

## Education Report: Teacher Demand and Supply

<b>To:</b>	Hon Chris Hipkins, Minister of Education		
<b>Cc:</b>	Hon Aupito William Sio, Hon Kelvin Davis, Hon Jan Tinetti		
<b>Date:</b>	27 October 2021	<b>Priority:</b>	Medium
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<b>Messaging seen by Communications team:</b>	No	<b>Round Robin:</b>	No

### Purpose of Report

The purpose of this paper is for you to:

**Note** the latest (August) initial teacher education (ITE) enrolment data.

**Note** the provisional set of results from the 2021 Teacher Demand and Supply Planning Tool (TDS).

**Agree** our overall view of the teacher initiatives we plan to offer in 2022 school years and how these will be focused towards priority needs.

**Note** our proposed workplan for ensuring a stable supply of quality teachers in a rapidly changing labour market.

### Summary

1. The supply of, and demand for, regular (permanent and fixed term) teachers has been disrupted by COVID-19. Our 2021 estimates suggest that primary and secondary school teachers will remain in the profession at unusually high levels: 93.2% secondary and 92.0% primary teachers will remain in the profession at the end of 2021, compared to 89.6% secondary and 90.0% primary seen in 2020. This is a 'spike' in retention rates above historical norms: average retention rates over 2014-2019 were c.89% for primary and secondary teachers.
2. Predicting the future supply of teachers is more than usually challenging. There are multiple factors that could affect the supply of teachers in 2022, including changes in border settings, both in Aotearoa New Zealand and internationally, teachers' response to the vaccine mandate, as well as changes to the wider economy.
3. Reflecting this uncertainty, this year's Teacher Demand Supply Planning Tool is based around two scenarios, reflecting different levels of teacher retention into 2022 and beyond. Whilst both scenarios predict that supply will meet demand in the primary sector at a national level, the story is more nuanced in the secondary sector. A "fast return" to historically normal retention rates will likely see a small gap in supply in the immediate future, which widens over the next three years. A "slow return" to historically

normal retention rates is more likely to result in equilibrium of supply and demand over the next three years.

4. We will continue to monitor the state of the labour market and will be ready to support the sector as new needs emerge. This includes preparing contingency plans should the newly announced vaccine mandate create supply challenges for specific schools. This also includes preparing to restart overseas recruitment initiatives should future border settings permit.
5. We have conducted a review of the impact and efficacy of our current suite of teacher supply initiatives. We plan to continue our existing suite of initiatives into 2022, with some modifications to ensure that they more appropriately targeted towards priority groups. We also plan to stand up additional support for domestic ITE graduates and for the ECE sector.
6. In addition, we know that there are long-term, entrenched challenges in parts of the teacher labour market. The ongoing disruption in the market provides an opportunity for greater creativity and innovation to tackle these challenges. We plan to put in place a programme of work to identify new and different ways to meet these needs. We have prioritised five segments for this work based on our current assessment of the highest priority needs of the system as a whole:
  - STEM;
  - te reo Māori, and the Māori medium sector;
  - Pacific languages;
  - ECE; and
  - hard to staff locations.
7. We will also put in place a program of work to tackle some of the long-standing structural challenges in managing the teacher labour market. This will include prototyping an approach for regional demand-supply modelling, reflecting one of the focuses of the new Te Mahau, as well as investing in fixing long-standing data challenges which limit our intelligence on teacher supply, especially around secondary school subjects and in the ECE sector.

## Recommended Actions

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The Ministry of Education recommends you:

- a. **Note** the latest information that the Ministry holds about the supply and demand for teachers and kaiako, including insights from the frontline, latest enrolments in ITE as at August 2021, and provisional data from the 2021 Teacher Demand and Supply Planning Tool.

**Noted**
- b. **Note** that the Ministry will provide a full briefing on the 2021 Teacher Demand and Supply Tool in November.

**Noted**
- c. **Note** that the Ministry will continue to monitor the labour market and will prepare contingency plans to help the sector to respond to future needs. This includes preparing to restart overseas recruitment as border settings permit.

**Noted**

- d. **Agree** to continue our current suite of teacher supply interventions, including restarting an initiative to better support ITE graduates to find their first role.

**Agree / Disagree**

- e. **Agree** that the Ministry will reprioritise \$2m over two years from within existing funding to extend existing and pilot new teacher supply initiatives for the Early Childhood Education sector.

**Agree / Disagree**

- f. **Agree** that, following this report, the Ministry will make operational decisions on minor changes to initiatives on an ongoing basis, keeping you updated about proposed new initiatives or significant changes in market conditions on a periodic basis.

**Agree / Disagree**

- g. **Note** we will put in place a work program to develop new interventions to tackle entrenched challenges in the teacher labour market through 2023 and beyond. Any additional funding needed for new interventions will be considered as part of the Budget 2023 process.

**Noted**

- h. **Note** the five priority segments of teachers that we propose to focus on in our future policy development work:

- STEM (Science, Technology, Engineering, Maths);
- te reo Māori, Māori medium;
- Pacific languages;
- ECE; and
- hard to staff locations.

**Noted**

- i. **Note** that we will put in place a program of work to tackle some of the structural challenges in managing the teacher labour market. This includes piloting a regional approach to teacher demand and supply interventions, focusing on one region, and assuming resources can be secured from within baselines.

**Noted**



Anna Welanyk  
Te Puna Ohumahi Mātauranga



Hon. Chris Hipkins  
Minister of Education

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## Background

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1. The normal dynamics of the teacher labour market have been disrupted by the COVID-19 pandemic. Four trends are particularly important, noting that some trends will affect the supply of teachers in different directions:
  - a. *Higher retention and reduced turnover of teachers* – The number of people staying in the profession has ‘spiked’: the rate of retention has increased from 90% to an estimated 92% in primary and from 90% to an estimated 93% in secondary for 2020 and 2021 respectively. This has a very significant flow-on implication to our projections of teacher supply. Projecting what will happen to this workforce once the economy and border settings transition to a stable post-pandemic situation is the single most significant factor in assessing the medium-term teacher supply picture and is discussed more fully below.
  - b. *Reduced immigration to Aotearoa New Zealand* – The closure of the border has reduced the flow of new incoming teachers – between 300-700 new teachers were recruited per year between 2017 and 2020, dropping to around 160 in 2021, most of whom are likely to be returning citizens. A border entry exception was granted for up to 300 overseas teachers to enter Aotearoa New Zealand with teachers expected to start during 2022.
  - c. *Reduced migration from Aotearoa New Zealand* – Prior to the pandemic, significant numbers of people left Aotearoa New Zealand on an ‘OE’, a trend which has significantly reduced during the pandemic. Consistent with wider emigration rates of 20–34-year-olds, which dropped from around 43,000 in 2019 to 33,000 in 2020<sup>1</sup>, retention rates have increased to highs of 90% and 92% for secondary and primary school teachers in this age range, respectively.
  - d. *Strengthening of the wider economy* – Employment has increased substantially following a lockdown-impacted low point in Q1 2020, increasing the competition for a fixed pool of domestic graduates. If that trend continues, and notwithstanding the recent increases in ITE enrolment seen in 2022 (see para 18), we might see greater mobility out of the teaching profession to other roles, as well as decreased ITE enrolment.
2. These trends have been factored into the 2021 Teacher Demand and Supply Planning Tool and are integral to our 12 to 24-month plan to attract, grow, and retain the supply of our teaching workforce.
3. There is a greater than usual level of uncertainty in our projections for future teacher supply: future developments in COVID policy, for example, can have a significant impact. Since the Teacher Demand and Supply Planning Tool was developed, the Government announced the introduction of a vaccine mandate for everyone working in a school or childcare setting. We have not included any assessment of the impact

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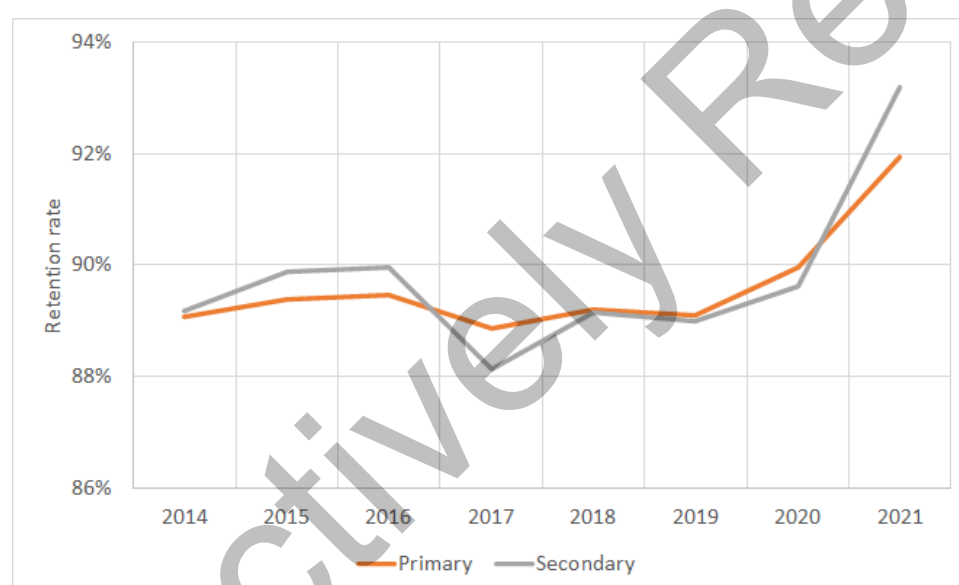
<sup>1</sup> From Stats NZ Infoshare Table: *Estimated migration by direction, age group and sex, 12/16-month rule (Annual-Sep)*

of this change within the Tool but will continue to closely monitor the impact on teacher supply, especially in early 2022.

### **2022 Teacher Demand and Supply provisional insights**

4. You will receive a full update on the complete 2021 Teacher Demand and Supply Planning Tool in early November 2021, and an associated communications plan. The following is a preliminary view of our projections. While we are confident this preview is directionally accurate, it remains subject-to-change. For that reason, the insights from this section are not suitable for public release at this stage.
5. As noted above at para 1, the numbers of teachers remaining in the profession has 'spiked' during 2021 to rates significantly above both the historical average and recent trends. Graph 1 below shows this increase. While the primary cause of this increase is likely COVID-19 behavioural changes (e.g. staying in a 'safe' profession, perceived inability to travel), there are likely other factors that will have longer-term consequences. Most notably, we expect that some of the increase in retention reflects teachers staying in the profession due to the improved teacher compensation package negotiated in 2019.

*Figure 1: Age weighted retention rates for primary and secondary.*



6. Changes in retention rates are the key driver of changes in our projections of future teacher supply. A one percentage point increase in retention for 2022 results in 286 'additional' secondary teachers, with compounding effects in following years.
7. For this reason, understanding what has happened to school teacher retention rates and what we expect to happen to them in the future is a central assumption of the Teacher Demand and Supply Planning Tool.
8. A key determinant of retention rates in future years will be the timeline of future border re-openings and the position of the wider economy. We have little information from other agencies which can be used to inform this prediction in a publicly available model and, if we form our estimate, it risks being seen in public as a 'government prediction' on the timing of future border settings.

9. In response to these challenges, we have prepared two scenarios to estimate upper and lower bounds of supply and demand across primary and secondary sectors. The two scenarios selected make the following assumptions about retention rates:
- Scenario 1 (“fast return to normal”): Retention rates return to normal in 2022 and beyond: in 2022, they are slightly below historical norms (representing ‘pent up’ demand for international travel), in 2023 and beyond they return to the historically normal rate.
  - Scenario 2 (“slow return to normal”): Retention rates in 2022 remain the same as in 2021, before gradually decreasing over the coming years but to a level below historical norm.

The results of these scenarios are summarised in the table below:

	(TDS – Teacher Demand-Supply Planning Tool)	2022	Short term outlook to 2024
Primary	2020 TDS	Supply at least meets demand nationally	Supply at least meets demand nationally
	2021 TDS “fast return to normal”	Supply at least meets demand nationally	Supply at least meets demand nationally
	2021 TDS “slow return to normal”	Supply at least meets demand nationally	Supply at least meets demand nationally
Secondary	2020 TDS	Around 30 short	Gap widens over time
	2021 TDS “fast return to normal”	Around 200 short	Gap widens over time
	2021 TDS “slow return to normal”	Supply at least meets demand nationally	Supply at least meets demand nationally

10. *Teacher Subjects:* The Teacher Demand and Supply Planning Tool does not currently provide insight into the supply and demand for teachers in specific subjects. However, based on an analysis of school timetable data, and consistent with the analysis that was done to inform the initial design of the Border Exception [METIS 1252370 refers], we believe that there is still a shortage of teachers in certain STEM subjects, and the proportion of new graduates specialising in these subjects is significantly lower than the number of people currently teaching them. In particular, initial estimates suggest we are currently training about only half the number of Maths teachers that we require to maintain existing supply. This picture is confirmed from intelligence received from regional offices, from sector advocacy groups, and from recruitment agents, who also note the shortage in te reo Māori teachers, Māori medium teachers, and other subjects.
11. In addition, despite the positive overall picture in the primary sector, the Ministry anticipates that there will still be an ongoing need for targeted support for primary



schools to find teachers in certain parts of the country, and in the Māori medium sector. We hear from our regional offices, unions, and the sector that rural areas continue to find challenges recruiting. Between 2004 and 2019, rural schools' turnover rates were around three to seven percentage points higher than their urban counterparts<sup>2</sup>.

### ***ECE Supply***

12. Due to limitations in the data that we currently collect from the ECE sector, we are not able to prepare demand-supply estimates as we can in the compulsory sector (we outline a plan to address this below in para 56).
13. The sector tells us there remains a significant shortage of qualified ECE teachers. We have heard this message from a range of groups and representatives, who point to the simultaneous challenges from a strengthening labour market, an inability to recruit overseas trained teachers, and competition from within the education sector from higher paying roles especially in the kindergarten and primary sectors.
14. We also hear from stakeholder groups about the shortage of relief teachers in the ECE labour market. This view is supported by newly available data that one recruitment agency supplied on a confidential basis, suggesting that they have had a significant increase in their inability to find suitable teachers for relief roles.
15. We are told by the sector that recent changes to discretionary hours have helped certain services. However, the change in discretionary hours is temporary and expires on 31 January 2022 [METIS 1265021 refers].
16. The challenges of ECE teacher supply are complex, with a need to both increase the supply of new teachers, increase the retention rate of teachers staying in the profession, as well as needing to ensure equitable distribution across Aotearoa New Zealand. In view of these challenges, we have prioritised ECE both as an area for new short-term interventions to increase the supply of teachers – see para 37-39 below – as well as an area for future work to tackle long term supply challenges – see para 46-51.

### ***ITE Enrolment***

17. ITE enrolment rates remains the single most significant factor influencing the long-term supply of teachers. We previously briefed you on 'as at April' enrolment trends in initial teacher education [METIS 1261053 refers]. The Ministry has now compiled data on enrolments in ITE qualifications 'as at August' in 2021. The 'as at August' 2021 data can be compared with data from the same time in 2020 to get a sense of how enrolments are tracking this year.
18. The key results from the 'as at August' 2021 data show that the number of domestic students enrolling in an ITE qualification for the first time increased by 27% (an increase of 1,100 students) in 2021 compared with the same time in 2020 to reach 5,110. This was the result of:
  - i. an increase of 25% (315 students) in ECE ITE,
  - ii. an increase of 26% (490 students) in primary ITE, and

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<sup>2</sup> Teacher Turnover | Education Counts

- iii. an increase of 34% (275 students) in secondary ITE.<sup>3</sup>
19. A large increase in first-time ITE domestic students in 2021 across all the teaching sectors likely reflects the impact of COVID-19 and students seeking to enrol in 'safe haven' programmes during times of economic uncertainty. It is not clear at this stage if the higher numbers of people commencing ITE will be sustained in the future in a post-COVID-19 environment. Further information on the 'as at August' ITE enrolments can be seen as Annexe 1.

### Current teacher supply interventions

20. In recent years, the Ministry has been allocated approximately \$142m<sup>4</sup> of investment as part of a package of interventions to increase the supply of teachers. We have conducted a review of the impact of this package and have incorporated it into the analysis that follows. We will present a summary of this review to you in November, as part of a scheduled Cabinet report-back.
21. We organise teacher supply initiatives into four categories:
- a. *Buy* – enable the migration of overseas teachers to Aotearoa New Zealand
  - b. *Grow* – increase the number of teachers being trained in Aotearoa New Zealand
  - c. *Retain* – increase the number of teachers remaining in the profession
  - d. *Distribute* – ensure teachers are teaching where they are most needed.
22. We have reviewed our teacher supply initiatives in each category to assess their overall impact on teacher supply, and how well they are helping us to support recruitment of priority pools of teachers. Initiatives were assessed to decide if they should be stopped, restarted, continued, or grown. We also assessed the support for priority pools and if there are any gaps or opportunities across the initiatives and considered if the initiatives continue to provide value for money.
23. Our assessment, including the results of this review, is that there are few 'big ticket' initiatives that have not been previously identified. Instead, we have focused on making deliberate changes to better deliver on our existing initiative set, whilst undertaking new, deeper work to unlock new ideas for the future. We summarise our planned changes below and include a full list in Annex 2.
24. We recommend you agree to these proposed changes to our existing initiatives as a package. The above changes to initiatives will be managed within baseline of the whole teacher supply budget package – discussed further at para 59 below. We are happy to provide more detailed advice on each proposed change if required.
25. Going forward, we plan to move to a model of making ongoing operational changes to our initiatives to better improve delivery for the sector. We will manage our initiatives under a programme of continuous improvement, and add, remove or refine settings as

<sup>3</sup> The 'as at April' enrolment data had shown an overall increase of 1,090 first time domestic ITE students (31% increase) between 2020 and 2021. This was the result of an increase of 280 ECE students (31% increase), an increase of 495 primary ITE students (27% increase) and 295 secondary ITE students (40% increase).

<sup>4</sup> Teacher supply has received funding in three recent budgets: Budget 17: \$9.5M; Budget 18: \$20M; Budget 19: \$95M. In addition, it received \$10.6m in October 2018. This sums to \$135m which has been publicly announced as our 'teacher supply investments' in the past. In addition, the VBS received an additional \$6m in Budget 2018 and an extra \$0.9m was reallocated to ECE in September 2019.



required. We will keep your office informed of the changes on an ongoing basis, with specific decisions elevated to you as required on a risk and impact basis.

### **Buy**

26. Historically, the Ministry has run significant overseas recruitment campaigns encouraging overseas trained teachers to come to Aotearoa New Zealand. These have been paused since March 2020 (the 300 teachers entering under the Border Exception is a separate approach and does not include any attempt to actively recruit overseas teachers). We have considered whether and how overseas recruitment schemes should be restarted once border conditions allow.
27. To date, overseas schemes have proved both impactful and cost effective, with nearly 1,000 returning Aotearoa New Zealand and overseas trained teachers arriving since 2019. Although parts of the sector have expressed concerns about the suitability of some overseas candidates, we think these concerns are manageable with the existing regulatory requirements from the Teaching Council and NZQA for overseas trained teachers.
28. Once international borders are more open, we think that there will be an initial outflow of teachers from Aotearoa New Zealand, most of which are teachers who have deferred overseas travel or work experience as a result of the pandemic. Overseas teacher recruitment campaigns are our single most effective channel for correcting this quickly, especially in subjects or locations of high need, capitalising on Aotearoa New Zealand's positive image overseas. When border settings permit, teachers can be brought in under this initiative relatively quickly: months rather than multiple years for other initiatives that train new teachers.
29. We cannot restart active overseas recruitment campaigns under the current border settings. Given the wider changes in immigration settings, we will commence planning to restart overseas recruitment once border settings allow freer entry to Aotearoa New Zealand. We will start the planning now and will update you on progress on this before the end of the year, as part of our planned update on the future of the Border Exception project.

### **Grow**

30. We currently have 465 scholarship places available to encourage new entrants to enter initial teacher training. We plan to expand the number of scholarships available by about 10% (see 59 below on the financial implications of this change.) They are well established interventions that help address the medium-term supply of Aotearoa New Zealand trained teachers, by removing some of the financial barriers for people undertaking ITE. Any additional scholarship places will be for teachers in priority pools, and we will also look at increasing places for scholarships in high demand.
31. We also plan to expand the Bilingual Education Study Award. This award is given to provide a year's paid leave for teachers to improve their proficiency in te reo Māori me ōna tikanga Māori and develop their skills as a bilingual or immersion teacher. We plan to expand this award to accommodate high demand for the award, and to help meet demand in the sector for te reo Māori and Māori medium teachers.

### **Retain**

32. In 2018, you agreed to make the Teacher Education Refresh (TER) programme free for teachers needing to complete the programme before entering or re-entering teaching. Since fees were removed there has been a substantial increase in

participation: from 419 participants in 2017 calendar year, to an average of 740 per calendar year since then, at an average cost of \$1,600 per teacher. We recommend continuing this funding as it assists the sector to retain qualified teachers, by removing the financial barrier to TER participation. We have suggested an extension to this funding below, which aims to improve completion rates for teachers required to complete the programme (see para 34 below).

33. We plan to expand the scope of the Voluntary Bonding Scheme and National Beginning Teacher Grant so that they now include the ECE sector (see para 40 below).

#### ***Distribute***

34. We plan to restart and refocus domestic recruitment initiatives to support teachers who need extra help. For example, we know that some beginning teachers need extra support to successfully transition into their first teaching job. We also want to support beginning teachers who want to move from relieving into permanent roles, which may provide a lower quality mentoring and development experience for new teachers. Low decile, specific subjects and hard to staff schools also need support to recruit teachers. Historically, the Ministry has provided this by contracting with recruitment agents. We plan to restart this initiative, with closely defined outcome-measures and, assuming this can be negotiated with the agents, a payment-by-result structure.

#### ***Support improved uptake of initiatives by teachers and services, schools and kura***

35. We are aware that some teacher supply initiatives are not always easy for users in the sector to find out about, so concerted efforts to tailor information to teachers, schools, services and training organisations will improve uptake. Initiatives are currently stand alone, so linking initiatives by career stage on a teacher's career pathway will improve access to support for teachers. We are investigating ways to make information on initiatives easier to find and use across all our channels for all our audiences.
36. We will work to better tailor information to improve the uptake of initiatives, especially to priority pools. We will trial a case-management approach to assist potential teachers and schools to access support and, through doing so, improve application success rates. We will also repackage the initiatives to support teachers' career pathways, instead of an initiative-by-initiative approach.

#### ***Additional support for the ECE sector***

37. As mentioned above in para 13, we are aware that parts of the ECE sector are facing significant supply challenges and we have considered what immediate steps can be put in place to support the sector.
38. We propose to reallocate \$2m over 2 years from within the existing budgets to develop a 'challenge fund' focused on boosting the number of beginning and returning teachers in the ECE sector. The fund will aim to increase the number of ECE teachers entering and returning to the profession by:
  - a. Increasing support for beginning ECE teachers by expanding existing initiatives to include ECE where possible.
  - b. Increasing completion rates of ECE TER. This could include providing course costs to students to reduce the financial, technology and ICT skills barrier and working with training providers on other strategies to reduce withdrawal numbers.

- c. By attracting more people into ECE TER. This could include improving promotion of the TER to qualified people who want to return to teaching.
39. The fund will be organised around clear, measurable, definitions of success, with potential micro-interventions from the fund evaluated against their ability to deliver on these goals. We will monitor the interventions through a performance mechanism that allows ongoing assessment to determine whether the interventions are on track to deliver the target outcome, allowing us to rescope or reprioritise quickly.

*Expanding access to existing initiatives*

40. The ECE sector is not currently included in some teacher supply initiatives that are open to other parts of the sector, including the National Beginning Teacher Grant, the Voluntary Bonding Scheme and Isolated Practicums. We are investigating whether these initiatives can be expanded to include ECE. From preliminary work, the National Beginning Teacher Grants may be quite straightforward to extend to the ECE. The other initiatives may be possible but are more complex and will require more work into the next financial year. For example, if private providers are eligible for state sector schemes like the voluntary bonding scheme, we could extend the scheme to ECE. If not, we may need to design a new initiative for private ECE providers.

*Increasing completion rates of ECE TER and attracting more people into ECE TER*

41. We propose to pilot a new initiative to support qualified ECE teachers to return to the profession. The ECE returners represent a pool of potential teachers, all of whom will have previously been trained. They also have a relatively short time back into the profession: at the fastest, the required refresher course can be completed within 12 weeks, with most courses taking up to one year. In contrast, a 'non-qualified' ECE teacher might take up to three years to become a qualified teacher.
42. TER is the only initiative aimed at encouraging qualified teachers to return to the profession. The programme provides a pathway back into the profession by updating teachers' professional knowledge on contemporary educational knowledge and practices, as well as providing them with a route to full certification.
43. Since 2018, the Ministry has funded the fees for TER participants which appears to have led to a significant increase in enrolment in TER. However, the completion rates for some ECE courses seems to be higher than others. We have done some initial work on why this is the case. It appears that, amongst other factors, TER recipients may have difficulty accessing technology and upskilling on ICT required to complete their online study. This is a high priority opportunity to increase the number of new ECE teachers relatively quickly, given the relatively short completion time for the TER.
44. We will work closely with ECE TER providers to design and scope potential interventions to be funded from this fund, which are initially likely to be small-scale 'micro' interventions that target specific barriers faced by learners. Aligned with the vision for Te Mahau for better 'feedback loops and information flows' from the sector, we will closely monitor the progress of the interventions, with clear, objective measures of success for the fund, standing up and scaling down interventions on a flexible basis based on information received from providers.
45. We are currently working on the operational details and timing of this package and will work with your office to plan a potential announcement. In the future, if successful, the pilot initiative for returning teachers could be rolled out to attract qualified returning teachers in a similar way.

## Future workplan

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46. We know that there are entrenched challenges in certain parts of the teacher labour market around the supply of teachers in certain subjects. We plan to examine whether we have the right set of initiatives to attract, grow and retain sufficient teachers in these areas from first principles, asking 'what would it take' to deliver sufficient teachers in each priority group.
47. We know that each of the priority groups has their own specific challenges that prevents potential teachers from applying. Currently, we do not have sufficient information about these barriers, nor what it would take to overcome them in order to design effective interventions. Our programme of work will seek to understand the problem at a granular level, so we can develop effective solutions to better serve the sector and address these entrenched challenges.
48. We will define clear, measurable definitions of success for each priority group. Wherever possible, these targets will be based on our assessment of what it will take to deliver existing government commitments, such as the commitment that 30% of Māori learners are participating in Māori Medium Education by 2040. Where explicit, quantified commitments have not been made, we will look to set them based on our best-available evidence.
49. We will use the findings from the research and work closely with the sector to identify potential solutions to the specific problems we discover. These would go beyond incremental adjustments to our existing initiatives and instead focus on what new interventions are needed to serve this group in the most effective way possible. The work would also consider interventions that enable schools to use our existing workforce differently including options for how our teacher aide and paraprofessional workforce works alongside the teacher workforce.
50. We have identified five priority segments. Most of these align to long-standing and well understood priorities for teacher supply. Pacific language teachers are a new addition, reflecting the Ministry's wider strategic priorities for Pacific languages:
  - a. STEM teachers. *Rationale for inclusion*: very high demand from schools which we are not currently meeting; preliminary analysis of data from school management systems suggests that we are only training about half the maths teachers we require.
  - b. Te Reo Māori and Māori-medium teachers. *Rationale for inclusion*: te Tiriti and equity commitments, Government policy commitments to boost number of te reo and Pacific language teachers and learners (including, but not limited to, supplying sufficient teachers to deliver the Government's ambition for 30% of Māori learners to be participating in Māori-medium education by 2040).
  - c. Pacific language teachers: *Rationale for inclusion*: Government policy commitments to boost number Pacific language teachers.
  - d. ECE teachers. *Rationale for inclusion*: ongoing growth in demand; long-term decline in ECE ITE enrolments from peak in 2012, despite increases in recent years; significant and ongoing feedback from the sector about the specific challenges of recruiting qualified ECE teachers.
  - e. Hard to staff locations. *Rationale for inclusion*: significant feedback from the sector that certain locations are significantly harder to attract staff than others, largely due to rurality. Contributes to MBIE's Regional Skills policy.

51. We will come back to you in mid-2022 with an update on this work and present options for new initiatives in 2023 and beyond.

### **Taking a regional focus**

52. To date, our supply planning has largely been conducted at a national level, with interventions aimed at tackling national challenges, as well as a focus on specific 'hard to staff' locations. However, we know that each part of Aotearoa New Zealand has specific challenges which reflect the specific characteristics of each region. As part of the creation of Te Mahau, we want to ensure that we are 'giving priority to regional and local voice' in our approach, and so plan to move towards creating regional supply strategies with insights tailored to the specific situation of that region. This will also allow us to be more targeted in our approach; we will be able to stand up new initiatives that tackle the specific challenges of staffing schools in a given region, creating specific pathways and solutions that work for that region.
53. There are some risks to a regional approach that we will need to manage as we do this work. We will work to ensure that we maintain coherence in our approach across Aotearoa New Zealand, managing an equitable distribution of resources. In addition, working at a regional level will require us to invest in new data, both qualitative and quantitative, to understand the specific challenges of each region and different initiatives that align more precisely to a region's needs.
54. To help us to navigate these challenges better, we plan to move progressively to a regional approach. As a first step to doing this, we plan to stand up a project team to build a supply strategy for one education region. Over the next 12 months, and contingent on sufficient resources being available (see para 61 below) we plan to build a pilot supply strategy for this region, working closely with the relevant Te Mahau office as well as local peak bodies and stakeholder groups. We will report back on this in mid-2022, identify lessons learned from that work and, if the approach appears viable, propose a plan to expand this approach to other regions in the future.

### **Investing in better data**

55. As discussed above, the annual Teacher Demand and Supply Planning Tool offers the most comprehensive insight into the current state of the teacher labour market. However, there are some significant limitations in the Tool, including the reliability of sub-national projections (beyond Auckland) and the absence of subject-specific demand and supply projections. In addition, as noted above, the Tool is unable to project supply and demand needs in the ECE sector.
56. We have developed a workplan to address these needs. We hope to be able to have:
- a. Region-specific insights – within 12 months
  - b. Subject-specific insights – within 12 months
  - c. Demand and supply modelling in the ECE sector – within 24 months (*this is substantially more complex than the other two due to the lack of data currently held by the Ministry and is contingent on agreeing timelines with Stats NZ for when we can access the IDI infrastructure*)
57. Delivering the above requires an additional investment in departmental costs to fund the analytical approach. We note this in our following section.



## Financial implications

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58. Paragraphs 26-45 set out a set of initiatives that we expect to deliver over 2022 and beyond. Annexe 2 gives our 2022 budget by initiative, including new initiatives, expansions to existing initiatives, and restarting initiatives if needed.
59. Our current intent is to fund these initiatives from within our current baselines, recognising the ongoing financial impacts caused by COVID-19, especially around the timing and scale of potential future overseas recruitment initiatives. If these were to be restarted at scale and early in 2022, this will cause financial pressure (up to a 30% increase in our current budget for the next two years) that could not be met from our baseline for this financial year. Given the uncertainty about when and how these initiatives might restart, at this stage, we do not plan to go through the Budget 2022 cost pressure process. Instead, we plan to use our planned December 2021 advice to you on the future of the Border Exception initiative to review progress on these initiatives, note when they may restart, and set out options for funding if required.
60. Over the medium term, the research noted above at para 46-51 will likely result in new initiatives which will require funding. At this stage, we anticipate that we will submit a budget bid for Budget 2023 to fund these initiatives, as well as to fund the renewal of existing initiatives, such as keeping the Teacher Education Refresh fees free.
61. In addition, we are aware that the work identified above creates funding pressures on the Ministry's departmental baselines, and we would need extra budget for the following:
- a. \$850k per year for two years to support the ongoing maintenance and development of the Teacher Demand and Supply Planning Tool, as well as its expansion into the ECE sector and developing subject-level analysis (Teacher Demand and Supply Planning Tool is currently funded from a line in the Budget 2019 package which expires in June 2022). Beyond that, future funding will be needed to maintain the model on an ongoing basis.
  - b. \$600k costs for planned research into the priority teacher segments identified above.
  - c. \$850k for staff costs to pilot a regional teacher demand-supply tool and to deliver expanded package of initiatives.
62. We will work within the Ministry to identify how these funding pressures can be met. If we are unable to find a solution within baseline funding, we will advise your office and note the implications on our work programme.

## Communications

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63. As noted above, the results from the Teacher Demand and Supply Planning Tool 2021 release are provisional and still being quality assured internally. For that reason, we do not recommend you communicate these numbers externally at this stage. We anticipate that this will be ready for your office by 3 November 2021.
64. We are developing an approach to publishing the results of this year's Tool alongside a summary of our planned future teacher supply interventions. We will work with your office to provide supporting communication materials.



## Next steps

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65. To ensure a timely operational response to shifting contexts in the future, we recommend that the approval for ongoing adjustments to the current initiatives stays with the Ministry. We will keep your office aware of changes being made to existing initiatives before they are implemented. We will also come back to you for approval on any new initiative, or where we think a proposed change may be particularly controversial or sensitive to a part of the sector.
66. We are working to improve timing and sequencing of our ongoing cadence of advice on teacher supply so that decisions are taken at the time when they can be fully informed by the evidence. We will report back to you in early 2022 on work we have started to re-sequence the flow of teacher supply advice including the Demand and Supply Planning tool.
67. We will provide you an interim update in mid-2022 on the findings from our research into tackling the priority groups of teachers identified above as well as any emerging new interventions that might be ready for Budget 2023.
68. We are currently assessing the impact of the newly announced vaccine mandate on teacher supply, including preparing plans to provide the sector with additional, focused support to deal with local staffing challenges in light of the mandate. We will provide your office with a separate update on this work shortly.

## Proactive release

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69. This report will be proactively released once the finalised numbers for the Teacher Demand and Supply Planning Tool have been approved for release. Any information which may need to be withheld will be done so in line with the provisions of the Official Information Act 1982.

## **Annexes**

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- Annex 1: Enrolments in ITE qualifications 'as at August' 2021
- Annex 2: Summary of the review of existing initiatives and the proposed changes for 2022
- Annex 3: Additional estimated budget required for expanded and new initiatives for 2021/22 - 2022/23

Proactively Released

## Annex 1: Enrolments in ITE qualifications 'as at August' 2021

1. We previously briefed you on 'as at April' enrolment trends in initial teacher education (ITE) (METIS 1261053 refers). The Ministry has now compiled data on enrolments in ITE qualifications 'as at August' in 2021. The 'as at August' 2021 data can be compared with data from the same time in 2020 to get a sense of how enrolments are tracking this year.
2. The focus in the Ministry's reporting of the ITE enrolment data is on the number of domestic students starting an ITE qualification for the first time. This gives an indication of the number of people who may be available to join the teaching workforce for the first time in the future.
3. In the past, the 'as at August' data has been a reasonable predictor of the trend in the full-year enrolment data in primary ITE, where most students enrol at the start of a year. The 'as at August' data is less predictive for early childhood education (ECE) and secondary ITE, due to the higher number of students who can start at a later date in the year.
4. The Ministry does not publish the part-year ITE enrolment data on Education Counts but the information is used internally and shared with agencies and Ministry working groups.
5. Key insights of the 'as at August' ITE enrolment data are the (see Table 1 and Figure 2):
  - number of domestic students enrolling in an ITE qualification for the first time increased by 27% (an increase of 1,100 students) in 2021 compared with the same time in 2020 to reach 5,110. This was the result of:
    - an increase of 25% (315 students) in ECE ITE
    - an increase of 26% (490 students) in primary ITE, and
    - an increase of 34% (275 students) in secondary ITE.<sup>5</sup>
  - change in students for each individual teaching sector does not add to the change in total students as there were a small number of students with an unknown sector and the data is rounded to the nearest 5.
  - large increase in first-time ITE domestic students in 2021 across all the teaching sectors likely reflects the impact of COVID-19 and students seeking to enrol in 'safe haven' programmes during times of economic uncertainty. It is not clear at this stage if the higher numbers of people commencing ITE will be sustained in the future in a post-COVID-19 environment.
  - number of first-time domestic students enrolled in Māori medium ITE programmes decreased by 23% (60 students) in 2021 compared with the same time the previous year. Because numbers are relatively low, the Māori medium enrolment data shows considerable variation over time. For example, enrolments in Māori medium increased by 26% in 2018, decreased by 21% in 2019, and increased by 24% in 2020.

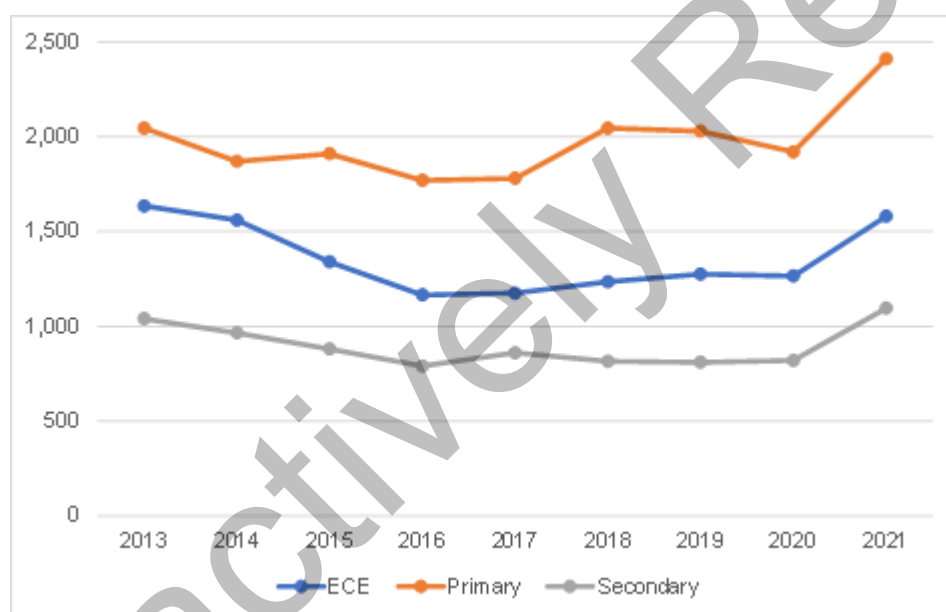
<sup>5</sup> The 'as at April' enrolment data had shown an overall increase of 1,090 first time domestic ITE students (31% increase) between 2020 and 2021. This was the result of an increase of 280 ECE students (31% increase), an increase of 495 primary ITE students (27% increase) and 295 secondary ITE students (40% increase).

*Table 1: Number of domestic students enrolling in an ITE qualification for the first time by indicative teaching sector 2013-2021, as at August*

Indicative teaching sector	2013	2014	2015	2016	2017	2018	2019	2020	2021
ECE	1,635	1,560	1,340	1,165	1,175	1,235	1,275	1,265	1,580
Primary	2,045	1,870	1,910	1,770	1,780	2,045	2,030	1,920	2,410
Secondary	1,040	965	880	790	860	815	810	820	1,095
Unknown	20	25	15	15	10	40	15	10	35
Total	4,660	4,370	4,100	3,735	3,820	4,125	4,125	4,010	5,110

Notes: 1. Where students enrol in an ITE qualification which prepares them to teach in more than one sector, we report them in each of these sectors. 2. Data in this table, including totals, have been rounded to the nearest 5 to protect the privacy of individuals, so the sum of individual counts may not add to the total.

*Figure 2: Number of domestic students enrolling in an ITE qualification for the first time by indicative teaching sector 2013-2021, as at August*



- ITE qualifications range in length from one to three years (studying full-time), so the first-time ITE students will be graduating at different times in the future depending on the qualification they enrolled in. The majority of students in ECE and primary ITE are enrolled in three-year bachelor's degrees, while secondary first-time ITE students are enrolled in ITE programmes that take one year to complete on a full-time basis.
- Full-year enrolment data for ITE in 2021 will be available in March 2022 and we will brief you on the results.

## Annex 2: Summary of the review of existing initiatives and proposed changes for 2022

Goal	Initiative	Description	Recommendation
Buy	Overseas recruitment	Procure recruitment expertise to target returning Aotearoa New Zealand and overseas trained teachers with expertise in shortage subjects.	Prepare to restart this initiative from early 2022 if needed when border restrictions are lifted, as border policy allows.
	Overseas Relocation Grant (ORG)	Grant for overseas-trained or returning Aotearoa New Zealand teachers relocating to fill a vacancy.	Prepare to restart this initiative from early 2022 if needed when border restrictions are lifted, as border policy allows.
	Overseas Finder's Fee (OFF)	Grant to schools who have incurred recruitment costs to hire teachers from overseas.	Prepare to restart this initiative from early 2022 if needed when border restrictions are lifted, as border policy allows.
	Recruitment, Retention, and Responsibility Fund (3RNF)	Grant for schools to employ people with subject matter expertise as a Limited Authority to Teach (LAT) teacher	Continue the initiative and work with sector to improve applicant experience and links to employment-based initial teacher education (EBITEs). Investigate ways of improving uptake for applicants in priority pools.
Grow	Bilingual Education Study Award (BE)	Provides a year's paid leave for a teacher to study and develop their skills as a bilingual or immersion teacher.	Double numbers from late 2021 of available awards to accommodate high demand for te reo Māori and Māori medium teachers.
	Iwi-based co-design Scholarships	Pilot programme to support supply and retention of Māori medium and te reo Māori teachers.	Once the current evaluation has been considered, investigate expansion in consultation with the sector and Iwi groups in mid-2022.
	TeachNZ Scholarships	Fund is used to encourage people into teaching and to support people to move into identified shortage areas, through various targeted scholarships.	Plan to increase scholarships by a minimum of 10% to meet demand from early 2022, particularly to support training for priority pools.
	Teach First NZ (TFNZ)	TFNZ delivers an employment based ITE in low decile schools.	No changes proposed as an evaluation is currently underway. Further decisions to be taken once the evaluation is complete in early 2022.
Retain	National Beginning Teachers Grant (NBT)	Grant for eligible schools to fund recruitment and structured mentorship of beginning teachers.	Expand to include ECE in late 2022 and increase uptake of available grants for new teachers ahead of Term 1 in 2022.
	Teacher Education Refresh (TER)	A subsidy for enrolment in "refresh" courses for qualified returning teachers, those with expired certification, or overseas-trained teachers.	Expand enrolment by a minimum of 10%, and secure funding for the initiative to continue beyond June 2022. Pilot a new initiative alongside TER to support improvement of completion rates.
Retain + Distribute	Voluntary Bonding Scheme (VBS)	Incentive for teachers who are bonded to work for three or more years in areas of high need.	Settings have not been substantially reviewed since 2009. Conduct a review by mid-2022, to investigate how to change settings, including learning from reviews of other state sector bonding schemes. Investigate if expanding the scheme to private sector ECE employers is feasible as part of the update.
Distribute	Domestic Recruitment	Repurposing of the overseas recruitment support. Procured	Restart to support teachers and schools who need extra help with recruitment in early 2022, e.g. hard to staff and low decile

		recruitment agency to support schools.	schools. Trial a 'concierge'-style recruitment support targeted to beginning and returning teachers.
	<b>Domestic Finder's Fee (DFF)</b>	Repurposing of OFF. Funding for schools who incur recruitment costs.	Continue to give targeted support to teachers and schools who need extra help with recruitment in early 2022.
	<b>Domestic Relocation Grant (DRG)</b>	Repurposing of ORG. Up to \$4,250 reimbursement of moving costs for teachers relocating within Aotearoa New Zealand.	Continue to give targeted support to teachers and schools who need extra help with recruitment in early 2022.
	<b>Isolated Practicums</b>	Subsidy to ITEs who place students in practicums in Auckland and isolated areas.	Review in mid-2022 and adjust to target priority pools and better support teachers in Auckland and isolated areas.



**Annex 3: Additional estimated budget required for expanded and new initiatives for 2021/22 - 2022/23**

<b>Non-departmental - new</b>	<b>Additional 2021/22 Budget (\$m)</b>	<b>Additional 2022/23 Budget (\$m)</b>
New TER course costs	1.8	1.8
ECE extension to NBT	0.6	0.6
ECE extension to VBS	1.05	1.05
10% increase to TER	0.84	0.84
TER 2022/23	0	1.05
Restart domestic recruitment	0.88	0.88
6 months overseas recruitment if needed	2.15	4.30
Increase in scholarships (10% places)	2.01	2.01
Increase bilingual study award	1.60	1.60
<b>Total</b>	<b>10.93</b>	<b>14.13</b>
<b>Departmental - new</b>	<b>2021/22</b>	<b>2022/23</b>
TDS	0.815	0.815
TDS ECE	0	0.15
Research	0.6	0
FTE (regional focus and new initiatives)	1.21	1.21
<b>Total</b>	<b>2.621</b>	<b>2.171</b>