



Briefing Note: Analysis of transitions of ITE graduates into teaching and subsequent retention in the workforce

To:	Hon Chris Hipkins, Minister of Education		
Date:	15 February 2019	Priority:	Medium
Security Level:	In Confidence	METIS No:	1177330
Drafter & Key Contact:	David Jagger	DDI:	s 9(2)(a)
Messaging seen by Communications team:	Yes	Round Robin:	No

Purpose of Report

The purpose of this paper is to provide you with information you have requested on transitions into teaching from Initial Teacher Education (ITE) courses, and retention of ITE graduates subsequent to entering the teaching workforce.

The Ministry of Education recommends you:

Note the results of Ministry analysis on these topics, looking at subsequent employment outcomes for ITE cohorts graduating up to 2015;

Note in particular that the Ministry's analysis of retention rates for new graduate teachers suggests that the percent of individuals still employed in the sector five years after starting is considerably higher than a figure commonly quoted in the media;

Note that we intend to update this analysis for the most recent graduate cohorts and publish via a *He Whakaaro* (Education Insights) paper during April/May;

Agree that this Briefing will be proactively released.

Agree / Disagree

Summary

- A high proportion of graduates from schooling ITE programmes become teachers, with the majority gaining a primary or secondary teaching position in the state and state integrated sector within a year of qualifying (80% of 2015 graduates).
- An increasing trend in the proportion of graduates transitioning into teaching positions in recent years starts to explain why we still see steady volumes of new graduate teachers entering the workforce despite the decline in the overall number of graduates.

- Whilst the majority of graduates are becoming teachers, it is clear many are employed in part-time positions or are not gaining employment until part way through their first year after graduation.
- Around three quarters of new teachers with a New Zealand teaching qualification remain in the profession after five years. This proportion is considerably higher than figures often quoted in the media, asserting that only half of graduates remain teaching within five years of graduating.
- Even though some new graduate teachers are leaving teaching, the remaining new graduate teachers are increasing their teaching hours (FTTE) over time. For the first few years, the increase in FTTE of those who continue to teach more than offsets the loss of FTTE of those that leave.
- We plan to update this piece of analysis, to include the most recent cohorts of new teachers entering the profession, incorporating graduate data up to 2017 and finalised payroll data for 2018. We intend to publish this in a *He Whakaaro* (Education Insights) paper during April/May 2019. This will take place after we have published the latest (2018) workforce statistics on Education Counts and updated the Teacher Demand and Supply Planning Tool.



Dr Craig Jones
Deputy Secretary
Evidence, Data & Knowledge

15/02/2019



Hon Chris Hipkins
Minister of Education

25/2/19

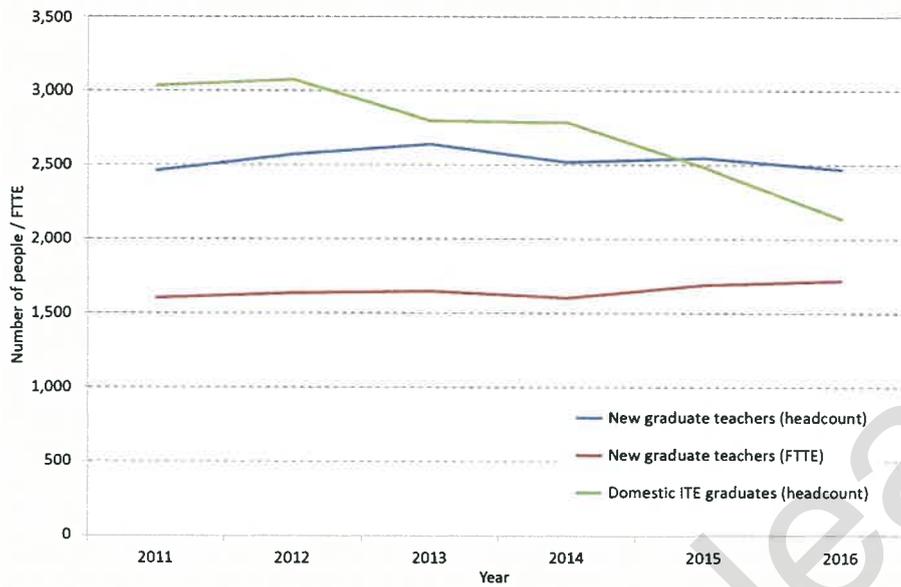
Background

1. You have requested information on the levels at which Initial Teacher Education (ITE) graduates transition into teaching roles and, for those who do, how many remain as teachers over the first few years.
2. In October 2018, the Ministry published initial results from the Teacher Demand and Supply Planning Tool. The tool incorporates an estimate of future levels of new teachers entering the workforce, of which new graduate teachers form a significant share. Statistics published by the Ministry highlight decreases over recent years in the number of domestic students completing primary or secondary ITE qualifications (dropping from 3,325 to 2,250 between 2011 and 2016, though increasing to 2,390 in 2017). However, analysis of the rates at which graduates transition into teaching roles and subsequently remain within the workforce provides further key information for understanding teacher supply through ITE routes.
3. The Ministry has undertaken analysis focusing on patterns of transition from primary and secondary ITE programmes to teaching positions in the state and state integrated sector. The analysis also looked at retention rates for new teachers over their first five years of teaching. The analysis used historic data and is only current to 2016. It nevertheless provides useful insights into general patterns of entry to and exit from the teaching workforce for ITE graduates.

How do new graduate teacher trends compare with ITE graduate volumes?

4. We define 'new teachers' in any given year as individuals appearing for the first time on payroll on a primary or secondary school teacher contract. Within this wider group, we define 'new graduate teachers' as those with a recently gained domestic (New Zealand) qualification. As such, our definition of 'new graduate teachers' excludes teachers arriving newly to the New Zealand workforce with overseas qualifications, those who have upgraded their qualifications, and individuals for whom we cannot find a qualification in our records.
5. There are two ways to count the size of the teaching workforce. The most intuitive method is headcount (i.e. the number of *people*) but it is useful also to look at the amount of full-time teaching equivalents (FTTE) that teachers account for. FTTE provides a way of describing how many teaching hours each position involves and is measured across a full year. For example, an individual in a 1 FTTE position means they work for the whole year in a full time capacity, whereas a 0.2 FTTE position means that the role will involve the equivalent of one day's teaching work a week.
6. *Figure 1* overleaf presents trends in entries to the workforce of new graduate teachers on both headcount and FTTE bases, alongside numbers of domestic ITE graduates with a first primary or secondary teaching qualification.
7. Of note is the large decrease in ITE graduate numbers between 2011 and 2016, in particular since 2014. However, the number of new graduate teachers starting in the workforce was stable, on both counting bases, between 2011 and 2016.

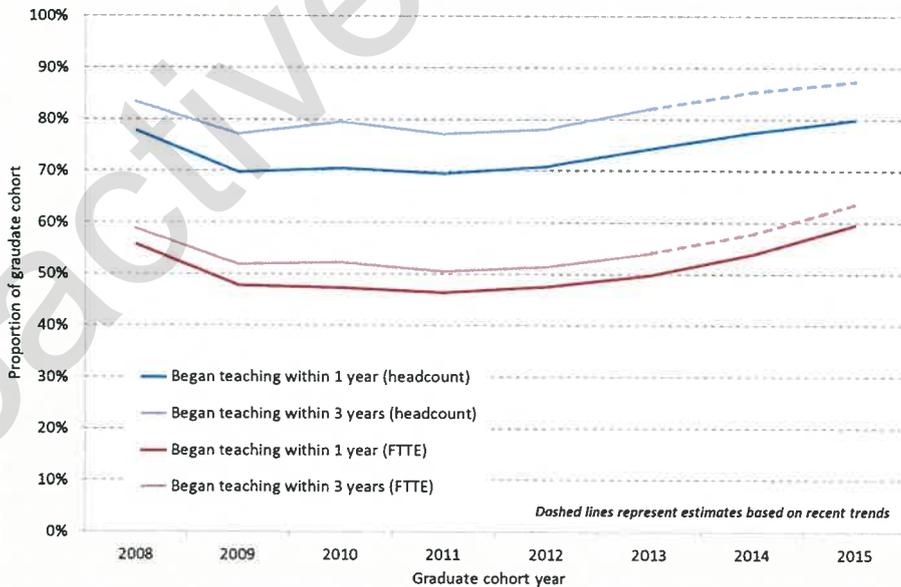
Figure 1: New graduate teachers, on headcount and FTTE bases by year starting as a qualified teacher, and ITE graduates, by year of graduation¹



How many graduates become teachers?

8. Figure 2 presents the proportion of ITE graduates that begin teaching within one year and three years of qualifying. Three-year rates for the 2014 and 2015 graduate cohorts are estimated, as the analysis only includes payroll data up to 2016. It illustrates that a high proportion of graduates from ITE programmes become new graduate teachers, with the majority gaining a position within a year of qualifying. Of the cohort graduating in 2015, on a headcount basis, 80% started teaching within a year of qualifying and it is estimated that a further 7% will start teaching two or three years after qualifying.

Figure 2: Proportion of ITE graduates that began teaching within one year and three years of qualifying



¹ Volumes of graduates and new graduate teachers aren't directly comparable for any given year, due to new graduate teachers in each year being sourced from individuals graduating across multiple previous years.

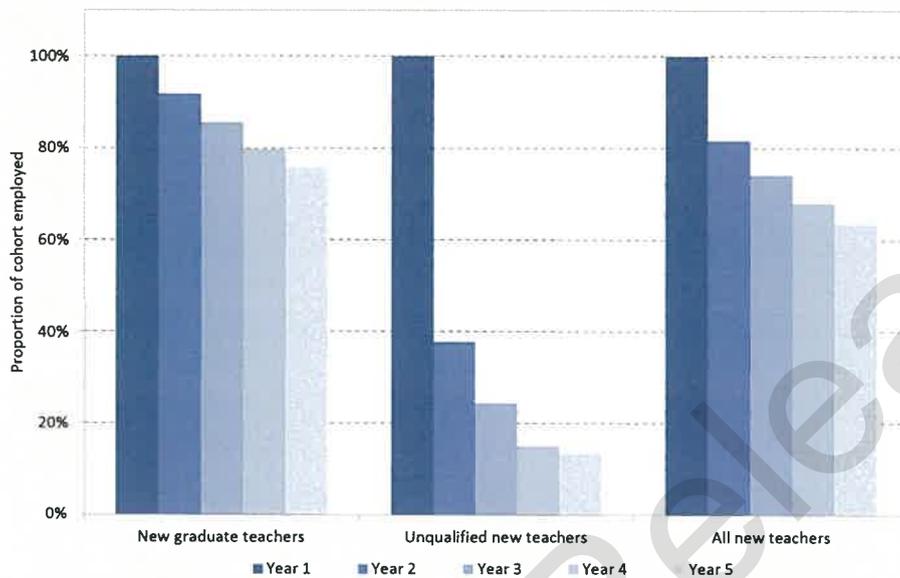
9. *Figure 2* further highlights an upward trend in the proportion of ITE graduates transitioning into a new graduate teaching role after completing their studies. The proportion of graduates starting teaching within one year of qualifying increased by 10 percentage points between the 2011 cohort, when 70% transitioned to teaching within a year, and the 2015 cohort. This increasing trend in the proportion of graduates transitioning into teaching positions in recent years starts to explain why we still see steady volumes of new graduate teachers entering the workforce (as seen in *Figure 1*) despite the decline in the overall number of graduates.
10. We also looked at the amount of FTTE that new graduate teachers accounted for. Comparing this with the headcount measure (the proportion of people who became new graduate teachers) illustrates the extent to which graduates are fully employed across a given year.
11. Proportions on an FTTE basis are lower than headcount. Of the cohort graduating in 2015, whilst 80% started teaching within a year of qualifying, only 60% of the cohort's potential FTTE was utilised over the same period. In simple terms, whilst the majority of graduates become new graduate teachers, it is clear many are employed in part-time positions or are not gaining employment until part way through their first year after graduation.
12. A separate analysis of the employment status of all new teachers (that is, including also new teachers arriving with overseas qualifications or without qualifications) highlights that around half enter the workforce in fixed term full- or part-time roles, and this proportion has been stable over recent years. The proportion of new teachers starting in permanent full- or part-time roles has increased over recent years, from 22% in 2013 to 33% in 2017, with the proportion entering in day relief positions decreasing.

Do new graduate teachers stay teaching?

13. The next stage of our analysis identified a number of cohorts of new teachers based on the year they first appeared on payroll. We then tracked each cohort over time to see if they remained as a teacher over a five year period.
14. We calculated retention rates by measuring each teacher's appearance on payroll during the four calendar years subsequent to their first year of appearance. Our retention rates allow for teachers leaving and returning during the five year window. For example, if a teacher continues to work in Year 2, takes a year out in Year 3 and is not on the payroll, then returns in Year 4 and continues to Year 5, they will be counted as retained in Years 2, 4 and 5.
15. We were able to explore differences between new teachers by qualification status, to observe whether retention rates for new graduate teachers were different to those of other sub-groups, such as 'unqualified' teachers (teachers for whom we cannot find a qualification in our records).
16. *Figure 3 overleaf* focuses on the cohort of new teachers starting in 2012. It shows that, overall, 82% of the cohort were still employed as teachers in New Zealand after one year and 64% remained after 5 years (by 2016).
17. A large proportion of the losses were accounted for by teachers for whom we cannot find a qualification in our records, who accounted for 16% of the cohort. Of the unqualified teachers who started teaching in 2012, 38% were still employed the following year and 14% remained after five years. This is not unanticipated, as untrained teachers may be engaged by schools for a variety of operational reasons. For example, schools may engage staff members with a Limited Authority to Teach in order to deliver specific vocational education. We would expect schools to adjust the staff engaged in these roles as their needs change.

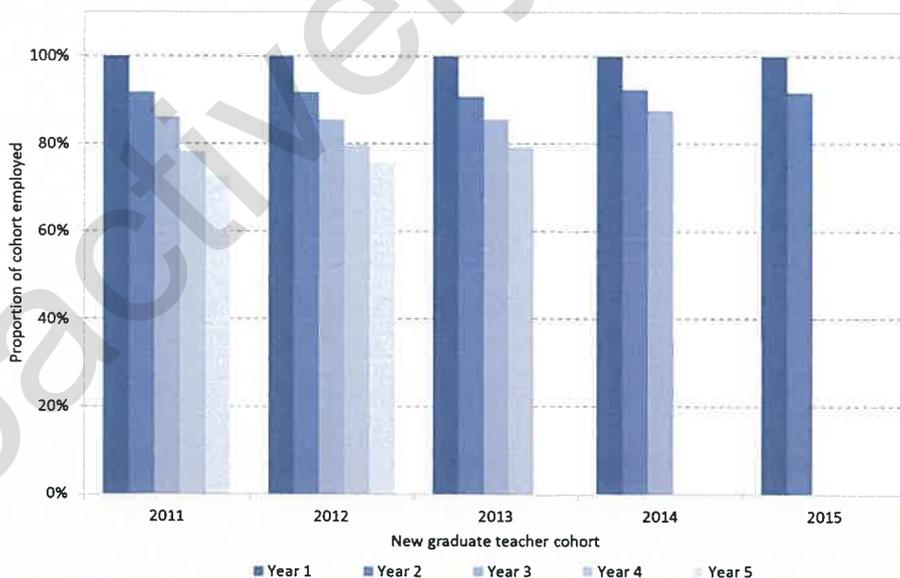
18. Retention rates for new graduate teachers were high, with 92% still employed the following year and 76% remaining after five years.

Figure 3: Proportion of new teachers starting in 2012 (Year 1) that are still employed as teachers in subsequent years (up to Year 5 = 2016), on a headcount basis, by qualification status



19. Figure 4 focuses on new graduate teachers only, and presents retention rates for each new graduate teacher cohort since 2011 on a headcount basis. It shows that retention patterns for new graduate teachers has been stable across recent years.

Figure 4: Proportion of new graduate teachers still employed as teachers in subsequent years (up to Year 5), on a headcount basis, by the year they started teaching

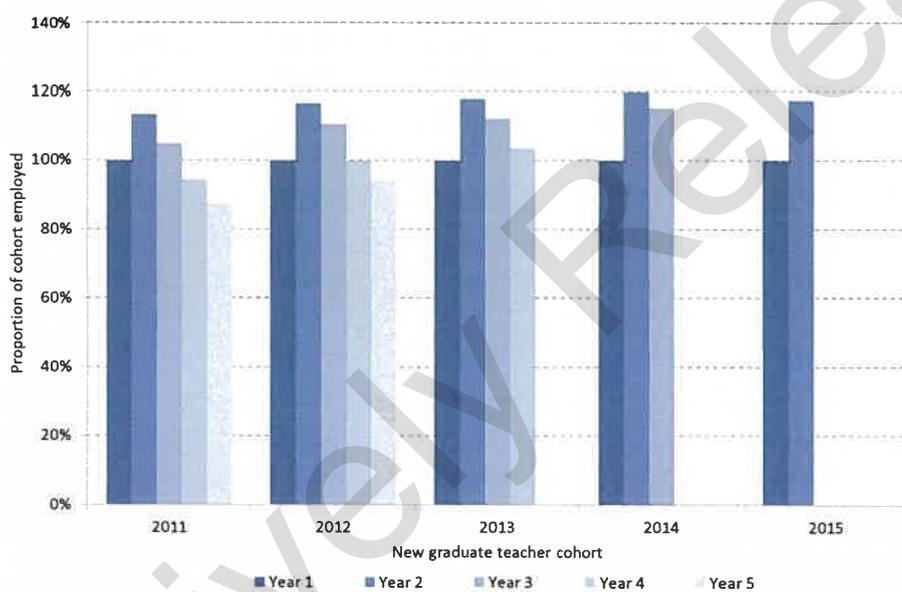


20. These retention numbers are different to a figure often quoted in the media, asserting that '2016 figures show 50 percent of graduates quit within five years'. Our own analysis, as outlined above, indicates that the retention rates of new graduate teachers are considerably better than this estimate. Our estimate is that around a quarter of new graduate teachers are no longer on payroll in what would have been their fifth year of teaching, and furthermore we do not assume that all those who no longer appear have

permanently left the profession. The origin and basis of the statistic commonly used in the media is not known to analysts within the Ministry, though it could potentially include unqualified teachers in its calculation.

21. Our analysis highlighted very different trends in the rate at which new graduate teachers are retained depending on whether headcount or FTTE was used. On a headcount basis, we observed a year-on-year decrease each year, as expected as members of each cohort leave the workforce over time. On an FTTE basis however, employment levels increased in the year after the cohort started (Year 2), and generally don't drop below the Year 1 starting level until four or five years after the cohort started. *Figure 5* illustrates this pattern, which has also been stable across recent years. This finding means that, even though some new graduate teachers are leaving teaching, the remaining graduate teachers are increasing their teaching hours (FTTE) over time. For the first few years, the increase in FTTE of those who continue to teach more than offsets the loss of FTTE of those that leave.

Figure 5: Proportion of new graduate teachers still employed as teachers in subsequent years (up to Year 5), on an FTTE basis, by the year they started teaching



Next Steps

22. As part of our workforce analysis programme, the Ministry plans to update this piece of analysis. The update will include the most recent cohorts of new teachers entering the profession, incorporating graduate data up to 2017 and finalised payroll data for 2018.
23. We intend to publish the analysis in a *He Whakaaro* (Education Insights) paper during April/May 2019. This will take place after we have published the latest (2018) workforce statistics on Education Counts and updated the Teacher Demand and Supply Planning Tool.
24. We will feed the insights from this analysis, and its update, into the Education Workforce Strategy and our education workforce and teacher supply short and medium term initiatives.

Proactive release and future communications

25. We recommend that this Briefing is proactively released as per your expectation that information be released as soon as possible. Any information which may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.
26. We are already including the key results in reactive media responses, and will include them in future communications about teacher supply.

Proactively Released