



Briefing Note: Workforce data release

To:	Hon Chris Hipkins, Minister of Education		
Date:	22 March 2019	Priority:	Medium
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Drafter:	Hien Nguyen	DDI:	
Key Contact:	Rebecca Parish	DDI:	§ 9(2)(a)
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Purpose of Briefing

The purpose of this Briefing is to:

Note the 2018 update to the teacher workforce data series and introduction of the new regular teacher movement (in and out of the workforce) data series.

Note further detailed information regarding the characteristics of the primary and secondary schooling workforces is provided in the attached dashboards.

Note that the Ministry plans to release the update and the new series on the Education Counts website on 05 April 2019.

Note that this information will be discussed with the Education Workforce Technical Dashboard Group, the Education Workforce Strategy Governance Group and the Auckland Teacher Supply Action Group.

Agree that this Briefing will be proactively released.

Agree / Disagree

Summary

- This briefing informs you of the key results of the teacher workforce and new regular teacher movement (in and out of the workforce) data series prior to their public release planned for 05 April 2019.
- During 2017 and 2018, the number of regular teachers in primary and secondary schools increased by 1.9% and 1.3%, respectively.
- In 2018, the rates of regular teachers entering the workforce (entering rate) in primary and secondary schools increased to 6.1% and 7.4% respectively. The rates of regular teachers leaving the workforce (leaving rate) in primary and secondary schools decreased to 5.0% and 6.0% respectively.
- The regular teacher movement (between regions) data series is not part of this release. We expect to be able to brief you on this data series in July 2019.
- Further reference information on the characteristics of primary and secondary schooling workforces is included in the annexed Education Workforce Dashboards.



Dr Craig Jones
Deputy Secretary
Evidence Data and Knowledge

22/03/2019

Hon Chris Hipkins

Minister of Education

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Background

1. On 5 December 2018 the Ministry advised you of the upcoming 2019 early learning, schooling and tertiary education annual data release schedule. As part of this briefing we advised that a new regular teacher movement (in and out of the workforce) data series would be released at the same time as the existing teacher workforce data is updated [METIS 1169876 refers].
2. The teacher workforce data series, which includes the number of teachers by common breakdowns (e.g. sector, region, age group), will be updated to include the 2018 data.
3. The new regular teacher movement (in and out of the workforce) data series has been developed based on the teacher workforce data series. The initial focus of the series is on regular teachers (i.e. teachers who were employed in fixed-term and permanent roles) and whether they have left the teacher workforce. Entering teachers are those who are new or returning to teaching after having a break (of at least one year). Leaving teachers are those who taught in the previous year but are no longer teaching. Annex One provides further details on this series.
4. National Primary and Secondary teacher workforce quarterly dashboards were developed for the quarter ending 31 December 2017 and were updated for the quarters ending 31 March 2018 and 30 June 2018 as the one source of the truth for the respective teacher workforces.
5. The teacher workforce dashboards were not updated for the September 30 quarter as the Ministry was transitioning to using the same data that feeds into the Teacher Demand and Supply Planning Tool, thus ensuring the planning tool projections and workforce dashboards align in terms of data used and the story the data is telling.
6. The teacher dashboards were developed with the sector through the Education Workforce Dashboards Technical Group and shared with the Education Workforce Strategy Group, with unions prior to National Primary and Secondary teacher bargaining getting underway.
7. An Auckland Primary and Secondary teacher workforce dashboard was also developed with quarterly updates being shared with the Auckland teacher supply action group.

Key Highlights

Teacher workforce

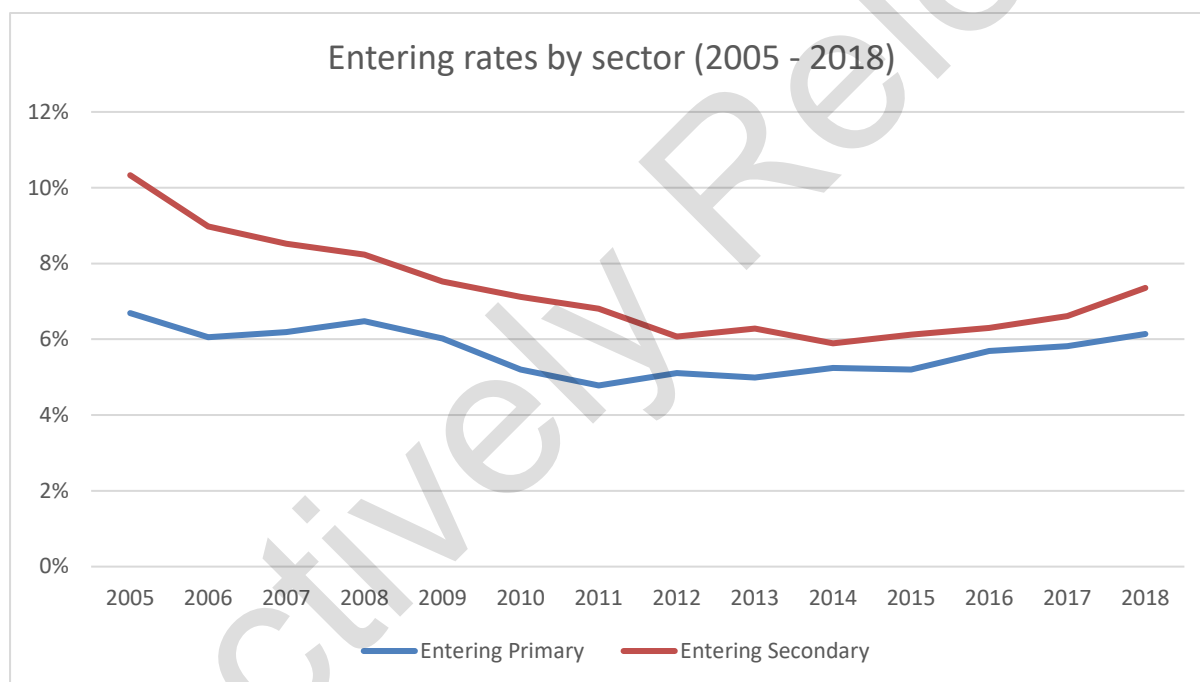
8. Between 2017 and 2018:
 - a. The total number of teachers (both regular and day relief) continued to increase. There were 976 more regular teachers in 2018 than in 2017, and 1,004 more teachers in total;
 - b. At primary school level, the total number of regular and day relief teachers increased by 1.7% (672 teachers). At secondary school level, the total number of regular and day relief teachers increased by 1.1% (332 teachers);
 - c. The proportion of regular teachers by age groups remained consistent, with teachers between the ages of 35 and 64 accounting for 71% of the regular teacher workforce in 2018;

- d. Teachers of European/Pākehā ethnicity still account for the majority of the teacher workforce at approximately 70%, while teachers of Māori and Pacific ethnicity remain stable at 11% and 3% respectively. Female teachers still account for the majority of the workforce at 75%.

Teacher movement¹

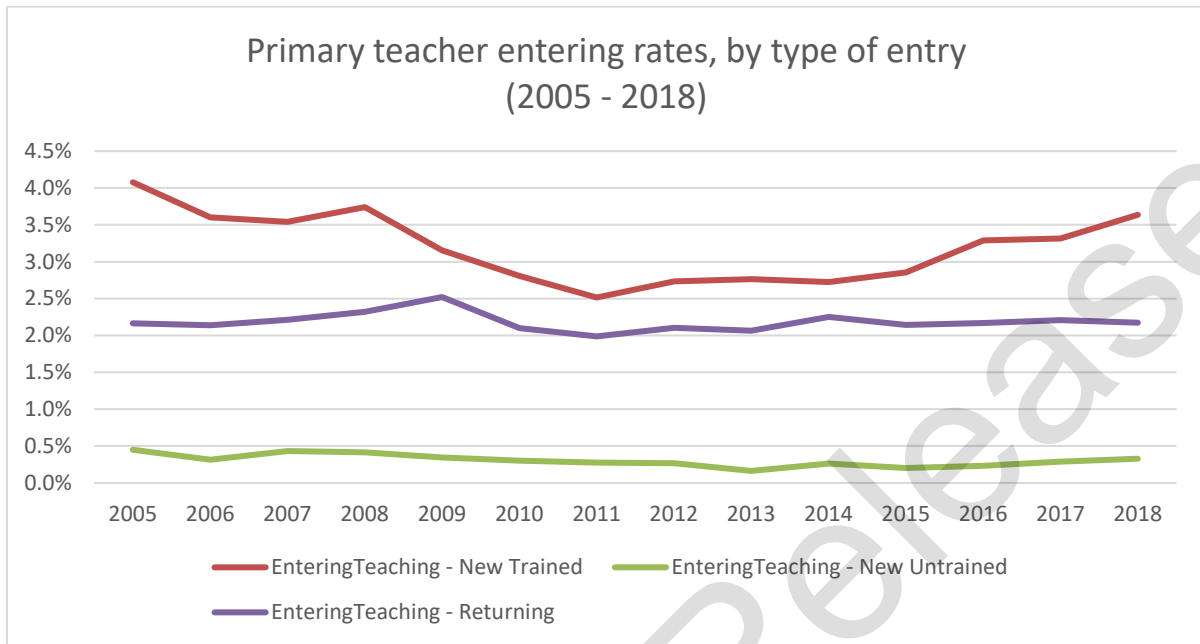
Entering rates

9. In 2018, 4,040 teachers entered the regular teaching workforce, of which 2,114 entered the primary school level and 1,926 entered the secondary school level (see Annex Two for number of teachers entering the workforce annually during 2005 and 2018).
10. Entering rates at primary and secondary school levels gradually increased from 2011 to 6.1% and 7.4%, respectively, in 2018 (refer to the chart below).
11. Since 2011, the national rate of regular teachers entering the workforce (entering rate) have been increasing. In 2018, the national entering rate increased to 6.7%.

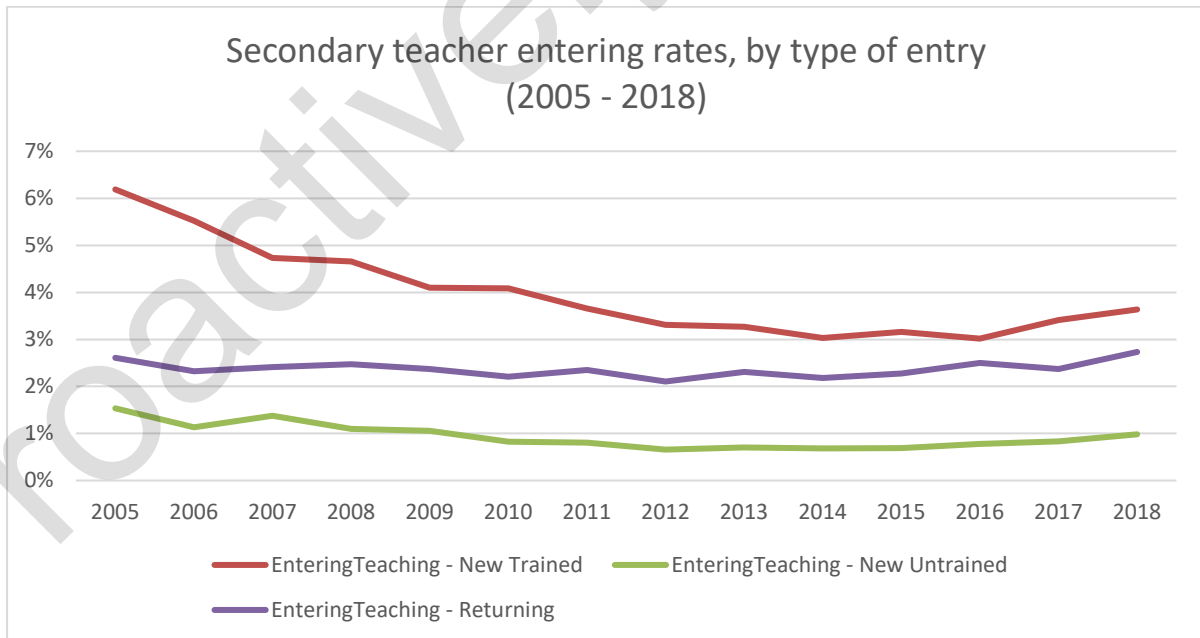


¹ Note that entering rates and leaving rates are calculated using different reference years as denominators, and caution should be exercised in directly comparing these rates. Comparing the *number* of teachers entering in any year with those leaving in the same year is however an appropriate comparison. For further explanation of the formula, see Annex One.

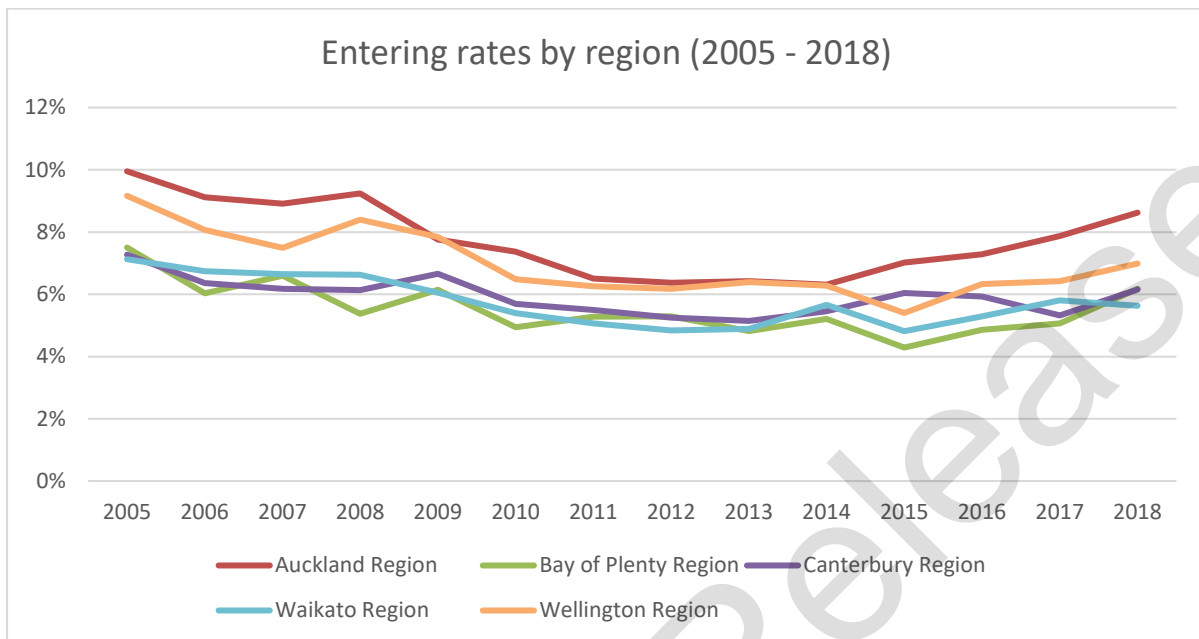
12. At primary school level, there were increases in entering rates of all three types of entering teachers (see entering teachers definition in Annex One) since 2011. New-trained teachers entering the workforce had the greatest increase and accounted for the majority of the entering teachers.



13. At secondary school level, there were also increases for all three types of entering teachers since 2011. New-trained teachers account for the majority of the entering teachers. However, returning teachers had the greatest rate increase in 2018 (up from 2.3% of teachers to 2.7%).



14. Regionally, the majority of the teachers entering the workforce were concentrated in five regions with the highest populations (refer to the chart below). Since 2011, there were increases in entering rates in all five regions with Auckland experiencing the sharpest increase.

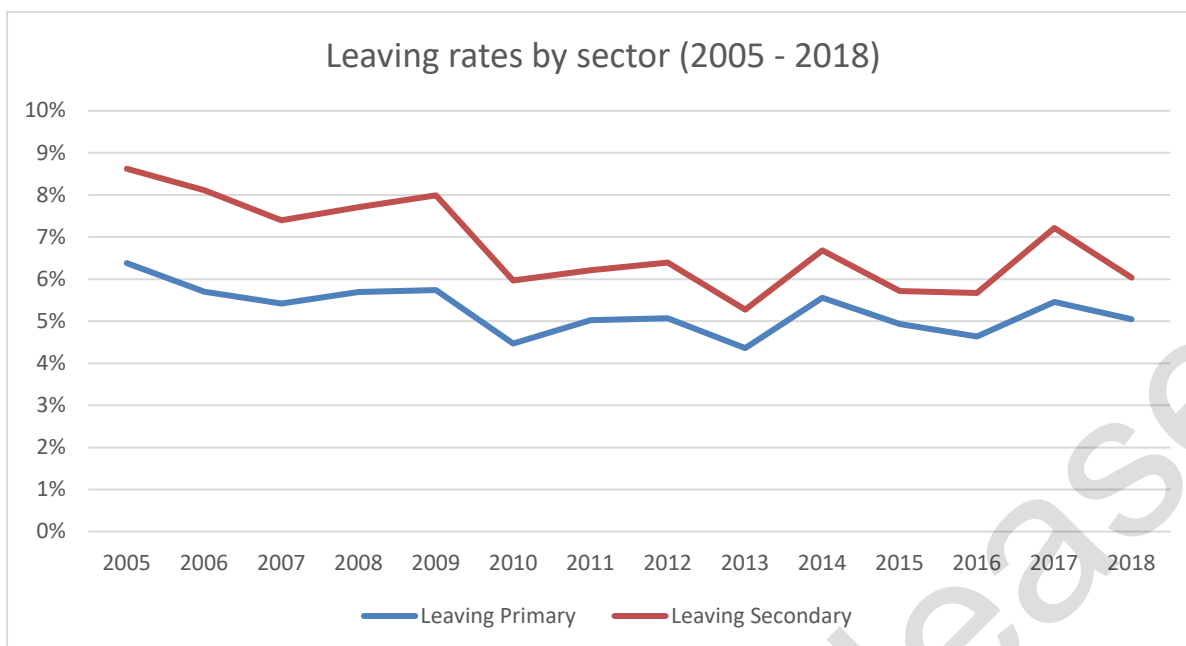


Leaving Rates

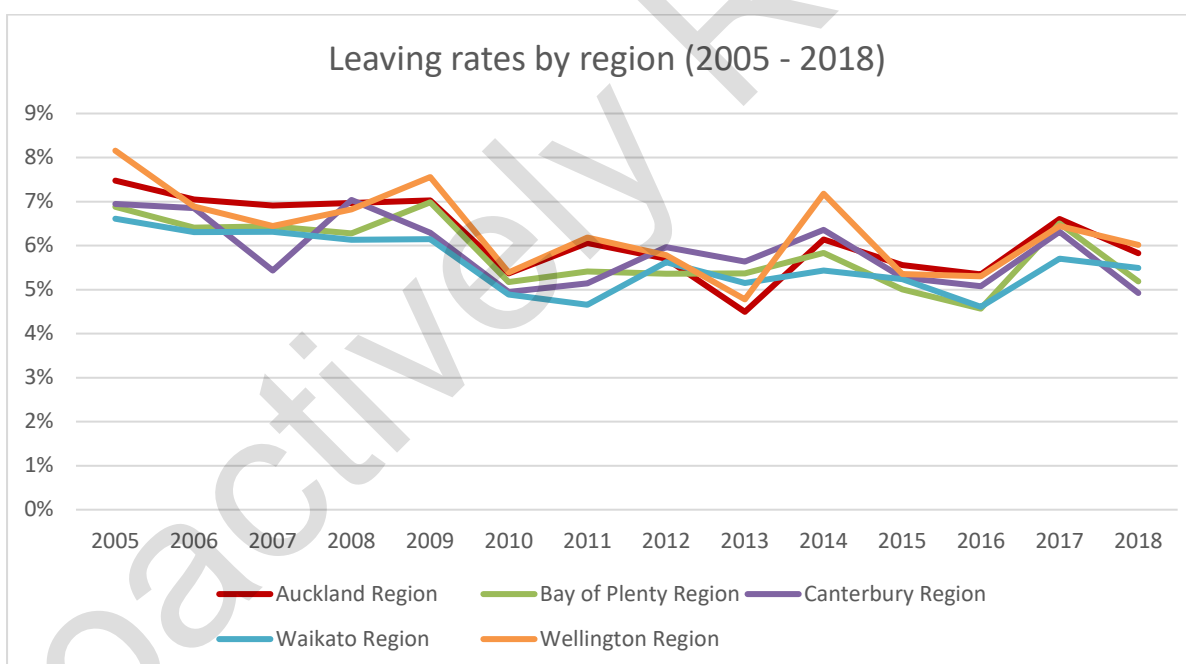
15. In 2018, 3,267 teachers left the regular teaching workforce, of which 1,706 left the primary school level and 1,561 left the secondary school level (see Annex Two for number of teachers leaving the workforce annually during 2005 and 2018).

16. Leaving rates vary over time but have consistently been between 4.0% and 7.0% since 2011. In 2018, the national leaving rate decreased to 5.5%.

17. The leaving rate at primary school level has always been lower than that of secondary school level. Leaving rates at primary and secondary school levels decreased to 5.0% and 6.0%, respectively, in 2018.



18. Regionally, the majority of the teachers leaving the workforce were concentrated in the five regions with the highest populations. Since 2011, there were decreases in leaving rates in four of these five regions. The exception was Waikato where the leaving rate remained higher than 2011 but had a slight decrease in 2018.



Further workforce information

19. Attached as Annex Four is the latest iteration of the Education Workforce Dashboards for the primary and secondary teachers. These provide further detailed information regarding the characteristics of the combined and separate primary and secondary schooling workforces.

20. The Dashboards have been refreshed to incorporate 2018 teacher workforce data, as well as making use of the Ministry's improved data series used in the Education Workforce Demand and Supply Planning Tool and other workforce data which is released on EducationCounts.govt.nz.

21. Due to improvements in our workforce database and methodology the historical data presented differs from that presented in previous dashboards. The main differences are:

- Composite schools, previously classified as primary schools, are now classified as secondary schools.
- Teachers who receive a payment in January (being paid for the previous year), and receive no other payment subsequently in the year, are now counted as having left the payroll (lapsed). Previously they were not recognised as lapsed.
- The new dataset includes approximately 700 more teachers a year than the dataset used in these dashboards prior to September 2018.

Communications Approach

22. We have prepared reactive questions and answers as part of this release (attached as Annex Three), and will continue to work closely with your office ahead of the release.

Next Steps

23. The 2018 teacher workforce and teacher movement (in and out of the workforce) data series are planned to be released on Education Counts on 05 April 2019 and we will work with your office on the final communications.

24. The regular teacher movement (between regions) data series will be ready for release in July 2019.

25. The Teacher Demand and Supply Planning tool projections will be revised in May 2019, to improve our projections and inform our view of whether the long term supply-demand balance has improved. We will explore ways to demonstrate the aggregate impact that recent teacher supply initiatives have had on our long term supply projections.

26. This information, including the Education Workforce Dashboards, will be shared with sector representatives via the Education Workforce Technical Dashboard Group and the Education Workforce Strategy Governance Group in April. Dashboards for Auckland region will also be shared with the Auckland Teacher Supply Action Group in due course.

Proactive Release

27. We recommend this Briefing Note is proactively released as per the expectation that information will be released as soon as possible. Any information that may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.

Annexes

Annex One: Teacher movement (in and out of the workforce) data series' purposes, definitions and methodology

Annex Two: Number of teachers entering and leaving the workforce

Annex Three: Reactive questions and answers

Annex Four: Education Workforce Dashboards

Proactively Released

Annex One: Teacher movement (in and out of the workforce) data series' purposes, definitions and methodology

What the new teacher movement (in and out of the workforce) data series is and why we need it

Last year the Ministry released a new set of teacher workforce data series based on annual data rather than the previously used point in time series. As part of improving our information base we are developing a teacher movement data series from this annual teacher workforce data to describe the ways in which teachers move into teaching, move between positions and schools and leave teaching.

This is the first set of the series and includes those who are entering the regular teaching workforce, and those who were in permanent and fixed term positions and are no longer in the teacher workforce. These measures are useful as they:

- Help identify the extent to which the teacher workforce is being replenished by newly trained teachers vs those who have taught previously
- Provide an indication of the characteristics and numbers of teachers who are no longer involved in any form of teaching in state and integrated schools.

Limitations of the new teacher movement data series

It is important to note that movements into, out of and within the teacher workforce are impacted by a range of factors including changing demand for teachers and external labour market conditions.

Additionally, changes in any one aspect of the workforce may affect another, for example, a decrease in the number of teachers leaving teaching may lead to a decrease in teachers entering teaching as there are fewer available positions.

We will release the next iterations of the data series over coming months to look at teachers shifting between permanent / fixed term and day relief positions and teachers moving between schools / regions. The teacher movement (between regions) data series will be available in July 2019.

Regular teachers

Teachers who are employed on a fixed term or permanent basis in state or state integrated schools. Teachers in day relief positions or employed in private schools are excluded.

Entering teachers

Regular teachers who are teaching in the workforce and were not teaching in the previous year.

This includes:

- New teachers - those who have never taught previously in state and state integrated schools. New teachers who have completed their teaching qualifications and training are New-trained, while those who have not are New-untrained.
- Returning teachers – those who have previously taught in a state and state integrated school but have had a break from teaching for at least one “full” calendar year.

Entering rate

The number of teachers entering in a year as a proportion of the total number of teachers in that year. For example, the 2018 teacher entering rate formula:

$$2018 \text{ teacher entering rate} = \frac{\text{Number of teachers entering the workforce in 2018}}{\text{Total number of teachers in 2018}}$$

Leaving teachers

Teachers who were regular teachers in the workforce in the previous year and now are not teaching in any state or state integrated school.

Leaving rate

The number of teachers leaving in a year as a proportion of the total number of teachers in the previous year. For example, the 2018 teacher leaving rate formula:

$$2018 \text{ teacher leaving rate} = \frac{\text{Number of teachers leaving the workforce in 2018}}{\text{Total number of teachers in 2017}}$$

Comparing entering and leaving rates

The entering and leaving rates cannot be directly compared because their rates are calculated using different denominators. The entering rate calculates the proportion of teachers entering the workforce in a particular year, while the leaving rate calculates the proportion of teachers from the previous year that are no longer working in the reporting year (see denominators in above formula). The two rates thus refer to proportions of populations of teachers from different years and are thus not directly comparable.

Comparing number of teachers entering and leaving

Comparing the numbers of teachers entering and leaving the workforce is however appropriate. For example, in 2018, there were 4,040 teachers entering the regular workforce, while there were 3,267 teachers leaving the regular workforce. The difference, 773 teachers, indicates the number of regular teachers entering is higher than those leaving.

Annex Two: Number of teachers entering and leaving the workforce

Table 1 shows the total number of teachers entering the workforce and also by sector (Primary and Secondary) between 2005 and 2018.

Table 1: Number of teachers entering the workforce by sector between 2005 and 2018														
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Entering Teaching - Primary	2,023	1,840	1,901	2,021	1,890	1,642	1,496	1,601	1,623	1,724	1,721	1,905	1,965	2,114
Entering Teaching - Secondary	2,537	2,234	2,159	2,093	1,894	1,809	1,738	1,552	1,624	1,515	1,581	1,638	1,711	1,926
Entering Teaching - Total	4,560	4,074	4,060	4,114	3,784	3,451	3,234	3,153	3,247	3,239	3,302	3,543	3,676	4,040

Table 2 shows the total number of teachers leaving the workforce and also by sector (Primary and Secondary) between 2005 and 2018.

Table 2: Number of teachers leaving the workforce by sector between 2005 and 2018														
Year	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Leaving Teaching - Primary	1,942	1,725	1,647	1,749	1,789	1,402	1,586	1,586	1,367	1,806	1,623	1,534	1,827	1,706
Leaving Teaching - Secondary	2,065	1,993	1,841	1,954	2,031	1,502	1,580	1,632	1,348	1,728	1,470	1,464	1,878	1,561
Leaving Teaching - Total	4,007	3,718	3,488	3,703	3,820	2,904	3,166	3,218	2,715	3,534	3,093	2,998	3,705	3,267

Proactively Released

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