Aboriginal and Torres Strait Islander Teacher 2015 Workforce Analysis

More Aboriginal and Torres Strait Islander Teachers Initiative

MARCH 2017

Australian Government

Aboriginal and Torres Strait Islander Teacher 2015 Workforce Analysis

Workforce data analysis for this report was prepared by Ernst and Young (EYC3).

This project was funded by the Australian Government through the More Aboriginal and Torres Strait Islander Teachers Initiative (MATSITI).

Further information about the More Aboriginal and Torres Strait Islander Teachers Initiative is available at www.matsiti.edu.au.

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Foreword

The More Aboriginal and Torres Strait Islander Teachers Initiative (MATSITI) was a four year national program, from 2012 to 2015, to increase the number of Aboriginal and Torres Strait Islander people becoming and remaining as teachers and leaders in Australian schools.

Under MATSITI, Ernst and Young (EYC3) prepared the *Analysis of the 2015 Aboriginal and Torres Strait Islander Teaching Workforce* which was completed in March 2016. This analysis made comparisons on a range of measures between the 2015 and 2012 available data for Aboriginal and Torres Strait Islander teachers employed in government and non-government schools in all Australian states and territories.

Efforts in ascertaining an accurate picture of Aboriginal and Torres Strait Islander people's participation as teachers and student teachers were hampered by limited visibility of workforce data on the part of some government, Catholic and independent school jurisdictions and universities across Australia. In that context, the EYC3 analysis provides some valuable trend data and findings.

The 2012 and 2015 data mapped the Aboriginal and Torres Strait Islander teacher workforce in terms of their school settings, types of locations, age, gender, promotional level and employment type.

Key findings on the numbers of Aboriginal and Torres Strait Islander teachers include:

- 3100 teachers identified as Aboriginal and Torres Strait Islander in 2015. This represents 1% of the total teacher workforce in Australia. Also in 2015, 5.3% of school students identified as Aboriginal and Torres Strait Islander
- 2661 teachers identified as Aboriginal and Torres Strait Islander in 2012
- Between 2012 and 2015 there was a net increase in teachers identifying as Aboriginal and Torres Strait Islander of 439
- Between 2012 and 2015, 697 new Aboriginal and Torres Strait Islander teachers were recruited in schools
- 1001 Aboriginal and Torres Strait Islander teachers who were employed in 2012 were not captured in 2015 data and for the purposes of the analysis were regarded as having left teaching.

These findings reveal that the apparent growth in Aboriginal and Torres Strait Islander teachers is low and their representation is far lower than that of Aboriginal and Torres Strait Islander school students. Also, MATSITI research has revealed that most employment growth was achieved by a small number of school jurisdictions, rather than being evenly distributed across Australian employers.

Many government policies during the last five decades have committed to increasing the number of Aboriginal and Torres Strait Islander teachers to improve student outcomes. Even with school and teacher education stakeholders taking action to fulfil these commitments, change from the current situation cannot be measured without effective data collection systems which have regard for privacy provisions and the cultural safety of teachers identifying as Aboriginal and Torres Strait Islander.

The government strategy *Closing the Gap* aims to "halve the gap in employment outcomes between Indigenous and non-Indigenous Australians [by 2018]". EYC3 projections indicate that at the current rate, the education sector will contribute only modestly to this outcome.

Professor Peter Buckskin PSM,FACE

Project Director, More Aboriginal and Torres Strait Islander Teachers Initiative

Dean: Aboriginal Engagement & Strategic Projects

University of South Australia

Part I
Executive Summary

Executive summary

Background

This report provides a workforce profile of Aboriginal and Torres Strait Islander (Indigenous) teachers in Australia in 2015. EYC3 was commissioned to prepare this report by the More Aboriginal and Torres Strait Islander Teachers Initiative (MATSITI).

This research provides a follow up to the Aboriginal and Torres Strait Islander Teacher Workforce Analysis published in October 2014. The earlier report used data from the National Teaching Workforce Dataset (NTWD) to provide an understanding of the Indigenous teaching workforce in 2012. This report provides a deep understanding of the workforce in 2015 and highlights changes over the last three years. The scope of the data analysis includes demographics, qualifications, employment status and school type.

The data is intended to inform the development of future workforce planning, and lasting reforms by school jurisdictions and university faculties of education to increase the number and capacity of Aboriginal and Torres Strait Islander teachers working in Australian schools.

Data collected

Data was collected from a variety of sources including jurisdictional employers, jurisdictional regulators and through online surveys of Indigenous teachers in selected jurisdictions. In addition, approval was received from the Australian Government Department of Education and Training to make use of the 2012 NTWD.

The data collection methodology was similar in the nature to the 2012 approach in terms of how data was managed, including privacy controls, data standardisation and normalisation and analysis and reporting. This also means that many of the data limitations inherent in the 2012 analysis remain for this 2015 analysis. In addition, data was unable to be provided by all custodians in 2015. Data limitations are captured in more depth later in this report.

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Process

The following were the key process steps in developing the Analysis of the 2015 Indigenous Teaching Workforce.

- Stakeholder liaison in every state and territory to explain the purpose of the analysis and outline the process to be undertaken to manage data.
- Agreement with employers and regulators on the preferred method for data capture.
- Design, implementation and deployment of a quantitative survey for jurisdictional employers where this was identified as the preferred method of data capture.
- Preparation and agreement of confidentiality agreements with jurisdictional employers and regulators who were supplying data with an extraction from their administrative systems.
- Creation of a quarantine environment for housing and analysing the data for the purposes of the analysis.
- Creation and review of draft and final reports prior to issue.

Executive summary

Structure of this report

With the data collected, it was not possible to repeat the analysis undertaken on the 2012 workforce for the 2014 report. This analysis compared the Ingenious teaching workforce to the non-Indigenous teaching workforce and leveraged the full data available from the NTWD. This report adopted an alternate approach and instead compared the 2015 Indigenous teaching workforce to the 2012 Indigenous teaching workforce.

This analysis reports initially compares the 2015 collected data with that from 2012.

Following this, different cohorts of the Indigenous teaching workforce are compared for similarities and differences. Definitions of the characteristics of teachers for each cohort can be found in each section. The five cohort comparisons are:

- Comparison 1: New and Existing teaching workforces
- Comparison 2: New and Left teaching workforces
- Comparison 3: Left and Existing teaching workforces
- Comparison 4: Existing teaching workforce development
- Comparison 5: Indigenous status changes for Existing teaching workforce

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Summary of key findings

The key findings for Indigenous teachers in 2015 are:

- 3,100 teachers identified as being of Indigenous status in 2015.
- 2,661 teachers identified as being of Indigenous status in 2012. However, when data from 2015 was matched to the 2012 data, 743 teachers had updated their status in 2012 from non-Indigenous or unknown to Indigenous.
- The median age of Indigenous teachers is 40 years old.
- 75% of Indigenous teachers are female.
- 83% of Indigenous teachers work full-time.
- 83% of Indigenous teachers are classroom teacher. 188 (7%) are deputy principals and 89 (3%) are principals.
- 57% of Indigenous teachers work in primary schools, 32% at secondary schools and 11% at combined schools.
- 80% of Indigenous teachers are in ongoing employment, 17% are on a fixed term contract and 3% are casual.
- 49% of Indigenous teachers are employed in a major city while 10% are employed in remote or very remote areas.

About MATSITI

The More Aboriginal and Torres Strait Islander Teachers Initiative (MATSITI) Project is a four-year national scheme to increase the number of Aboriginal and Torres Strait Islander people entering and remaining in teaching positions in Australian schools.

Key outcomes for the MATSITI project include:

- comprehensive qualitative and quantitative research reports on background factors and various strategies and their effectiveness in increasing the number of Aboriginal and Torres Strait Islander teachers;
- a series of partnerships and co-investment agreements with school authorities, university schools of education and other agencies to achieve lasting reform;
- a national community engagement and marketing strategy to promote teaching as a career option for secondary Aboriginal and Torres Strait Islander students and adults.

The MATSITI project is aligned with the Council of Australian Governments (COAG) National Indigenous Reform Agreement and associated Closing the Gap targets to address Indigenous disadvantage.

The $7.5 million MATSITI Initiative was announced by the Commonwealth Minister for Schools, Early Childhood and Youth in July 2011 and is funded by the Australian Government; it is now administered by the Department of Prime Minister and Cabinet.

The Initiative was led by senior Aboriginal and Torres Strait Islander educators, with secretariat and research support provided by the office of the Dean: Aboriginal Engagement & Strategic Projects, located within the University of South Australia.

Part II
Methodology

Methodology

Preparatory activities

Prior to commencement of the collection, a scoping study was undertaken to assess the viability of the collection being performed. This identified a number of potential risks to a successful collection and these were incorporated into the methodology where appropriate

As result of the scoping study, a number of decisions were made to minimise burden on data custodians in comparison to the 2012 NTWD collection, and for this purpose. This included:

- Reduction of the requested data items from 45 to 21 to enable focus on those known to add value to the analysis and where any data quality issues identified were acceptable.
- Only data on teachers who had identified as being of Indigenous status was requested. As such, this excluded both non-Indigenous teachers and those who had not self-identified.
- Leverage off the approach for the NTWD in relation to:
    - Restriction so that any personally identifiable information was not made available to EYC3 in a directly identifiable format. This leveraged the “hash” approach used in 2012.
    - Similar themed confidentiality agreements which re-iterated obligations previously made in relation to data protection.
    - Utilisation of quarantine environment for data storage and analysis.
    - Provision of data in an unchanged manner meaning EYC3 would centrally normalise data to the standards defined for the NTWD.

Once these issues were accepted, it was determined to proceed with the collection and analysis.

Stakeholder liaison

Jurisdictional workshops were hosted in every capital city with employer and regulator representatives invited to attend. These sessions provided an open forum for potential data custodians to present views on the data collection so that alternates could be identified.

In some jurisdictions, employers were not comfortable providing their administrative data without consent from teachers. In these instances, an online survey was established and these data custodians were asked to encourage their Indigenous teachers to complete the survey. Consent to the use of data was explicitly stated on the survey and this was then collated for analysis.

Participating data custodians were provided with personalised confidentiality agreements and a data request at the same time. Appropriate sign offs were sought and data could then be provided. A hash utility was used to minimise the risk of re-identification of any individual and data was then made available to EYC3 for subsequent analysis.

In parallel to the activities above, formal endorsement to use the 2012 NTWD was sought, and received, from the Australian Government Department of Education and Training. This was an essential requirement to enable comparisons between the Indigenous teaching workforce in 2012 and 2015.

Methodology

Data requested

The following data items were requested from data custodians and through the online survey. Not all custodians were able to supply all data items.

Proposed data items

Demographics	Gender
	Age / year of birth
	Aboriginal and/or Torres Strait Islander status
Qualifications	Level
	Field
	Institution
	Year
Registration	Regulatory authority
	Conferral year
	Teaching restrictions
	Registration status
Employment	Employment status
	Time fraction employed
	Type of employment
	Employee classification
School	School type
	School sector
	School location

Preparation of the 2015 Indigenous Teaching Workforce Dataset

Raw data received from either online surveys or data custodians was loaded into the quarantine environment inside EYC3. Data was checked for alignment to the data request and previous custodian feedback on availability. Where differences were observed, these were followed up directly with data custodians.

Once data was loaded, standardisation scripts were applied to normalise the data to those used for the NTWD. The NTWD was chosen as the standard to minimise cost, effort and time associated with redefining a new standard. It also allowed for more direct comparisons with the 2012 dataset to be performed. In some cases, new data values emerged that were not present in the 2012 data but encoding rules were developed to standardise these as well.

Following standardisation of the 2015 data collected, this was integrated with the 2012 data. This was to enable the analysis to understand any changes between these time periods as reflected in the data captured for them. As expected, not all 2012 teachers could be located in the 2015 dataset and vice versa; however the data of all teachers was used for subsequent analysis.

Data gaps and limitations

There were several data gaps and limitations in the completeness and/or accuracy of the data collected that has impacted the analysis of the Indigenous teaching workforce. Many of these were identified in 2012 and can be referenced in the 2014 report. These are not repeated in depth here but include:

- Extensive use of free text, particularly in relation to qualification data.
- Potential incompleteness of qualification data where qualifications, outside the one required to teach, are optional to provide.
- Self reporting of some data fields, including Indigenous status.
- Some data custodians do not request data on the Indigenous status of their teachers/registrants.
- Some data items may be subject for misinterpretation. An example is "years with employer" which should be viewed as a proxy for experience but there are circumstances where this may not be correct. These include changing employer or jurisdiction or being on extended leave.
- In addition to issues that arose in 2012, other data limitations specific to the 2015 Indigenous teaching workforce data include:
- Data from regulators was only able to be captured from three jurisdictions. This limits the ability to compare teachers registered but not employed as was able to be done with 2012 and will result in a lower total count.
- Data was not received from all* employers or regulators. Similar to the comment above on regulators, this will result in a lower total count.
- Timing of data collection from the jurisdictions was dependent on a number of factors such as legal processes and resource availability. Variations in the timing of the data extraction and release may have occurred.
- The comparison of the 2012 and 2015 Indigenous workforces was conducted by matching the two datasets used three matching keys (in de-identified format). The matching rate was high, however, the variations between the two datasets (e.g. maiden name existing in the 2012 NTWD but married name in the 2015 Indigenous Teaching Workforce Dataset dataset) may have led to either incorrectly unmatched teachers or incorrectly duplicated matches.
- The 2015 survey data was not compulsory and reliant on participation in the absence of any direct incentive. This may mean response rates do not represent the true number of Indigenous teachers. It should though be noted that surveys were conducted with organisations that were unable to participate in the 2012 NTWD and so any data collected on these teachers is "new".

*The Northern Territory Department of Education and Teacher Registration Board of Western Australia chose not to participate in the data collection.

The Catholic Commission NSW, Queensland Catholic Education Commission and all State and Territory Independent School authorities opted for a teacher workforce survey rather than a data collection.

Part III
Comparison of the 2012 and 2015 Indigenous Teaching Workforces

Data Preparation

To support an understanding of the movements of the Indigenous teaching workforce from 2012 to 2015, the National Teaching Workforce Dataset (2012) and the 2015 Indigenous Teaching Workforce Data were integrated and compiled. This compilation was then divided into four cohorts showing below, noting that some of the data limitations identified earlier in this report may mean some error in these cohorts.

Legend, Summary Statistics and Definitions

- **1,660** teaching workforce members who were employed in both 2012 and 2015, and were recorded with an Indigenous status in both years. Classified as "**Existing" (no status change)"**.
- **743** teaching workforce members who were employed in both 2012 and 2015, and were only classified with an Indigenous status in 2015. Classified as "**Existing (changed status)"**.
- **1,001** Indigenous teaching workforce members who were part of the 2012 NTWD collection but not able to be identified in 2015. Classified as "**Left"**.
- **697** teaching workforce members who were newly employed after 2012 and before 2015, and were classified with an Indigenous status. Classified as "**New"**.

= approximately 100 individuals

Key observations of the 2012 and 2015 Indigenous teaching workforces

Statistics for the 2012 and 2015 Indigenous teaching workforces

In order to gain an understanding of the similarities and differences of the overall 2012 and 2015 Indigenous teaching workforces, summary statistics are presented below. The 2012 Indigenous teaching workforce was analysed in the 2014 report, however, as stated previously, 743 teachers had updated their status in 2012 from non-Indigenous or unknown to Indigenous. To construct a more precise image for the 2012, these teachers were combined with the original 2012 Indigenous teaching workforce (2,661) when analysed.

The following are the basic statistics for all of the 3,404 2012 Indigenous teaching workforce:

- The median age was 41 years old.
- 76% of teachers were female.
- 85% of teachers worked full-time and the remaining 15% worked part-time.
- 86% were classroom teacher while 55 (2%) were deputy principals and 98 (4%) were principals.
- 53% of teachers taught at primary schools, 29% at secondary schools and 18% at combined schools. For states other than NSW, 50% of teachers taught at primary schools, 24% at secondary schools and 26% at combined schools
- 78% were on a ongoing contract, 15% were on a fixed term contract and 7% were on a casual contract.
- 44% were employed in a major city while 15% were employed in remote or very remote areas. For states other than NSW, 36% were employed in a major city while 24% were employed in remote or very remote areas.

Overall, demographic characteristics are mostly unchanged between the 2012 and 2015 Indigenous teaching workforces.

The 2015 Indigenous teaching workforce is more concentrated in major cities compared to that in 2012. There are a higher number of deputy principals, and less teachers were employed with casual contracts in 2015.

The following are the basic statistics for all of the 2015 Indigenous teaching workforce (3,100) :

- The median age is 40 years old with 75% of teachers being female.
- 83% of teachers work full-time and the remaining 17% work part-time.
- 83% are classroom teacher while 188 (7%) are deputy principals and 89 (3%) are principals.
- 57% of teachers teach at primary schools, 32% at secondary schools and 11% at combined schools. For states other than NSW, 54% of teachers teach at primary schools, 29% at secondary schools and 17% at combined schools.
- 80% are on ongoing contracts, 17% are on fixed term contracts and 3% are on casual contracts. For states other than NSW, 72% are on ongoing contracts, 24% are on fixed term contracts and 4% are on casual contracts.
- 49% are employed in a major city while 10% are employed in remote or very remote areas. For states other than NSW, 42% are employed in a major city while 18% are employed in remote or very remote areas.

Key observations of the 2012 and 2015 Indigenous teaching workforces

Degree Level	2012	2015
Doctoral Degree Level	0.4%	0.1%
Master Degree Level	5.7%	5.3%
Graduate Diploma Level	13.2%	6.4%
Graduate Certificate Level	1.9%	1.5%
Bachelor Degree Level	55.8%	67.2%
Bachelor degree and above	77.0%	80.4%
Advanced Diploma and Associate Degree Level	0.6%	1.3%
Diploma Level	18.5%	12.7%
Certificate III & IV Level	1.5%	3.8%
Certificate I & II Level	2.3%	0.3%
Miscellaneous Education	0.1%	1.4%

This analysis looks at the qualifications of the 2012 and 2015 Indigenous teaching workforce. The percentage of teachers with a bachelor degree or above increased by **3.4%** from 2012 to 2015.

The percentage of teachers who held a Graduate Diploma Level Degree in 2015 was less than half of those in 2012.

The top 5 study fields other than Education did not change for the 2012 and 2015 teaching workforce. The number of Indigenous teachers reporting qualifications in Society and Culture; Health; and Management and Commerce rose while Natural and Physical Sciences and Creative Arts fell.

Top 5 Study Fields 2012		Top 5 Study Fields 2015	
Society and Culture	12.7%	Society and Culture	15.3%
Natural and Physical Sciences	5.3%	Natural and Physical Sciences	3.0%
Creative Arts	2.1%	Management and Commerce	2.3%
Management and Commerce	1.7%	Health	2.2%
Health	1.1%	Creative Arts	1.3%

Key observations of the 2012 and 2015 Indigenous teaching workforces

Movement from qualification institution to teaching position:

Analysis was performed on the state(s) of the institution that an Indigenous teacher received their initial teacher education qualification* (defined as either a bachelor, graduate diploma or master degree in education), and where they now teach. This provides an understanding of mobility of the 2015 Indigenous teaching workforce post conferral of their qualification.

* Some institutions (e.g. ACU) were defined as in multiple jurisdictions

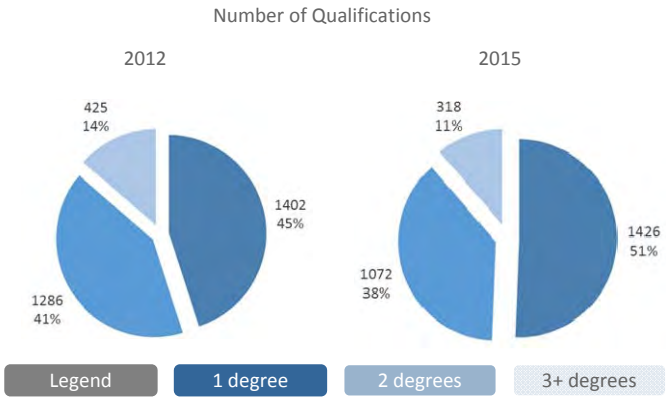
The analysis showed that, in large part, Indigenous teachers work in the jurisdiction in which they completed their studies. This observation is consistent with that of in 2012. However the ACT showed a different pattern, where teachers working at ACT have also graduated from NSW, QLD and other states. Blank values indicate no movement, whereas values at 0% are indicative of some movement that has been subject to rounding down.

Jurisdiction of Education Qualification

Jurisdiction of Current Employment	ACT	NSW	QLD	SA	NT	TAS	VIC	WA	Multiple	Total
ACT	20%	33%	14%						33%	100% (15)
NSW	1%	81%	2%	0%	0%		1%	1%	14%	100% (1161)
QLD		8%	86%	0%	1%	0%	2%	0%	3%	100% (479)
SA		1%		97%	1%				1%	100% (100)

Number of qualifications:

In the 2012 teaching workforce, the percentage of teachers with one qualification was 6% lower than that of the 2015 teaching workforce. Whereas the percentage of teachers with two or more qualifications were higher for the 2012 teaching workforce.



Part IV
Cohort Analysis

Cohort Analysis

To gain a deeper understanding of the dynamics between the 2012 and 2015 Indigenous teaching workforces, considering movements of teachers over the two time periods. The two teaching populations were compiled and divided into four cohorts depending on the availability of their data during the two periods. The cohorts and their definitions were presented in the Data Preparation section.

The four cohorts were utilised to form five comparisons to explore any observable dynamics in demographic or employment characteristics across time.

The five cohort comparisons are:

- Comparison 1: New and Existing teaching workforces
- Comparison 2: New and Left teaching workforces
- Comparison 3: Left and Existing teaching workforces
- Comparison 4: Existing teaching workforce development
- Comparison 5: Indigenous status changes for Existing teaching workforce

The number of teachers (by cohort) involved in each comparison was firstly presented. Observations were obtained using different approaches depending on the comparison, and captured dynamics were presented:

- The approach for the **New and Existing Teaching Workforces Comparison** was to obtain demographic and employment patterns within each cohort and compare between the two cohorts.
- The approach for the **New and Left Teaching Workforces Comparison** was similar to the one used in the previous comparison. In addition to this some analyses were done separately on states other than New South Wales.
- The approach for the **Left and Existing Teaching Workforces Comparison** was different to the previous two. To observe potential reasons for leaving, data of the Left and Existing teaching workforces in 2012 were analysed as a whole, and demographic and employment characteristics were explored for teachers who left after 2012 in comparison with teacher who stayed.
- The **Existing Teacher Workforce Development Comparison** focused on the career progression and movement of existing teachers. Employment information in the 2012 and 2015 dataset were horizontally compared for each teacher and the overall changes over time for the group were presented.
- **Indigenous status changes for Existing Teachers** was the final comparison. It involved a general overview of similarities and differences between existing teachers who changed and did not change status on their demographic and employment characteristics in 2012.

New and Existing Teaching Workforces

Comparison 1

Definitions used in this comparison:

New indicates Indigenous teachers who were not employed in 2012 but are currently employed in 2015. There are 697 teachers in this cohort.

Existing indicates Indigenous teachers who were employed in 2012 and are still employed in 2015. There are 2,403 teachers in this cohort.

Rationale:

This comparison provides an understanding of the attributes that "new" teachers are bringing to the Indigenous teaching workforce.

Key findings:

- New teachers are younger overall compared to existing teachers.
- Proportionally, more new teachers are working in major cities, inner regional and remote areas than existing teachers.

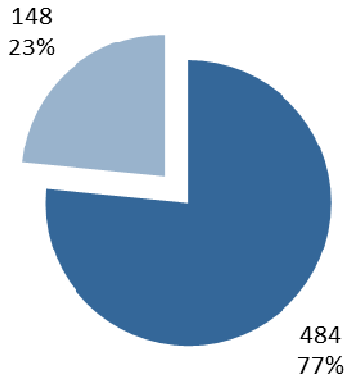
Gender

77% of newly employed Indigenous teachers are females

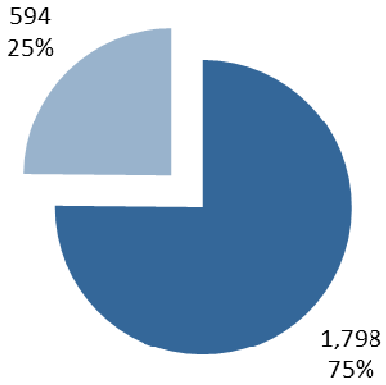
This analysis looks at the gender composition of the new and existing Indigenous teachers.

The percentage of female teachers is higher in the new teaching workforce (with a known* gender) compared to the existing teaching workforce.

77% of newly employed Indigenous teachers are female.



75% of existing employed Indigenous teachers are female.

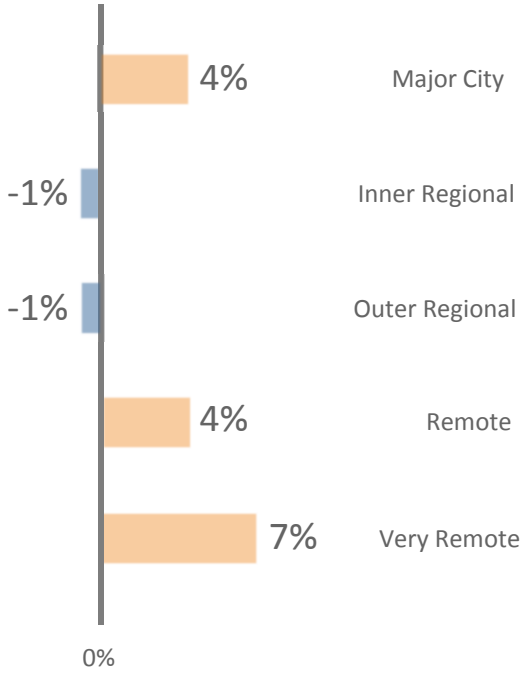


Legend | Female | Male

Gender and regional distribution

The distribution of female teachers has changed slightly. The percentage of female teachers in the new teaching workforce who are teaching in major cities, remote and very remote areas is higher than the existing workforce in 2015.

% change of new to existing female Indigenous teachers



* 9.3% of new teachers and 0.4% of existing teachers were missing gender information

Age

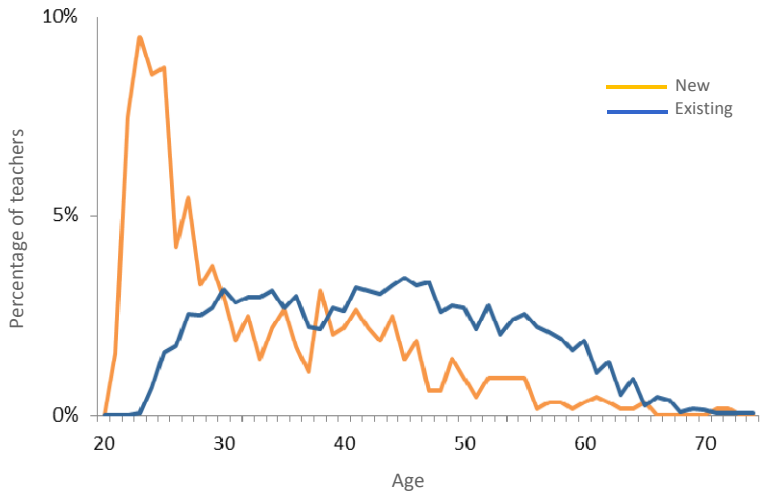
The newly employed teachers are younger overall than the existing teachers

Analysis of age enables an understanding of age profiles of the new and existing teachers, and therefore the potential years of service for both groups.

28 is the median age for **new** teachers

43 is the median age for **existing** teachers

Age distribution of new and existing teachers



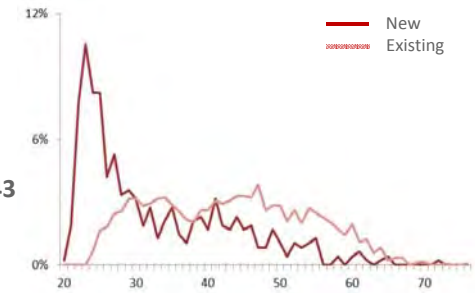
	Under 30	Above 40
New	**53%**	**23%**
Existing	**12%**	**58%**

Over half of the new teachers are under the age of 30 and over half of the existing teachers are over the age of 40.

The median age for

New female teacher: **28**

Existing female teacher: **43**



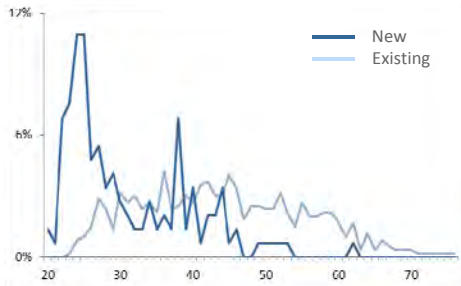
Age distribution of new and existing female teachers

From a gender perspective, the median age for new and existing teachers for both males and females showed no observable difference. Nevertheless, new female teachers appear to be slightly older than new male teachers, where 24% of them are aged over 40. This percentage is 14% for new male teachers.

The median age for

New male teachers: **28**

Existing male teachers: **43**



Age distribution of new and existing male teachers

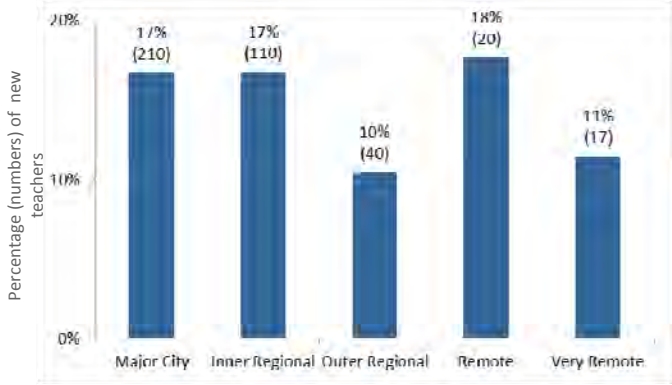
Employment

Proportionally, more new teachers are employed in major cities, inner regional and remote areas

Employment location

The majority of the Indigenous teaching workforce are concentrated in major cities and regional areas, with around **10%** in remote and very remote areas. This pattern is consistent for both new and existing teachers. In terms of the percentage of new teachers compared to existing teachers, new teachers comprise from **10%** to **18%** of the teaching workforces in different regions, where outer regional areas have the lowest percentage of new teachers.

Geographical distribution of new teachers



Employment classification

90% of new teachers are employed at classroom teachers level, which accounts for **18%** of total classroom teachers in 2015. In 2015, new teachers comprise **15%** of all executive teachers, and **7%** of deputy principals and principals.

	New Teachers	Existing Teachers
Primary	52%	58%
Combined	15%	11%
Secondary	33%	31%

Female Indigenous Teacher

Male Indigenous Teacher

Employment school

More than half of the new and existing teachers are employed by primary schools. Secondary schools employed more than **30%** of teaching workforces, this left around **10-15%** of teachers working at combined schools in both groups. The percentage of new teachers working for primary schools however is slightly lower than that of existing teachers, and higher in combined schools.

The gender composition at different school types is consistent for both new and existing teachers. The proportion of female teachers is the highest in primary schools and is lower in combined and secondary schools. This pattern was also observed in non-Indigenous teachers in 2012.*

*National Teaching Workforce Dataset - Data Analysis Report, Australian Government, June 2014

New and Left Teaching Workforces

Comparison 2

Definition:

New indicates Indigenous teachers who were not employed in 2012 but are currently employed in 2015. There are 697 teachers in this cohort.

Left indicates Indigenous teachers who were employed in 2012 but were not captured in the 2015 data. There are 1,001 teachers in this cohort.

Rationale:

This comparison provides an understanding of the attributes of teachers who have left the Indigenous teaching workforce since 2012 and whether those that have subsequently entered the workforce are similar in the attributes they bring or are bringing a different set of attributes.

Teachers who were involved in this comparison were restricted to be from the same data sources (new teachers = 697, teachers who left = 604).

Key findings:

- New teachers are younger overall than teachers who left.
- More new teachers are employed with fixed term contracts compared to teachers who left.

*National Teaching Workforce Dataset - Data Analysis Report, Australian Government, June 2014

Demographic factors

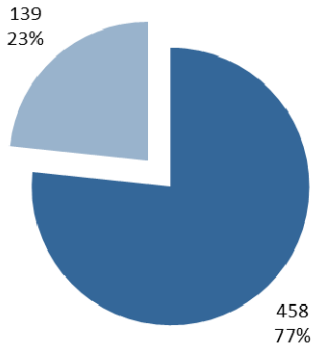
The newly employed Indigenous teachers are younger overall compared to teachers who left

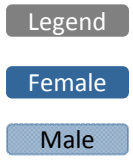
This analysis looks at the gender composition of the newly employed Indigenous teachers after 2012 and Indigenous teachers who were employed before 2012 and not captured in the 2015 database.

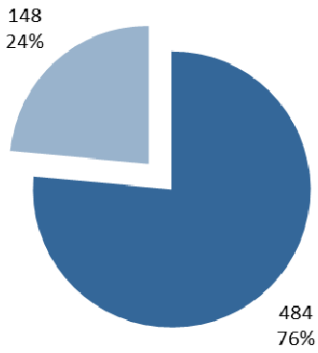
There is no noticeable changes in gender compositions of the newly employed and teachers who left.

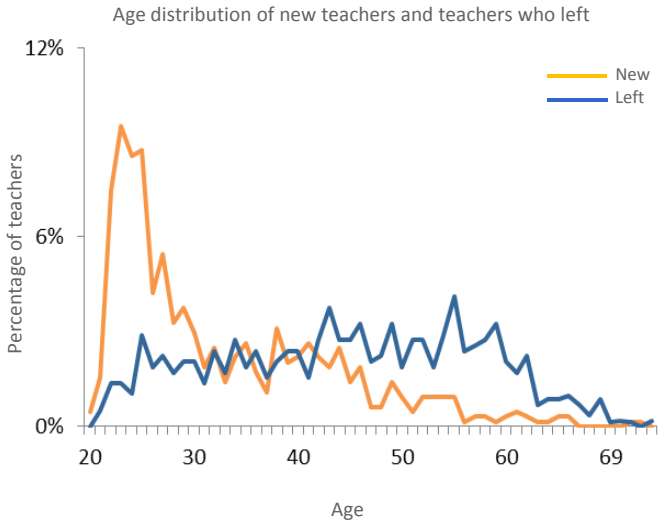
77% of newly employed Indigenous teachers are female.

76% of Indigenous teachers who left were female.









The median age for new teachers is 29, compared to 45 for teachers who left. The percentage of teachers who left and were aged over 55 was **23%**, which is **20%** more than that of new teachers. It is expected that part of the teachers who were no longer captured in 2015 data have retired.

Employment factors

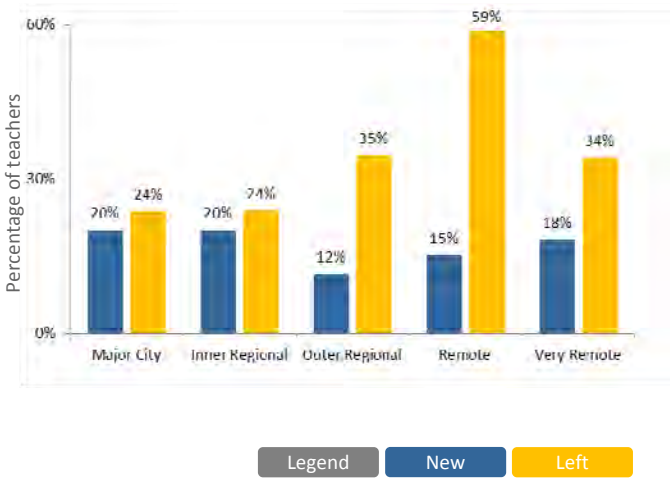
More new teachers are employed with fixed term contracts compared to those who left

Employment location

This analysis shows the effect of teachers leaving and entering the workforces on geographical teacher supply. To do this the remoteness of employers of teachers who left after 2012 and the of teachers who entered the workforce between 2012 and 2015 were independently compared with the existing workforce in the two time periods. For example, 59% of teachers working in remote areas left after 2012 and 15% of teachers in the same area joined in the workforce after 2012.

Overall the percentage of teachers who left in the 2012 teaching population was higher than the percentage of teachers who entered the 2015 workforce for all geographical areas.

Geographical distribution of new teachers and teachers who left*



* 300 new teachers and 25 teachers who left missing school remoteness data

Employment school

The distribution of new teachers in different types of schools is similar to that of teachers who left. New teachers, however, had a slightly higher percentage working in primary and secondary schools but a lower percentage in combined schools. When looking at states other than NSW, the percentage of new teachers in primary schools is in fact lower than teachers who left. Other patterns remained the same.

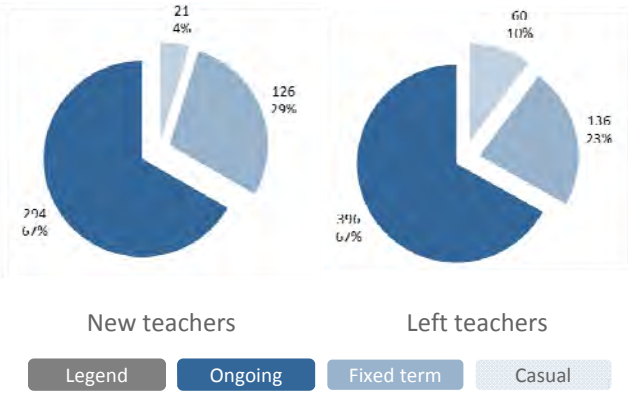
	New Teachers	Left Teachers
Primary	**52%**	**49%**
Combined	**15%**	**21%**
Secondary	**33%**	**30%**

Employment classification

Classification patterns for the new teachers are similar to teachers who left, where around **90%** of them are classroom teachers, and **6%** are executive teachers. **2%** more new teachers are employed as deputy principals compared to teachers who left and **3%** less are employed as principals.

Employment type

6% more new teachers are employed with fixed term contracts than that of teachers who left and, **5%** less on causal contracts. This could suggest a more stable demand for Indigenous teachers.



Left and Existing Teaching Workforces

Comparison 3

Definition:

Left indicates Indigenous teachers who were employed in 2012 but were not captured in the 2015 data. There are 1,001 teachers in this cohort.

Existing indicates Indigenous teachers who were employed in 2012 and are still employed in 2015. There are 2,403 teachers in this cohort. For this comparison, only 2012 data was used.

Rationale:

This comparison provides an understanding of the attributes of teachers who left Indigenous teaching workforce since 2012 and those who remained in the workforce. This will support understanding if there are attributes that are more associated with leaving rather than staying.

Key findings:

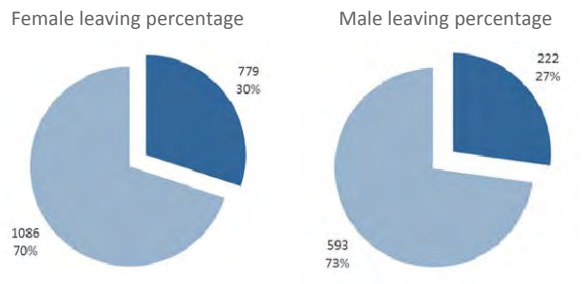
- A higher percentage of females than males left the workforce since 2012, most notably female principals.
- Teachers in combined schools and schools in remote areas had the highest percentage of leaving.

Demographic factors

More female teachers left the workforce between 2012 and 2015

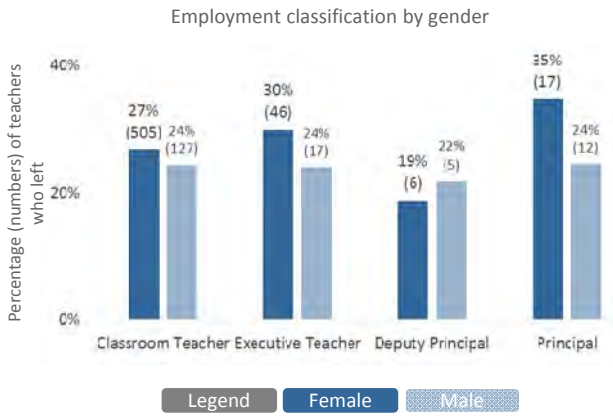
Gender was analysed to explore it's effect on the percentage of teachers who left between the years 2012 and 2015.

At **30%**, females were more likely to have left the Indigenous teaching workforce than males.



Gender and employment classification

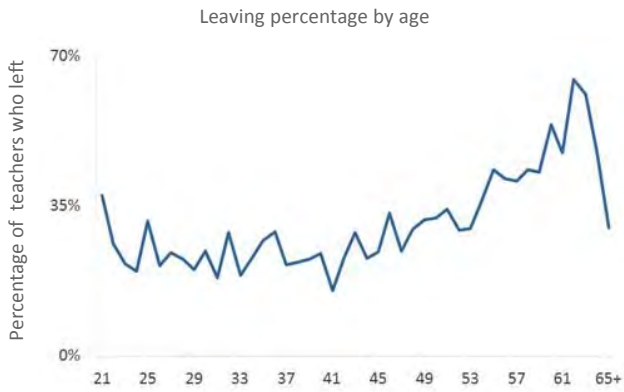
In general, principals are more likely to have left than other employment classifications. When taking gender into consideration, the percentage of female teachers who left at classroom teacher, executive teacher and principal levels was higher compared to that of male teachers. At deputy principal level, females had a lower leaving percentage than males, at **19%** compared to **22%**.



Age

The leaving percentage of age and the employment years (the number of years a teacher has been working on record) were analysed to determine it's effect. The average leaving percentage across all ages was **31%**.

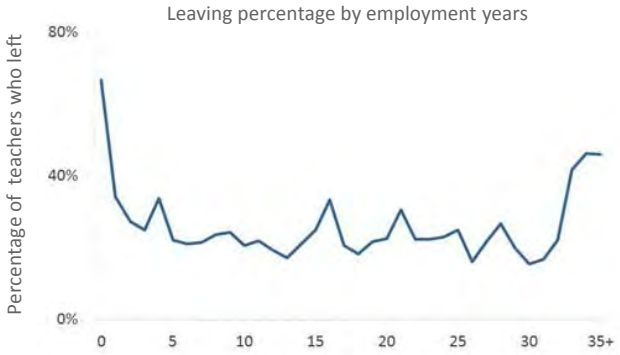
There was a slight upward trend in age indicating that the older a teacher is the more likely to leave. The major exceptions to this were young teachers (21 years old) of whom **38%** left and teachers around expected retirement age (65+) of whom **30%** left.



Employment factors

The highest percentage of teachers who left were principals, combined school teachers and teachers who taught at remote schools

Teachers who have a less than one employment year had the greatest chance of leaving, **67%**. This percentage dropped to around **25%** and stayed relatively constant until 34 years and longer when it increased again and averaged at **46%**. This could be due to teachers retiring. It is important to note that Employment Years refers to the number of years a teacher has been employed with their current employer.



Leaving percentage by employment classification		2012 Median age Left	Existing
Classroom Teachers	26% (632)	44	40
Executive Teachers	28% (63)	52	41
Deputy Principals	20% (11)	51	44
Principals	30% (29)	52	49

The employment class and type of school of each teacher was analysed and it was found that teachers were least likely to leave at deputy principal level and most likely to leave at principal level.

In terms of median age executive teachers had the largest age gap between those who stayed and those who left. Principals had the highest median age for those who stayed and teacher who left while classroom teachers had the lowest.

School Type Leaving Percentage		Left	Existing
Primary School	21% (302)	44	41
Combined School	39% (182)	48	43
Secondary School	24% (187)	43	40

The percentage of teachers who left a combined school was around twice more than that of at other school types, however they also had the highest median age in of those who left at 48. Primary and secondary school teachers had similar median ages and similar leaving percentages.

Geographic Leaving Percentage		Left	Existing
Major City	19% (213)	42	40
Inner Regional	17% (109)	50	41
Outer Regional	33% (159)	44	42
Remote	56% (113)	44	41
Very Remote	35% (77)	50	46

There was a slight trend of teachers leaving the workforce more from remote areas however remote schools (**56%**) had a higher rate of leaving than very remote schools (**35%**).

In terms of median age teachers who taught at very remote schools also had the highest median age for both those who left and those who stayed. Conversely teachers who taught in major cities had the lowest median age.

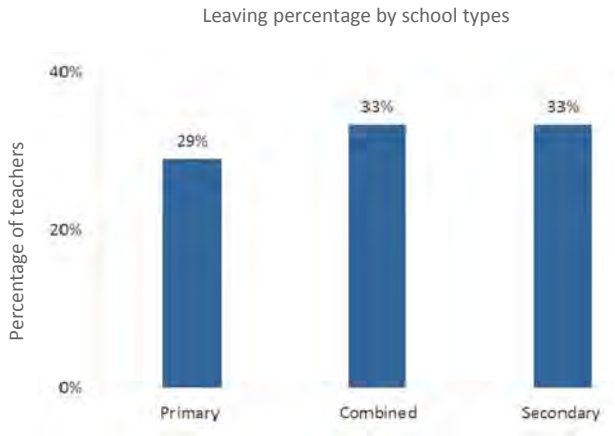
Female Principals

The median age of female principals who left the workforce between 2012 and 2015 was 54

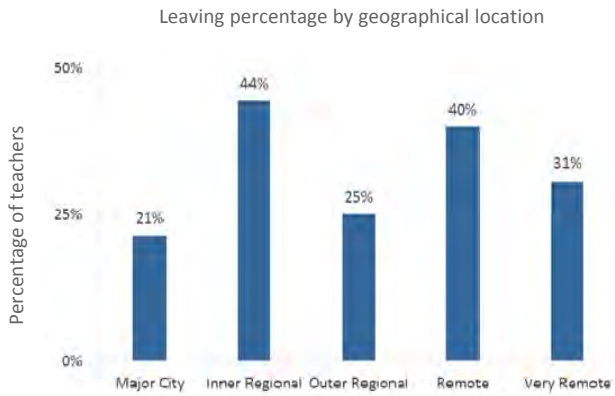
Given that female principals had a higher leaving percentage than other employment classifications, this makes this group a targeted area for focus. Hence further analyses were carried out on this group. There were 17 female principals who left between 2012 and 2015, whereas 32 female principals continued teaching from 2012 to 2015.

- The median age for female principals who left was 54.
- The median employment years for female principals who left was 15.
- **33%** of female principals on ongoing contracts left compared to **100%** on fixed term contracts leaving.
- **33%** of full time female principals left compared to **100%** of part time leaving.

29% of female principals at primary schools left. Combined and secondary schools had the same leaving percentage at **33%**. This suggests that the type of school female principals teach at had little effect on their chance of leaving.



Female principals who led in inner regional areas had the highest leaving percentage at **44%**. Conversely female principals who taught in major cities had the lowest leaving percentage **21%.** Female principals who taught in remote areas also had a relatively high leaving percentage at **40%**.



Existing Teaching Workforce Development

Comparison 4

Definition:

Existing indicates Indigenous teachers who were employed in 2012 and are still employed in 2015. There are 2,403 teachers in this cohort.

Rationale:

This comparison provides an understanding of changes in employment data items of Indigenous teachers who are in the workforce in both 2012 and 2015.

Key findings:

- More than half of the principals in 2012 are still principals in 2015.
- Teachers appear to be moving away from remote areas to regional and metropolitan areas.
- Teachers appear to be moving from combined schools to either primary or secondary schools.
- The percentage of part-time teachers has increased in 2015.

Employment classification

More than half of the principals in 2012 are still principals in 2015

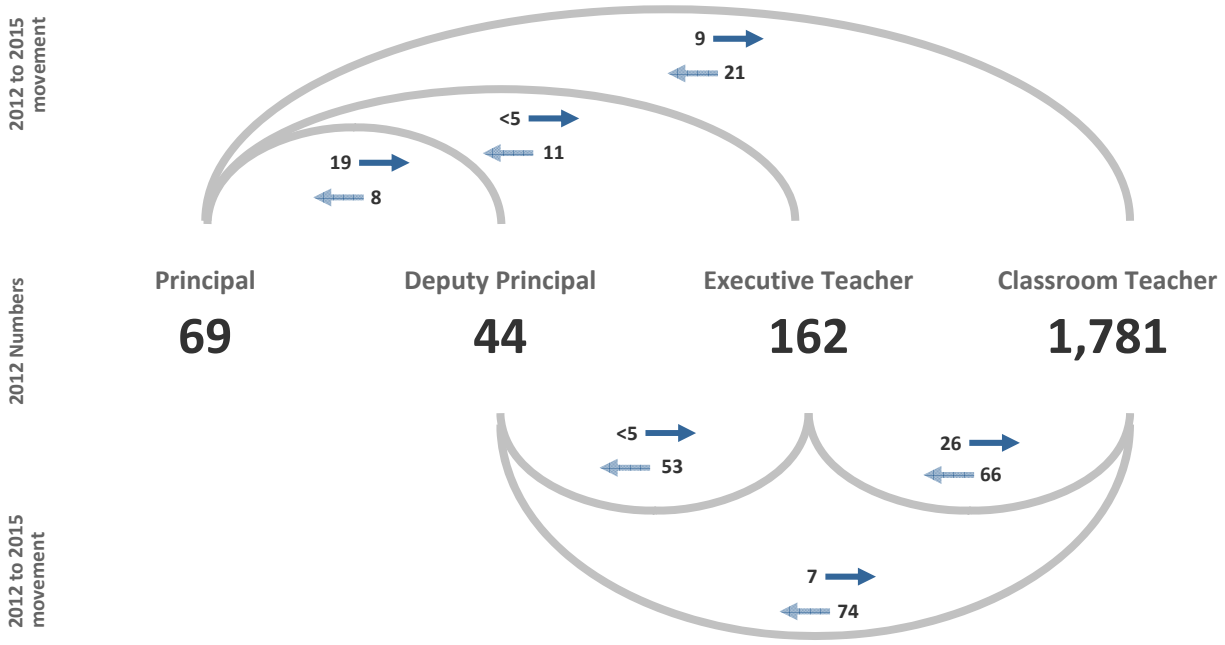
This analysis looks at movement into leadership roles since 2012. Within a relatively short period of time, many teachers hold a similar position with the following observations:

- **91%** of classroom teachers in 2012 are still classroom teachers in 2015.
- **4%** of classroom teachers in 2012 are deputy principals in 2015.
- **1%** of classroom teachers in 2012 are principals in 2015.

- **17%** of executive teachers in 2012 are classroom teachers in 2015.
- **42%** of executive teachers in 2012 are still executive teachers in 2015.
- **34%** of executive teachers in 2012 are deputy principals in 2015.
- **7%** of executive teachers in 2012 are principals in 2015.

- **17%** of deputy principals in 2012 are classroom teachers in 2015.
- **55%** of deputy principals in 2012 are still deputy principals in 2015.
- **19%** of deputy principals in 2012 are principals in 2015.

- **13%** of principals in 2012 are classroom teachers in 2015.
- **28%** of principals in 2012 are deputy principals in 2015.
- **57%** of principals in 2012 are still principals in 2015.

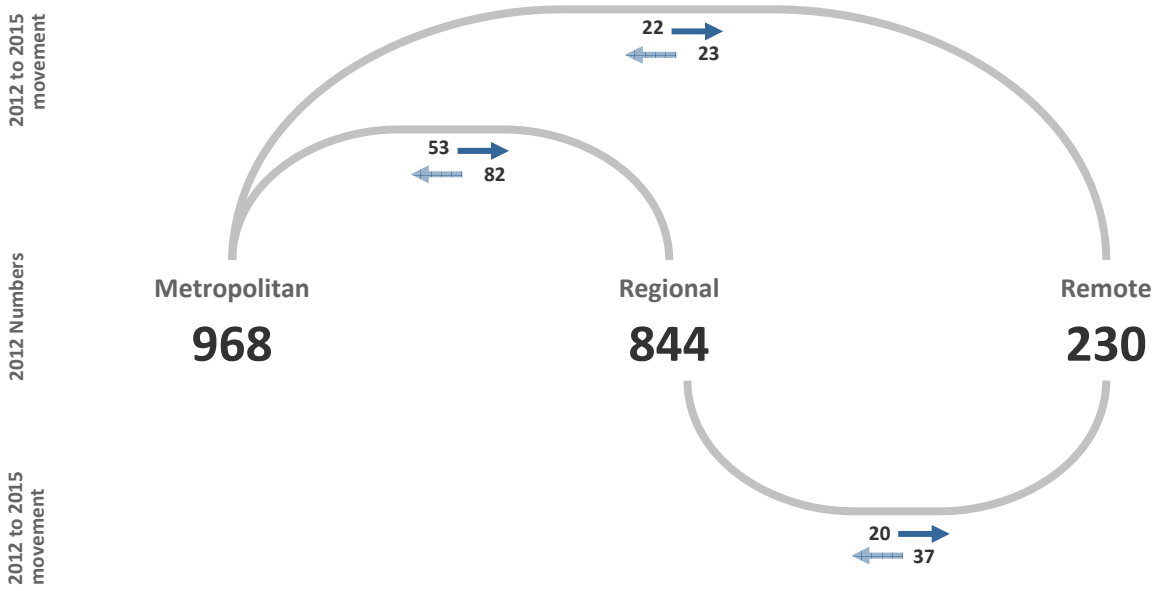


Geographic location

There was considerable movement from remote areas to regional and metropolitan areas

This analysis considers the region of teachers employed in 2012 and in 2015. The analysis indicates a low percentage of movement from metropolitan to regional and remote areas. There was, however, somewhat noticeable movement from remote areas to metropolitan and regional.

- **92%** of metropolitan teachers in 2012, still work in metropolitan areas in 2015.
- **87%** of regional based teachers in 2012, still work in regional areas in 2015.
- **73%** of remote based teachers in 2012, still work in remote areas in 2015.

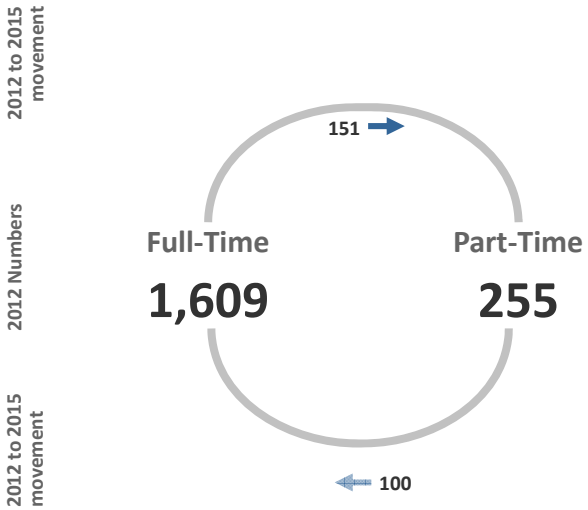


Fraction of time employed

Overall there are a higher number of part-time teachers in 2015

This analysis considers the fraction of time employed for teachers employed in 2012 and in 2015.

- **41%** of part-time teachers in 2012 are now full-time.
- **10%** of full-time teachers in 2012 are now part- time.
- The percentage of part-time teachers in 2012 was **14%**.
- The percentage of part-time teachers in 2015 is **17%**.



The average age for teachers who changed their employment types were as follows:

- The average age for teacher who stayed full-time from 2012 to 2015 was 42 years.
- The average age for teacher who went from full-time work in 2012 to part-time work in 2015 was 33 years.
- The average age for teacher who went from part-time work in 2012 to full-time work in 2015 was 40 years.
- The average age for teacher who stayed part-time from 2012 to 2015 was 41 years.

School Type

45% of combined school teachers moved to either primary or secondary schools

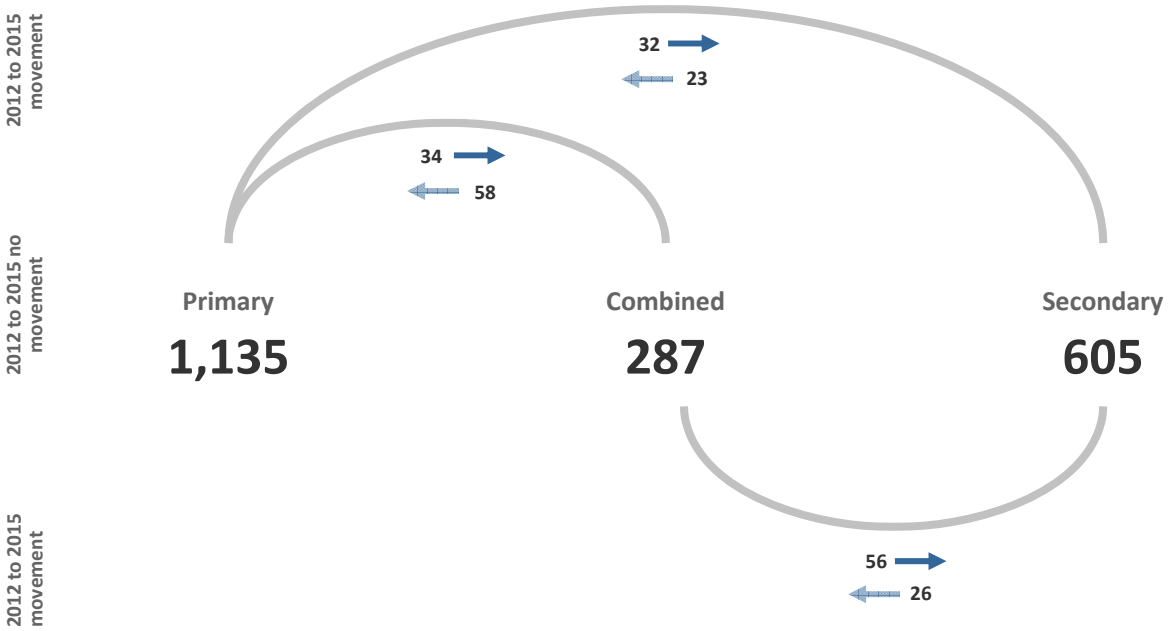
This analysis considers the change in types of school teachers were employed in from 2012 to 2015.

- **94%** of primary school teachers in 2012, still work in primary schools in 2015.
- **55%** of combined school teachers in 2012, still work in combined schools in 2015.
- **91%** of secondary school teachers in 2012, still work in secondary schools in 2015.

From 2012 to 2015 there was a lower proportion of teachers teaching in combined schools from **14%** in 2012 down to **11%** in 2015 with approximately equal proportional numbers going into both secondary and primary schools.

The median age for new teachers and teachers who left for different school types

Median Age	New Teachers	Left Teachers
Primary	**41**	**42**
Combined	**43**	**45**
Secondary	**40**	**42**



Indigenous Status Changes for Existing Teachers

Comparison 5

Definition:

Existing teachers who did not change Indigenous status indicates existing teachers who self-identified as Indigenous teachers in both 2012 and 2015. There are 1,660 teachers in this cohort.

Existing teachers who changed Indigenous status indicates existing teachers who did not self-identify as Indigenous teachers in 2012* but have self-identified as Indigenous teachers in 2015. There are 743 teachers in this cohort.

Rationale:

This comparison provides an understanding of differences between teachers who self-identified as being of Indigenous status in 2012 and those who did not, but where both have self-identified in 2015. The purpose is understand what attributes exist that may explain the increase in self-reporting.

Key findings:

- A higher percentage of self-reported Indigenous status change occurred in major cities and inner regional areas compared to other regions.
- More status changes were reported in secondary schools compared to other schools types proportionally.

*National Teaching Workforce Dataset - Data Analysis Report, Australian Government, June 2014

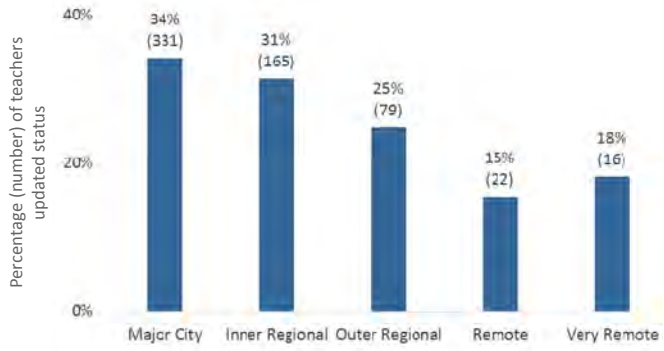
Employment factors

A higher percentage of self-reported Indigenous status change occurred in major cities and inner regional areas compared to other regions

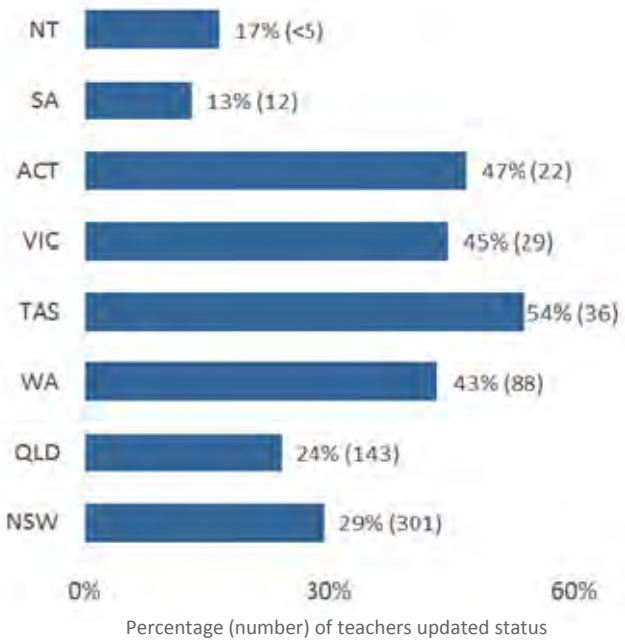
Geographic distribution

More than 30% of existing Indigenous teachers updated their status from non-Indigenous or unknown to Indigenous in major cities and inner regional areas.

Comparison by school remoteness



Comparison by states



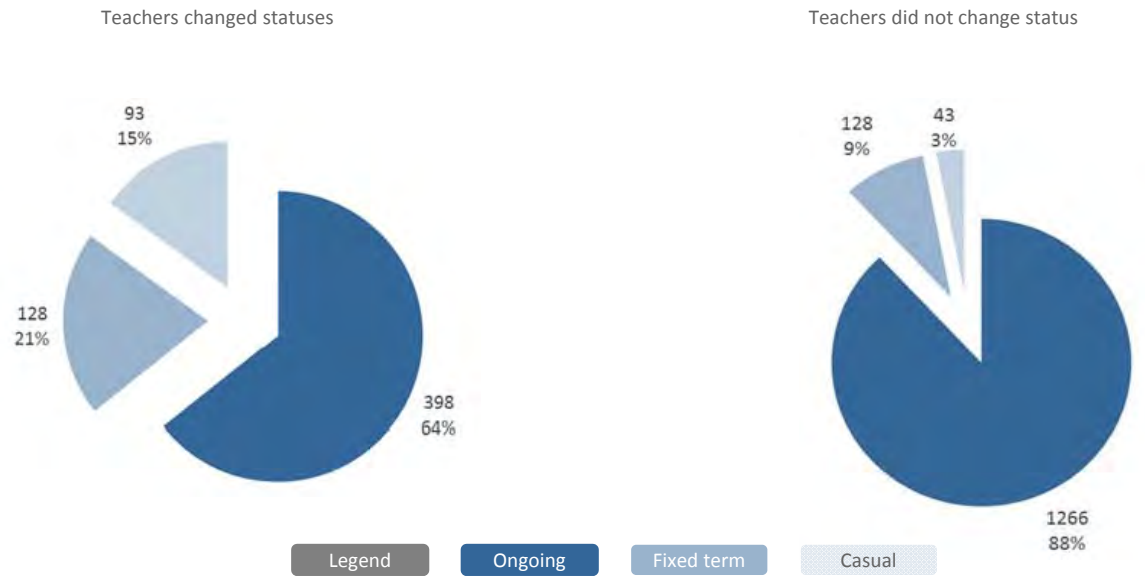
In terms of states, Tasmania had the highest percentage of changes among existing Indigenous teachers, where this percentage were also over 40% in Australian Capital Territory, Victoria and Western Australia.

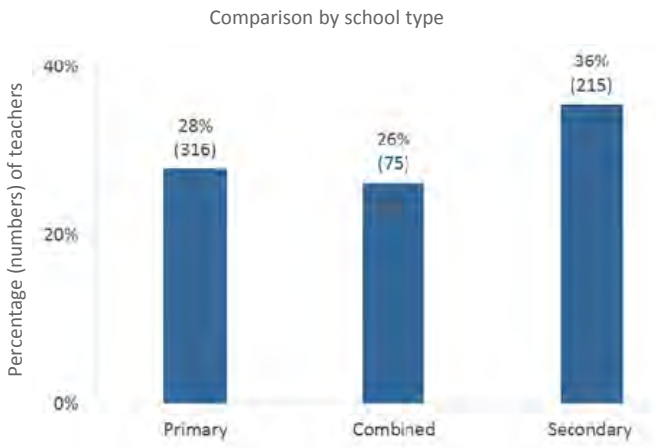
Employment factors

Secondary schools had the highest percentage of Indigenous status change

Employment type

There were higher percentages of teachers with fixed term and casual contracts who changed their Indigenous statuses, compared to those who did not change.





School type

More status changes were also reported in secondary schools compared to other schools types.

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