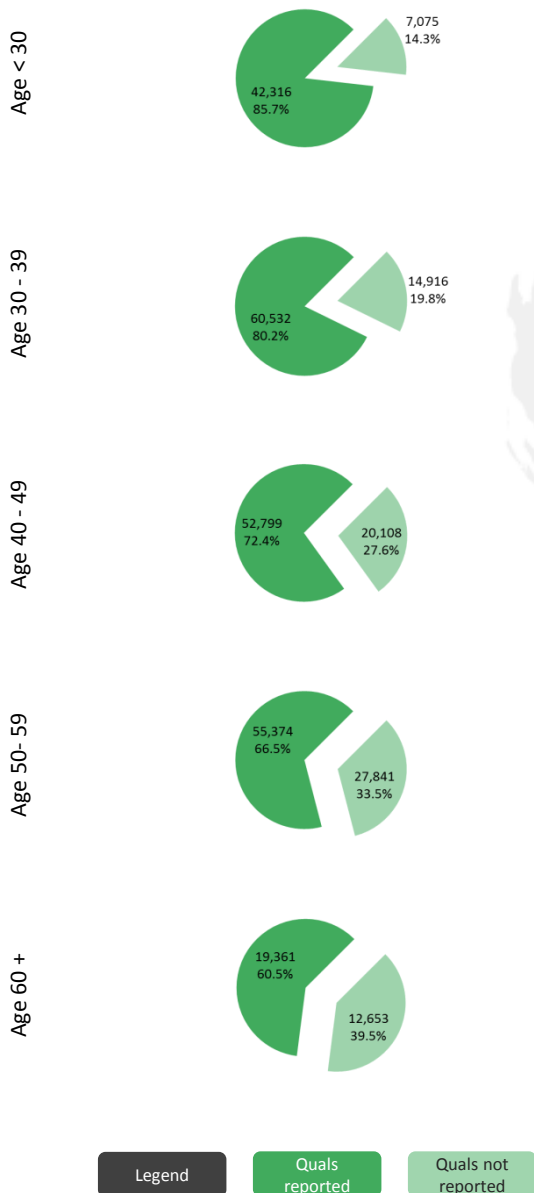
## Availability of qualifications data

Availability of qualifications data has been previously identified. The initial analysis below shows the proportion of known employed teachers for which at least one qualification has been captured in the NTWD.

As regulators were established in different jurisdictions, there was not always a requirement to collect qualifications data. This may explain why for older teachers, less qualifications data is available and is higher for younger, more recently registered, teachers.

## Institution of an Education Qualification

Analysing education qualifications of all levels, provide the table below which shows the percentage of graduates for each age grouping and the institution from which the qualification was conferred.



- 8.3%** Australian Catholic University
- 6.1%** Queensland University of Technology
- 5.6%** Griffith University
  
- 8.6%** Queensland University of Technology
- 5.7%** University of Western Sydney
- 5.6%** Edith Cowan University
  
- 12.6%** Queensland University of Technology
- 7.0%** Edith Cowan University
- 4.9%** Overseas
  
- 10.0%** Queensland University of Technology
- 8.0%** Edith Cowan University
- 6.6%** University of South Australia
  
- 9.2%** Queensland University of Technology
- 8.3%** Edith Cowan University
- 7.7%** University of South Australia

## Field of Study

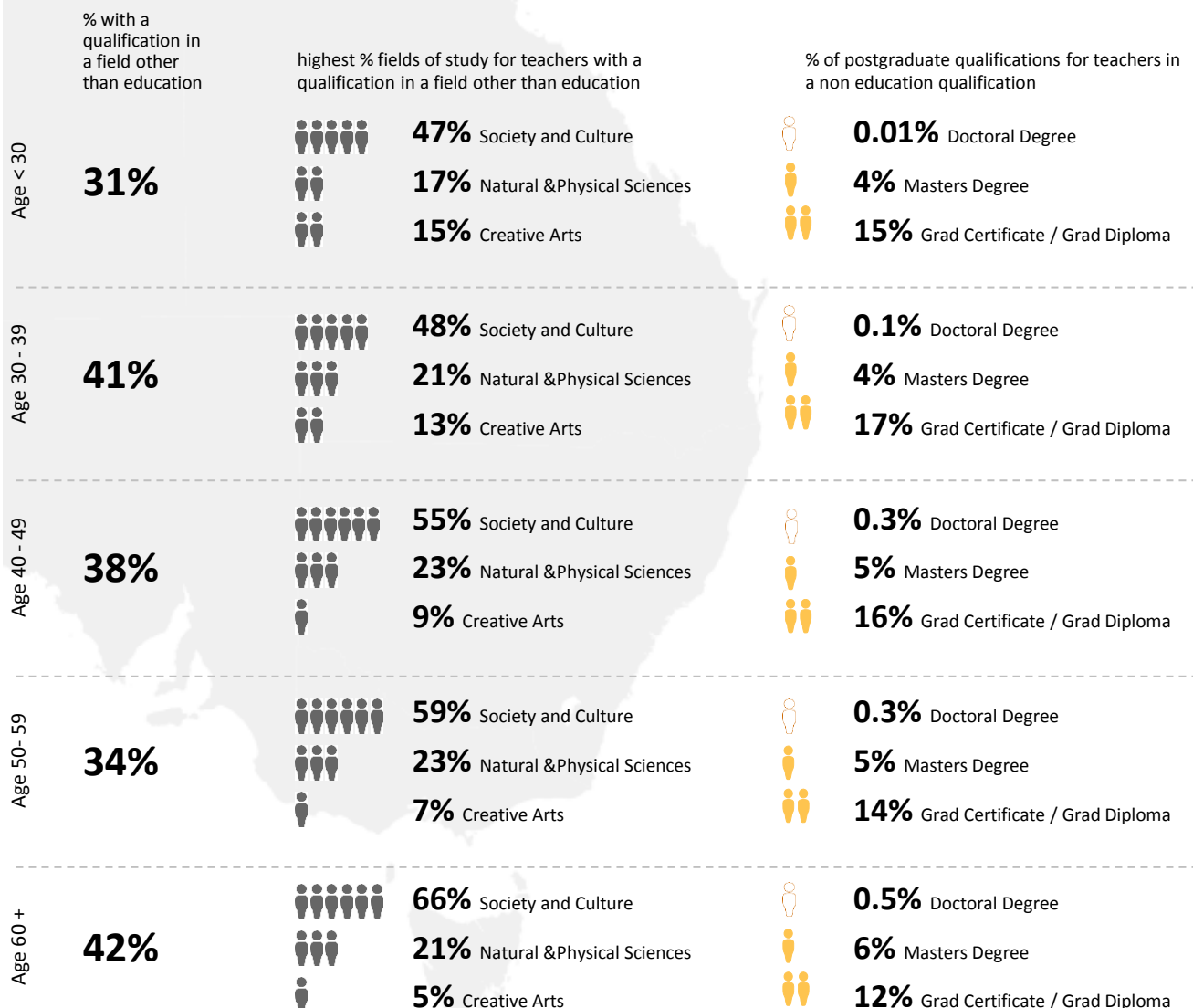
Analysis was undertaken into qualifications, other than those specific to education. For known employed teachers where a qualification has been captured, 37% have an additional qualification in another field.

Across all age groups, the top three other fields of study as listed below were consistent in representing between 80% and 90% of all alternate fields of study. Of those reporting another degree, there is an emerging trend that, for younger teachers, this is less likely to be in the natural and physical sciences and more likely to be in creative arts.

## Level of Study beyond Bachelors Degree (AQF Level 7)

Analysis was undertaken to understand the extent of postgraduate qualifications (in any field). The percentage represented below is the percentage of total qualifications in the analysed group (as opposed to the percentage of individuals) over all qualifications data.

The total proportion of postgraduate qualifications is similar at around 20%, though older teachers have more Masters and Doctoral Degrees.





# Aboriginal & Torres Strait Islander (Indigenous) Teachers

Analysis of the Aboriginal & Torres Strait Islander teaching population enables a greater understanding of the differences in this cohort when compared to non Aboriginal & Torres Strait Islander teachers. The key findings from analysis, in this section, that warrant further investigation are:

- Collection of data on Aboriginal & Torres Strait Islander status is inconsistent across jurisdictional employers and regulators. To improve reporting and analytic capabilities, this needs to be addressed through definition of national standards that outline minimum collection requirements. Within the NTWD there are 2,661 Aboriginal & Torres Strait Islander teachers; 2,195 are known employed teachers and 466 are additional registrants. Due to Aboriginal & Torres Strait Islander status not being captured for all teachers, our estimate of the total number of known employed Aboriginal & Torres Strait Islander teachers is 3,700.
- There are less Aboriginal & Torres Strait Islander teachers to Aboriginal & Torres Strait Islander students than for non Aboriginal & Torres Strait Islander teachers and students. This effect is evident across all jurisdictions but more pronounced in some.
- Aboriginal & Torres Strait Islander teachers are generally younger than non Aboriginal & Torres Strait Islander teachers, except for in remote and very remote locations, where they also have more experience.
- Aboriginal & Torres Strait Islander teachers are less likely to have postgraduate qualifications.
- Reviewing Aboriginal & Torres Strait Islander education graduates in the last five years, indicates that between 50% and 60% of these graduates are in teaching positions. The percentages of conversion from graduate to known employed and additional registrants is lower for Aboriginal & Torres Strait Islander teachers. Though this could be due to a data quality issue, further analysis into conversion and retention of Aboriginal & Torres Strait Islander teachers could be considered.

# Reporting of Aboriginal & Torres Strait Islander Teachers

## Jurisdictional reporting

The data below indicates the percentage of known employed teachers in the NTWD who identify as either of Aboriginal & Torres Strait Islander or not of Aboriginal & Torres Strait Islander status. The remaining will be teachers whose Aboriginal & Torres Strait Islander status is unknown.

The reporting rate nationally of an Aboriginal & Torres Strait Islander status is 54% with Victoria having the lowest reporting due to not holding a “not Aboriginal & Torres Strait Islander” status. Within the NTWD there are **2,661** Aboriginal & Torres Strait Islander teachers and if the Aboriginal & Torres Strait Islander reporting rate is extrapolated through all jurisdictions, with some assumptions for Victoria with no non Aboriginal & Torres Strait Islander status reporting, then the estimate of Aboriginal & Torres Strait Islander teachers is around **3,700**. Compared to the total pool of known employed teachers in the NTWD, this equates to **1.2%** of the total teaching workforce.

ACT **90%** of teachers have declared an Indigenous status

NSW **58%** of teachers have declared an Indigenous status

NT **96%** of teachers have declared an Indigenous status

QLD **72%** of teachers have declared an Indigenous status

SA **79%** of teachers have declared an Indigenous status

TAS **83%** of teachers have declared an Indigenous status

VIC **0.1%** of teachers have declared an Indigenous status

WA **99%** of teachers have declared an Indigenous status

# Age Profile of Aboriginal & Torres Strait Islander Teachers

## Age Profile

Analysis of the self reported Aboriginal & Torres Strait Islander status of known employed teachers indicates that Aboriginal & Torres Strait Islander teachers are generally younger than non Aboriginal & Torres Strait Islander teachers.

The more 'jagged' appearance of the age profile of Aboriginal & Torres Strait Islander teachers represents the smaller total population of Aboriginal & Torres Strait Islander teachers, which leads to more likelihood of peaks.

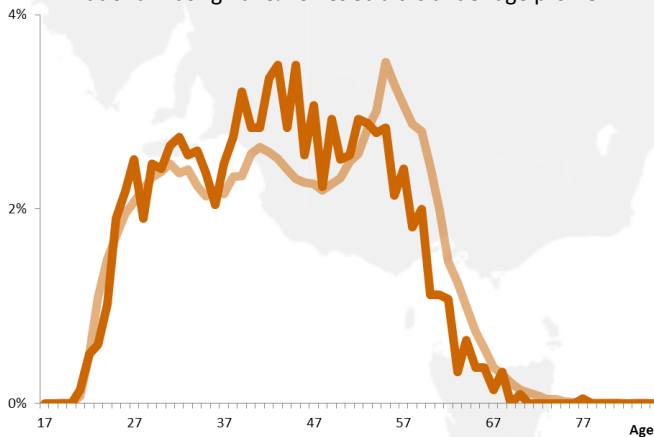
**43** is the median age of Aboriginal & Torres Strait Islander teachers.

**45** is the median age of non Aboriginal & Torres Strait Islander teachers.

14% of Aboriginal & Torres Strait Islander teachers, compared to 23% of non Aboriginal & Torres Strait Islander teachers, are aged over 55.

Across jurisdictions (opposite), Aboriginal & Torres Strait Islander teachers are older than non Aboriginal & Torres Strait Islander teachers in the ACT, Northern Territory and Queensland. The age difference is most observable in South Australia and Tasmania where the median age for Aboriginal & Torres Strait Islander teachers is five years below that of non Aboriginal & Torres Strait Islander teachers.

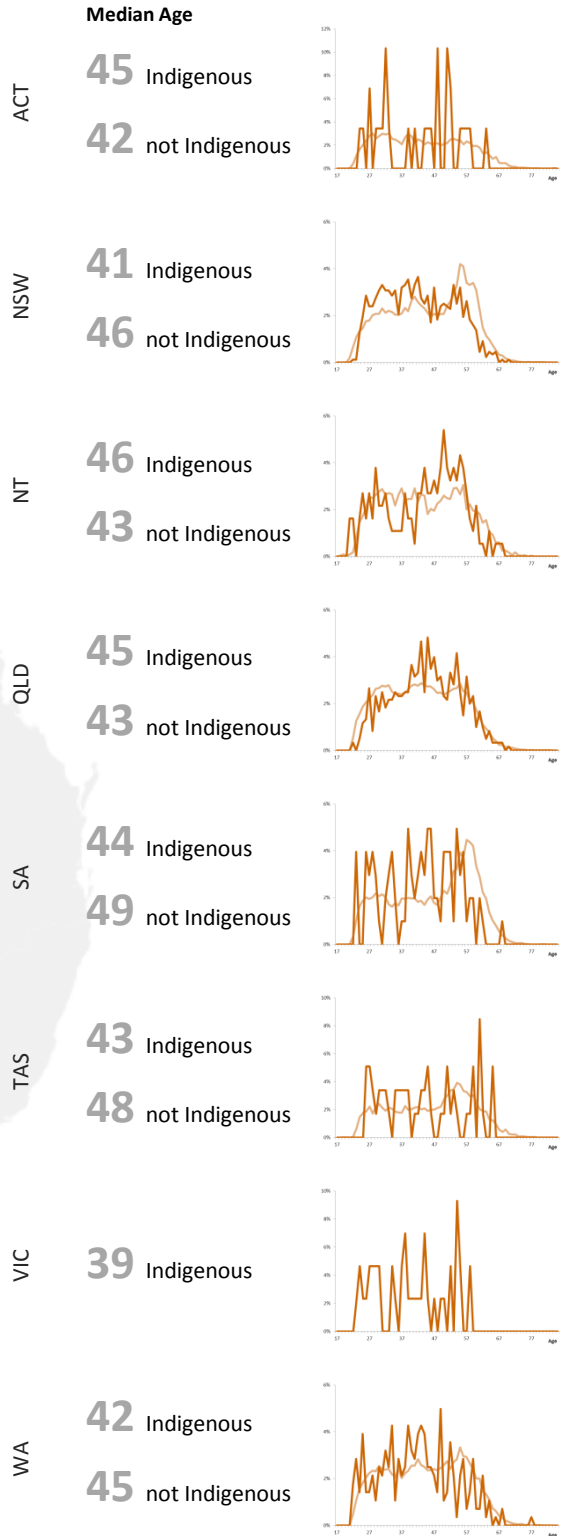
National Aboriginal & Torres Strait Islander age profile



Legend

- Indigenous
- Not Indigenous

### Median Age

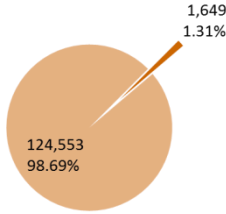


# Demographic Profile of Aboriginal & Torres Strait Islander Teachers

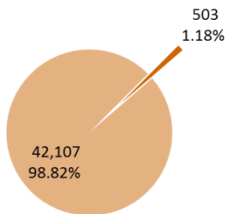
## Aboriginal & Torres Strait Islander and Gender

As a proportion, Aboriginal & Torres Strait Islander teachers are more likely to be female and less likely to be male when compared to the overall population. However, this difference is minor.

Proportion of known employed female teachers



Proportion of known employed male teachers



## Birth Country



**91%** of Aboriginal & Torres Strait Islander teachers were born in Australia

**83%** of non Aboriginal & Torres Strait Islander teachers were born in Australia

Aboriginal & Torres Strait Islander teachers report being born in 25 countries other than Australia. The top three other countries are below.



**0.9%** of Aboriginal & Torres Strait Islander teachers were born in the UK

**5.9%** of non Aboriginal & Torres Strait Islander teachers were born in the UK



**0.7%** of Aboriginal & Torres Strait Islander teachers were born in New Zealand

**1.6%** of non Aboriginal & Torres Strait Islander teachers were born in New Zealand



**0.5%** of Aboriginal & Torres Strait Islander teachers were born in Papua new Guinea

**0.3%** of non Aboriginal & Torres Strait Islander teachers were born in Papua new Guinea

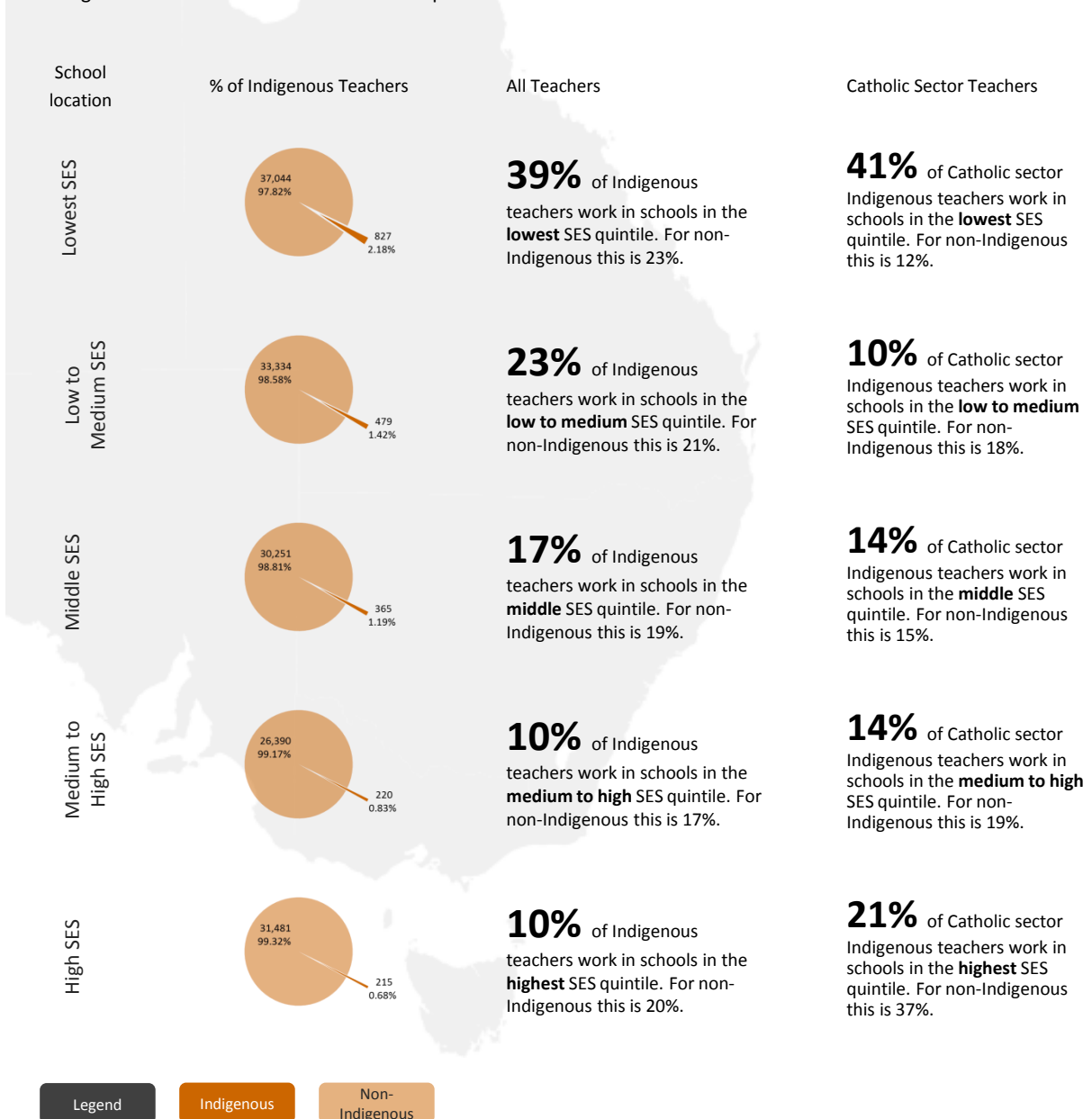
# Distribution of Aboriginal & Torres Strait Islander Teachers based on SES

## Socioeconomic Status of School Location

Each school location was mapped against the 'Index of Relative Socioeconomic Advantage and Disadvantage' from the ABS SEIFA (Socioeconomic Indexes for Areas) indices. The proportion of Aboriginal and Torres Strait Islander teachers to non-Aboriginal and Torres Strait Islander teachers has been mapped to indicate where Aboriginal and Torres Strait Islander teachers are more likely to be teaching. Teachers were then allocated to five quintiles based on the relative level of advantage for the school location. Aboriginal and Torres Strait Islander teachers were more likely to be teaching in the lowest and low to medium SES quintiles.

## Sector distribution

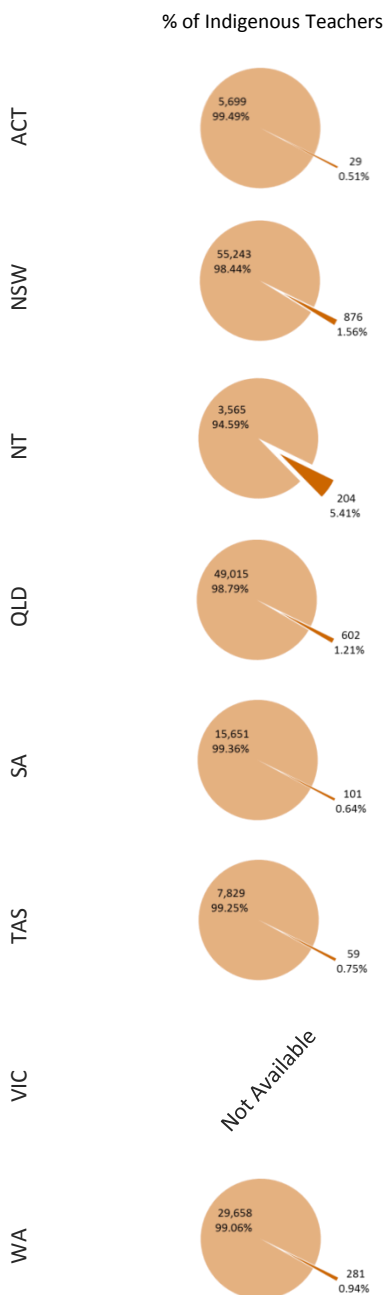
Given that Government sector school teachers are the most prevalent in the NTWD, the distribution of Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander teachers by SES quintile closely resembles the national perspective. Analysis of the Catholic Sector for the five jurisdictions for which data were available was performed. The analysis shows that Catholic Sector Aboriginal and Torres Strait Islander teachers are, proportionally, more represented in the lowest SES school locations, though this is also indicative of all teachers in this sector.



# Jurisdictional distribution of Aboriginal & Torres Strait Islander Teachers

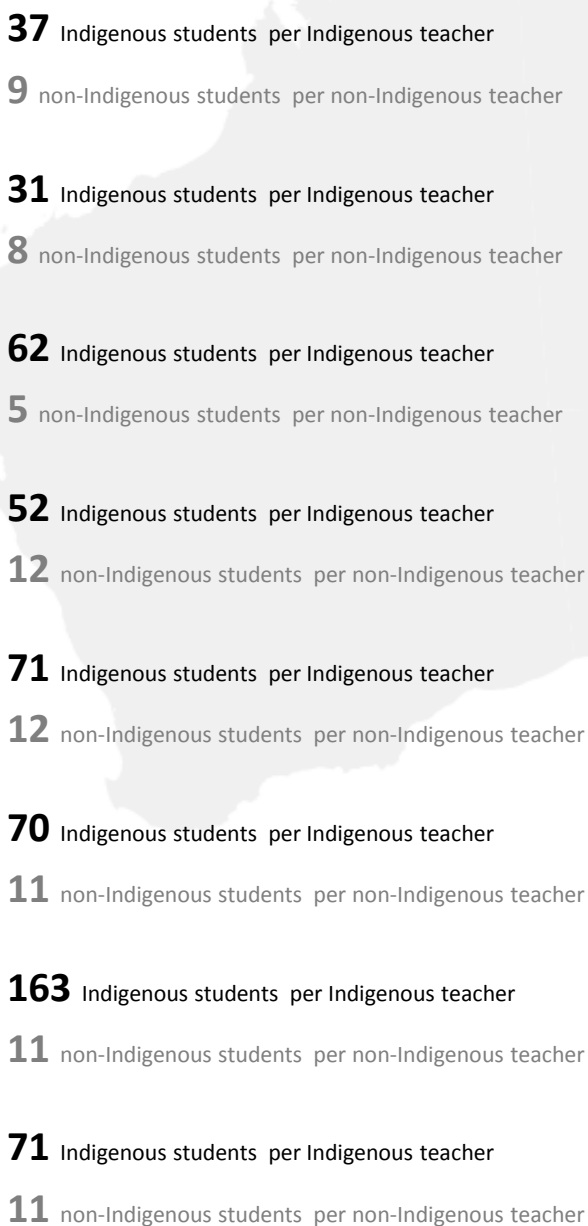
## Proportion of Aboriginal & Torres Strait Islander teachers by jurisdiction

Analysis was performed across sectors, where data was available, to understand jurisdictional differences in the proportion of Aboriginal & Torres Strait Islander to non Aboriginal & Torres Strait Islander teachers. The Northern Territory has the highest, and the ACT has the lowest proportion.



## Total Aboriginal & Torres Strait Islander school students to Total Aboriginal & Torres Strait Islander teachers: Government Sector

Using Government sector data only and based on the reporting of Aboriginal & Torres Strait Islander teachers, an estimation was made as to the total number of Aboriginal & Torres Strait Islander teachers in a jurisdiction. This was combined with Schools Australia data on full and part time indigenous student numbers to make an estimate of the number of Aboriginal & Torres Strait Islander teachers for each Aboriginal & Torres Strait Islander students. Jurisdictional differences do exist per the graphic below but it is not possible to extend this analysis beyond a jurisdictional level to understand the distribution further. NSW has the lowest ratio and Victoria the highest.



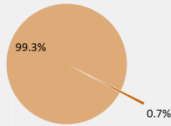
# Aboriginal & Torres Strait Islander Principals

Analysis was performed specifically on Aboriginal & Torres Strait Islander Principals. There are 78 Aboriginal & Torres Strait Islander principals with location information available within the NTWD, so analysis could be skewed.

When compared to the distribution of all Aboriginal & Torres Strait Islander teachers (as shown on the next page), Aboriginal & Torres Strait Islander principals have lower proportional representation in Major Cities, Outer Regional and Remote areas and are more highly, proportionally represented in Very Remote school locations. There are as many, if not more, Aboriginal & Torres Strait Islander principals in Very Remote locations as in all other locations, including 17% more principals in Very Remote locations when compared to Major Cities..

Aboriginal & Torres Strait Islander principals, in all locations by remoteness, are younger than non Aboriginal & Torres Strait Islander principals, with this gap most obvious in major cities.

Major City



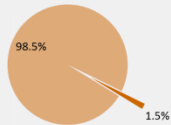
**0.7%** of principals are Indigenous

**49** median age of Indigenous principals

**99.3%** of principals are not Indigenous

**55** median age of non-Indigenous principals

Inner Regional



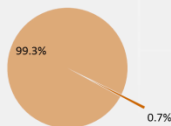
**1.5%** of principals are Indigenous

**52** median age of Indigenous principals

**98.5%** of principals are not Indigenous

**53** median age of non-Indigenous principals

Outer Regional



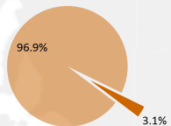
**0.7%** of principals are Indigenous

**47** median age of Indigenous principals

**99.3%** of principals are not Indigenous

**52** median age of non-Indigenous principals

Remote



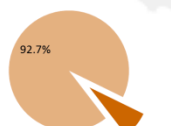
**3.1%** of principals are Indigenous

**49** median age of Indigenous principals

**96.9%** of principals are not Indigenous

**50** median age of non-Indigenous principals

Very Remote



**7.3%** of principals are Indigenous

**48** median age of Indigenous principals

**92.7%** of principals are not Indigenous

**51** median age of non-Indigenous principals

Legend

Indigenous

Not  
Indigenous

# Aboriginal & Torres Strait Islander Teachers in Remote Locations

## Distribution of all Teachers

Analysis into the school location indicates that Aboriginal & Torres Strait Islander teachers are represented, proportionally, more in remote and very remote schools. The absolute numbers though indicate there are more Aboriginal & Torres Strait Islander teachers in major city locations.

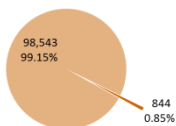
School location data was not available for 79 Aboriginal & Torres Strait Islander teachers and 5,977 non Aboriginal & Torres Strait Islander teachers.

## Age and Remoteness

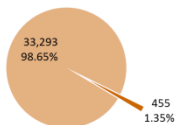
When analysing the Aboriginal & Torres Strait Islander profile across geographic location, younger Aboriginal & Torres Strait Islander teachers are generally located in schools in major cities. This contrasts with the non Aboriginal & Torres Strait Islander teachers who are generally older in the cities and younger in more remote locations.

In remote and very remote schools, Aboriginal & Torres Strait Islander teachers have a higher median age than non Aboriginal & Torres Strait Islander teachers, and this is particularly evident in very remote schools where the age difference of the medians is 11 years. With 8.2% of very remote and 17.1% of remote Aboriginal & Torres Strait Islander teachers being under 30, this raises issues of attracting and retaining younger Aboriginal & Torres Strait Islander teachers to these areas.

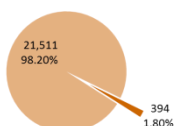
Major City



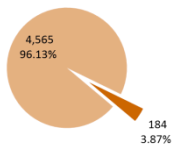
Inner Regional



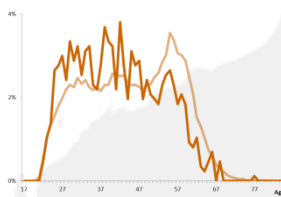
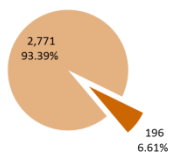
Outer Regional



Remote

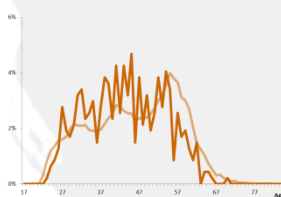


Very Remote



**41** median age Indigenous teachers

**45** median age non-Indigenous teachers



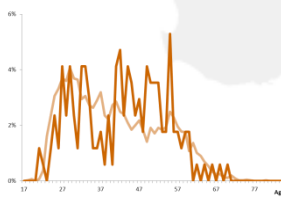
**43** median age Indigenous teachers

**47** median age non-Indigenous teachers



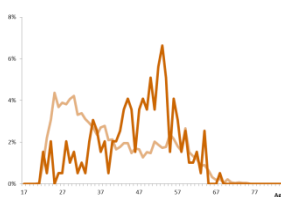
**43** median age Indigenous teachers

**43** median age non-Indigenous teachers



**43** median age Indigenous teachers

**39** median age non-Indigenous teachers



**48** median age Indigenous teachers

**37** median age non-Indigenous teachers

Legend

Indigenous

Non-Indigenous

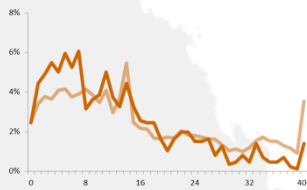
### Years with Employer

The general observation of years with employer indicates that Aboriginal & Torres Strait Islander teachers in very remote locations have a higher median number of years with their current employer. By contrast, non Aboriginal & Torres Strait Islander teachers in very remote locations have the lowest median number of years with their current employer.

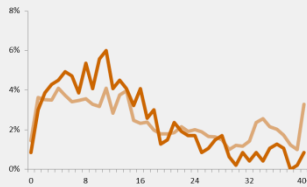
By aligning the median age and the median years with employer, the data indicates that non Aboriginal & Torres Strait Islander teachers generally commence employment aged between 31 and 33. Aboriginal & Torres Strait Islander teachers have a similar commencement age in major cities and regional area but are commencing at an older age, age 35, in remote and very remote locations. This suggests a later arrival to the teaching profession for Aboriginal & Torres Strait Islander teachers in remote locations.

Median years with employer

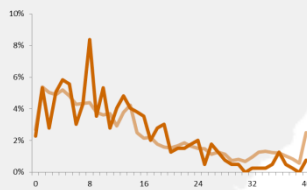
**Major City**  
**10** years for Indigenous teachers  
**13** years for non-Indigenous teachers



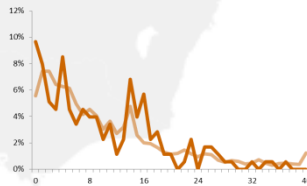
**Inner Regional**  
**11** years for Indigenous teachers  
**14** years for non-Indigenous teachers



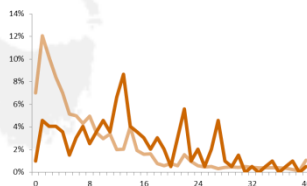
**Outer Regional**  
**10** years for Indigenous teachers  
**11** years for non-Indigenous teachers



**Remote**  
**8** years for Indigenous teachers  
**8** years for non-Indigenous teachers



**Very Remote**  
**13** years for Indigenous teachers  
**6** years for non-Indigenous teachers



### Registration Status

**18.7%** of Aboriginal & Torres Strait Islander teachers hold a registration status of Authority To Teach or Provisionally Registered. This is compared to **16.1%** of non Aboriginal & Torres Strait Islander teachers.

Aboriginal & Torres Strait Islander teachers in remote and very remote locations represent **18.3%** of the total Aboriginal & Torres Strait Islander teaching workforce but are more represented, at **24.0%**, of Aboriginal & Torres Strait Islander teachers with a registration status of Authority To Teach or Provisionally Registered.

### Teaching Restrictions

**2.5%** of Aboriginal & Torres Strait Islander teachers were tagged with a teaching restriction compared to **2.8%** of non Aboriginal & Torres Strait Islander teachers.

Similar to registration status, Aboriginal & Torres Strait Islander teachers in remote and very remote locations are over-represented with **40.1%** of Aboriginal & Torres Strait Islander teachers with a teaching restriction working in these locations. This compares to **3.6%** for non Aboriginal & Torres Strait Islander teachers.

# Employment of Aboriginal & Torres Strait Islander Teachers

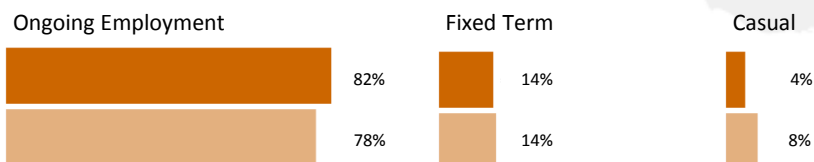
## Employment Class

Analysis of Aboriginal & Torres Strait Islander teachers suggests their representation as principals is similar to non-Aboriginal & Torres Strait Islander teachers. Particularly within deputy principals and also executive teachers, Aboriginal & Torres Strait Islander teachers have a lower proportional representation, but marginally more in relation to classroom teachers. It is suggested that this may be due to Aboriginal & Torres Strait Islander teachers working in smaller schools but the NTWD does not hold data to test this hypothesis.



## Employment Type

The analysis indicates that Aboriginal & Torres Strait Islander teachers are more likely to be in an ongoing employment arrangement rather than a fixed term or casual one.



**Experience**

**11 years** is the median number of years with the current employer for Aboriginal & Torres Strait Islander teachers.

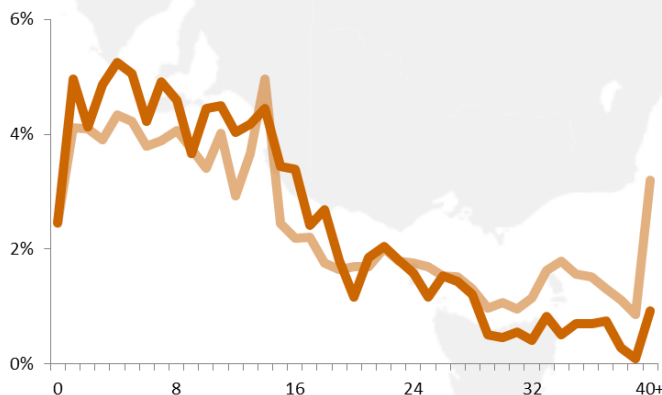
**13 years** is the median number of years with the current employer for non Aboriginal & Torres Strait Islander teachers.

The analysis indicates that Aboriginal & Torres Strait Islander teachers generally have less years working with their current jurisdictional and sector employer than non Aboriginal & Torres Strait Islander teachers.

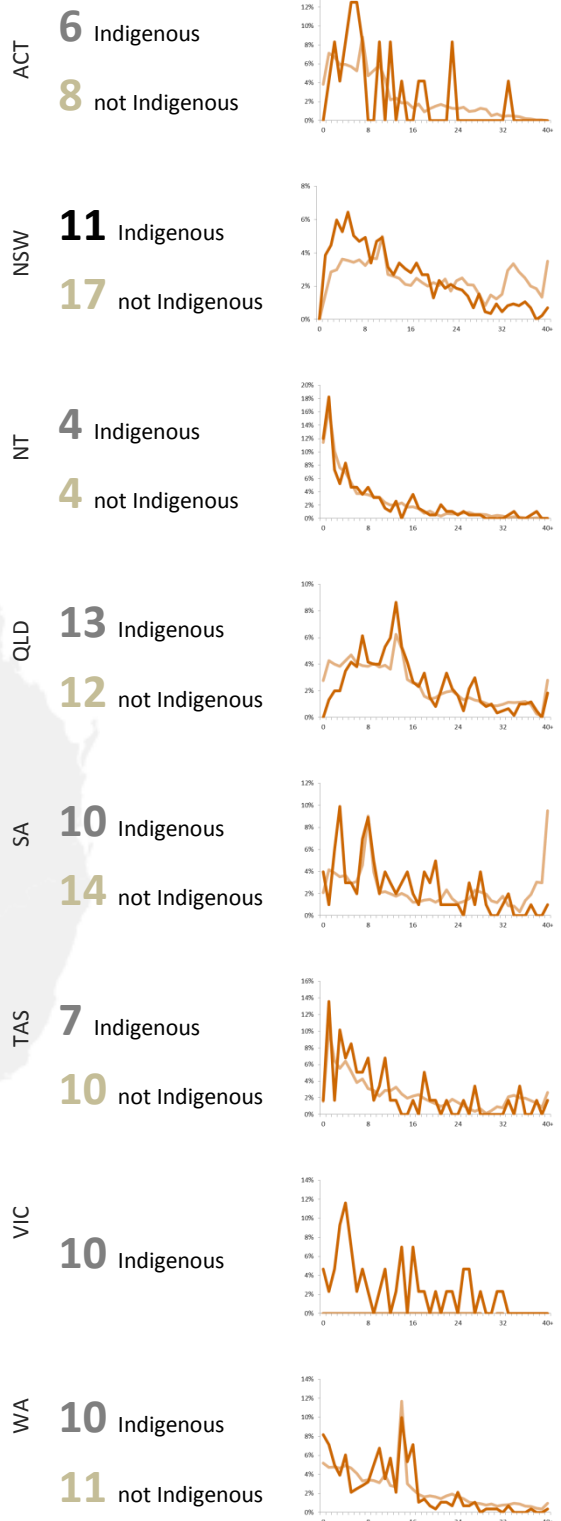
When looking at jurisdictional level breakdowns opposite, different patterns emerge. In NSW, the median years with the current employer for Aboriginal & Torres Strait Islander teachers is 11, in line with the national median, but for non Aboriginal & Torres Strait Islander it is 17 years. South Australia has a median of 10 years for Aboriginal & Torres Strait Islander teachers and 14 years for non Aboriginal & Torres Strait Islander teachers but has 19% of non Aboriginal & Torres Strait Islander teachers having 35 or more years with their employer, compared to 2% for non Aboriginal & Torres Strait Islander teachers.

NT, Queensland and WA all exhibit similar trends in the years with current employer data.

Years with current jurisdictional and sector employer (national)



Median Yrs with employer

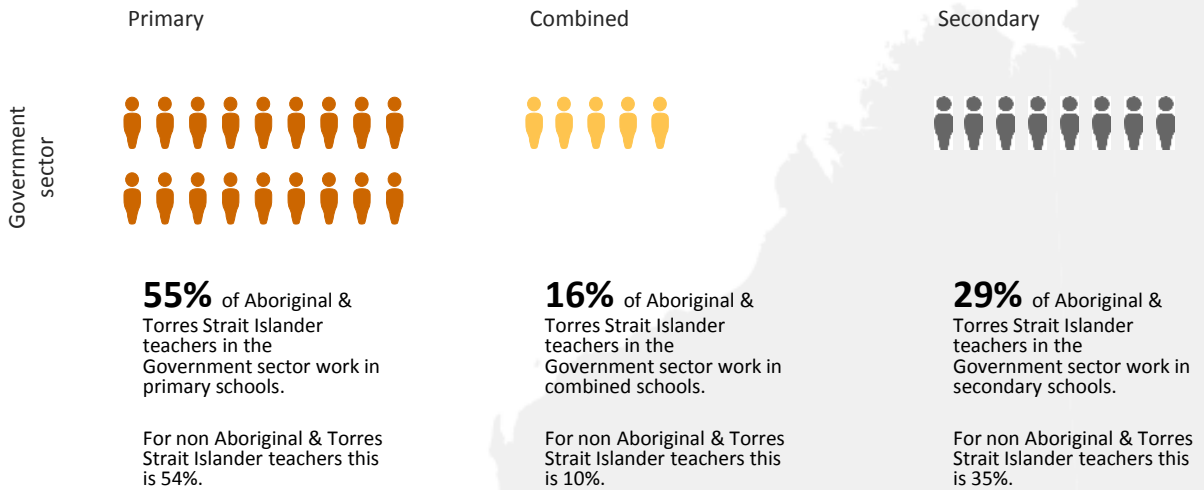


Legend: Indigenous (darker orange), Not Indigenous (lighter orange)

# Employment of Aboriginal & Torres Strait Islander Teachers

## School Type

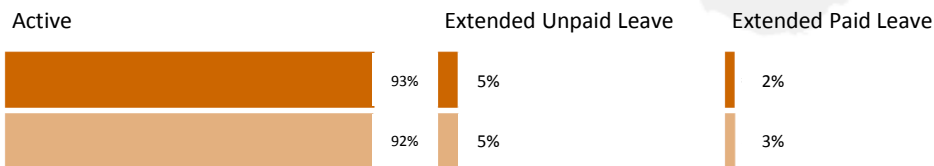
Analysis of school type indicates that Aboriginal & Torres Strait Islander teachers work in primary schools in a similar proportion to non Aboriginal & Torres Strait Islander teachers. The differences in combined and secondary level schools would not be evident if these categories were combined. The NTWD does not support further analysis but a hypothesis is that Aboriginal & Torres Strait Islander teachers are more likely to be working in combined schools due to these being more prevalent in remote and very remote locations.



Due to the limitations in collection of Catholic and Independent sector data, these sectors have not been presented. The NTWD holds 142 Catholic sector and 11 Independent sector teachers. 105 Aboriginal & Torres Strait Islander teachers work in a school type classified as "other".

## Employment Status

Data on employment status was only available for two thirds of teachers. It shows no noticeable differences between Aboriginal & Torres Strait Islander and non Aboriginal & Torres Strait Islander teachers.



### Time Fraction Employed

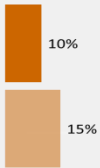
#### Full Time



#### More than 3 days per week but not full time



#### Less than 3 days per week



Aboriginal & Torres Strait Islander teachers are less likely to be in part time positions and more likely to be in full time roles.

In Queensland, 1.4% of teachers in full time roles are Aboriginal & Torres Strait Islander teachers, compared to 0.9% in part time roles. In the Northern Territory, 3.9% of teachers in full time roles are Aboriginal & Torres Strait Islander teachers, compared to 3.2% in part time roles.

Across all teachers, and where a time fraction (ranging from 0.1 to 1.0) is available, Aboriginal & Torres Strait Islander teachers are working at 0.90 while non Aboriginal & Torres Strait Islander teachers are working 0.89. The time fraction employed by Aboriginal & Torres Strait Islander teachers in the ACT, Western Australia and Queensland is higher than the national average.

### Salary



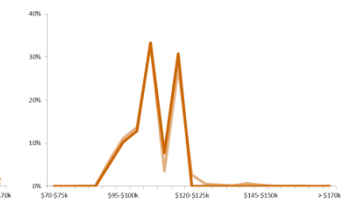
**\$80K - \$85K** is the median salary for full time Aboriginal & Torres Strait Islander teachers. For non Aboriginal & Torres Strait Islander teachers this resides in the \$85k - \$90k range. This is hypothesised to be due to non Aboriginal & Torres Strait Islander teachers holding a greater proportion of principal, deputy principal and executive teacher positions (16.5% compared to 14.3%).

When comparison of salary by employment class is performed, it can be observed, in the charts below, that only at principal level do we see variation between Aboriginal & Torres Strait Islander and non Aboriginal & Torres Strait Islander teachers.

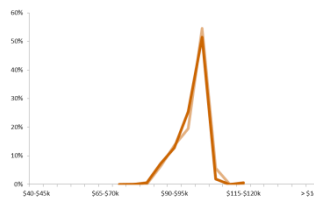
#### Principals



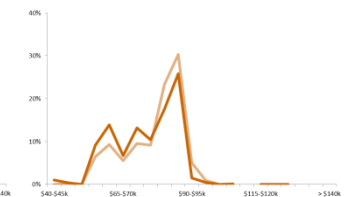
#### Deputy / Assistant Principals



#### Executive Teachers

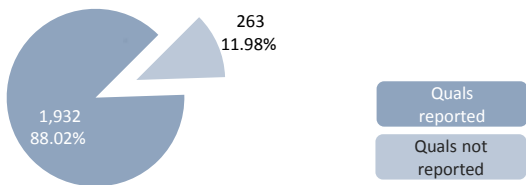


#### Classroom Teachers



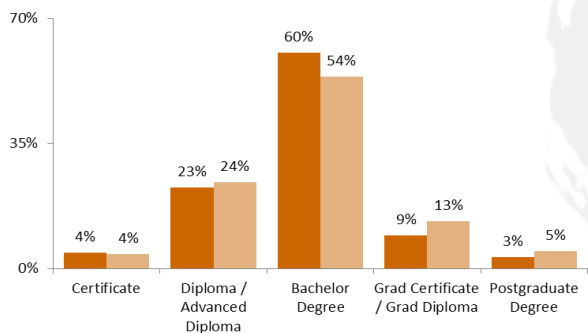
# Qualifications of Aboriginal & Torres Strait Islander Teachers

**88%** of Aboriginal & Torres Strait Islander teachers have had a qualification captured for them in the NTWD. This is marginally lower than the 91% captured for non-Aboriginal & Torres Strait Islander teachers.



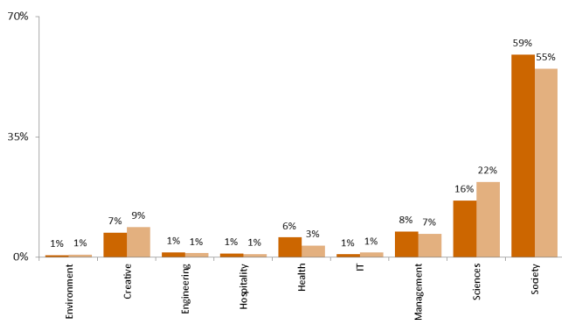
## Level of Study

When reviewing the level of qualification obtained by Indigenous teachers, the analysis indicates that Indigenous teachers are less likely to have completed postgraduate studies than non-Indigenous teachers.



## Field of Study (excluding Education)

Indigenous teachers have, proportionally, more qualifications in Health and; Society and Culture fields of studies than non-Indigenous teachers. By contrast Indigenous teachers hold fewer qualifications in the Sciences and Creative Arts.



## Institution

Aboriginal & Torres Strait Islander students have graduated with an Education qualification from 43 institutions. The analysis presents the institutions with the highest percentages of Aboriginal & Torres Strait Islander to non-Aboriginal & Torres Strait Islander known employed teachers (minimum 10 teachers in with workforce).

Batchelor Institute of Indigenous Tertiary Education	<b>87.5%</b>
Australian Catholic University	<b>6.5%</b>
University of Western Sydney	<b>6.3%</b>
University of Sydney	<b>5.8%</b>
University of Newcastle	<b>5.1%</b>
Curtin University	<b>4.6%</b>
James Cook University	<b>4.5%</b>
Charles Darwin University	<b>4.0%</b>
Charles Sturt University	<b>2.4%</b>
The University of New England	<b>2.2%</b>

### Movement from qualification institution to teaching position

Analysis was performed of the state of the institution that an Aboriginal & Torres Strait Islander teacher received an education qualification and where they now teach. This provides an understanding of mobility of the Aboriginal & Torres Strait Islander teachers post receipt of their qualification.

**Jurisdiction of Education Qualification**

		ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Total
Jurisdiction of Current Employment	ACT	71%	26%					3%		100%
	NSW	1%	95%	0%	2%	1%		1%	0%	100%
	NT	1%	5%	62%	11%	8%	1%	11%	2%	100%
	QLD	0%	6%	1%	88%	1%	1%	2%	0%	100%
	SA		1%	3%		92%		3%	2%	100%
	TAS		5%				93%	2%		100%
	VIC						9%	91%		100%
	WA		1%	1%	0%		1%	1%	96%	100%

The analysis shows that, in large part, Aboriginal & Torres Strait Islander education graduates who are employed in teaching positions in schools, generally work in the jurisdiction in which they completed their studies. Blank values indicate no movement, and values at 0% are indicative of some movement that has been subject to rounding down.

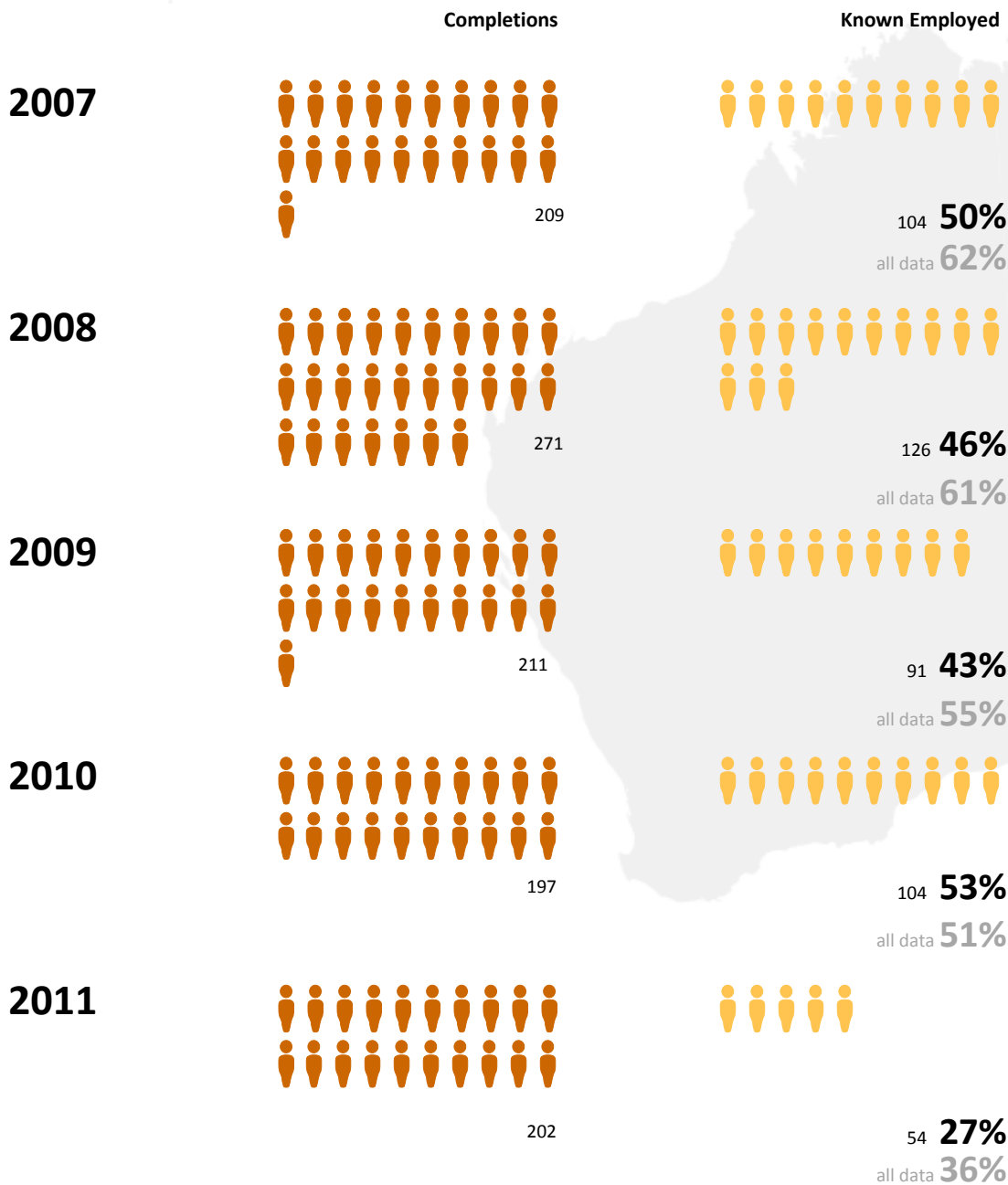
By reading across the table, it is possible to understand where teachers have come from to teach in that jurisdiction. WA (96%) and NSW (95%), have the highest proportion of teachers graduating within their jurisdiction. By contrast, NT (62%) and ACT (71%) have the lowest proportions. ACT has a high corresponding proportion of teachers graduating in NSW and also a low total Aboriginal & Torres Strait Islander teaching base from which these percentages are derived. In NT, higher numbers of Aboriginal & Torres Strait Islander teachers (11% each) have graduated from institutions in Queensland and Victoria. The single largest number of movements is from NSW institutions to Queensland, but this numbers 40 teachers in total.

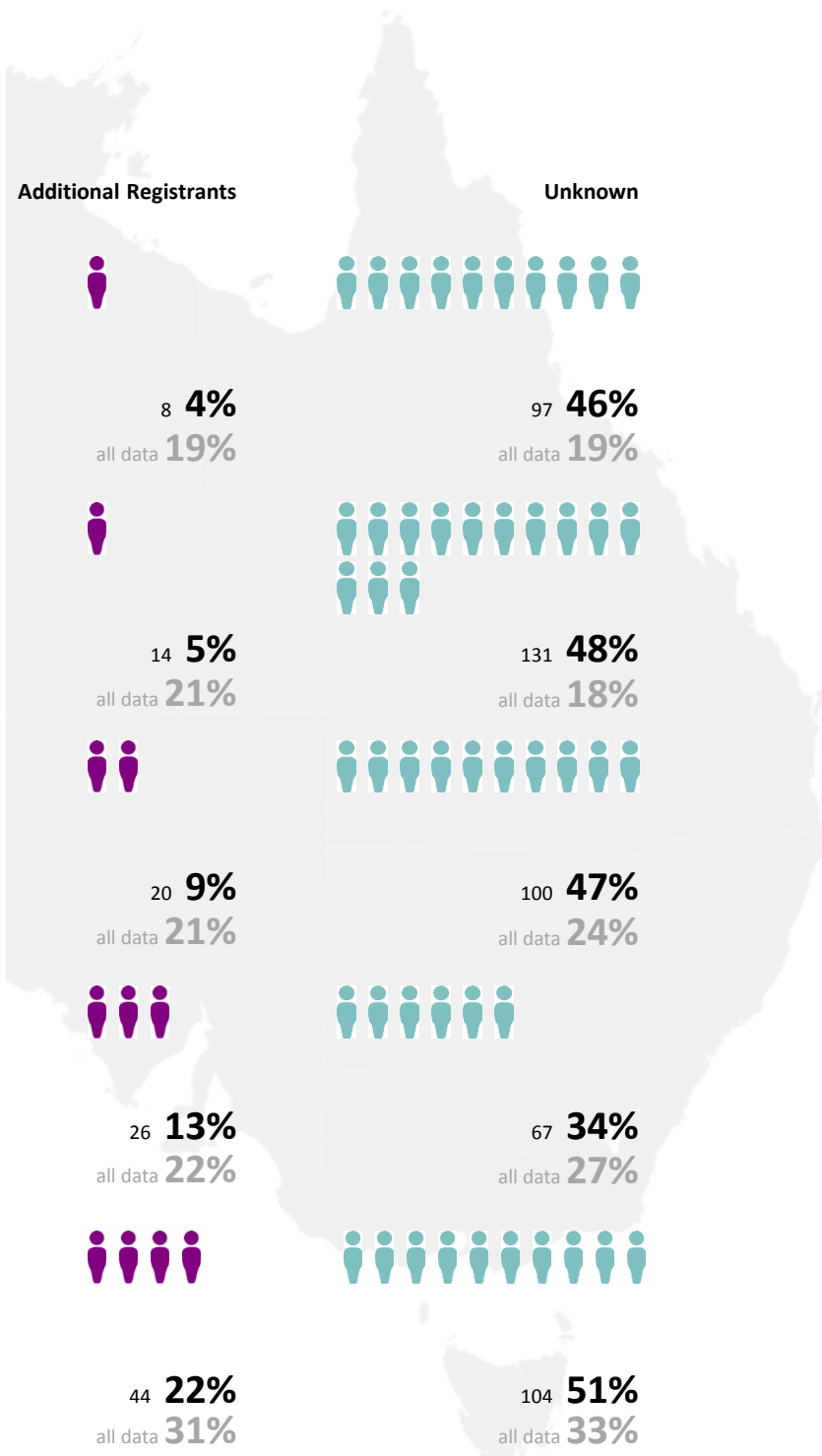
By reading down the table, it is possible to have a broad appreciation of whether a jurisdiction is a “net” importer or exporter of Aboriginal & Torres Strait Islander teachers.

Victoria is the only jurisdiction where Aboriginal & Torres Strait Islander graduates teach in every other state or territory. NSW Aboriginal & Torres Strait Islander graduates are also distributed around most of the country.

# Aboriginal & Torres Strait Islander teacher education graduates in the teaching workforce

Using aggregate University completions data, sourced via the MATSITI Project, allows to see whether graduates in the years 2007 – 2011 are currently known to be employed in a teaching role, are an additional registrant or cannot be located in the NTWD dataset. This analysis used summary values as it is not possible to track individuals from completion to workforce.





Between 2007 and 2009, around 50% of those completing an education qualification either remain in the workforce, as actively employed, or have maintained registration as a teacher. This implies that around 40% of those with an education qualification are not working directly as teachers. Note, there is no available data to determine if these individuals have remained in the school sector in other roles.

An observation is that the number additional registrants increases with more recent graduate completions. Though limitations in the data are such that additional registrants may be working in the non Government sector (for some jurisdictions) or as casual relief teachers, this supports anecdotal evidence that finding employment, post graduation, can take time.

The higher proportion, 51%, of unknown graduates from the 2011 completions, may indicate that some individuals have chosen not to register until they obtain a teaching position. Further data would be needed to test this hypothesis.

There are also observed differences between the Aboriginal & Torres Strait Islander graduates and the population of all teachers for whom data is available. Apart from 2010 graduates, the conversion rate to known employed is lower for A&TSO graduates, and across all years the unknown percentage is higher.

There are a number of teachers whose graduation year was not available in the data provided and could not be included in the graphic opposite.

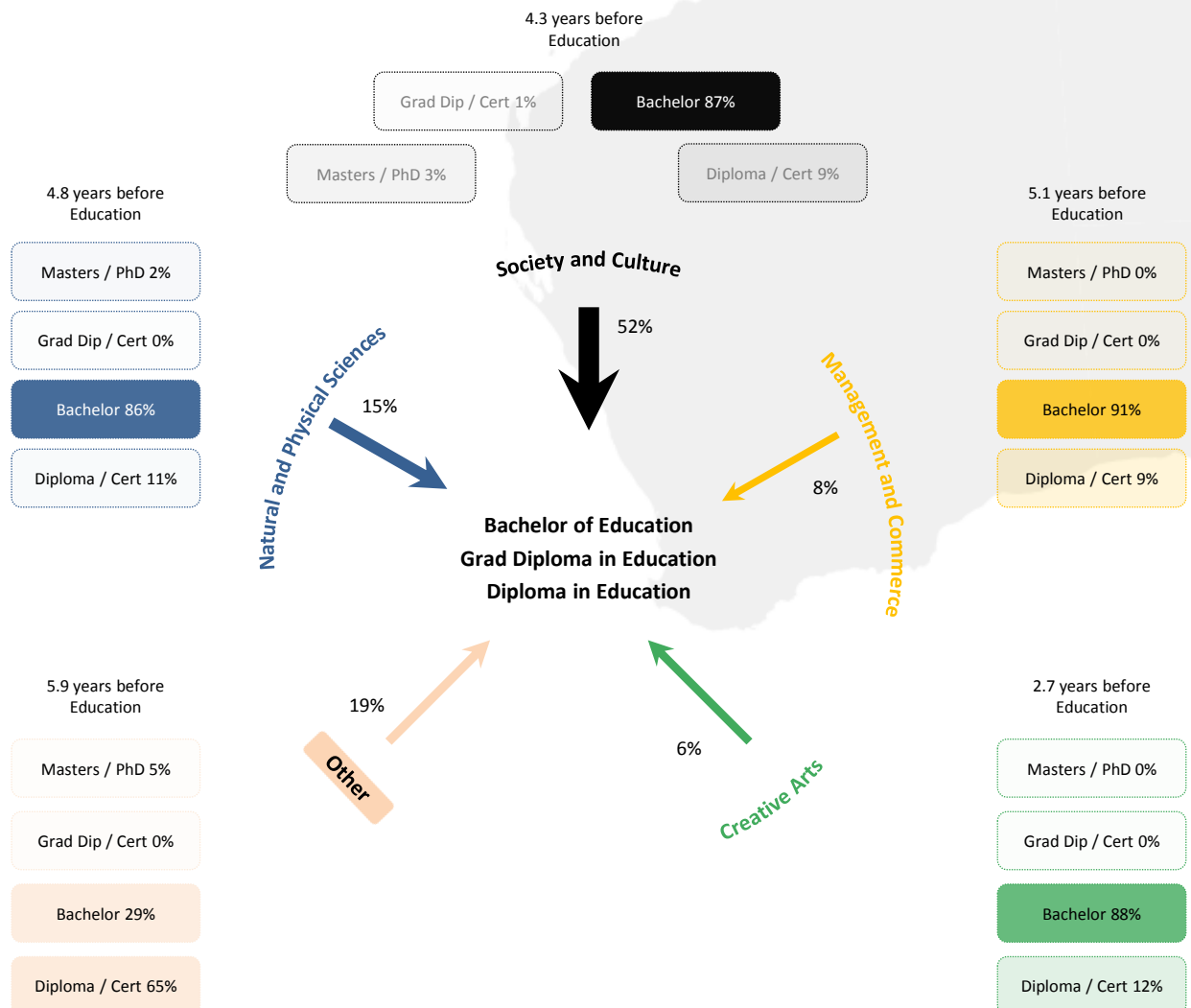
# Pathways to a Teacher Education Qualification

## Pathways into Education

This analysis presents information on qualifications that Aboriginal & Torres Strait Islander teachers received before or concurrently with their education qualification (either a Bachelor, Graduate Diploma to Diploma in Education). The initial circle in the graphic represents the field of study that a teacher had a qualification in prior to their graduating with their education qualification. The outer boxes are the level of the prior qualification. The average years gap between graduating with the prior degree and graduating with the education qualification is also shown.

When comparing Aboriginal & Torres Strait Islander teachers to all teachers, the following is observed:

- **14%** of Aboriginal & Torres Strait Islander teachers have a qualification reported prior to their reported teaching education qualification
- **24%** of non Aboriginal & Torres Strait Islander teachers have a qualification reported prior to their reported teaching education qualification
- Aboriginal & Torres Strait Islander teachers are less likely to have obtained a postgraduate qualification before commencing study in education.
- Aboriginal & Torres Strait Islander teachers with an alternate qualification will have completed this closer, in time, to their education qualification than non Aboriginal & Torres Strait Islander teachers.
- Aboriginal & Torres Strait Islander teachers with an alternate qualification are proportionally less like to have this in Creative Arts and more likely to be in another field, such as Education or Health.



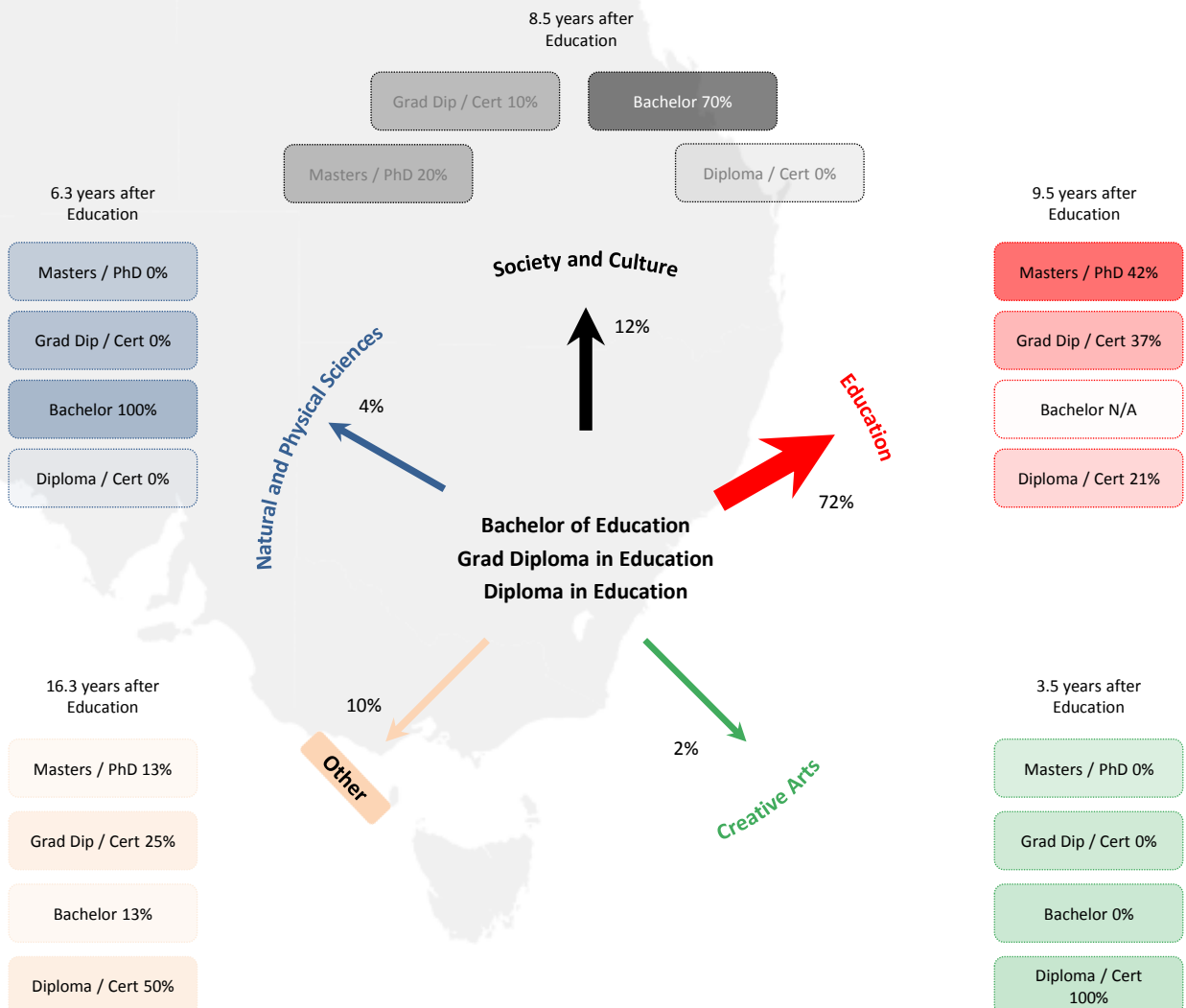
# Qualifications following Teacher Education

## Qualifications following Education

In this instance, the analysis is of qualifications after graduation from the education qualification (either a Bachelor, Grad Diploma or Diploma in Education).

When comparing Aboriginal & Torres Strait Islander teachers to all teachers, the following is observed:

- **4%** of Aboriginal & Torres Strait Islander teachers have a qualification reported after their reported teaching education qualification
- **5%** of non Aboriginal & Torres Strait Islander teachers have a qualification reported after their reported teaching education qualification
- Aboriginal & Torres Strait Islander teachers proportionally are more likely to study further in Education than non Aboriginal & Torres Strait Islander teachers, who have a higher proportion in Society and Culture.
- Aside from “other” fields of study, Aboriginal & Torres Strait Islander teachers will complete studies closer, in time, to non Aboriginal & Torres Strait Islander teachers in alternate areas.
- Aboriginal & Torres Strait Islander teachers completing further study are proportionally lower than non Aboriginal & Torres Strait Islander teachers in pursuing this study at a postgraduate level.





## Additional Registrants

Understanding teachers who are registered but not employed enables workforce planning to have a deeper appreciation of the available skills and resources that could be deployed to support classroom learning.

There are many reasons why an individual may choose to retain registration but not be in an active teaching role. These may include teachers actively seeking employment or those pursuing a different career, who wish to keep options of a return open.

Due to data gaps, assumptions have been required to be made to understand this population of teachers, and this section provides a guide only. The key findings from analysis, in this section, that warrant further investigation are:

- 14%, or 62,000 individuals, of the registered teaching workforce is estimated to not be in a teaching position.
- Teachers born out of Australia are less likely to be in a teaching position, suggesting difficulties with finding employment or that these teachers may not have the required skill sets.
- The additional registrant population holds qualifications in a range of fields equally as broad as known employed teachers; but also holds these qualifications to a higher level. An opportunity exists to leverage their knowledge, though this may not be directly in a classroom setting.

# Profile of Additional Registrants

Determining the number of registered teachers that are not currently employed in a teaching role is not easily possible within the data able to be collected for this dataset for a number of reasons outlined in the project report.

Within the dataset, there are **126,522** additional registrants. Analysis attempted to determine an approximation on how many of these teachers may be registered but not employed based on the data captured. The following numbers can be reasonably removed from this count.

**5,000** known employed teachers, spread across all sectors and jurisdictions, for which matching against regulator data (except for NSW) was not possible and are subsequently expected to have a record in both employer and regulator data datasets.

**8,000** estimated casual relief teachers in VIC and NT.

**22,000** estimated teachers from the NSW, Queensland and Victoria Catholic sector based on headcount in the dataset and extrapolation from NSSC FTE.

**29,000** estimated teachers from the Independent sector based on headcount in the dataset and extrapolation from NSSC FTE.

As such, as approximated estimate of teachers who are registered but not in active employment is **62,000**.

This represents around **14%** of the national teaching workforce.

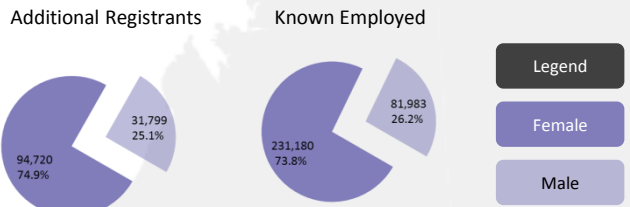
As these 62,000 cannot be discriminated within the additional registrant cohort, additional registrants in this report contain the full 126,522 individuals.

## Profile comparison

Initial analysis sought to determine if there were any differences between known employed teachers across some of the key demographic profile information available.

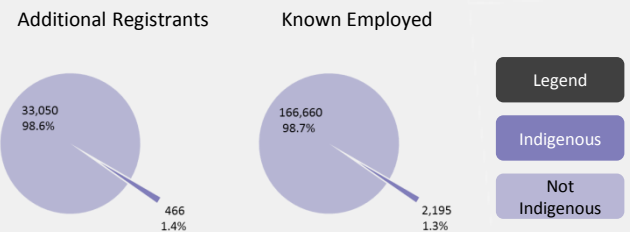
### Gender

No observable differences are observed in the gender split of additional registrants when compared to known employed teachers.



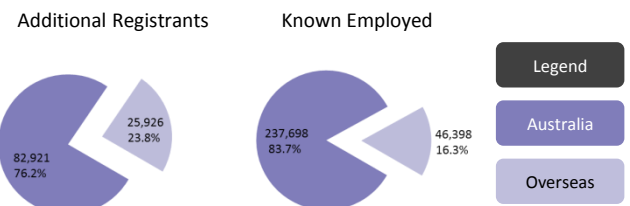
### Aboriginal & Torres Strait Islander status

No observable differences are observed in the Aboriginal & Torres Strait Islander split of additional registrants when compared to known employed teachers.



### Birth Country

Teachers born outside of Australia are more likely to be classified as additional registrants. This may indicate unique challenges for teachers from other countries to find a teaching position but the data is not sufficient to suggest potential causal factors.



# Age Profile

**44** is the median age for known employed teachers in Australia.

**44** is the median age for additional registrants in Australia.

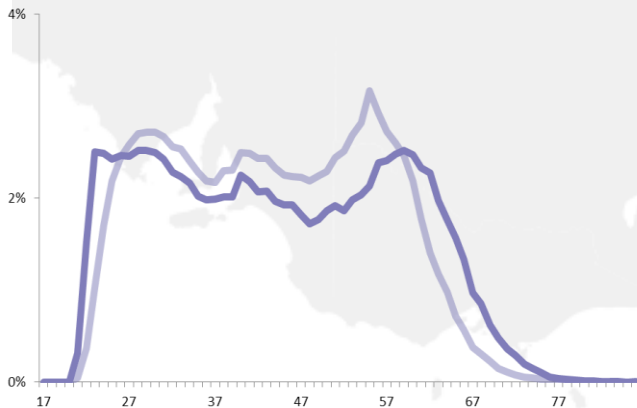
The data is not able to determine the appetite for additional registrants to return to teaching positions but age, and so retirement, is likely to be a key factor. The analysis investigated age differences between known employed teachers and additional registrants.

The national median age between employed teachers and additional registrants is the same but within jurisdictions different profiles exist.

When considering the available pool of additional registrants, nationally 30% of additional registrants are aged 55 or over. In Queensland, South Australia and Tasmania, 37% of additional registrants are 55 years of over. 10% of South Australia and 9% of Queensland additional registrants are aged over 65.

Only WA has a lower median age for additional registrants than known employed teachers. The greatest age difference between additional registrants and known employed teachers is in Queensland, where the median age for additional registrants is five years more than for known employed teachers.

National Age profile of known employed teachers and additional registrants

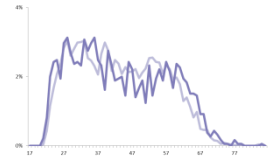


Median Age

**42** employed

**42** additional

ACT



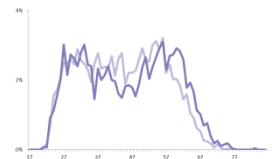
NSW data is not presented as the data held by the NSW regulator does not represent the full population of NSW teachers and is likely to be skewed to younger teachers.

NSW

**44** employed

**46** additional

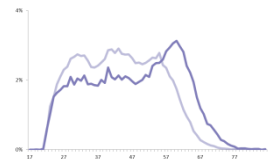
NT



**43** employed

**48** additional

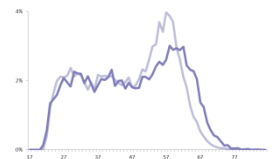
QLD



**47** employed

**48** additional

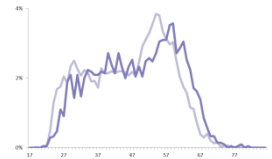
SA



**47** employed

**49** additional

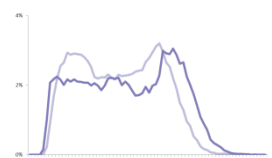
TAS



**43** employed

**46** additional

VIC



**45** employed

**44** additional

WA



Legend

Employed

Additional

# Qualifications

## Availability of qualification data

**77%** of additional registrants have at least one qualification captured in the dataset

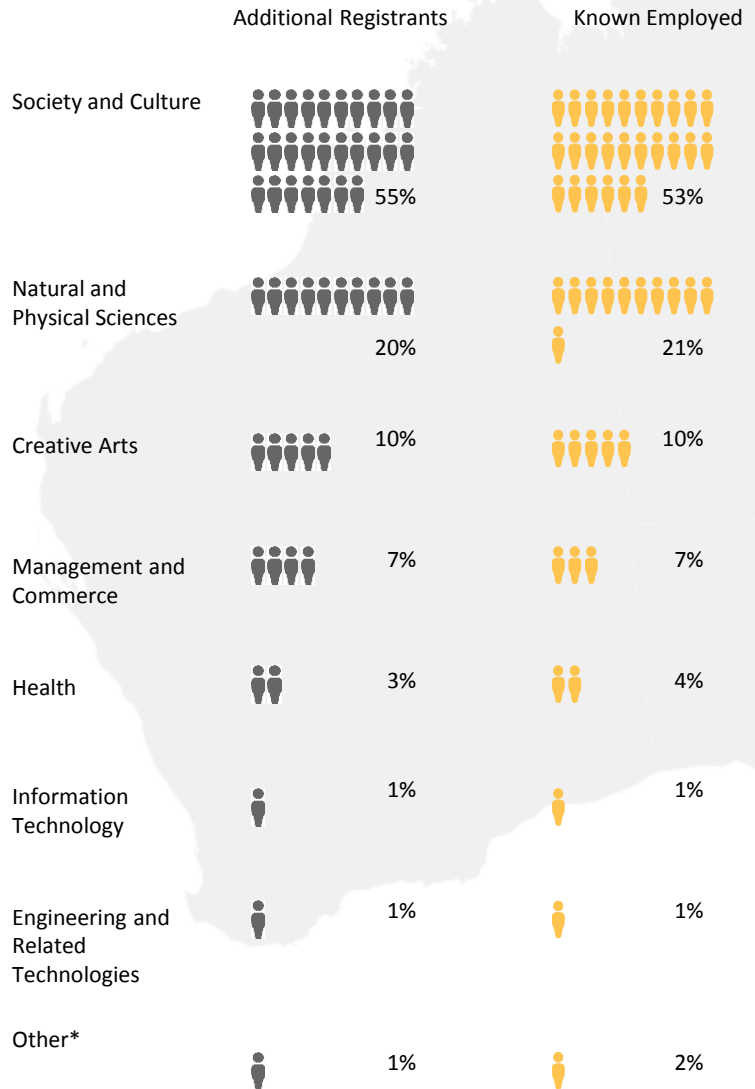
**73%** of known employed have at least one qualification captured in the dataset

### Qualification Field

Analysis into the field of study, excluding education, showed no marked difference between additional registrants and known employed teachers in respect to the proportions of individuals with qualifications in different fields.

Opposite the chart shows the proportion of non education qualifications fields for additional registrants and known employed teachers. This is independent of qualification level.

Earlier analysis suggested, with some assumptions, that 14% of teachers are registered but not employed. With the observed similar distribution across additional registrants and known employed teachers, this suggests that, for each qualification field, a further 14% of individuals remain qualified to teach and have a qualification in that field. This suggests that while, for example, there is no large untapped resource of natural and physical science teachers available; it also suggests there is no great gap there either.



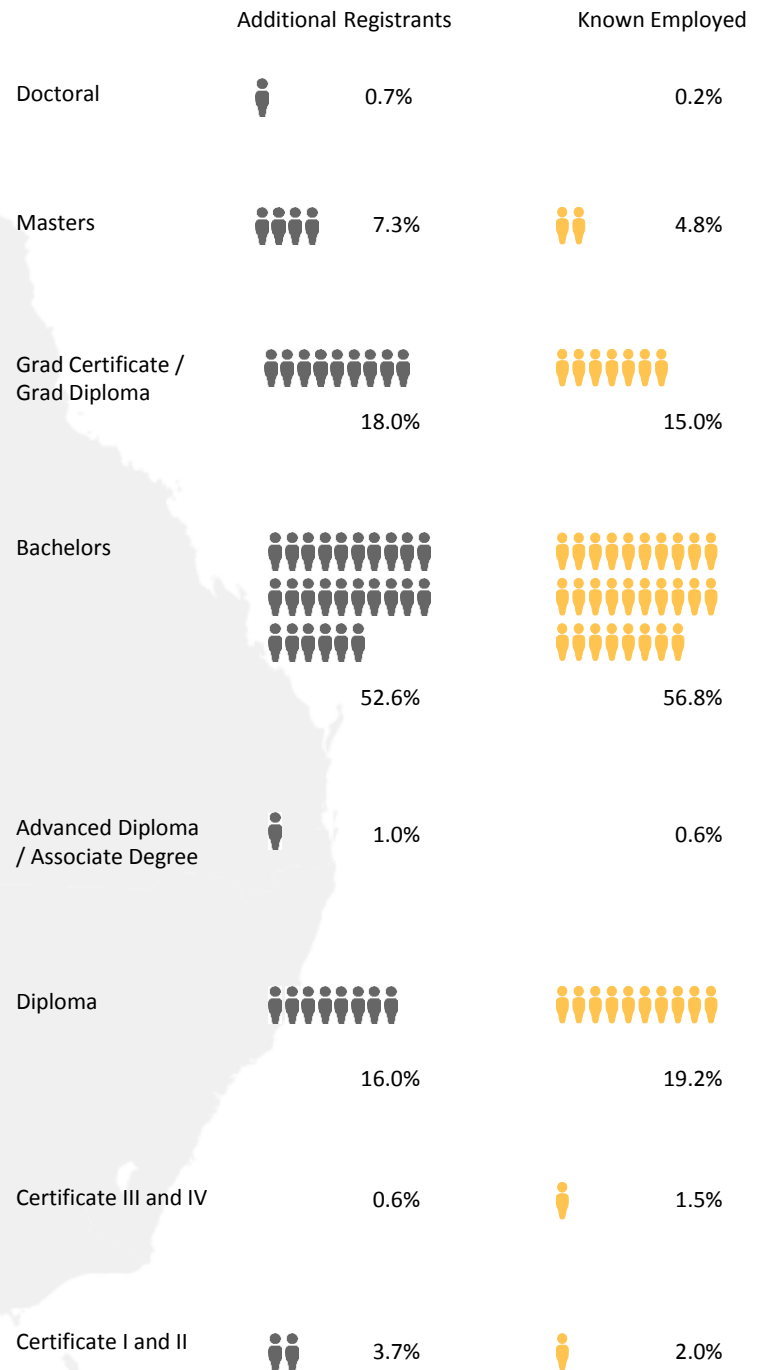
\* Other includes Agriculture, Environmental and Related Studies, Architecture and Buildings, Food, Hospitality and Personal Services, and Mixed Field Programmes.

### Qualification Level

Analysing the qualification level was performed across all qualifications, including education.

Additional registrants have a greater proportion of postgraduate qualifications level, with these representing 26% of the total qualifications compared to 20%. Despite the lower total number of additional registrants relative to known employed teachers, the total number of doctoral degree level individuals exceeds the known employed number (1289 to 890). 42% (13,198) of individuals with a Masters degree are additional registrants.

This data indicates that there is a pool of highly qualified individuals who are not in teaching positions but maintain registration. While these people may not intend to return to teaching, they could be a valuable resource to leverage to define approaches and programs that could improve education outcomes.





# Principals

There are four classifications for employment class: principals, deputy/assistant principals, executive teachers and classroom teachers. This enables analysis to understand different attributes of these employment classes.

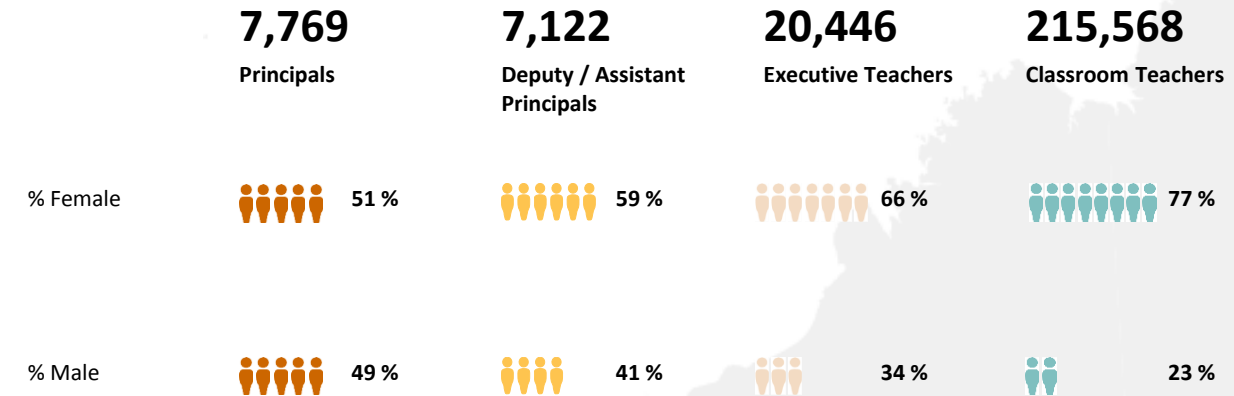
The key findings from analysis, in this section, that warrant further investigation are:

- The gender balance across the entire teaching workforce is not represented in school leadership positions. This is most pronounced at principal levels where 51% of principals are female, though it is noted that this representation will broadly represent the student population.
- Management and Commerce is the third most popular field of study, excluding education, for Principals and Deputy Principals. Understanding whether the extent to which this is driven by increased school autonomy, or by other factors, may enable appropriate course design to meet the needs of school leaders.
- Principals and Deputy/Assistant Principals have a higher proportion of Doctoral and Masters degree qualifications, while classroom teachers have a higher proportion of Graduate Certificates and Diplomas. Understanding the influences of postgraduate study choice for teachers may encourage greater participation while remaining available to teach.

# Profile of Employment Class

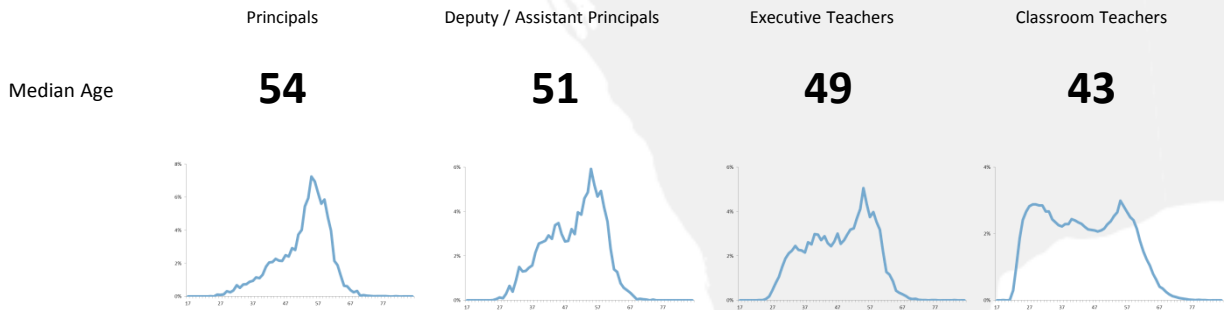
## Gender

The gender distribution across the four employment classes shows that, relative to their total population, males are more likely to be in more senior roles in schools. This is evident where males represent 26% of the total teaching workforce, for which employment class data is available, but represent 49% of principals.



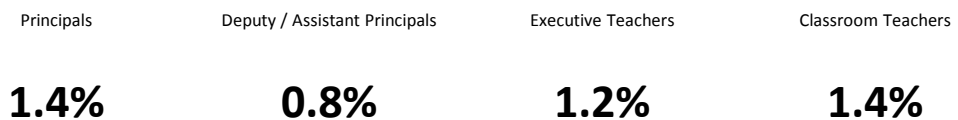
## Age Profile

The age profile is similar across principals, deputy/assistant principals and executive teachers. In all these classes, there is a skew to old ages which is more pronounced the more senior the position.



## Aboriginal & Torres Strait Islander status

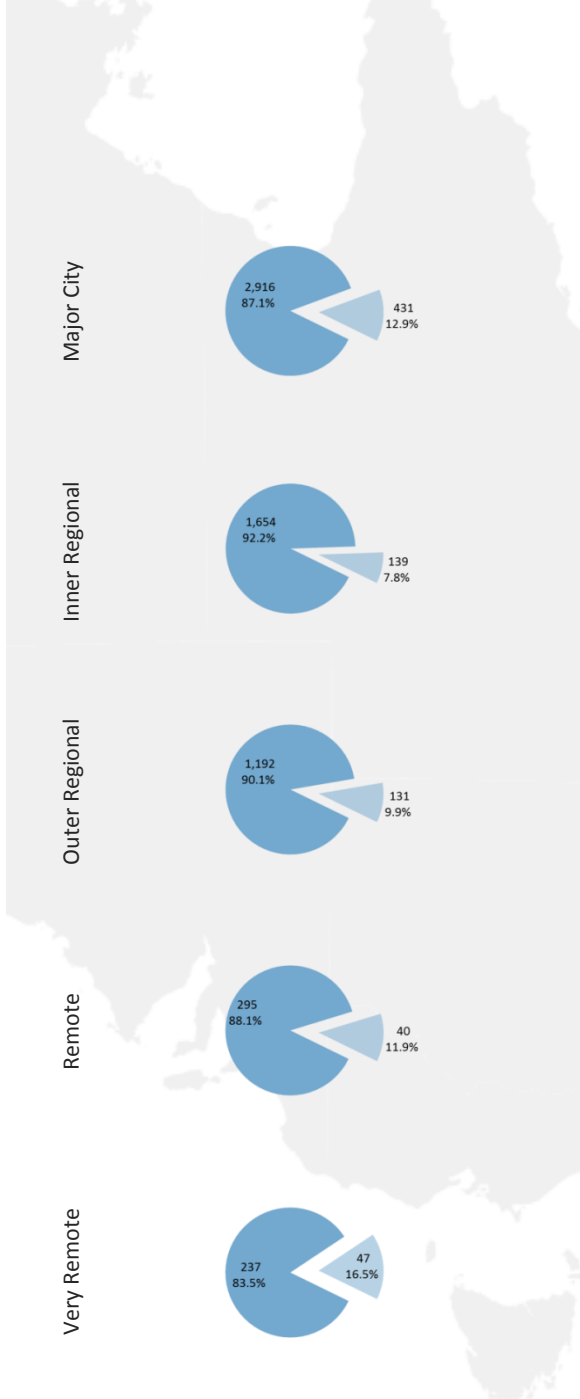
Only deputy / assistant principals have a lower representation of Aboriginal & Torres Strait Islander teachers relative to the population. This is hypothesised to be due to the school size that Aboriginal & Torres Strait Islander teachers work in, but data is not available to test this.



# Remoteness

## Birth Country of Principals

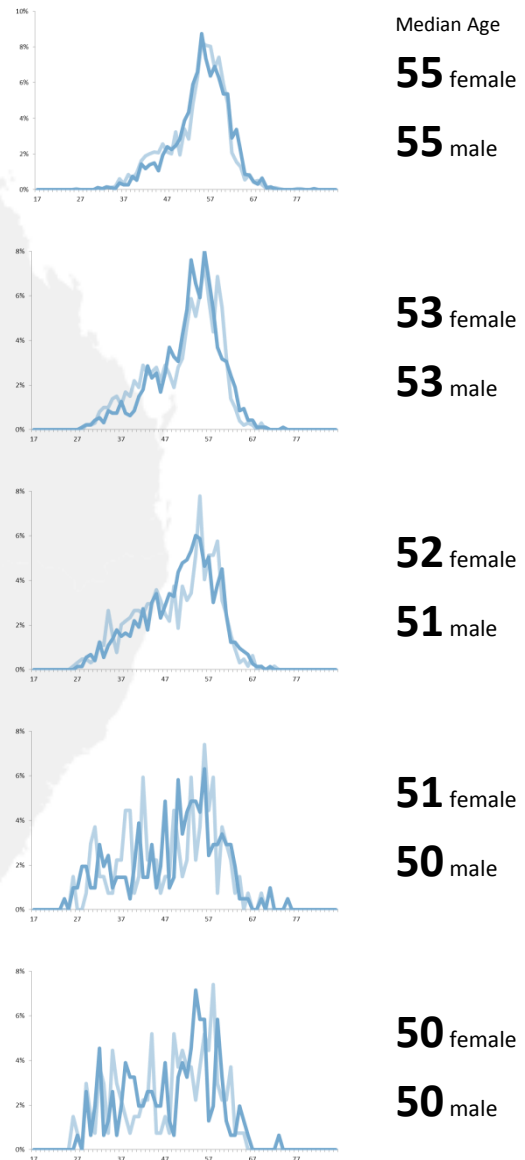
Of the principals for which birth country is known, the highest proportion of principals born outside Australia are located in very remote locations.



## Age of Principals

The general trend observed is that the median age of principals tends to be younger, the more remote the school location. There is little observed differences between genders in each remoteness category.

Variation in remote and very remote locations is due to the limited number of principals in these locations.



Legend

Australia

Overseas

Legend

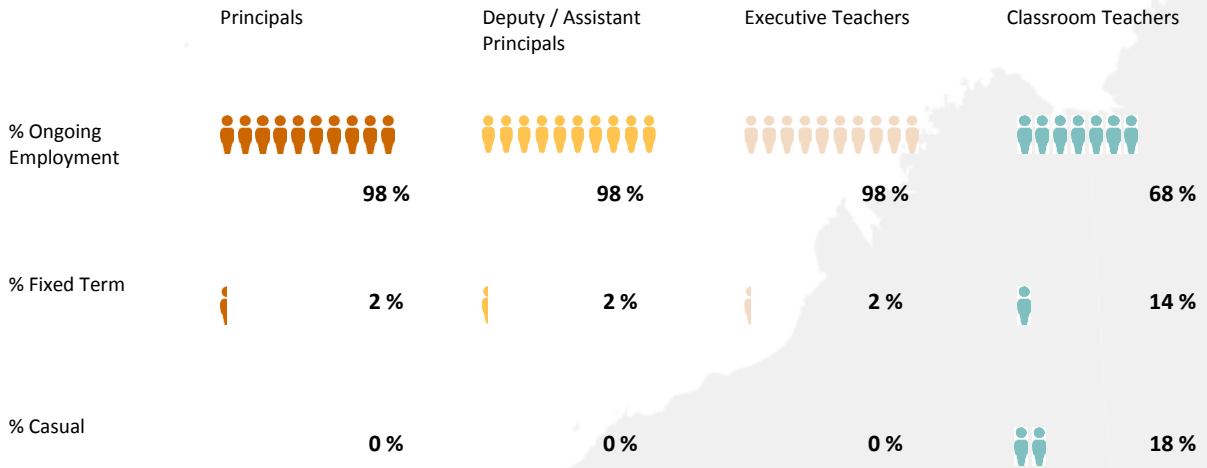
Female

Male

# Employment

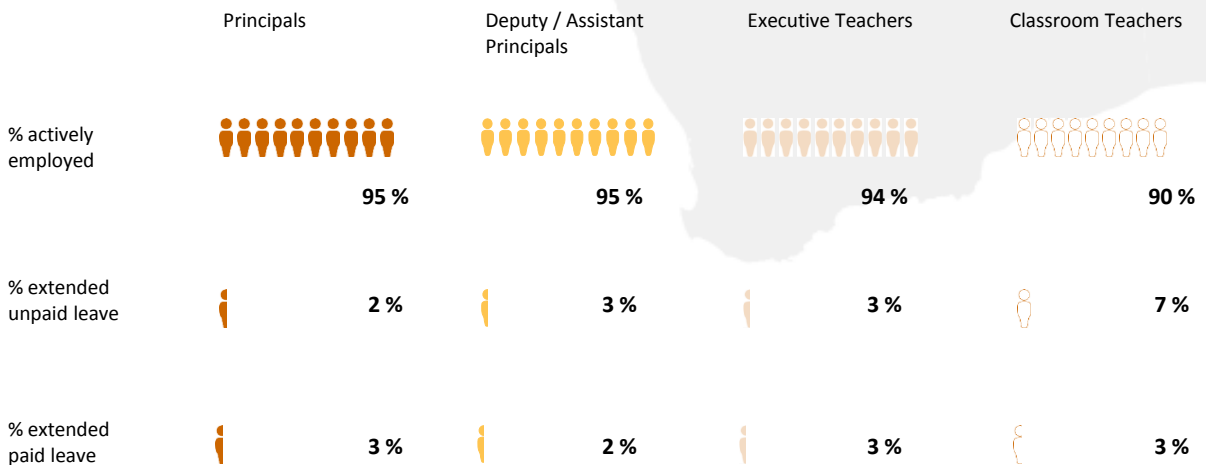
## Employment Type

Classroom teachers exhibit a different profile compared to the other three employment types. There is a very small number (<5) principals, deputy/assistant principals and executive teachers in casual employment but rounding sees these at 0%.



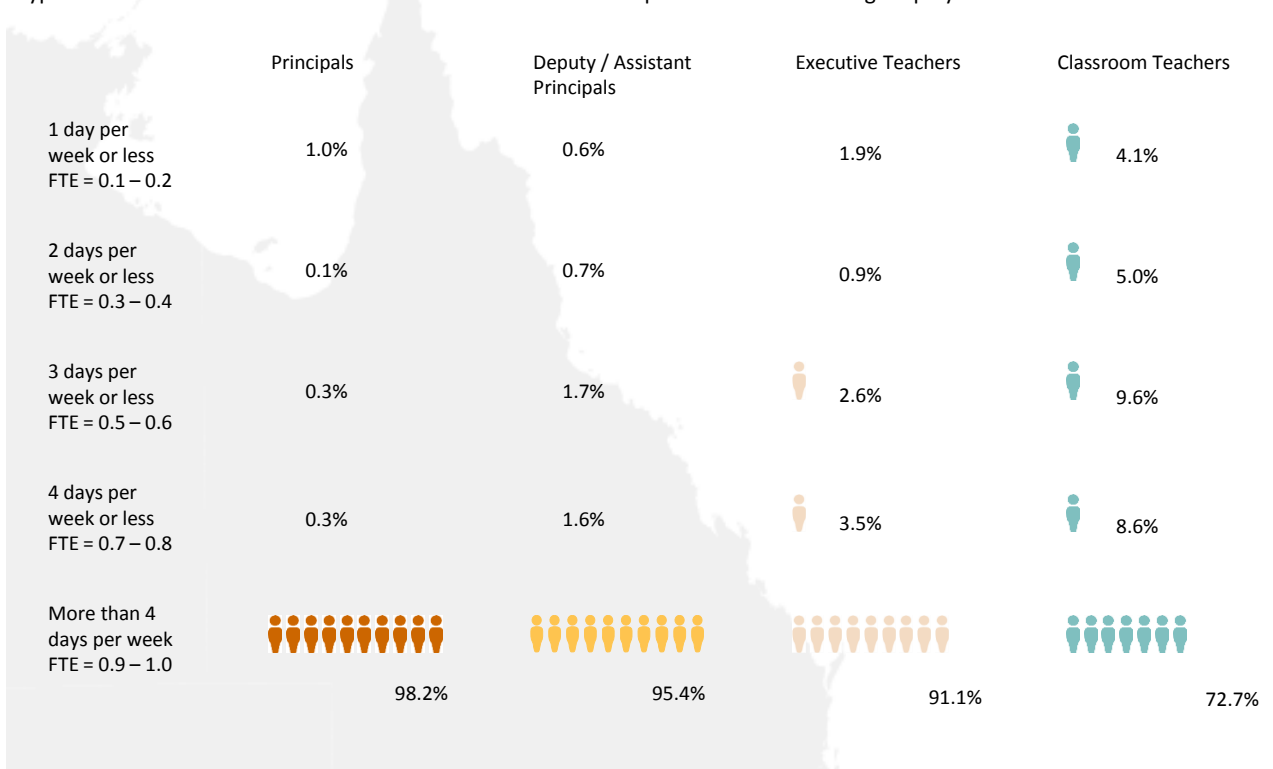
## Employment Status

Similar to employment type, classroom teachers exhibit a different trend to the other employment classes, though the differences are less pronounced. These can be summarised by a statement that 1 in 20 school leaders and 1 in 10 classroom teachers are on extended leave at any time.



### Time fraction employed

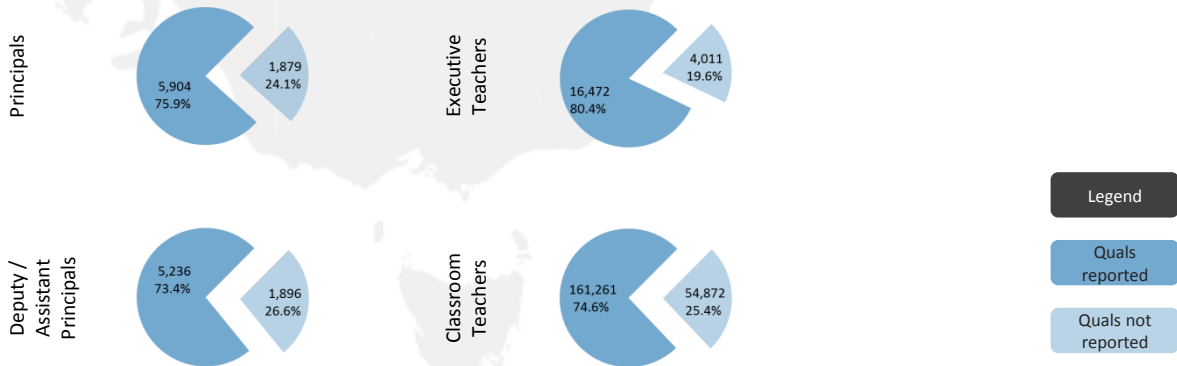
When time fraction employed is grouped into day blocks, a similar theme emerges as was observed with employment type and status. This is that classroom teachers have a different profile to the remaining employment classes.



## Qualifications

### Availability of qualifications data

Availability of qualifications data has been previously identified. The initial analysis below shows the proportion for each employment class for which at least one qualification has been captured in the dataset. Executive teachers have the highest proportion of teachers who have reported a qualification with similar percentages noted for the other employment classes.



# Field and Level of Study

## Field of Study

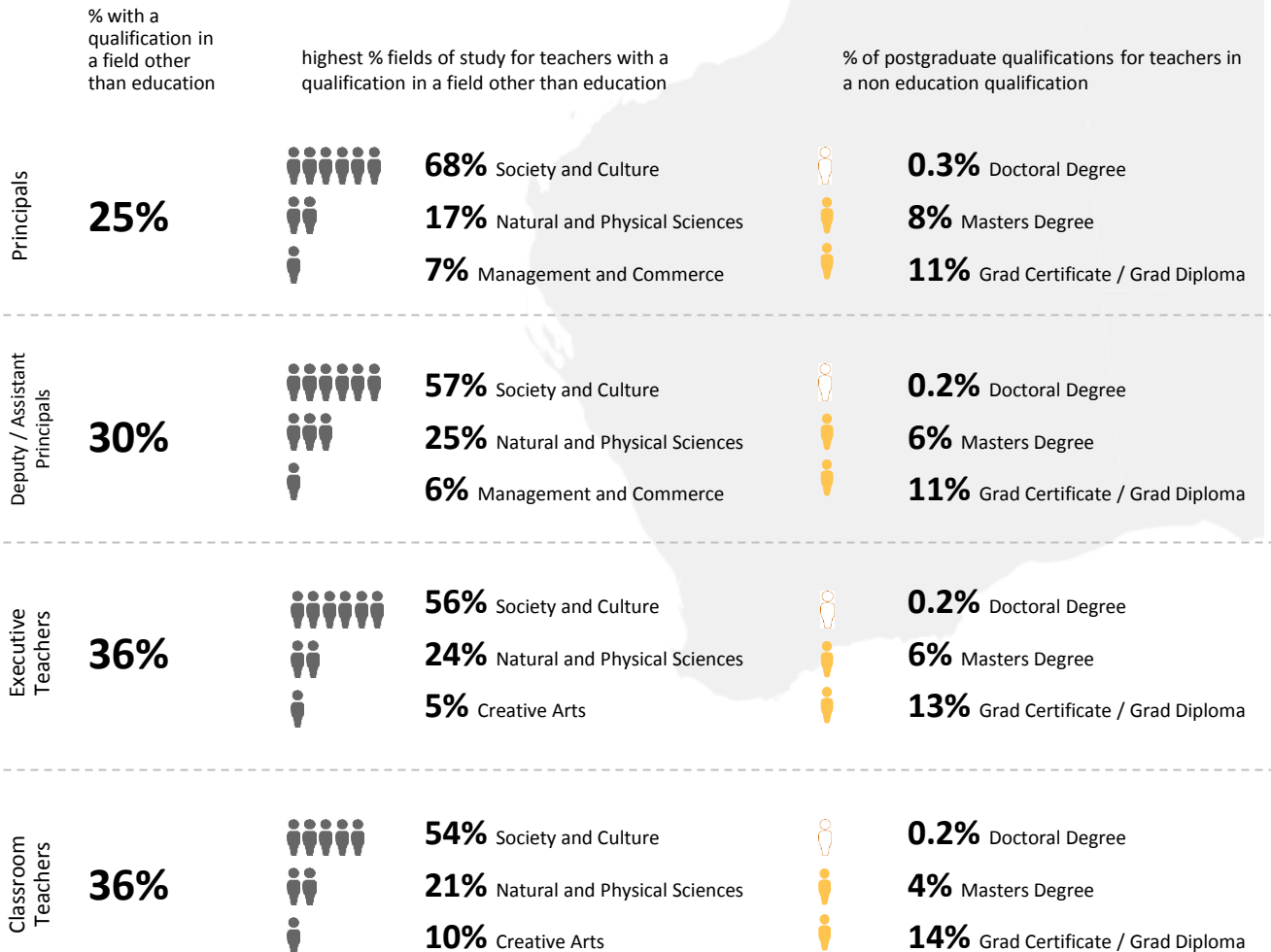
Analysis was undertaken into qualifications, other than those specific to education. The data suggests that Principals have less non Education qualifications than other employment classes but, in this case, as Principals have a higher median age, this is expected to be due to this information not historically having needed to be provided.

While Society and Culture, and Natural and Physical Sciences were the top other fields of study across all employment classes, Principals and Deputy/Assistant Principals has Management and Commerce as their third most popular field of study.

## Level of Study beyond Bachelors Degree (AQF Level 7)

Analysis was undertaken to understand the extent of postgraduate qualifications (in any field). The percentage represented below is the percentage of total qualifications in the analysed group (as opposed to the percentage of individuals) over all qualifications data.

The data suggests that school leadership roles have a higher proportion of Masters and Doctoral Degrees when compared to classroom teachers. Classroom teachers have a higher proportion of graduate certificates and graduate diplomas. This trend was also evident in younger teachers suggesting these may be an emerging postgraduate preference for early service teachers.







## Teachers in Low SES School Locations

Leveraging ABS data enabled the school location that the teacher works in to be assigned to one of five SES quintiles based on relative socio economic advantage and disadvantage. Analysis was performed to determine whether differences exist in the teacher profile of those working in lower SES school locations, as opposed to higher SES school locations.

The key findings from analysis, in this section, that warrant further investigation are:

- The demographic and employment profile of teachers does not differ in any observable manner between lower and higher SES school locations.
- Schools in higher SES locations are more likely to have teachers with an additional qualification reported in a field of study other than education.
- Schools in higher SES locations are more likely to have teachers with a postgraduate qualification. Understanding whether this, and the field of study difference, has an impact on imparting the curriculum and meeting desired educational outcomes is an area for further investigation, beyond the data currently held.

# Teachers across SES Locations

## Approach

There are a number of methods to determine SES. In this analysis, the SEIFA (Socio-Economic Indexes for Areas) indices developed by the ABS was used. The specific Index used is the Index of Relative Socio-Economic Advantage and Disadvantage (IRSAD). Where school location (street address) has been provided for a teacher, this has been mapped into a Statistical Area Level 2 (SA2). The determination of SA2 is determined by the ABS. The ABS provides information on an SA2 as follows: "SA2s generally have a population range of 3,000 to 25,000 persons, and have an average population of about 10,000 persons. SA2s in remote and regional areas generally have smaller populations than those in urban areas." (source: <http://www.abs.gov.au/ausstats/abs@.nsf/Latestproducts/88F6A0EDEB8879C0CA257801000C64D9>).

The IRSAD index was broken into five quintiles based on advantage and a teacher was assigned to one of these quintiles based on the location of the school they spend the most time at. Where a single IRSAD index score could have been assigned to multiple quintiles, this was allocated to the lower quintile.

IRSAD classification was available for 97% of the known employed teachers.

## Data distribution

Where IRSAD was able to be determined, the allocation of teachers around one of the five SES quintiles was performed. The number of teachers allocated to each quintile is below.

**66,121** teachers in the **low** SES quintile

IRSAD range 554 – 933  
424 SA2s

**61,640** teachers in the **low – medium** SES quintile

IRSAD range 934 – 979  
420 SA2s

**60,051** teachers in the **medium** SES quintile

IRSAD range 980 – 1024  
433 SA2s

**55,602** teachers in the **medium – high** SES quintile

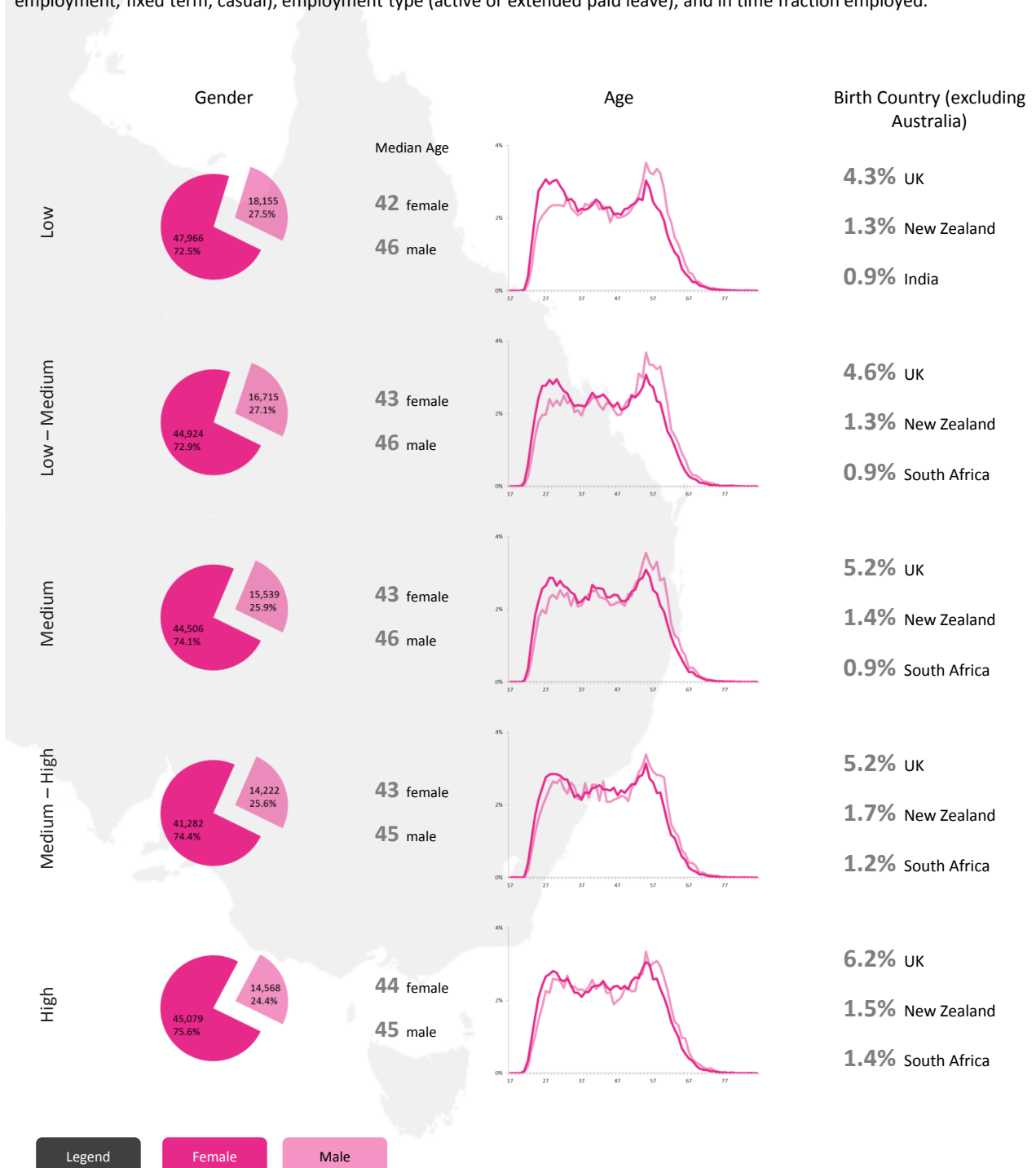
IRSAD range 1025 – 1070  
409 SA2s

**59,922** teachers in the **high** SES quintile

IRSAD range 1071 – 1196  
418 SA2s

# Teacher Profile

Across different SES locations, there are few differences in the basic demographic profile of teachers that can be observed. A slight trend does exist where teachers born outside of Australia are more likely to be found in higher SES schools but this effect is minor (14% of teachers in low – medium SES located schools were born outside Australia, while this is 18% for high SES located schools). Though not displayed below, similarities were also not observed in employment status (ongoing employment, fixed term, casual), employment type (active or extended paid leave), and in time fraction employed.

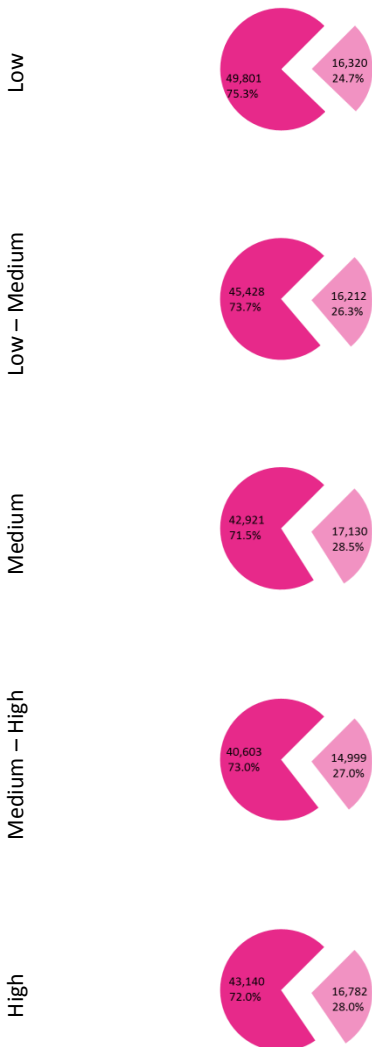


# Qualifications

## Availability of qualifications data

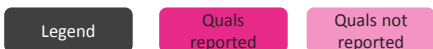
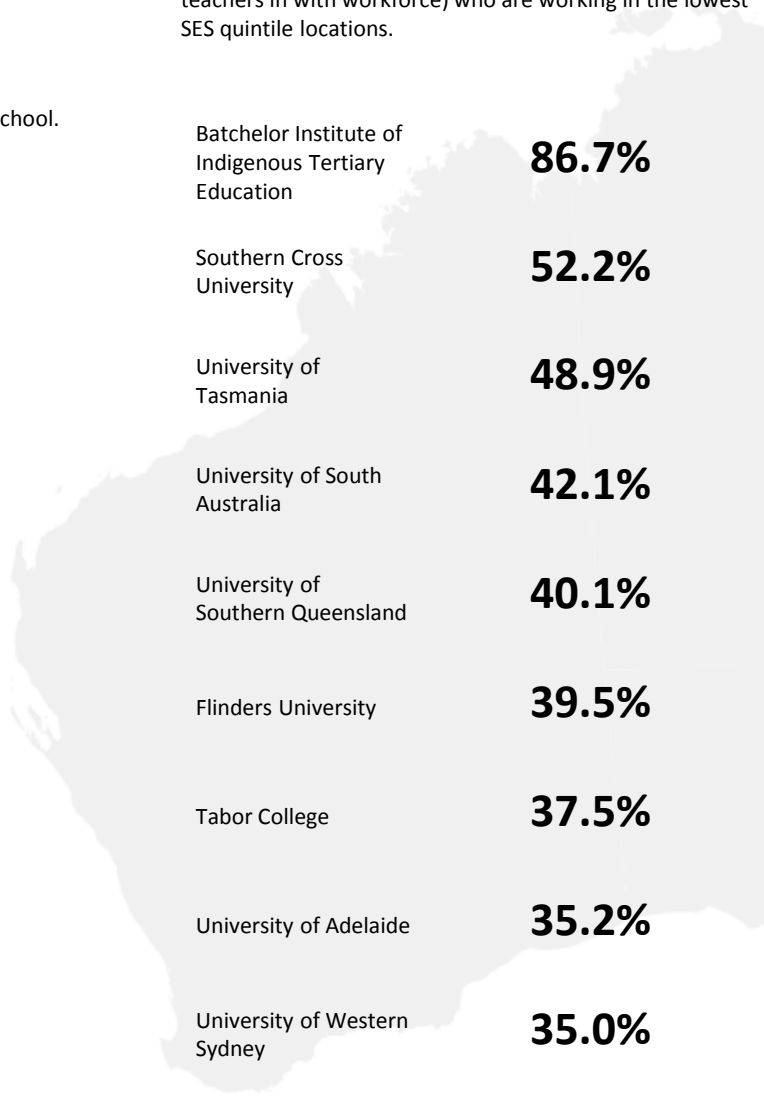
Availability of qualifications data has been previously identified. The initial analysis below shows the proportion of known employed teachers for which at least one qualification has been captured in the dataset.

The availability of qualification data does not vary significantly based on the SES location of a teacher’s school.



## Institution

The analysis presents the institutions with the highest percentages of known employed teachers (minimum 10 teachers in with workforce) who are working in the lowest SES quintile locations.



## Field of Study

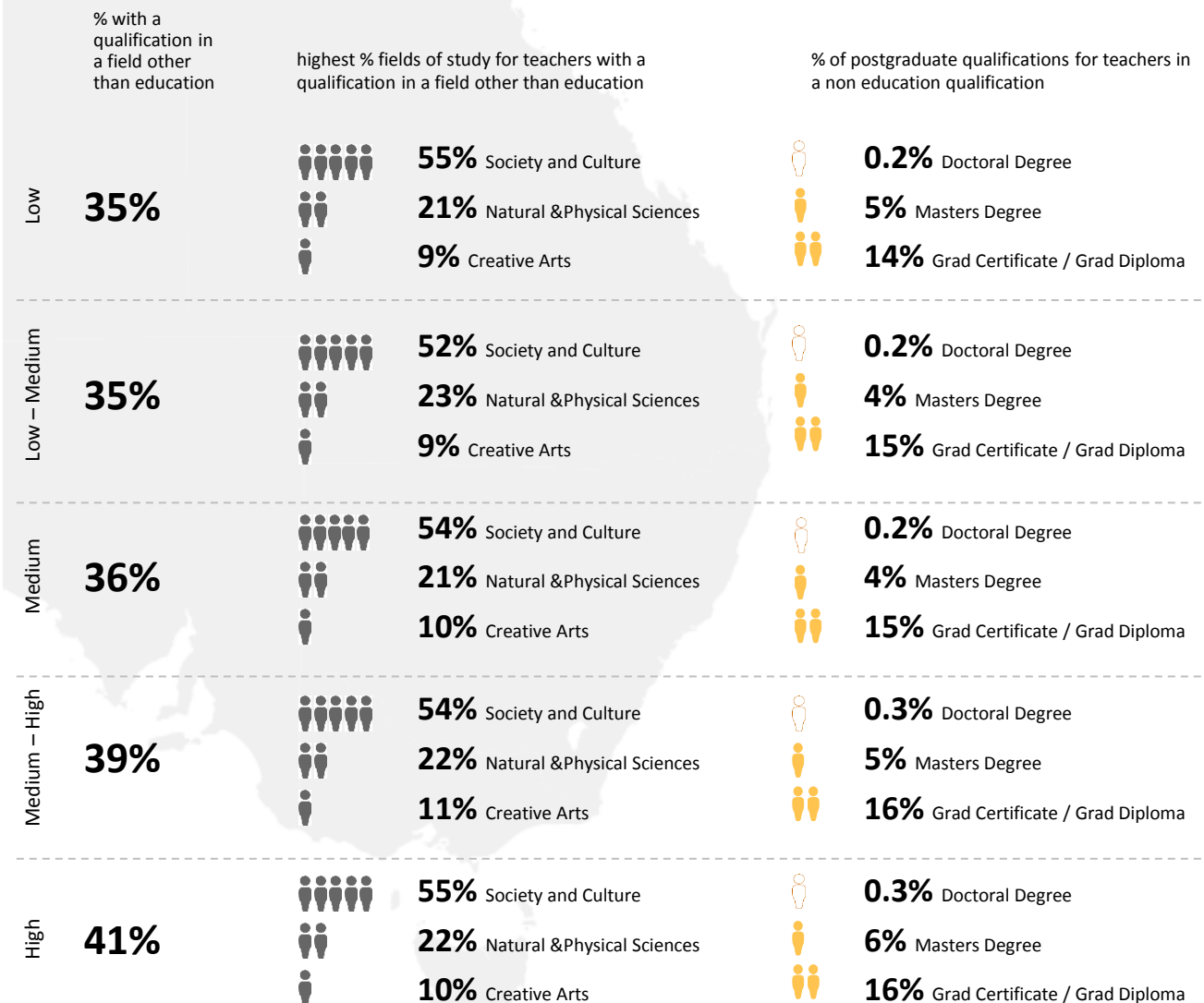
Analysis was undertaken into qualifications, other than those specific to education. For known employed teachers where a qualification has been captured, 37% have an additional qualification in another field.

The data shows that the higher the SES location of the school, the more likely it is that teachers in that school will have a qualification in a field alongside education. The distribution of alternate qualification fields is similar across SES school location.

## Level of Study beyond Bachelors Degree (AQF Level 7)

Analysis was undertaken to understand the extent of postgraduate qualifications (in any field). The percentage represented below is the percentage of total qualifications in the analysed group (as opposed to the percentage of individuals) over all qualifications data.

The data shows that the higher SES location of the school, the more likely it is that teachers will have higher qualifications. The values displayed are rounded but in low SES schools 18.4% of postgraduate qualifications, while for high SES schools, this is 21.6%.





## Qualifications

Qualifications, in addition to professional learning and development, provide an important indication of the skills in the teaching workforce and so available to school students. Analysis was performed over available qualifications data to understand the distribution of skills across Australia, the non-education fields of study that teachers have qualifications in, providers of teacher education, qualification pathways leading to and from an education qualification and potential attrition.

The key findings from analysis, in this section, that warrant further investigation are:

- Males, compared to females; and non Aboriginal & Torres Strait Islander, compared to Aboriginal & Torres Strait Islander teachers hold a higher proportion of qualifications in the Sciences.
- The distribution of field and level of study is broadly similar between city, regional and remote school teachers.
- The distribution of field of study is broadly similar across jurisdictions but level of study exhibits differences.
- The greatest majority of teachers in every jurisdiction received an education qualification from an institution in the same jurisdiction. However, the relative size varies around Australia.
- Prior to receiving an education qualification, if a teacher has another qualification, it is most likely to be a Bachelor degree and in the area of Society and Culture. Qualifications after the teacher qualification has been conferred are more likely to be postgraduate than before.

# Qualifications

## Availability of qualifications data

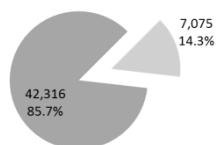
Availability of qualifications data has been previously identified. The initial analysis below shows the proportion of known employed teachers for which at least one qualification has been captured in the dataset.

As regulators were established in different jurisdictions, there was not always a requirement to collect qualifications data. This may explain why for older teachers, less qualifications data is available and is higher for younger, more recently registered, teachers.

## Non education qualifications

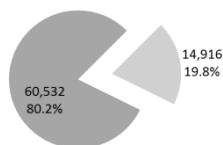
Analysis of qualifications other than in education indicate that older teachers, who have at least one qualification, have the highest reported percentage of a qualification in another field.

Age < 30



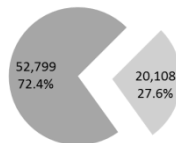
**31%** also have a non education qualification

Age 30 - 39



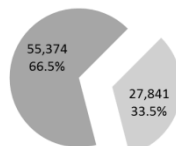
**41%** also have a non education qualification

Age 40 - 49



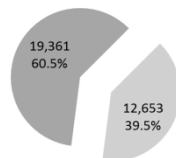
**38%** also have a non education qualification

Age 50 - 59

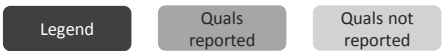


**34%** also have a non education qualification

Age 60 +



**42%** also have a non education qualification



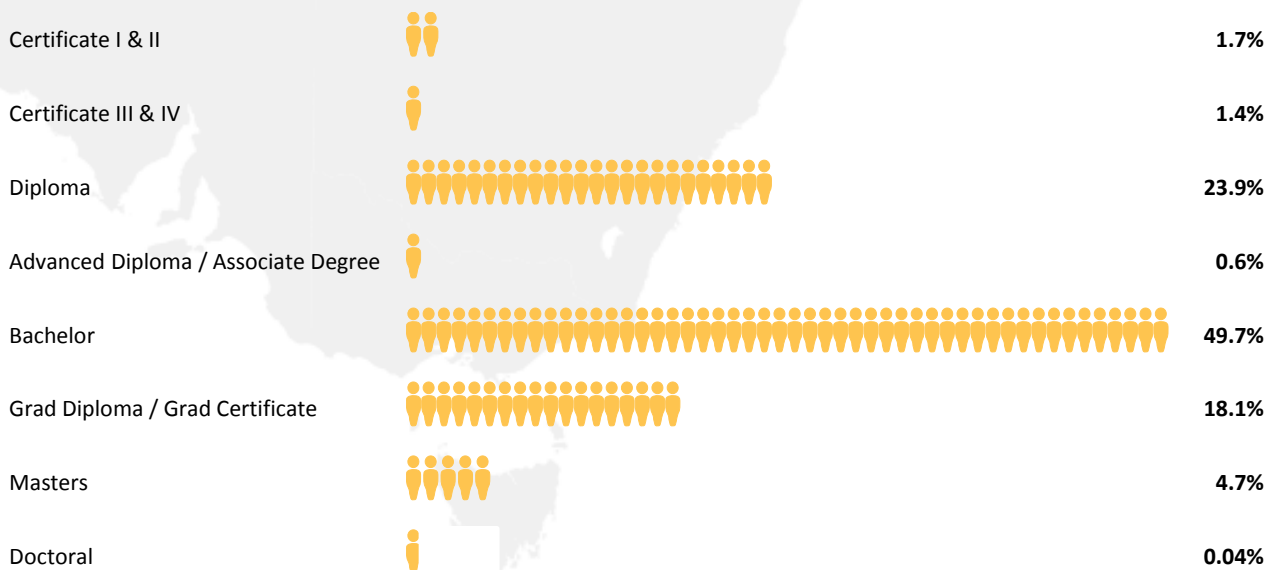
### Most common non education qualifications

Where data is available for both the qualification level and qualification field, the most common non education qualifications are presented below. The limitations of collection of this data, generally in a free text form, mean that 16% of qualifications cannot be classified based on inadequately or not provided field of study.



### Education qualifications

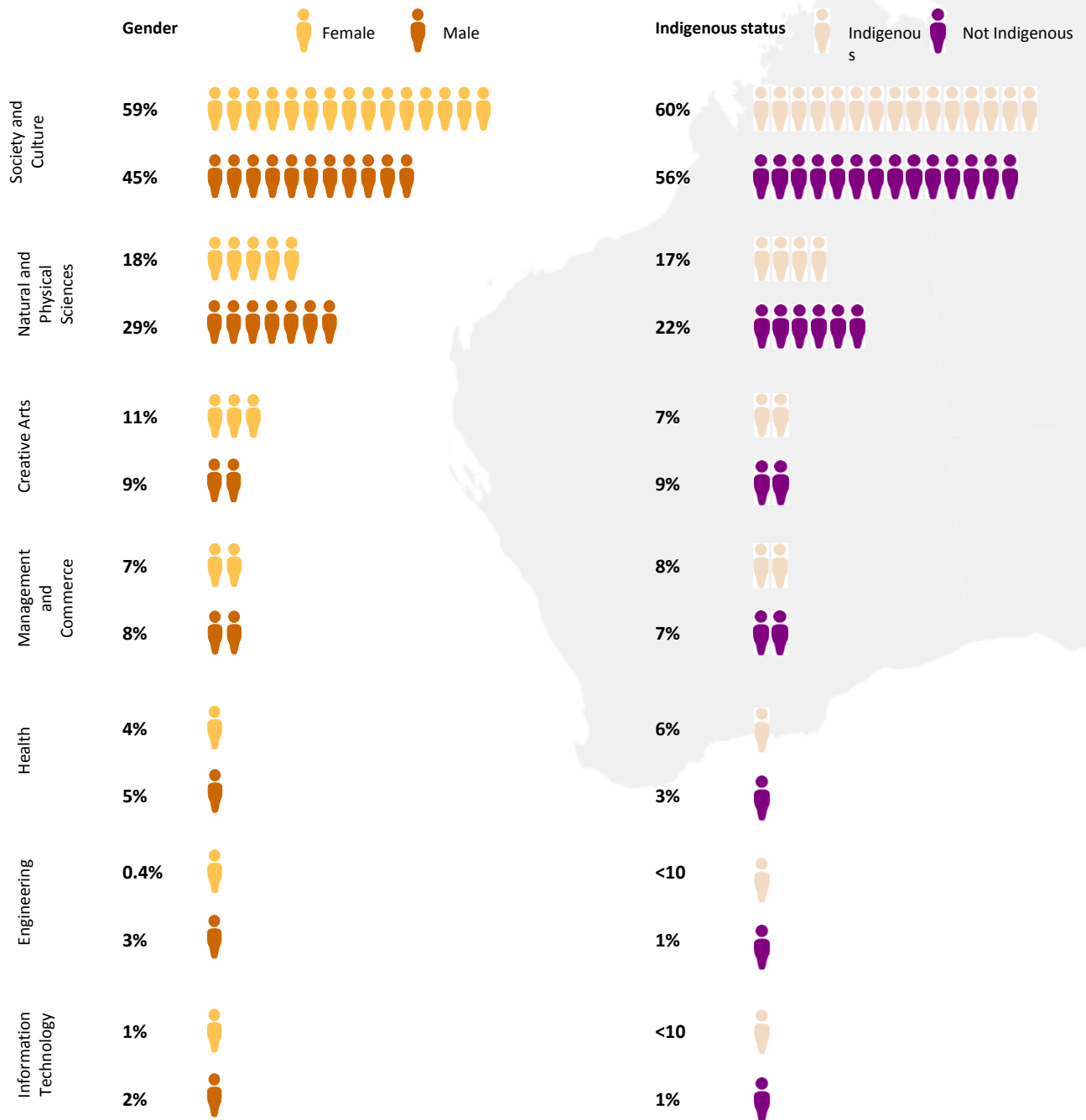
The data collected does not provide an indication of the qualification gained that is required to teach. The graphic below shows the proportion of the 284,521 education qualifications at each qualification level. A teacher with multiple education qualifications will appear in multiple qualification levels.



# Field of Study (non Education)

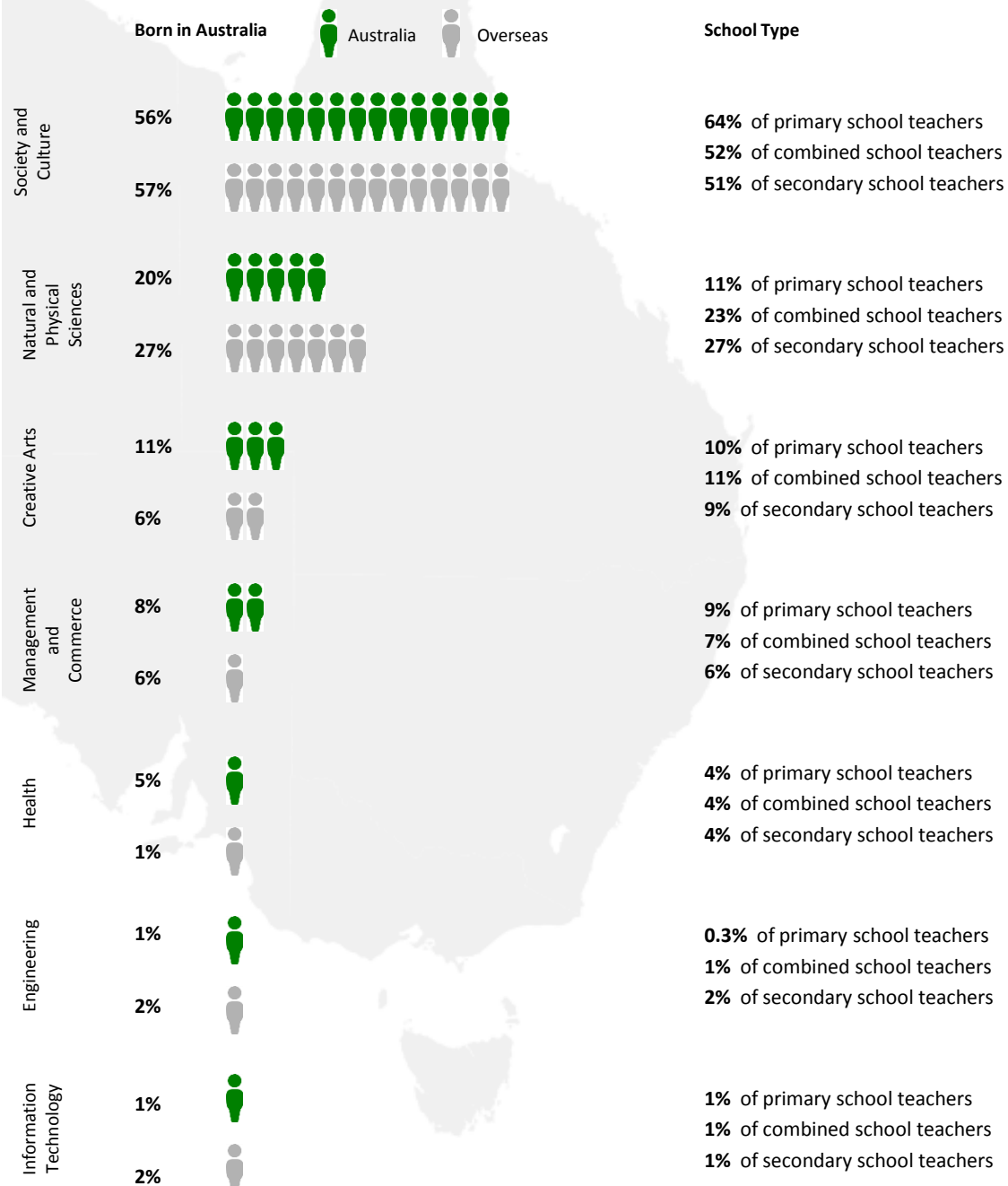
Analysis of the demographic profile of non education qualifications was performed. The graphic shows the proportion of each category of teacher that have a qualification in that field (e.g. 59% of female teachers with a non education qualification have this in Society and Culture). When analysing gender, female teachers are more likely to have alternate qualifications in Society and Culture and males are more likely to have qualifications in the Natural and Physical Sciences and Engineering.

Aboriginal & Torres Strait Islander teachers are less likely to have an alternative qualification in Natural and Physical Sciences but are more likely to be qualified in Health.



Analysis of alternate qualification field by birth country shows that non Australian born teachers are more likely to have a qualification in the Natural and Physical Sciences. Australian teachers by contrast are more likely to hold qualifications in the Creative Arts and Health.

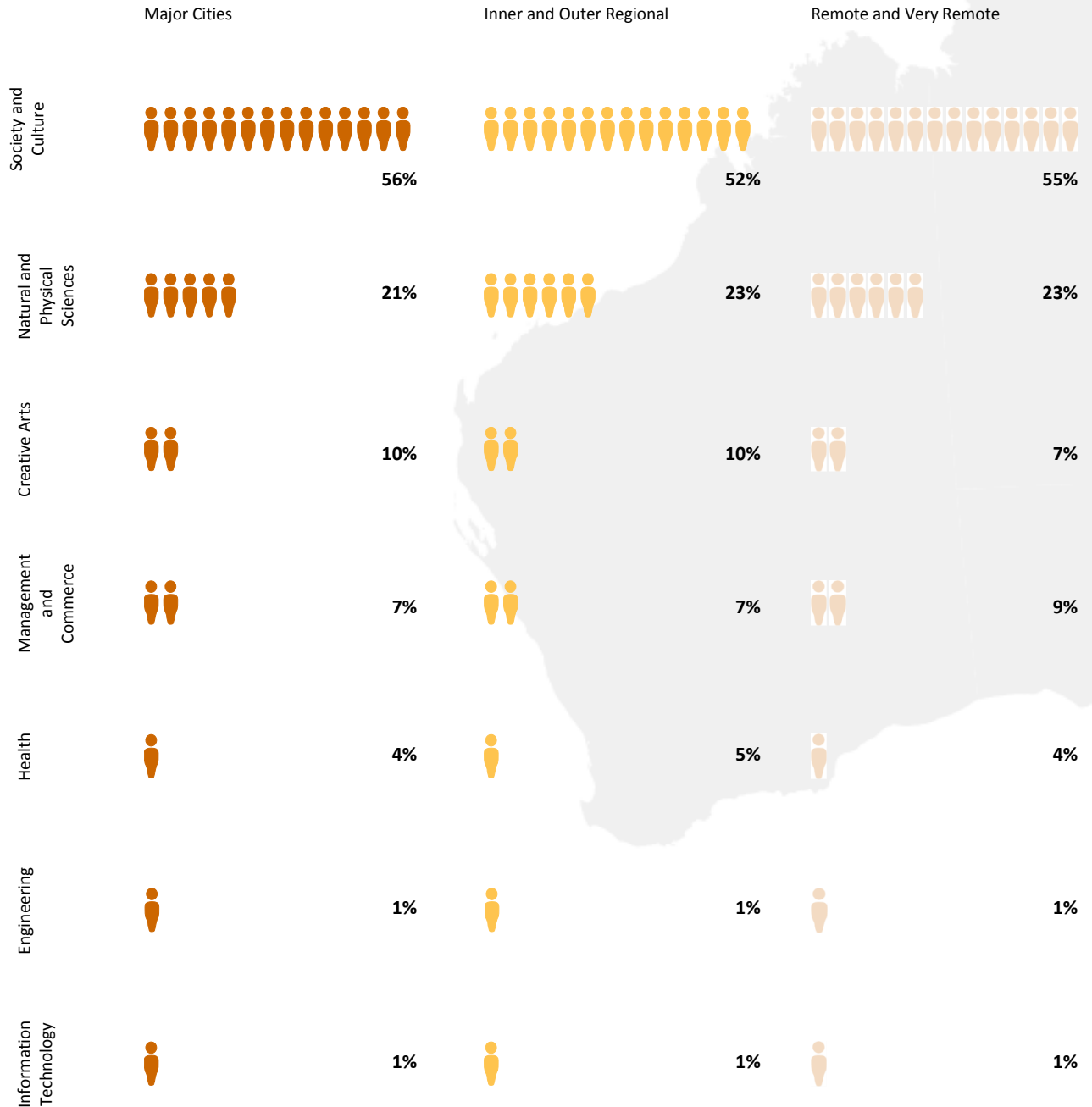
Analysis of the percentage of teachers for each of the reported three school types was performed. There is an increased proportion of secondary school teachers with a Natural and Physical Sciences qualification relative to Society in Culture in primary school teachers.



# Field of Study (non Education)

## Remoteness

The five remoteness categories were grouped into three groups to understand the distribution of field of study for non education qualifications around Australia. Differences are not large but remote areas have a higher proportion of Natural and Physical Sciences and, Management and Commerce when compared to Major Cities which are higher in Creative Arts.



### Jurisdictional comparison

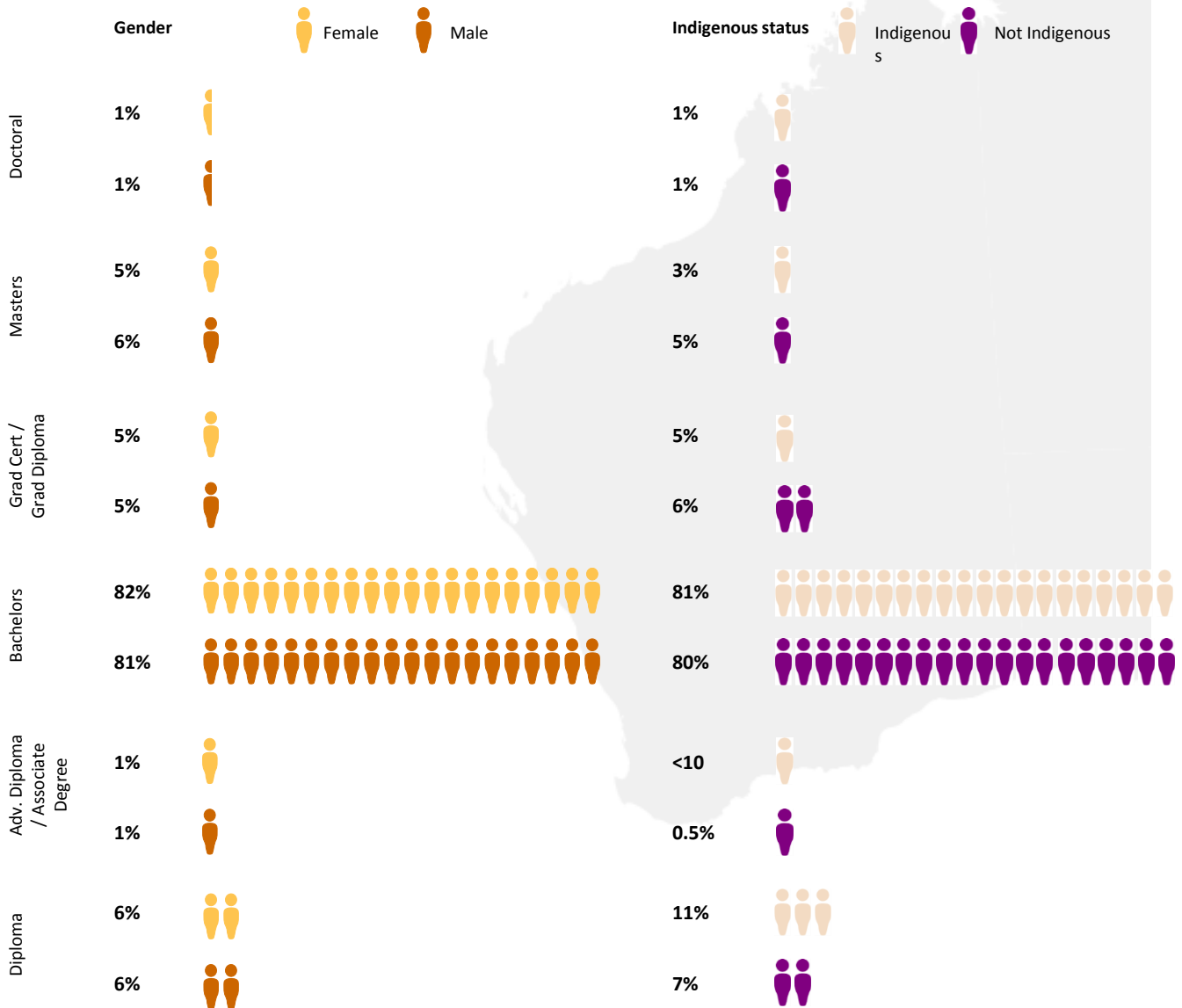
Availability of qualification data represents historical requirements for capturing this information for the purposes of registering a teacher. The distribution of non education qualifications around the country is not uniform and this drives some of the understanding around percentage of teachers known to have a non education qualification (especially Victoria).

Proportionate to population size, the ACT has, by some margin, the highest proportion of Information Technology qualifications. WA has the highest proportion in the Natural and Physical Sciences and Tasmania has a high proportion in Health.



# Level of Study (non Education)

Analysis of the demographic profile of non education qualifications was performed. The graphic shows the proportion of each category of teacher that have a non education qualification at a particular level (e.g. 5% of female teachers with a non education qualification have this at Masters level). There are few gender differences though male doctoral level qualifications are higher at 1.3% compared to 0.6% for females. Comparing indigenous status, Aboriginal & Torres Strait Islander teachers have a higher proportion with diploma level qualifications compared to non Aboriginal & Torres Strait Islander teachers with a higher proportion of postgraduate qualifications.



Analysis of alternate qualification field by birth country shows that non Australian born teachers, with 16.9%, are more likely to have a more postgraduate qualifications than Australian born teachers (8.9%). Australian born teachers have much greater concentration of qualification level for non education qualifications at the bachelors level.

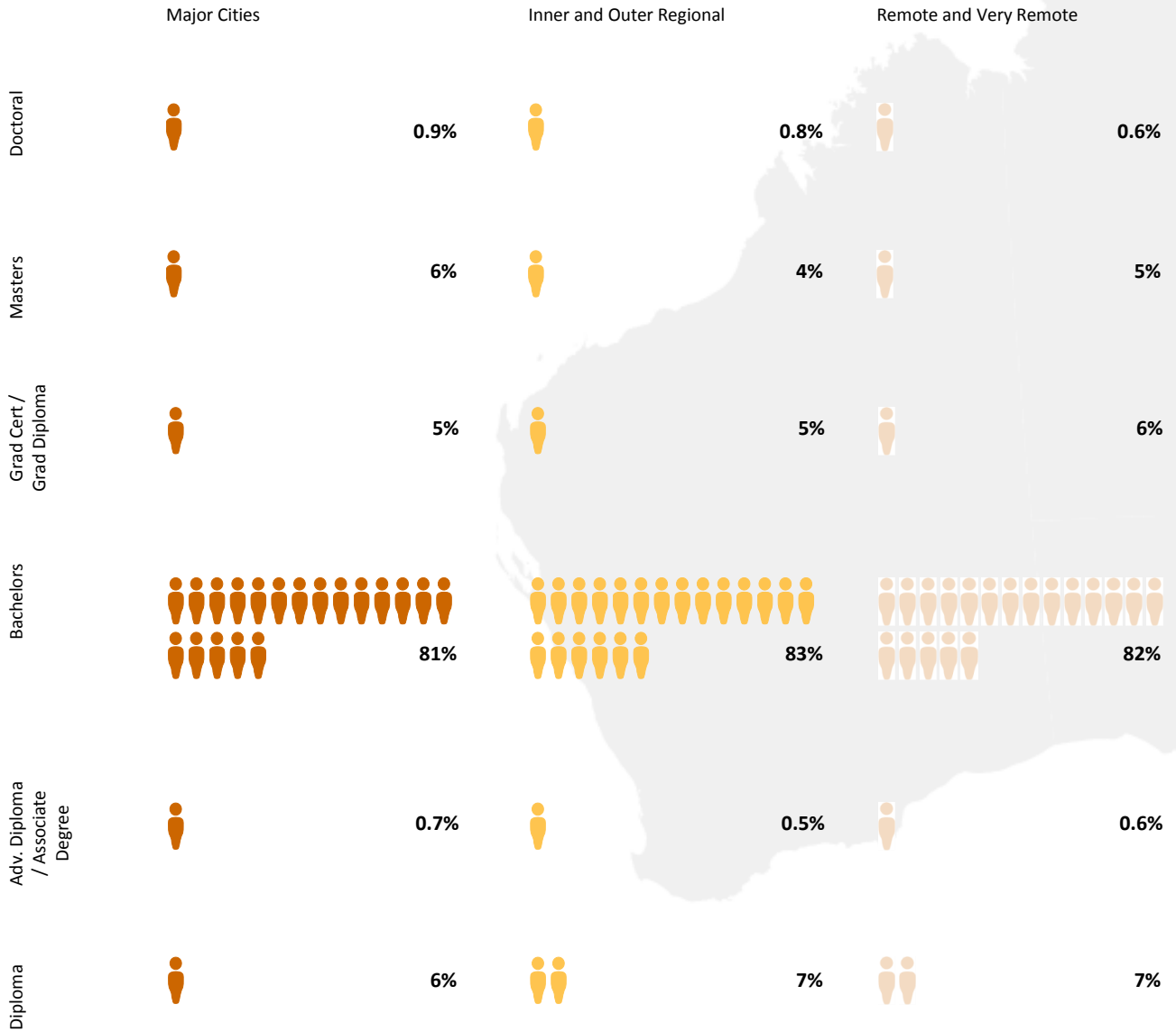
Across different school types, combined schools have the highest proportion of Doctoral and Masters degree qualifications outside education, but the overall percentage for postgraduate qualifications is evenly spread.



# Level of Study (non Education)

## Remoteness

The five remoteness categories were grouped into three groups to understand the distribution of field of study for non education qualifications around Australia. Differences are not large but regional areas have the lowest proportion of postgraduate qualified teachers (9.1%) compared to major cities (12.2%) and remote area (11.0%).



### Jurisdictional comparison

Availability of qualification data represents historical requirements for capturing this information for the purposes of registering a teacher. There are similarities in the distribution of levels non education teaching qualifications around the country but in vidual differences do exit. ACT has the greatest proportion (25.5%) of qualifications at the postgraduate level, followed by the Northern Territory (15.2%) and Western Australia (13.1%). The result in the ACT is offset by lower Bachelor's degrees as behind Queensland (10.7%), the ACT has the second highest proportion of degrees below a Bachelors degree (10.1%).

	ACT	NSW	NT	QLD	SA	TAS	VIC	WA
	<b>Percentage of teachers with a qualification captured</b>							
	100%	73%	92%	98%	97%	92%	40%	86%
	<b>Known percentage of employed teachers with a non education qualification</b>							
	45%	25%	37%	33%	29%	39%	21%	31%
Doctoral	1.7%	0.6%	0.4%	0.9%	1.0%	0.8%	0.7%	1.2%
Masters	10.2%	6.0%	7.3%	4.9%	4.8%	2.9%	4.5%	4.6%
Grad Cert / Grad Diploma	13.6%	6.1%	7.5%	4.1%	6.2%	3.4%	3.2%	7.3%
Bachelors	64.4%	83.9%	77.5%	79.3%	81.6%	87.3%	85.1%	80.1%
Adv. Diploma / Associate Degree	2.1%	0.0%	0.5%	0.7%	0.6%	0.4%	1.2%	1.2%
Diploma	7.9%	3.4%	6.7%	10.0%	5.9%	5.3%	5.5%	5.6%

# Institution for Education Qualifications

This page provides a deeper understanding of the three most common education qualifications amongst teachers: Graduate Diploma, Bachelor Degree and Diploma in Education. For this analysis only qualifications awarded after 2007 were included. This is to make some allowance for under-reporting across jurisdictions in earlier periods.

This analysis compares recent graduates across four dimensions in respect to the current known employed teachers and the proportion of teachers in that category. The highest five ranking institutions are shown. A minimum of 10 teachers were required in a category for it to be considered (e.g. 90.2% of graduates from the University of NSW who are known employed are working in low SES schools).

A greater understanding of the students being graduated and the type of school they teach in, can lead to more appropriate design of initial teacher education courses.

Indigenous Teachers	Teachers in Remote Locations	Teachers in Low SES located schools	Secondary School Teachers
Batchelor Institute of Indigenous Tertiary Education <b>87.5%</b>	Batchelor Institute of Indigenous Tertiary Education <b>64.0%</b>	Batchelor Institute of Indigenous Tertiary Education <b>86.9%</b>	University of New South Wales <b>90.2%</b>
Australian Catholic University <b>6.5%</b>	Curtin University <b>14.7%</b>	Southern Cross University <b>52.2%</b>	Australian College of Physical Education <b>75.5%</b>
University of Western Sydney <b>6.3%</b>	Charles Darwin University <b>14.2%</b>	University of Tasmania <b>48.9%</b>	University of Western Australia <b>66.8%</b>
University of Sydney <b>5.8%</b>	Edith Cowan University <b>14.1%</b>	University of South Australia <b>42.1%</b>	University of Adelaide <b>60.5%</b>
University of Newcastle <b>5.1%</b>	Murdoch University <b>13.2%</b>	University of Southern Queensland <b>40.1%</b>	University of Queensland <b>53.4%</b>

### Movement from qualification institution to teaching position

Our analysis looked at the state of the institution that a teacher received an education qualification and where they now teach. This provides an understanding of mobility of the teachers post receipt of their qualification as well as the source of teachers for different jurisdictions. As with the previous page, only Graduate Diploma, Bachelor Degree and Diploma in Education were included in this analysis but no restriction on graduation year was applied.

**Jurisdiction of Education Qualification**

		ACT	NSW	NT	QLD	SA	TAS	VIC	WA	MJ*	OS*
Jurisdiction of Current Employment	ACT	50%	21%	1%	2%	2%	1%	5%	2%	17%	
	NSW	1%	86%	0%	1%	1%	0%	2%	1%	5%	3%
	NT	1%	13%	31%	12%	10%	2%	19%	5%	3%	5%
	QLD	0%	5%	0%	84%	1%	0%	3%	1%	3%	3%
	SA	0%	1%	1%	0%	92%	0%	2%	0%	1%	2%
	TAS	0%	5%	0%	2%	1%	81%	5%	1%	1%	1%
	VIC	0%	3%	1%	1%	1%	1%	79%	1%	9%	4%
	WA	0%	1%	0%	1%	0%	0%	2%	91%	1%	4%

\*MJ = multi jurisdictional

\* OS = overseas

The table above shows that, for all jurisdictions, the majority of teachers are teaching in the same jurisdiction as where their institution was located. This does though vary by jurisdiction with Northern Territory and ACT in particular having the lowest rates of teachers qualified in their jurisdiction. For the Northern Territory, teachers are trained in predominantly Victoria, New South Wales or Queensland. For the ACT, these teachers come from NSW or multi jurisdictional institutions, which includes the Australian Catholic University.

Victoria and Western Australia have the highest proportion of their teachers who received their qualification from overseas.

This table is designed to be read across to understand the mix of teachers in each jurisdiction. Though not presented an alternate view is vertical to understand the proportion of teachers that move from a jurisdiction to another one. There may be a temptation to use this view to understand supply of graduates and meeting demand for teachers. This however is subject to possible confusion through multi jurisdictional institutions (where campus is not available), overseas institutions, additional registrants and those that have left the workforce. For these reasons, this analysis requires additional longitudinal data.,

# Pathways to a Teacher Education Qualification

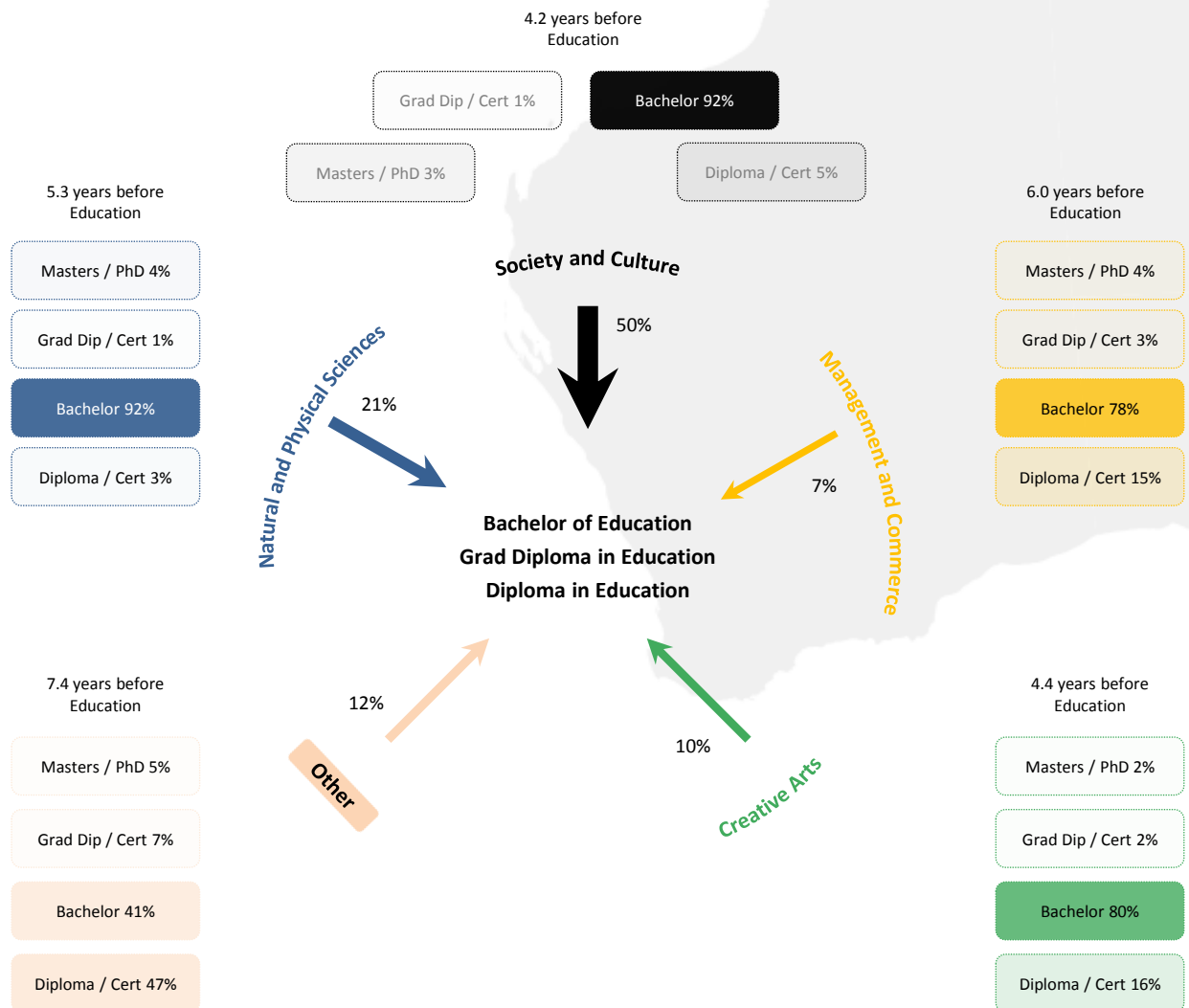
## Pathways into Education

This analysis presents information on qualifications that teachers received before or concurrently with their teacher education qualification (either a Bachelor, Graduate Diploma or Master of Teaching). The outer circle in the graphic represents the field of study that a teacher had a qualification in separate from their teacher education qualification. The outer boxes are the level of the separate qualification. The centre lists the teacher education qualification they received. The average years gap between graduating with the prior degree and graduating with the education qualification is also shown.

Analysis was limited to teachers with one of the education qualifications only. 52,061 teachers had another qualification received before, or concurrently, with that education qualification.

The analysis shows that for the four major fields of study that bachelor degree is the most common level. For other fields, diplomas or certificates are more common.

Teachers who studied Society and Culture, and Creative Arts complete (and by inference start) their education qualification sooner than other fields of study.



# Qualifications following Teacher Education

## Qualifications following Teacher Education

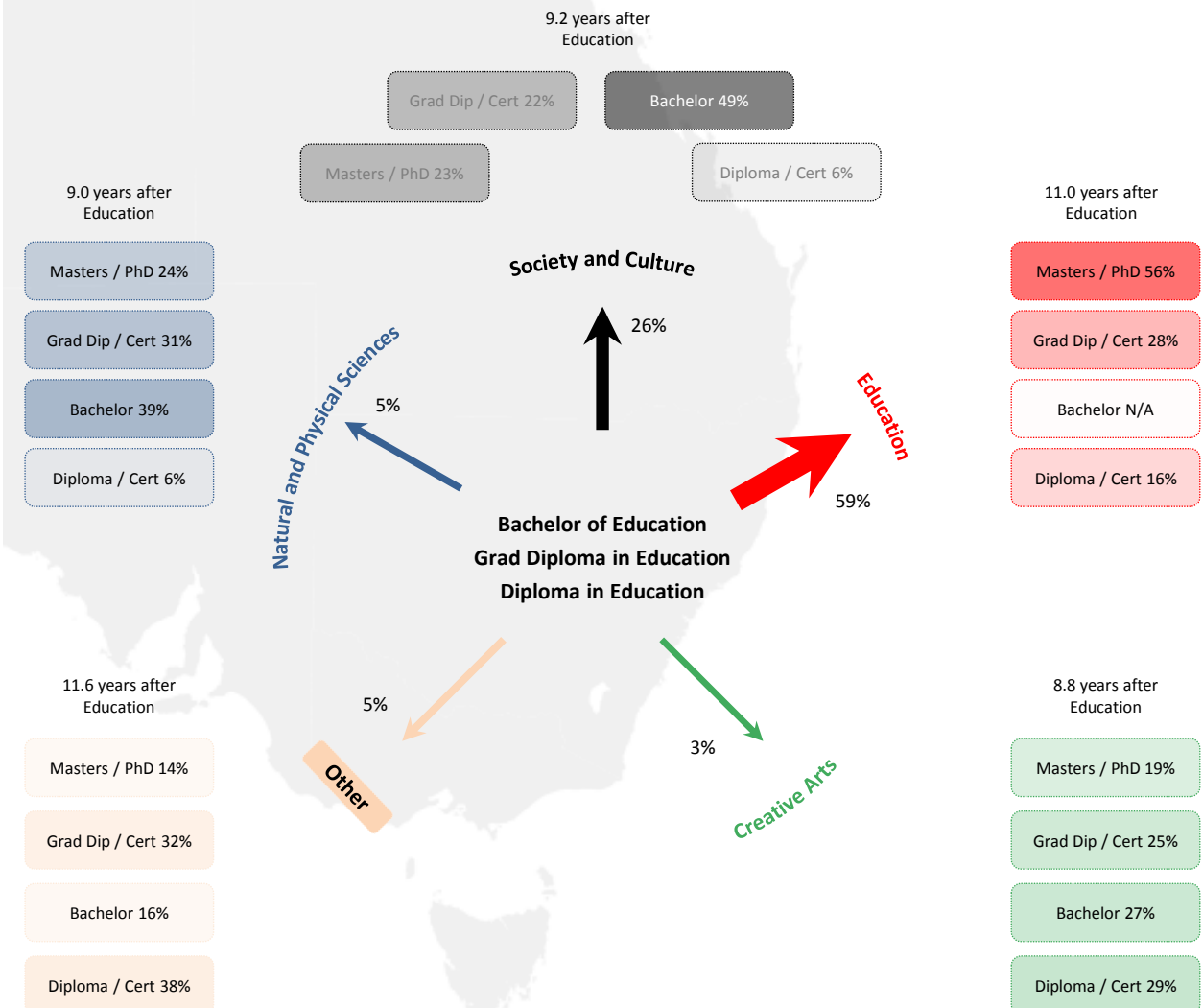
This analysis represents the alternate analysis to that opposite. In this instance, the analysis is of qualifications after graduation from the education qualification (either a Bachelor, Grad Diploma to Diploma in Education).

There were 11,510 teachers with a qualification after their education qualification. This is 22% of those who had a qualification prior to their education qualification.

The pattern is quite different to the previous page. Education is now one of the top four fields being studied, which may be expected, given these individuals now have a teaching qualification.

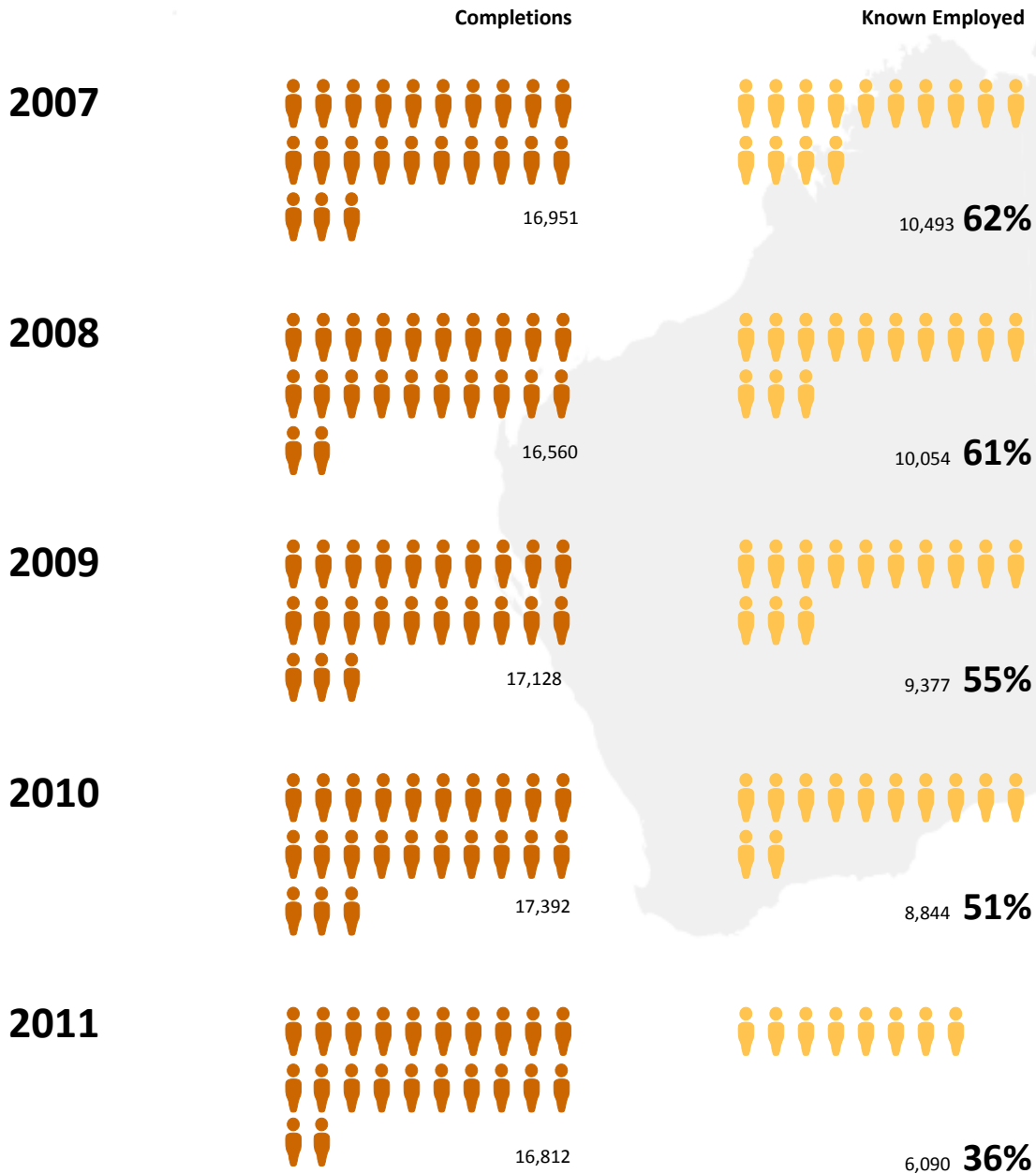
There is also a greater spread across different levels and more teachers obtain postgraduate s after their teaching qualification than before. Despite the lower numbers graduating after their teacher qualification, there are three times as many postgraduate qualifications obtained after the teaching qualification than before. This may suggest that if highly skilled individuals are needed in teaching then developing exiting teachers may be a path to consider.

Post education qualifications are also undertaken later and are assumed to commence between six and eight years after the teaching qualification has been received.



# Teacher education graduates in the teaching workforce

Using aggregate university completions data from the Higher Education Statistics collection allows to see whether graduates in the years 2007 – 2011 are currently known to be employed in a teaching role, are an additional registrant or cannot be located in the NTWD. The completions data is summary in nature so it is not possible to track individuals from completion to workforce, but analysis can be performed on some available variables.





The data tends to exhibit a consistent trend of around 60% of graduates being identified as known employed and 20% additional registrants. The exception is 2011 where the proportions are less towards known employed and the unknowns are also higher. This may be due to these graduates being newer to the workforce.

There are a number of teachers whose graduation year was not available in the data provided and could not be included in the graphic below. Of teachers with a graduation year, 78% of teachers aged 20-29, 20% of teachers aged 30-39, and 12% of teachers aged 40-49 received their teaching qualification between 2007 and 2011. Applying this measure, indicates a further 3,194 teachers would be classified as known employed and 4,720 would be additional registrants. These teachers would be classified as Unknown in the categorisation below. If applied consistently over the years this would increase the percentage of known employed by 4%, increase the percentage of the additional registrants by 6% and reduce the unknown percentage by 10%.

# Teacher education graduates in the teaching workforce

## Gender comparison

The trends of entrance into employment are similar for both male and female teachers. Between 2007 and 2009, a slightly higher proportion of female graduates are, within the NTWD, identified as being known employed or as additional registrants (average difference 1.5%), and this impact reverses for 2010 and 2011 (average difference 2.8%). There is not sufficient data to further investigate why this may be.

		Completions	% Known Employed	% Additional Registrants	% Unknown
2007	Female	12,674	 63%	 19%	 18%
	Male	4,277	 61%	 18%	 21%
2008	Female	12,491	 60%	 22%	 18%
	Male	4,069	 63%	 19%	 18%
2009	Female	12,912	 55%	 22%	 23%
	Male	4,216	 55%	 20%	 25%
2010	Female	13,180	 50%	 23%	 27%
	Male	4,212	 53%	 22%	 25%
2011	Female	12,866	 35%	 31%	 34%
	Male	3,946	 39%	 31%	 30%



END

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