







Secondary Teacher Supply Working Group Report

August 2016

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Foreword

We are pleased to present this report on behalf of the Secondary Teacher Supply Working Group.

New Zealand has some of the world's best teachers and leaders. Our teaching workforce is critical to raising student achievement and lifting the equity of outcomes for all children and young people. There is more we can do to ensure that every student has the teachers they need to meet their learning needs.

The New Zealand Post Primary Teachers' Association and the Ministry of Education, through the production of this report, have demonstrated their commitment to building stronger relationships across the education sector, of building on commonalities and respecting differences. This report reinforces that all the parties who have contributed to this report have common goals and shared intent in terms of identifying and addressing issues that will impact positively on the New Zealand teaching workforce, and make a difference for our students.

This report considers factors influencing teacher supply and the pressures currently faced by teachers in a range of settings. It takes a forward-looking approach to dealing with secondary teacher supply issues over the medium term, and reflects research on teacher supply in New Zealand.

We expect it will generate thought, discussion, and responses about how we ensure that there is an adequate supply of high quality teachers available to meet the needs of all students and collectively respond to factors that are impacting on teacher supply in our secondary schools.

As we have indicated in this report, we believe that there is both demand and opportunity for a coordinated and proactive approach that delivers to the needs of current and future learners.

Alongside this focus on delivery, we also need to view secondary teacher supply in the context of the complete teaching career pathway. We need to consider how we attract, retain and motivate teachers throughout careers that can be potentially long and varied. We need to consider how we recognise, reward and support them to remain responsive and inspired to help prepare our children and young people meet 21st century challenges.

The supply and demand of quality teachers is a complex area. It involves a number of parties including the Ministry, teacher unions, schools and boards of trustees, the Education Council, the Tertiary Education Commission, initial teacher education providers, and other sector groups.

Many of these stakeholders have contributed to this report. We want to acknowledge the Ministry and PPTA working group and technical group members. We also thank the principals and sector organisations that met with the Working Group, and also those that wrote submissions and provided input and support.

We are grateful for the dedication and commitment demonstrated by everyone involved, to delivering the right teacher for each student, at the right time and the right place.

Angela Roberts

President New Zealand Post Primary Teachers' Association Lisa Rodgers

Deputy Secretary Early Learning and Student Achievement Ministry of Education

PART 1

Executive summary

This Secondary Teacher Supply Working Group Report (Report), from the Secondary Teacher Supply Working Group (Working Group), explores current and future issues around secondary teacher supply, and makes recommendations on how these can be addressed. The Working Group was established as part of the settlement for the 2015-2018 Secondary Teachers' Collective Agreement.

Process

The Working Group was made up of representatives from the Ministry of Education (Ministry), the New Zealand Post-Primary Teachers' Association (NZPPTA), New Zealand School Trustees Association (NZSTA), Secondary Principals' Association of New Zealand (SPANZ), New Zealand Secondary Principals' Council (NZSPC) and the Education Council.

The group drew on existing data and collected information directly from the sector in meetings and through written submissions. Qualitative information was used to give insight into trends and issues identified through the quantitative research.

The Report and recommendations are largely agreed by all the parties. Sections and recommendations in the Report which are not agreed are clearly shown as such.

Context and agencies

Supply and demand of teachers is complex and involves many parties, including the Ministry, the Education Council, Tertiary Education Commission (TEC), NZSTA, individual schools, unions and sector groups.

Current pressures signal a need for a coordinated and proactive approach. A system-wide response is required to meet the needs of current and future learners. In addition, secondary teacher supply needs to be seen in the context of the whole career pathway, from attraction to teaching through to retention and end of career.

The Report contains two agreed recommendations and four recommendations from the NZPPTA focused on central agencies and their role in addressing secondary teacher supply issues.

Workforce trends and current issues

- The workforce is ageing. 45.4% of secondary teachers are over 50 years of age.
- Fewer beginning teachers are entering the profession, and the proportion that start in permanent full time positions has also fallen.
- There is a high rate of attrition among beginning secondary teachers. Just under half leave teaching within the first five years of joining the profession.
- There are not enough new teachers in the science, technology and mathematics to meet demand.

- Teacher vacancies are increasing. Following the ten year low during the global financial crisis, job advertisements are rising, and we expect this trend to continue in the short to medium term.
- Teacher shortages create pressure across the education pathway and impact on student achievement. Employers report that they are forced to compromise on quality to fill positions.
- Supply and demand issues are nuanced, differ by school and location, and are being experienced across deciles. There is a concentration of issues in Auckland, but also in some regions and rural areas particularly in sciences, technology and maths (STM) subjects and Te Reo Māori.

The main driver of secondary teaching positions is the number of students. Forecasts indicate a small decline in the number of secondary students until 2020 which will lead to a decline in teacher numbers by around 800, and then an increase in rolls until 2027 which will mean around 1,100 more teachers. These figures are based on current staffing ratios being maintained.

Teacher retention is currently around 91%, which is relatively stable and consistent with the past decade. At this rate of retention, 2,200 secondary teachers a year will be required to join the workforce for the next eight years. However the NZPPTA contends that it cannot be assumed the retention rates will continue at this level, and that the impact of the Global Financial Crisis has been to increase the rate of retention.

There are secondary teacher shortages in most Western countries, which may contribute to recruitment and retention pressures here. Globally, countries have responded to shortages in different ways, some by lowering standards of entry, while others have found ways to maintain or continuously raise the quality of teachers and teaching. Countries with more balanced secondary teacher supply have policies that achieve this by looking broadly across the teaching career, addressing retention as well as recruitment.

Secondary Teacher Supply Dynamics

Supply and demand of secondary teachers is part of the wider labour market, and there are multiple factors that make it difficult to capture this complexity in a comprehensive predictive model. However, creating a stronger match between supply and demand is in the interest of the sector, and therefore understanding the factors that influence changes and how they interact, is important.

Centrally determined wages mean that remuneration plays less of a role when there are imbalances between demand and supply than many other areas of the labour market. However, existing collective agreements have created flexibility through a range of mechanisms to recognise differential staffing pressures - these include management units, middle and senior management allowances and allowances that recognise specific roles, eg, Specialist Classroom Teachers or expertise such as Advanced Classroom Expertise Teaching (ACET). Boards can also allocate recruitment, retention and responsibility payments from their operational or other internal funding to recognise differing factors.

Salary and other conditions of work are significant factors in regard to labour market dynamics for teachers, like other workers, and in particular the relativity to other similarly qualified professions.

Attraction into teaching

There are concerns about the perceptions of teaching as a profession, which are often negative. Shifting these perceptions is unlikely to be solved by a single approach.

There are particular pressures in some areas of specialist secondary subjects, such as attracting science, technology and maths graduates into teaching. Graduate pools in these subject areas are small and competing careers are currently perceived as more attractive than teaching.

Opportunities to promote teaching as an attractive career should be identified and acted upon.

The report contains five agreed recommendations regarding the appeal of teaching as a career.

Selection and Initial Teacher Education

There is currently significant variation in the match between secondary initial teacher education (ITE) and the needs of the sector, particularly in response to the need for teachers in certain specialist subjects and roles. There is concern in the sector about the quality of ITE graduates, and there is clearly a mismatch between the numbers graduating with particular teaching subjects and the needs of schools.

A more coordinated approach is required, which should include development of alternative high quality ITE pathways, development of a new approach towards scholarships that support ITE, and better connections between parts of the sector.

The Report contains 13 agreed recommendations about ITE, and a further recommendation from the NZPPTA.

Recruitment issues across the career pathway

The Report notes that some issues with recruitment are not revealed in data based on advertised vacancies. This is because schools report they are sometimes forced to make compromises on quality to secure an appointment and because schools may not advertise positions they believe they will not be able to fill. This masks supply issues, and is one of the reasons that the Working Group sought qualitative information from the sector.

Most new appointments are of experienced teachers rather than new teachers, and new secondary teaching graduates are more likely to be employed in fixed term or relieving roles than in permanent full time positions. This contributes to high attrition rates of new teachers. The number of beginning teachers joining the sector has declined significantly since the early 2000s.

Recruitment practices and the processes used by individual schools to induct new teachers into the profession have an impact on the supply of new teachers who come into the sector as a whole.

There are particular recruitment challenges in secondary subject areas including mathematics, sciences, technology, and Te Reo Māori, together with some subjects that are not widely offered in New Zealand secondary schools.

The Report contains six agreed recommendations about recruitment across the career pathway, and a further six from the NZPPTA.

Retention

Overall rates of secondary teacher satisfaction with their jobs are quite high, but there are areas of concern. These include retention of middle leaders, new teachers and relief teachers, as well as the potential medium term impact of a significantly ageing workforce.

Teacher retention rates in recent years have been inflated by the economic uncertainty of the global financial crisis, and have been stable over the medium term. The NZPPTA contends that under current settings it cannot be assumed this will continue.

Individual school and agency decisions can have a cumulative and detrimental impact on overall secondary teacher supply, or for particular groups of teachers.

The Report contains eight agreed recommendations about retention, one joint recommendation from the NZPPTA, the NZSPC, and the SPANZ, and a further recommendation from the NZPPTA.

Career development

The development of Communities of Learning provides welcome new opportunities for leadership among teachers, but also creates supply pressures for other leadership roles.

There continues to be strong interest in senior leadership roles in secondary schools, but less-so in middle leadership, where there are concerns about the support for, remuneration and manageability of the role. There is increasing evidence for difficulties filling these positions.

The Report contains six agreed recommendations about career development.

Later career stage

Like the wider workforce, the proportion of older teachers has increased in recent years. The proportion of secondary teachers over 60 years of age has risen from 10% in 2005 to 21% in 2015, which is now more than double the proportion of teachers under 30 years of age.

Retirement patterns amongst older teachers are changing, with flexible roles becoming more common. This presents opportunities and challenges for schools and the wider sector, and has an impact on the roles available for younger teachers.

The Report contains one agreed recommendation on the later career stage.

Recommendations of the Supply Working Group

- 1. That secondary teacher supply is viewed within the career pathway from pre-recruitment to end of career and recognises the impact of agencies and individual schools on the retention and recruitment of secondary teachers.
- 2. That secondary teacher supply is viewed within the context of an ageing work force and the significance of medium term secondary roll growth.
- 3. That the parties acknowledge that the staffing formula provides a firm basis for establishing the number of entitlement positions for current and future secondary teacher supply.
- 4. That this Report be forwarded to the Workload Working Group in particular for them to consider how workload impacts on recruitment and retention of secondary teachers.

Note: A number of these recommendations would require additional resourcing. Where further advice is needed, it will be developed to contribute to future Budget processes.

Note: The report will also be forwarded to the Education Council, the Ministry to inform the work programme to lift the quality of ITE, and the Funding Review Advisory Group for their consideration on the impacts of their work on recruitment and retention of secondary teachers.

Pre-recruitment recommendations

- 1. That the Ministry reviews its in-school promotion of secondary school teaching as a profession including the development of scholarships for secondary school graduates supported by their school through undergraduate study and ITE qualification.
- That the Ministry and the Education Council promote secondary school teaching to undergraduate students at career decision points to actively recruit them into teaching; and consider establishing a programme, similar to other professions (such as Russell McVeigh, Communication Advertising Association of New Zealand or Graduate Connection) that selects and supports top graduates through secondary ITE study and into employment.
- 3. That the Ministry broaden its promotion of teaching to the wider community through a range of media.
- 4. That the Ministry continue to collaborate with Curious Minds Strategy to promote STM subjects to secondary students and remove barriers to increased participation in STM.
- 5. That the Ministry investigate the recruitment campaigns of other professions for potential use in the Ministry promotion initiatives.

Initial Teacher Education recommendations

- 6. That the Ministry and the Education Council facilitate opportunities for the NZPPTA to contribute to their work programmes on raising the quality of secondary ITE.
- 7. That the Ministry, NZPPTA and the Education Council encourage the development of a cohesive range of pathways for innovative secondary ITE, including partnerships between hard to staff schools or kura and ITE providers to recruit secondary school graduates and support them

through ITE.

- 8. That the Ministry considers the merits of establishing field-based and employment-based secondary ITE qualification pathways for Career Change students that already hold an appropriate undergraduate qualification.
- 9. That the Ministry, the Education Council and TEC work together to ensure:
 - quality secondary ITE graduates
 - secondary ITE intakes are better matched to system and sector needs
 - availability of graduates where needed.

10. That the Ministry:

- reviews the existing scholarship programmes to focus on lifting the status of the profession.
- continues work with NZPPTA, NZSPC and SPANZ and other interested parties to establish advice through 2016 on the optimum number, value of scholarships annually and any necessary changes to bonding requirements.

The NZPPTA view is that the value of scholarship should be set at the minimum wage in each year of study plus the reimbursement of fees; that career change scholarships be paid at appropriate untrained teacher rates; and that the number of scholarships should represent proportion of 10% of all ITE graduates and at least 1% of the number of graduates required in each subject area

- ensures scholarships are offered to the best secondary ITE candidates across the range of secondary subjects
- ensures that scholarships are responsive to changes in secondary supply and as a priority that STM subjects are added to the scholarship programme for 2017 as an immediate response to supply issues.
- 11. That the Ministry looks for opportunities to connect schools with regional secondary ITE providers to improve practicum placement (including removing barriers) and employment opportunities for graduates.
- 12. That the Ministry reviews the use, effectiveness and adequacy of the isolation allowance funding to ITE providers to facilitate opportunities for rural and distance practicum.
- 13. That ITE providers and the Education Council work to ensure that graduates have teaching subject combinations that will lead to employment as a teacher and that the Education Council will monitor this.
- 14. That ITE providers, the Ministry and NZSTA establish opportunities to ensure that all scholarship graduates gain employment that enables them to complete certification requirements, and to support their retention in the secondary teacher workforce.
- 15. That the Ministry investigates, with the Education Council and secondary ITE providers, the quality and consistency of Professional Learning and Development (PLD)/study programmes to support and recognise associate teachers with a view to raising the status of the role.

The NZPPTA view is that in addition to the above, the role should be recognised through additional remuneration.

16. The Ministry and the Education Council work with Education Review Office (ERO) on the current national evaluation of the preparedness of beginning teachers and respond as necessary.

- 17. That the Ministry and the Education Council work together to establish systemic graduate monitoring to identify employment outcomes for teacher graduates, preparedness to teach (as assessed by the tertiary provider) and retention in the teaching workforce.
- 18. That the funding mechanisms and structures for secondary ITE be reviewed to ensure a better match to secondary teacher supply, and a report is produced in time to implement changes for 2019.

NZPPTA recommends:

A. That an independent statutory body take oversight of recruitment into ITE programmes and advice to the ITEs on the number of trainees required each year.

New appointments recommendations

19. That the Ministry expand the existing assistance for schools needing to recruit overseas teachers in shortage subjects and communicates to all schools the process and supports to enable overseas recruitment when required.

The NZPPTA, NZSPC and SPANZ view is that the recruitment agency costs should be fully funded for schools in need.

- 20. That the Ministry, NZSTA, NZPPTA and the Education Council take a more coordinated approach to ensure the access to, and quality and consistency of, practices to support beginning teachers across the secondary school network to recognise the importance of quality induction and support practices for beginning teachers.
- 21. That PLD and support be available for schools to deliver effective induction and mentoring programmes for beginning teachers.
- 22. That the Ministry facilitate the provision of advice and direction on good employment practice, including in particular:
 - the use of fixed-term appointments
 - guidance on what constitutes a "genuine reason" for fixed-term role
 - the employment and retention of new teachers.
- 23. That the NZSTA actively encourage schools to include the reason for a fixed-term position when placing advertisements in the Education Gazette.
- 24. That the parties to the Secondary Teachers' Collective Agreement (STCA) and NZSTA meet before the end of 2016 to consider how the existing mechanisms, such as incentive allowances and removal expenses, can be used to support recruitment and retention in hard to staff schools.

The NZPPTA view is that this could include significant increases to the High Priority Teacher Supply Allowance (HPSTA) and the Staffing Incentive Allowance (SIA), extending the HPTSA to all schools identified as chronically hard to staff schools and extending its duration, the inclusion in the criteria for reviewing SIA renewal of likely effects of its removal, and extending the eligibility criteria for removals to fixed-term positions that are subsequently appointed to permanent positions and in hard to staff settings.

NZPPTA recommends:

B. That support with housing and accommodation costs is developed for areas where median house

prices in the housing district in which the school is located exceeds seven times the secondary teacher income or where the school is in a hard to staff district.

- C. That the range of housing support mechanisms identified in Appendix D *Previous Initiatives* of this report be options for housing support and that Government work with Kiwibank to develop a no deposit scheme for secondary teachers in housing shortage areas.
- D. That the Ministry take responsibility for the management and maintenance of all school housing stock in hard to staff areas and fund required upgrades.
- E. That the Ministry immediately suspend the policy of selling off school housing stock and move to expand the core supply of school housing in hard to staff areas.
- F. That secondary teacher salary be linked to relative salary movements of other professionals to reflect the importance of relative salary to recruitment and retention.
- G. That either schools be required to state the reason for fixed-term positions when advertising in the Education Gazette, or that the Ministry survey principals annually for the reasons for fixed-term positions advertised in the Education Gazette.

Established teachers recommendations

25. That the Ministry establish, monitor and publish information on the secondary teacher workforce trends annually, including:

- Demographics of the workforce
- Information on the range of occupied positions (ie level of position, tenure)
- Flows into and out of the workforce (intakes, losses, movements)
- Pathways into permanent work for Provisionally Certified Teachers (PCT)
- Advertised and re-advertised vacancies
- Data on number of enrolments and graduations from ITEs
- Gathering information on the number of applicants schools receive when advertising vacancies, such as the Monitoring Teacher Supply survey completed by all state and state-integrated schools at the beginning of each school year.¹
- 26. The Ministry investigate other ways in which the current Education Gazette vacancy data could be improved or supplemented to get a better understanding of how vacancies are filled and reasons for vacancies not being filled.

The NZPPTA view is that the number of applicants for positions, and number of applicants considered suitable for the position by the principal should be included in information reported on by the Ministry. Benchmarks for all the above measures should be established and used as a tool for reporting.

- 27. That the Ministry work with the NZSTA and the Education Council to facilitate improved support to boards, principals and schools to lift the quality of engagement with teachers on teacher development and career planning.
- 28. That the Ministry, NZPPTA and NZSTA prioritise teachers seeking to enhance subject knowledge or retrain in shortage subject knowledge and/or pedagogy in the annual review of the criteria for

¹ www.educationcounts.govt.nz/publications/series/2519/149551

study awards and study grants.

The NZPPTA view is that the Service/Qualification Increment allowance three year top of scale restriction should be removed for teachers who retrain in subject shortage areas.

- 29. That the Ministry and the Education Council consider the support of teachers required to teach in an area for which they are not qualified, eg, access to study support grants or specialist mentoring.
- 30. That the Education Council take into account the impact of that policy on the availability of 'day' relievers in reviewing registration policy.

The NZPPTA view is that a new certification category should be established for day relief teachers and that this distinction be reflected in the STCA provisions for short term relievers.

- 31. That the Ministry investigate establishing international exchanges to contribute to raising the status of teaching.
- 32. That the Ministry investigate mechanisms to establish and maintain regional pools of specialist teachers in shortage subjects able to take up fixed-term roles to cover teacher absence or short term vacancies.

NZPPTA, NZSPC and SPANZ recommends:

H. That the Government consider the impact of a pay parity policy on its ability to respond effectively to supply pressures in the secondary sector.

NZPPTA recommends:

I. That an independent review panel be established to determine the appropriate current level of secondary teacher remuneration at classroom, middle and senior leadership level relative to other professions from which secondary teaching draws or is in competition for graduates.

Career paths recommendations

33. That the Ministry, NZSTA, NZPPTA, NZSPC, SPANZ and the Education Council consider appropriate solutions to problems with recruitment and retention of middle leaders in regard to remuneration, manageability, PLD, the status of the role and the impact of Communities of Learning (CoLs).

The NZPPTA view is that remuneration of middle leaders should be reviewed this year; middle leadership units be set by the rate of the Within School Teacher Allowance; the number of leadership payments increased and the value of Senior and Middle Management Allowances raised; unit restriction on holding the SQI be removed; and time allowances for middle leadership be increased.

- 34. That the Ministry and the Education Council, in their development of a leadership growth strategy and the re-design of PLD, consider how PLD can be developed to support and prepare teachers who aspire to middle and senior leadership roles.
- 35. That the Ministry, NZPPTA and NZSTA better communicate the process for recognition of relevant work for teachers returning to teaching.
- 36. That the Ministry and the Education Council improve 'system' opportunities for secondment to

organisations or agencies (eg, Ministry, ERO or Education Council) or industry.

- 37. That the Ministry, NZSTA and NZPPTA seek to gain a better understanding of the use of guidance and management time in schools.
- 38. That the Ministry, NZSTA and NZPPTA seek to gain a better understanding of the use of operational funding and locally raised funds for additional staffing, and the implications of this for secondary teacher supply.

End of career recommendations

39. That the NZPPTA, NZSTA and Ministry work to facilitate improved advice and guidance to schools on managing end of career options.

The NZPPTA view is that the options should include the ability to volunteer for the severance option in the surplus staffing process and that end of career planning be supported by:

- pro-rating non-contact time
- grand-parenting salary for teachers who relinquish leadership positions with up to two years advance notice of retirement
- supported Government Super Fund (GSF) contributions for those in the scheme who elect to relinquish units or move to part-time positions.

Agencies recommendations

- 40. That the Ministry strengthen its programme of qualitative and quantitative information to support the sector and better understand workforce trends.
- 41. That the Ministry convene a biannual meeting with key stakeholders, including TEC, NZSTA, the Education Council and NZPPTA, NZSPC, SPANZ, Immigration NZ and New Zealand Qualifications Authority (NZQA) to discuss workforce planning and supply, identifying relevant policy developments that could impact workforce supply and demand.

NZPPTA recommends:

- J. That the Ministry develop a behavioural model for predicting the impact on recruitment and retention of proposed changes in policy and of changes in supply-related factors.
- K. That the Ministry more regularly monitor the composition and intentions of the secondary teacher work force through whole sector censuses and individual teacher surveys.
- L. That data for primary and secondary should be presented separately in reports on the teacher supply.
- M. That the responsibility for managing, monitoring and reporting on secondary teacher supply be moved to a body with statutory and political independence and to that body be transferred:
 - the supply-related monitoring and data collection, supply projection and related policy advisory roles of the Ministry and the recruitment and promotion functions of TeachNZ
 - the responsibility for the provision of funding for ITE programmes by transfer from the budget allocation held by TEC

• the oversight of recruitment into ITE programmes and advice to the ITEs on the number of trainees required each year.

NZPPTA further notes that:

- the joint recommendations in this report are necessary but not sufficient steps to address the underlying causes of the secondary teacher supply problems.
- addressing the underlying causes of secondary teacher supply problems will require recognising the underlying problems of high work pressure, declining relative salaries and the spreading pressures generated by the housing supply crisis in Auckland and other centres.

The two points above were endorsed by NZSPC and SPANZ.

PART 2

Context for this report

Background to the Secondary Teacher Supply Working Group

- The Secondary Teacher Supply Working Group (Working Group) was established as part of the settlement for the 2015-2018 Secondary Teachers' Collective Agreement. It recognised the joint interest that the New Zealand Post Primary Teachers' Association (NZPPTA) and the Ministry of Education (Ministry) had in responding to issues of concern being raised in the sector around secondary teacher supply.
- 2. The Working Group consisted of representatives from:
 - NZPPTA² Angela Roberts, NZPPTA President (Co-Chair), Melanie Webber, Tom Haig, Dr Judie Alison
 - Ministry of Education Lisa Rogers, Deputy Secretary (Co-Chair), Sarah Borrell, Di Davies, Dr Phillip Stevens
 - Employers Lorraine Kerr, New Zealand School Trustees Association³ (NZSTA) President, James Thomas⁴, principal of Whangaparaoa College representing the New Zealand Secondary Principals' Council and the Secondary Principals' Association of New Zealand.⁵
 - Education Council Barbara Benson.
- 3. The Working Group's remit, as outlined in their Terms of Reference, was to provide advice to the Minister of Education on the following matters, including the range of responses which are available to address any issues which may be identified:
 - identify the factors influencing secondary teacher supply
 - identify the work currently being undertaken on secondary teacher supply
 - consider secondary teacher supply currently and over the medium term
 - consider recruitment and retention pressures for teachers who are:
 - a. full-time classroom teachers
 - b. part-time classroom teachers
 - c. middle management teachers
 - d. senior management teachers
 - e. representatives of minority populations
 - f. teachers of different subject specialisms
 - g. teachers in small and in rural schools
 - h. teachers in low decile schools
 - i. teachers in Māori medium schools.

² NZPPTA is the industrial and professional organisation which represents secondary teachers and leaders in State and Stateintegrated secondary schools.

³ NZSTA is the representative body for the majority of school boards of trustees.

⁴ Tom Webb, Principal Mangere College, substituted as the principals' nominee at the 22 June meeting.

⁵ The New Zealand Secondary Principals' Council and the Secondary Principals' Association of New Zealand are representative bodies for secondary school principals.

- 4. The Working Group adopted three common goals:
 - quality teachers are in front of all of our learners⁶
 - a sustainable, responsive, quality teaching workforce which meets the needs for all learners in all schools
 - the best graduates see teaching as a first choice career.
- 5. The Working Group highlighted the need to have responses which coherently cover the entire teacher career pathway (see diagram 1) and address recruitment and retention problems for the system, and not individual schools.

"Attracting talented people into the teaching profession must be a central part of any country's education policies, not just left to chance as it currently is in too many. Attracting talent requires attention to the whole system: the quality of teacher preparation; a professional work environment; adequate compensation; and attractive career opportunities."

"Matching teacher supply and demand is complex and multidimensional. It will involve expanding the overall supply of high-quality teachers, addressing specific subject shortages, recruiting teachers to the neediest areas, and maximising the retention of teachers over time. Policy responses are needed to improve the general attractiveness of the teaching profession and to target approaches to getting teachers into high-need areas.⁷"

- 6. To build a picture of what is currently happening in our secondary schools the Working Group drew on available data, research, submissions made by a range of contributors and meetings with groups of principals from five key regions.⁸
- 7. The Working Group agreed that teacher supply issues cannot be addressed by addressing recruitment in isolation and that applying a response to supply pressures at just one point in the teaching career pathway can simply transfer the pressures to other areas with little or no net benefit.
- 8. This report:
 - provides background to the secondary teacher supply story
 - considers key issues identified along teacher workforce career pathway
 - summarises key themes identified, along with variations in these themes to recognise the many different contexts in which teaching operates (eg, by region, subject)
 - provides conclusions and recommendations on the way forward.

⁶ The Secondary Teacher Supply Working Group is aware that there are significant supply issues for Māori immersion schools and immersion units; however the Working Group agreed that the issues are to be dealt with in a separate process.

⁷ *Teaching and leadership for the twenty-first century* 2012 International Summit on the Teaching Profession (page 15)

⁸ See Appendix A for more detail around contributors and Appendix G for a summary of suggestions



Diagram 1: Factors associated with recruitment and retention across a teaching career pathway⁹

⁹ Adapted from Teacher Attrition and retention research in Australia: Towards a theoretical framework. Mason S and Mata CP. Australian Journal of Education. Vol. 40 Issue 11. 2015

The big picture

- 9. In New Zealand education is focused on raising student achievement and lifting the equity of outcomes for all children and young people and our teaching workforce is critical to achieving this.
- 10. We have some of the world's best teachers and leaders but we recognise there is more we can do to ensure that every student has the teacher they need to meet their learning needs.
- 11. The supply and demand of quality teachers is a complex area that involves a number of parties, including the State through the Ministry, schools and boards of trustees, the Education Council, the TEC, ITEs, unions and other sector groups.
- 12. Current supply and demand pressures facing New Zealand secondary schools signal a need for a proactive approach from the parties involved, working with the sector and available data to understand the issues and initiate responses that are timely and effective. A shared and coordinated system-wide response is required to meet the current and future needs of secondary schools and learners.
- 13. The secondary schooling system in 2015 comprised approximately 275,000 students taught by approximately 25,500 secondary teachers (see Appendix B for full data tables).
- 14. Secondary teachers in New Zealand are predominantly graduates with one or more subject tertiary qualifications, recently graduated from ITE programmes or older career changers. They generally have a one year ITE qualification and are required to be registered to teach before they can be employed.
- 15. The majority of secondary teachers in New Zealand are employed by state and state-integrated schools. These schools are governed by boards of trustees which have responsibility for recruitment and employment of all staff within their school this means teachers apply for positions directly to the school they seek to work in. The principal of each school is the senior manager in the school and has responsibility for the day to day management of staff. The principal is also typically responsible for recruitment and makes decisions around selection of appropriate candidates for roles.

The Ministry of Education

16. The Ministry is the Government's lead adviser on education policy. The Ministry also has a stewardship role, meaning it has a focus on the long term health and performance of the system, and that it supports, where needed, sector leaders to raise achievement. The Ministry provides some services in the employment environment, eg, it monitors secondary teacher supply, provides payroll and negotiates state early childhood and school collective agreements (under delegation from the State Services Commissioner), provides scholarships and study awards. It shares a focus on lifting the status of teaching with the Education Council.

The Education Council of New Zealand

- 17. The Education Council has a number of functions relevant to teacher supply:
 - to enhance the status of teachers and education leaders
 - to identify and disseminate best practice in teaching and leadership
 - to register and to certificate teachers, and to establish and maintain criteria and standards for teacher registration
 - to conduct, in conjunction with quality assurance agencies, approvals of teacher education programmes
 - to establish and maintain criteria for the issue of practising certificates of different kinds
 - to perform the functions relating to teacher competence.

The Tertiary Education Commission

18. The TEC is responsible for funding tertiary education in New Zealand, including ITE courses.

Initial Teacher Education

19. There are nine ITE providers, seven universities and two Private Training Establishments, which provide secondary ITE to graduates and career changers wishing to become secondary teachers. They deliver programmes of ITE that lead to qualifications recognised for teacher registration by the Education Council.

The New Zealand Qualifications Authority

20. The NZQA manages National Certificate of Educational Achievement (NCEA) assessment for senior secondary school students and is responsible for the quality assurance of non-university tertiary education providers, including non-university ITE providers. If an overseas trained teacher wants to teach in New Zealand, one step to achieving New Zealand teaching certification is to get their teaching qualification assessed by NZQA as comparable to a New Zealand teaching qualification. Note that the Universities New Zealand (UNZ) Committee on University Academic Programmes (CUAP) is the body responsible for the approval and accreditation of New Zealand university qualifications, including university ITE providers.

Unions

- 21. The role of the NZPPTA is to promote the cause of education generally and phases of secondary and technical education in particular, to uphold and maintain the just claims of its members and to affirm and advance the Treaty of Waitangi. It represents and advocates for members on industrial and professional issues and negotiates the secondary teachers' and principals' collective agreements. As with other representatives to this report, it shares the desire to see the status of teaching lifted.
- 22. The role of the SPANZ and the NZSPC is to represent secondary principals.

New Zealand School Trustees Association

23. NZSTA is the representative body for 92% of school boards of trustees.

Immigration NZ

24. Immigration NZ has a role to ensure overseas teachers coming to New Zealand to teach are lawfully able to work in New Zealand. Overseas trained teachers from abroad must meet Immigration requirements including a character check, proof of New Zealand teacher registration and a job offer from a New Zealand school.

Agencies recommendations

- 40. That the Ministry strengthen its programme of qualitative and quantitative information to support the sector and better understand workforce trends.
- 42. That the Ministry convene a biannual meeting with key stakeholders, including TEC, NZSTA, the Education Council, NZPPTA, NZSPC, SPANZ, Immigration NZ and NZQA to discuss workforce planning and supply, identifying relevant policy developments that could impact workforce supply and demand.

NZPPTA recommends:

- J. That the Ministry develop a behavioural model for predicting the impact on recruitment and retention of proposed changes in policy and of changes in supply-related factors.
- K. That the Ministry more regularly monitor the composition and intentions of the secondary teacher work force through whole sector censuses and individual teacher surveys.
- L. That data for primary and secondary should be presented separately in reports on teacher supply.
- M. That the responsibility for managing, monitoring and reporting on secondary teacher supply be moved to a body with statutory and political independence and to that body be transferred:
 - the supply-related monitoring and data collection, supply projection and related policy advisory roles of the Ministry and the recruitment and promotion functions of TeachNZ
 - the responsibility for the provision of funding for ITE programmes by transfer from the budget allocation held by TEC
 - the oversight of recruitment into ITE programmes and advice to the ITEs on the number of trainees required each year.

Issues for New Zealand secondary teacher supply

- 25. What we know about teacher supply and demand is informed by several sources both hard data and feedback from the sector. Forecasts are based on current trends and any changes to those trends will lead to differences in projected outcomes.
- 26. Ministry data provides a high level view of teacher supply and demand. It shows small shifts in the size, ethnicity and gender of the secondary teaching workforce, while also revealing the following trends:

• the teaching workforce is ageing

Teachers are retiring later, working longer and more likely to be teaching in part-time, fixed-term or relieving roles as they join the 60+ age group. New Zealand has one of the largest proportions of secondary teachers 50 years of age and older in the OECD (45.4%), so these changing patterns of retirement mean a potentially large number within the workforce may move into more flexible working positions over the next two decades. This will present new challenges for schools to manage.

• fewer beginning teachers are entering the teaching workforce, and the proportion who start in permanent full time positions has also fallen

Between 2010 and 2015 just over 20% of beginning secondary teachers entered the teaching workforce in permanent full time positions (PFT), 50% in fixed-term and just under 30% in relieving positions. This has implications for their ability to access the induction and mentoring that is expected to support new teachers and achieve the standards of practice required for full teacher certification.

• there is a high rate of attrition among beginning secondary teachers

Just under half of all new secondary teachers leave the state and state-integrated system in the first five years of joining the profession. This is likely to impact on the supply of teachers with enough experience and expertise to move into the first level of management and leadership roles.

• there are not enough new teachers in the sciences, technology and mathematics to meet demand

Sciences (including physics, biology and chemistry), technology and mathematics graduates are not choosing teaching as a profession in the numbers needed to meet demand from schools. The retirement of existing teachers in these subject areas will exacerbate this situation.

• teacher vacancies are increasing

Over the last few years there has been a lift in teacher vacancies, which follows a ten year low point between 2010 and 2012.¹⁰ Although the lift is modest to date, we expect a rise in

¹⁰ The decrease in vacancies was linked to the global financial crisis.

vacancies to continue to over the short to medium term, particularly in certain subjects and locations.

• teacher shortages create pressure across the education pathway and impact on student achievement

When schools cannot engage the teachers they want, principals report that they are sometimes forced to compromise quality in order to fill vacancies.

Available data cannot yet capture all issues influencing the supply and demand of teachers. For example, schools may find many ways to ensure that different roles are performed. They may choose not to fill a vacant role, but rather adjust workload across other staff members.

A vacancy that is not advertised is not visible in current data and this may mask supply issues. Current data can reveal *what* is happening, but is less able to explain *why*. For example, what is driving employment patterns among beginning teachers or those 65+, or whether management roles are difficult to fill.

• supply and demand issues are nuanced, differ by school and location, and are being experienced across deciles

While the Auckland region is experiencing a concentration of issues, other regions (eg, West Coast, Southland and Northland) and rural areas are also reporting difficulties recruiting teachers, particularly in STM subjects and Te Reo. This is supported by the 2016 NZPPTA survey which identified increasing recruitment issues in other parts of the country and in filling other subjects. However some principals identified locations and/or individual schools that are not experiencing supply pressures.

Ministry of Education commentary

- 27. The main driver of secondary school teaching positions is the number of secondary students. Ministry forecasts suggest a gentle decline in secondary student rolls until a mini-baby boom hits in 2020-2025, peaking at almost 22,000 more teachers in 2024 compared with 2015 rolls (296,021 vs 274,211 respectively).¹¹
- 28. Teacher numbers forecast through to 2030 look very stable at a national level. There is a slight decline of 829 in the number of teachers needed between 2015 and 2021, then a slight increase of 1,171 between 2022 and 2027. The demand for more teachers will be met initially through short term roles until additional teacher numbers are justified at the individual school level. Teachers in fixed-term, part-time and relieving roles are likely to deliver around 22% of the teaching for the next 10 years.¹²
- 29. Retention rates across the secondary workforce have remained stable over the past decade, ranging from a low of 90.6% in 2006 to range between 91.7 to 92.8% over the past six years. It is important to note that 'teacher loss' data, on which retention figures are calculated, includes people on parental leave and leave without pay (eg, personal study leave). The inclusion of this

¹¹ See Appendix B

¹² See Appendix B

group means that retention figures are under-stated (the number returning in the last five years peaked at 655 and at its lowest point was 501).

- 30. Forecasts suggest there is room for around 2,200 replacement secondary teachers each year for the next eight years, before falling again. Of those replacements, up to 1,400 will be new teachers joining the payroll each year over the next eight years. Past trends show that returning teachers will be preferred for remaining positions, due to their previous experience.
- 31. The number of secondary school graduates in training has declined in 2016.¹³
- 32. Trends in demand for some subjects are in areas of existing pressure on supply, eg, the proportion of secondary students taking chemistry increased from 8.0% in 2003 to 10.0% in 2014.
- 33. The current secondary school workforce does not represent the ethnic makeup of the general population and has many more females (61%) than males (39%).

NZPPTA commentary

NZPPTA believes that the roll growth projected through the 2020s will be problematic if supply is not balanced ahead of time.

- 34. NZPPTA does not share a number of the underlying assumptions in the Ministry's staffing projections. More importantly, it does not share the notion of a 'steady state'.
- 35. Steady state modelling is sufficient when there is an oversupply of secondary teachers because errors in assumptions and projections are masked.
- 36. Currently rolls are declining slightly overall and teacher shortages are already the subject of concern for principals.
- 37. If, as supply theory suggests, the impact of steady state policy and conditions is falling retention and recruitment then even reasonably small increases in student numbers will intensify problems in subject growth areas and in subject shortage areas.
- 38. NZPPTA sees the start of the roll bulge as an important milestone for implementing measures which address supply issues.
- 39. The effects of the increase in student numbers is amplified as the roll bulge moves through and the same number of students generates higher staffing numbers through the staffing ratios.
- 40. Other factors will increase the number of teachers as rolls grow including the opening of additional schools and the base staffing generated by these.

The International scene (from the 2012 OECD report on the International Summit on the Teaching *Profession*)

41. There are secondary teacher shortages in most western countries which may contribute to recruitment and retention pressures for New Zealand. Overseas recruitment agencies have

¹³ See Appendix B.

become more active in New Zealand recently and there is growing demand for English speaking teachers in Asia.

42. The 2012 International Summit on the Teaching Profession report, *Teaching and leadership for the twenty-first century,* notes that:

"Difficulty in recruiting teachers either across the board or in certain subjects or geographic areas is widespread around the globe. Some countries also reveal a worrying downward spiral: Teacher shortages lead to lower standards for entry, producing lowered confidence in the profession, resulting in more prescriptions to teachers, which in turn tend to drive the most talented teachers out of the profession. By contrast to this vicious cycle, the highest performing countries have found ways to maintain or continuously raise the quality of teachers and teaching, producing a virtuous cycle."¹⁴

- 43. The report also indicates that:
 - on average, in OECD countries twenty percent of fifteen-year-olds attended schools with reported shortages of qualified maths and science teachers. A number of mechanisms are being tried to fill this need, including scholarships to subsidise training and differentiated pay, but more research is needed to assess the effectiveness of these efforts
 - in many systems, students in disadvantaged schools have the least-experienced and qualified teachers. Many countries use financial incentives to attract teachers to rural areas or poor sections of cities. China uses a "grow your own" approach, giving scholarships to young people in rural areas to become teachers. How well financial incentives work remains an open question if the conditions of the job remain unattractive
 - some countries are trying to attract a greater variety of people into teaching, encouraging men, minorities, and older candidates to consider the field. Switzerland and England, for example, focus on attracting "second career" candidates, both as part of the overall supply and for specific shortage areas such as maths and science. Recruitment and alternate training routes are specifically designed to appeal to such candidates. These second-career candidates' other professional experiences may be useful in schools, but a key question is how to validate the experience of people coming from other fields
 - it is not just the number of teachers entering the profession that differs in high performing countries, but also their retention rate. While in some cities in the United States up to fifty percent of teachers leave teaching within five years, and in the United Kingdom the attrition rate is twenty-five percent, in high-performing countries with effective teacher policies the attrition rate is under three percent
 - strong programs that prepare teachers for classroom challenges, and systematic induction and mentoring of new teachers, all reduce early career attrition rates significantly. In poorer schools, social supports for students, such as in full-service schools in the United States, can also reduce attrition. The prospect of career paths, opportunities to collaborate with colleagues, and high-quality school leadership can all improve teacher retention
 - government and union participants at the Summit agreed that "making teaching a wellrespected profession and a more attractive career choice both intellectually and

¹⁴ Teaching and leadership for the twenty-first century 2012 International Summit on the Teaching Profession

financially¹⁵, and investing in teacher development, and competitive employment conditions were all essential to getting teacher demand and supply in better balance"

- many European systems, England, the United States and Australia, have significant overall secondary teacher shortages but education systems that have a good overall supply of high-quality teachers, like those in Japan, Finland, Canada, South Korea, and Singapore, demonstrate that such a balance is possible. In these countries, a supply of high-quality teachers is not just attributable simply to a traditional cultural respect for teachers, but from a wide array of purposeful strategies employed over a period of years. Japan and Finland were described in some detail in the report.
- 44. Two countries that were identified as having a particularly stable and reliable supply of teachers are Japan and Finland. The information from the International Summit of the Teaching Profession provides some insight into how this was achieved.

Japan

- 45. The three key reasons given for Japan enjoying a good supply of teachers are:
 - teachers are respected and enjoy high social standing
 - relatively high compensation
 - civil service guarantees of long-term job security and retirement at age sixty and a strong, shared, professional culture.
- 46. The balanced distribution of teachers among different geographic regions is considered essential to equal opportunity. Teachers are employed by provincial governments and can then be assigned among schools. Teachers rotated to rural areas have a salary increase of up to twenty-five percent. This regional personnel management approach is reported to help to provide a more equitable distribution of teachers, including maths and science teachers. However, assignments to rural areas and small towns are very unpopular with teachers compared with teaching in big cities.

Finland

- 47. Finland's education system aims to guarantee equal opportunity to all students, so a highly qualified teacher in every classroom is considered fundamental. Teaching is viewed as one of the five most attractive professions for two main reasons:
 - high-quality teacher preparation programmes that are intellectually on par with other professions, and
 - working conditions in schools that allow wide-ranging professional autonomy.
- 48. Teachers design as well as teach the curriculum, assess student progress, and lead school improvement. Teachers earn an average academic salary, but the high respect with which teachers are held and their considerable professional autonomy accounts for the popularity of teaching as a profession.

¹⁵ Comparisons New Zealand, Canadian, UK, Japanese and Finnish secondary salaries and other key conditions are given in Appendix D.

- 49. A Master's degree is required. Teacher preparation programmes are of comparable quality throughout the country; they have strong research bases, and combine theory and practice with "teaching schools" attached to universities. Finnish teacher preparation programmes emphasise the ability to diagnose social and psychological problems in the classroom. They encourage teachers to be creative educators, responding to individual student needs and interests.
- 50. There are ten applicants for every teaching position, but the government pays continuous attention to the professional labour force and universities still need to take extra efforts to attract enough maths and science specialists into teaching.
- 51. The Finnish Ministry of Education collects data every two years for planning purposes, looking at the numbers of teachers needed nationally and regionally; pass rates in teacher education; and what changes might be needed in teacher requirements.

Key themes

- The dynamic international secondary teacher supply situation presents issues for teacher supply in New Zealand.
- Countries with balanced secondary teacher supply situations are focusing broadly across the teaching career and addressing retention as well as recruitment.

Secondary teacher supply dynamics

52. The Working Group agreed that it is helpful to outline common understandings of the main points in secondary teacher demand and supply theory and how the two are measured and predicted in New Zealand. This is attached in Appendix I NZPPTA Theory of Teacher Supply and Demand.

Projecting demand, monitoring supply

- 53. The Ministry has a strong interest in how well teacher supply matches demand and how that may change in the future. A range of modelling approaches are used to inform our understanding of this. On the demand side, we generally focus on identifying the number of teachers that need to be recruited in coming years. This is based on projections of school rolls and also takes into account teacher loss rates by age. On the supply side, we identify potential sources for teachers and whether these are likely to be sufficient.¹⁶ These sources include graduates (both current and those from previous years who are yet to find teaching employment), teachers returning to teaching from a break, as well as the potential for existing teachers to increase their hours or shift into more permanent roles.
- 54. As with all modelling, there is a range of factors that can be difficult to predict. Factors such as migration (affecting student numbers), changing patterns of working (people working past traditional retirement ages), relative labour market conditions, etc, can all change quickly and in ways that could not have been foreseen.

¹⁶ Current data is not yet able to reveal the subject qualifications of teachers or the subjects that they teach.

The Education Labour Market

- 55. Teacher supply should not be thought of in isolation. Teacher supply sits within the context of the teacher and broader labour markets, and other elements in the education system. None of these things are static and so their influence changes as they evolve. The education sector is constantly evolving as the size and characteristics of the communities they serve ebb and flow. The wider domestic and international economy also changes in ways that affect the teacher labour market. Some of these effects will be common across all areas, some will effect certain areas more than others.
- 56. We must be careful not to think of teacher supply as a single number or a homogeneous group of people. Many potential teachers are not currently teaching, because they are not yet qualified, not working or are working in other parts of the economy.
- 57. The teacher labour market is dynamic and fine-grained. It matches thousands of teachers and potential teachers to thousands of jobs and potential jobs. Whilst teachers have core or minimum qualifications, both individual teachers and the roles that are being filled will have varying qualities associated with them.
- 58. Teachers will vary in their dispositions, skills, specialist subject areas, experience, teaching styles, preferences, backgrounds, language skills, and family and cultural affiliations. They will have a wide range of differing circumstances, including those:
 - recently graduated from ITE who are actively seeking roles
 - with experience looking to make a change either into more challenging, specialist or managerial roles
 - starting a family
 - having partners or other family members with changing circumstances (including their own job)
 - preparing for retirement
 - observing the market with no intention to change.
- 59. Roles in schools will vary depending on:
 - particular skills and experience sought for particular roles
 - social and cultural context of the school and its students
 - the school's approach to teaching and learning and assessment
 - the environment in the school.
- 60. It is not possible to know this fine grain detail to the degree required to plan for and maintain the variety in the system and it is matched to student needs, or to ensure there are no hard-to-fill vacancies.
- 61. The teacher labour market is never static. The match between the characteristics of the teacher and the role will vary. Teachers do not always find their perfect job and schools may not immediately find their perfect teacher the best matched jobs are not always available and the best teachers for a role may not always be available.
- 62. If the quality of the match between teacher and role isn't high enough, the match will not happen. This may mean that the role is unfilled, or that a compromise is made by the school to

fill a role. It is the quality of the match that is important, rather than the number of people applying for the role.

- 63. Supply and demand for teachers is constantly shifting. The nature of roles, the aspirations and circumstances of teachers will change over time as schools also change in their pedagogy, size, roll characteristics, demand for subjects, or leadership.
- 64. Secondary teacher salaries have been set centrally since 1920. The centralised rates were first set through various wage and salary determinations mechanisms, and then from 1991 by negotiation between unions and the government through its agents.
- 65. Centrally determined salaries mean wages can play less of a role where there are imbalances between demand and supply. However, wages for teachers are not entirely inflexible; boards do have the capacity to recognise differing factors through a range of mechanisms including management units, management allowances, recruitment, retention and responsibility (RRR) payments from their operational or other internal funding. In addition, the Government and NZPPTA through a range of mechanisms in the Secondary Teachers' Collective Agreement (STCA) recognise differential staffing pressures in hard to staff schools.
- 66. There are many differences between teaching and other employment including hours, days of holiday, stability, location, pensions and any job comprises a package of pecuniary and non-pecuniary benefits. Nevertheless, it is worth making comparisons. On average, secondary teachers in New Zealand earn 28% more than other full-time, full-year workers with similar qualifications.¹⁷ This is similar to the Organisation for Economic Co-operation and Development (OECD) average of 32%, lower than Finland (43%), but much higher than other English-speaking countries like Australia (where they only earn 8% more), Canada (7%) and England, where teachers earn 3% less than other full-time, full-year workers with similar qualifications.
- 67. 'Turnover' is normal and even desirable in any organisation, including schools, provided that it occurs at a rate the organisation can sustain it is an important way of transferring knowledge and skills between schools. Principals we spoke with highlighted the importance of staff movement as a means to spread innovation and quality practice in particular from areas with links to ITEs and the latest pedagogical developments.
- 68. The number of teachers in the teaching workforce is the outcome of inflows and outflows. Any solution to a teacher supply issue needs to consider both flows that is recruitment into and retention of the teaching workforce. Some of the factors that influence these flows in and out of education are similar to those that influence flows within the sector. Other factors relate to changes in different areas of the labour market where opportunities outside of teaching develop as the general economy improves. However, even these general changes will have different impacts on teachers and potential teachers. The demand for STM skills are likely to be in high demand in the rest of the economy in boom time, but also as the nature of the economy evolves.
- 69. More detailed information on definitions of supply and demand and current initiatives can be found in Appendix I *NZPPTA Theory of Teacher Supply and Demand* and D *Initiatives in secondary teacher recruitment and retention* respectively.

¹⁷ Source: *Education at a Glance 2013: OECD Indicators,* Paris: OECD. The data is for 2013 earnings.

NZPPTA commentary

- 70. It is a statement of the obvious to say that individuals are different and jobs are different and that individuals make decisions about whether to be employed, or remain employed as a teacher. However, those individual decisions are influenced by factors which overall have great power in explaining and predicting overall secondary teacher supply shortage or surplus.
- 71. The established body of teacher supply research and accepted teacher supply theory¹⁸ identifies the major influences in overall recruitment and in retention of secondary teachers are the salary relative to other occupations and the alternative career opportunities open to them.
- 72. People may forego some salary in exchange for non-financial benefits of the job, but conversely when job conditions deteriorate a higher relative salary is required to recruit and retain the same number of teachers with the same qualities.
- 73. It is important in considering the 2013 OECD wage relativity figures to bear in mind that it is a snapshot within a trend. There has not been a policy in New Zealand of maintaining relative wages for secondary teachers since 2008 and that relativity with the New Zealand workforce in general has been declining since at least 2010.
- 74. *OECD at a Glance 2015* shows that New Zealand secondary teachers' salaries are on average three percentage points lower¹⁹ in relativity with other graduates of similar qualifications than the OECD average. At the same time, the amount of teaching required each year is 18% higher than the OECD average²⁰ (and the associated preparation and assessment will proportionately higher too). New Zealand teachers' statutory teaching hours are over 120 more per year than the OECD average.
- 75. The most significant attraction to secondary is the value placed by those who teach on teaching and working with students. Agencies should be careful not to feed into the public misconceptions of teaching in promoting school holidays as a factor for choosing to teach. It does not help the profession (or retention and recruitment) to reinforce the myth of the 9am to 3pm working day and a 38 week working year. Teachers are generally on site during term time for 7-8 hours per day. They are typically working in the evenings after school on school days and spend time in the weekends on school work. They work (on or off site) during the periods when students are on holiday. Secondary teachers also typically are reporting that their workloads are increasing²¹ and that more and more of the time when schools are closed for instruction is taken up by school work.²²

"I have found term time holidays to be far from that. I worked 60 hours across the last holiday (which is typical). Considering two of those days were public holidays this was two hours per week short of full-time. The main activity during holidays is marking internals."²³

¹⁸ Teacher turnover and Teacher Shortages: An organizational Analysis. Ingersoll R. 2001

¹⁹ 4% in 2013, see above *OECD at a Glance 2013* reference above.

²⁰ Source: *Education at a Glance 2015: OECD Indicators,* Paris: OECD. The data is for 2014 earnings.

²¹ See PPTA Workload Taskforce Report 2016

²² Ibid

²³ Ibid

*"I am a young teacher and I work over 70 hours a week on a non-busy week. My holidays are spent WORKING. My evenings are not spent with my husband - they are spent WORKING. The paper load and responsibilities of a teacher are immense."*²⁴

- 76. NZPPTA agrees with those independent commentators who advise that secondary teacher supply problems cannot be effectively dealt with by focusing only on recruitment but must also address issues of retention.
- 77. Problems in the supply of teachers (generally and/or in leadership positions) arise when:
 - the overall relative salary rates are too low to recruit and retain, and/or
 - the hard to staff responses are insufficient.
- 78. The largest impacts on overall teacher recruitment and retention are from relative salary, alternative career opportunities and non-financial aspects of the job. NZPPTA does not disagree with the other aspects of supply theory that the Ministry references, but does believe that advice on all mechanisms for improving secondary teacher recruitment and retention should be considered.
- 79. Responding to relative salary pressures in secondary schools will be problematic within a policy of pay parity with the primary sector, which experiences different recruitment and retention pressures and draws from a different pool of potential candidates.²⁵
- 80. High performing countries with balanced secondary teacher supply are seen as models for New Zealand education policies, not those with the same or worse supply problems.
- 81. NZPPTA believes that all aspects of teacher supply theory need to be applied in considering solutions.

²⁴ Ibid

²⁵ While secondary draws predominantly from tertiary graduates with subject qualifications who add an education qualification in secondary teaching, primary draws predominantly from secondary students who undertake a qualification in primary education.

Attraction into teaching (pre-recruitment)

Context

82. Numerous education agencies have a role across the teacher career pathway to attract graduates into teaching, including ITE providers, the TEC, the Education Council, school boards of trustees and principals, and the Ministry.

What we have heard

- 83. Principals we spoke with commented that:
 - the general perception of secondary teaching as a job is poor and is linked to perceptions of a high workload
 - there could be more promotion of teaching as a career within secondary schools.
 Teaching was described as a "quiet voice" among the marketing and media about career options that students are exposed to from tertiary providers and businesses
 - basic scale pay rates are a barrier to new graduates
 - the lack of income while re-training is a barrier to career changers, particularly those with families who are less mobile than other graduates
 - there are few graduates nationally in key subject fields (eg, maths and physics), with two submissions suggesting a correlation between shortage of qualified maths and science teachers, and the low number of students pursuing these subjects at tertiary level.
- 84. The 'Motivations for Teaching'²⁶ research explored what could motivate the right people into teaching with 66 potential teachers and six high-performing teachers. It identified a number of perceptions that present significant barriers to taking up a teaching career (see diagram 2 for these perceptions, as expressed by potential teachers).
- 85. The research findings were distilled to three key points (pg 9):
 - although teaching is potentially an inspiring, challenging and rewarding career, it is Plan B for most, rather than a career of choice
 - teaching has a weak image and a poor fit overall with what potential teachers consider their career 'must-have' (work-life balance, flexibility, fun, satisfaction, opportunities for personal development, money)
 - the issues are systemic most word-of-mouth and media coverage is negative and no one is putting forward a contrary view.
- 86. Principals and ITE providers also emphasised the need to highlight good news stories about why teaching is a good career the lack of these 'good' messages is damaging the profession.

²⁶ Motivations for Teaching (2010), unpublished research report for Ministry of Education, Windshift

Diagram 2: Perceived barriers to taking up a teaching career ²⁶



Sciences, Technology and Maths teacher supply.

- 87. Material supplied by New Zealand Universities (NZU) from 2013 for graduates with level 7 qualifications aged 30-39 in physics, maths and chemistry (hard to staff subjects²⁷) showed:
 - secondary teaching is the main employment for people with pure or theoretical physics, chemistry and maths qualifications
 - secondary teaching did not appear or rated low in the top 25 destinations for graduates with applied or vocational qualifications based on maths, chemistry and physics (for example engineering, process and resource engineering, mechanical and industrial engineering and technology)
 - typically employment rates were lower for those with qualifications in pure or theoretical STM subjects, and higher for those with applied or vocational STM qualifications
 - graduates with applied or vocational STM qualifications also had higher median incomes.
- 88. NZU hypothesised that those with degrees which typically lead to jobs earning below \$50,000 on entry often make decisions to enter teaching. Those with degrees which typically generate entry incomes of \$55,000 may not. Therefore while arts graduates may see teaching as a good opportunity, IT graduates may consider a business or IT sector opportunity as more appealing than teaching.²⁸
- 89. One of the outcomes of a Nation of Curious Minds (the Government's strategic direction for science and technology) is to '*deliver more science and technology competent learners, and*

²⁷ See Appendix C – Summary of NZU findings.

²⁸ That will also have an implication for gender ratios in teaching as there are more female arts graduates than STM.

more choosing science, technology, engineering and maths related career pathways'.²⁹ For this to be successful we need quality STM teachers in schools, who can prepare and inspire learners to undertake tertiary study in these areas. The programme offers a range of new, innovative or more readily available professional learning and development (PLD) opportunities for teachers to increase their interest in science and technology teaching, and pass this on to their students. These PLD opportunities include the Teachers in Industry pilots, the Sir Paul Callaghan Science Academies, and the priority PLD focus on science.

- 90. There are insufficient numbers of students with a STM specialism enrolling into and completing ITE to meet school needs. It is possible the scale of this issue is masked to some extent as some principals report resorting to 'work around' solutions such as using non-STM specialist teachers to fill these vacancies or attracting teachers back from retirement. Principals emphasise that such work arounds are not sustainable and may impact on student achievement.
- 91. Teaching is not currently presented as an option for students completing their STM qualifications in the way that other professions recruit and link students to potential employers. We need to reach tertiary students as they are making decisions about their next career steps and present teaching as a dynamic and exciting option.
- 92. This is a particular issue as demand for STM teachers is expected to continue to rise. There is significant competition for STM teachers and STM graduates from other jurisdictions, and other industries and professions.

Scholarships

- 93. Ministry of Education (TeachNZ) secondary scholarships are designed to attract people to complete teacher qualifications in areas of shortage. Scholarships are currently only offered for Māori medium and Te Reo teachers, and early childhood teachers with skills in Te Reo Māori or Pacific languages, as these have been ongoing areas of teacher shortage. Prior to 2010 TeachNZ Secondary Scholarships were available for teachers of STM subjects, but they were removed from the scheme as scholarship recipients were experiencing difficulty securing teaching positions at that time.
- 94. We have heard of some schools who are offering students 'scholarships' to undertake ITE on the basis that they come back to their school to teach for a specified period of time.
- 95. ITE providers also noted that the lack of allowances for postgraduate study makes recruitment into new exemplary programmes difficult. Many students choose to complete a Graduate Diploma as the Masters' fees and lack of living cost support are a deterrent.

²⁹ A Nation of Curious Minds is the Government's plan to encourage and enable better engagement with science and technology across all sectors of New Zealand society. These STM-related career pathways include careers as STM teachers. Source: <u>www.curiousminds.nz/assets/Uploads/science-in-society-plan-PDF.pdf</u>

Other

- 96. Principals we met raised the possibility of expanding employment-based ITE programmes such as Teach First NZ which has proven successful in attracting greater numbers of high calibre graduates into teaching from STM subjects than other ITE programmes.
- 97. The initial evaluations³⁰ show the Teach First NZ pilot programme is being successfully implemented and has particular strengths in the quality of participants, selection processes and the ability of the Teach First-University of Auckland partnership to make improvements as required. Evaluations have also found that participants have a positive impact on their schools: they are involved in many aspects of school life, the students they teach are positively engaged and almost all participants show leadership in the classroom or their department.

Key agreed themes

- The Working Group shares concerns about the perception of teaching as a profession. Ministry research on *Motivations for Teaching* indicates that this is an issue for the whole system and is unlikely to be shifted by a single approach
- There are particular pressures in some areas of speciality as well as greater pressures in some parts of New Zealand. A range of innovative approaches should be explored to address these. There are also opportunities such as the work being undertaken within the *Nation of Curious Minds* strategy to lift the number of students in science, technology, engineering and maths subjects
- Public perceptions of teaching as a career are often negative and are influenced by a range of factors (including negative word-of-mouth and media coverage, teacher reports of workload and low salary)
- Opportunities to promote teaching as an attractive career to school leavers, tertiary students and career changers should be identified and acted upon
- The 2009-10 research on *Motivations to Teaching* should be updated to investigate any changing perceptions or barriers
- New and innovative mediums to promote secondary teaching to students and the wider community should be explored (recognising the importance of 'word of mouth' and media coverage)
- The graduate pools in STM subjects where there are current and potentially future teacher shortages are small and competing careers are more attractive than teaching.

³⁰ The 2013 and 2014 cohort evaluations are available from Education Counts at

www.educationcounts.govt.nz/publications/schooling/2014-annual-evaluation-report-for-the-teach-first-nz-programme. The third and final evaluation report is not yet published.

Agreed recommendations

Pre-recruitment recommendations

- 1. That the Ministry reviews its in-school promotion of secondary school teaching as a profession including the development of scholarships for secondary school graduates supported by their school through undergraduate study and ITE qualification.
- 2. That the Ministry and the Education Council promote secondary school teaching to undergraduate students at career decision points to actively recruit them into teaching; and consider establishing a programme, similar to other professions (such as Russell McVeigh, Communication Advertising Association of New Zealand or Graduate Connection) that selects and supports top graduates through secondary ITE study and into employment.
- 3. That the Ministry broadens its promotion of teaching to the wider community through a range of media.
- 4. That the Ministry continues to collaborate with Curious Minds Strategy to promote STM subjects to secondary students and remove barriers to increased participation in STM.
- 5. That the Ministry investigates the recruitment campaigns of other professions for potential use in the Ministry promotion initiatives.
Selection and Initial Teacher Education

Context

- 98. The Education Council has the mandate to: lead developments in the purpose of ITE and coherence of the system; and enhance the status of the teaching profession in conjunction with other agencies, ITE providers and stakeholders in the schooling sector.
- 99. ITE providers need to ensure that graduating teachers have the theoretical understanding and practical experience to manage learning in the cultural contexts where they teach, and the ability to adapt practice to meet future needs.

What we have heard

- 100. There was considerable comment on ITE from principals we spoke with. They were concerned about:
 - the overall number and quality of graduates being recruited into ITE
 - how that intake is matched to sector needs, especially where demand in a subject area is increasing or there is a shortage of specialist teachers
 - the relevance and application of entry standards for selection into ITE, including how effectively ITE providers select-out students who may not be suited to teaching
 - the applications of standards for ITE providers selecting-out students who may not be suited to teaching through their study (including practicum)
 - a lack of coordination in the overall ITE system response to school and system needs. This included design issues such as:
 - i. the lack of a consistent requirement for students to have subject combinations that will maximise their employment
 - ii. the lack of consideration for future system needs, seen as causing an oversupply of primary teachers and shortage of teachers in some secondary subjects
 - iii. the small number of secondary specialist students in many ITE providers, which reduces the opportunity for economies of scale
 - increasingly limited practicum placement which in turn limits student teachers' exposure to a range of schools and reduced school exposure to ITE students, which may impact on recruitment in schools in rural, low decile and multicultural communities
 - v. the need for graduating teachers to have the theoretical understanding and practical experience to manage learning in the cultural contexts where they teach, and the ability to adapt practice to meet future needs
 - vi. the need for support and professional development for associate/mentor teachers
 - vii. insufficient incentives to outweigh the costs faced by career changers who consider entering tertiary study to complete and ITE qualification.

101. The ITE providers we spoke with raised concerns about:

- the need for timely and accurate feedback from schools where students are placed, so ITEs can act when there are concerns about suitability for teaching
- the desire and challenge of raising the overall quality of entry to ITE, particularly in areas of shortage such as STM subjects
- the difficulty attracting and retaining the right students into teaching. They cited Australian research indicating that STM students draw from those at the 90th percentile of achievement, while teaching students draw from the 50th percentile.
- 102. The ITE providers noted that there were internal barriers to promoting teaching in other faculties to bring graduates into ITE. Most graduates choose to work first rather than move immediately into teacher education.
- 103. The ITEs stated that selection processes for ITE are rigorous and providers take this very seriously, identifying the best candidates, those with the right disposition and enrolling them if a practicum place can be found for them in a school.
- 104. Information from ITE providers suggests that disproportionate numbers of candidates for STM subjects are rejected at interview due to a lack of language skill and a lack of interpersonal skills or disposition to teach. Providers noted that it is difficult to be more discerning about who is selected unless there is a change to the equivalent full-time student (EFTS) formula.
- 105. The ITE providers reported that there are challenges placing students on practicum in schools. They noted that the ageing workforce, change within schools and workload pressures are barriers for associate teachers. One instance was cited where an ITE was almost required to turn down physics students as there were no practicum places for students in this subject.
- 106. The ITE providers we spoke with commented that the system does not support beginning teachers and there is a need to better support those who are not permanently employed.

Other stakeholder comment

- 107. Other engagement with stakeholders in the education sector suggests that they are also not confident that providers and programmes of ITE deliver consistently high quality, teaching ready graduates.
- 108. The Education Council and the Council of Deans are both considering how to raise the quality of ITE and have recently published proposals detailing how this could happen.
- 109. There are multiple pathways into ITE, varying from under-graduate to post-graduate. There is also variability in the requirements different providers set for entry into ITE, and the amount and quality of practicum experience in schools (including access to effective mentoring and support).
- 110. It is also not clear that the ITE system responds well to changing demand for teachers with different skills and expertise.
- 111. The Ministry is undertaking a programme of work to support ongoing improvement in the quality and consistency of ITE. This includes the current exemplary post-graduate programmes

of ITE in English and Māori medium and those proposed for the early childhood sector. These programmes have been designed to provide more evidence of the components of ITE programmes that ensure graduates are of consistently high quality.

- 112. The outcomes of this work will inform all stakeholders involved in the future development of ITE.
- 113. There are also some actions in the *Curious Minds Strategy* which are specific to ITE, including action to 'work with initial teacher education providers, qualification accreditation bodies and relevant professional bodies to consider the nature and scope of science and technology content in initial teacher education.'

Agreed recommendations

Initial Teacher Education recommendations

- 6. That the Ministry and the Education Council facilitate opportunities for the NZPPTA to contribute to their work programmes on raising the quality of secondary ITE.
- 7. That the Ministry, NZPPTA and the Education Council encourage the development of a cohesive range of pathways for innovative secondary ITE, including partnerships between hard to staff schools or kura and ITE providers to recruit secondary school graduates and support them through ITE.
- 8. That the Ministry consider the merits of establishing field-based and employment-based secondary ITE qualification pathways for Career Change students that already hold an appropriate undergraduate qualification.
- 9. That the Ministry, the Education Council and TEC work together to ensure:
 - quality secondary ITE graduates
 - secondary ITE intakes are better matched to system and sector needs
 - availability of graduates where needed.
- 10. That the Ministry:
 - reviews the existing scholarship programmes to focus on lifting the status of the profession
 - continues work with NZPPTA, NZSPC and SPANZ and other interested parties to establish advice through 2016 on the optimum number, value of scholarships annually and any necessary changes to bonding requirements.

The NZPPTA view is that the value of scholarship should be set at the minimum wage in each year of study plus the reimbursement of fees; that career change scholarships be paid at appropriate untrained teacher rates; and that the number of scholarships should represent proportion of 10% of all ITE graduates and at least 1% of the number of graduates required in each subject area

- ensures scholarships are offered to the best secondary ITE candidates across the range of secondary subjects
- ensures that scholarships are responsive to changes in secondary supply and as a priority that STM subjects are added to the scholarship programme for 2017 as an immediate

response to supply issues.

- 11. That the Ministry looks for opportunities to connect schools with regional secondary ITE providers to improve practicum placement (including removing barriers) and employment opportunities for graduates.
- 12. That the Ministry reviews the use, effectiveness and adequacy of the isolation allowance funding to ITE providers to facilitate opportunities for rural and distance practicum.
- 13. That ITE providers and the Education Council work to ensure that graduates have teaching subject combinations that will lead to employment as a teacher and that the Education Council will monitor this.
- 14. That ITE providers, the Ministry and NZSTA establish opportunities to ensure that all scholarship graduates gain employment that enables them to complete certification requirements, and to support their retention in the secondary teacher workforce.
- 15. That the Ministry investigates, with the Education Council and secondary ITE providers, the quality and consistency of PLD/study programmes to support and recognise associate teachers with a view to raising the status of the role.

The NZPPTA view is that in addition to the above, the role should be recognised through additional remuneration.

- 16. The Ministry and the Education Council work with ERO on the current national evaluation of the preparedness of beginning teachers and respond as necessary.
- 17. That the Ministry and the Education Council work together to establish systemic graduate monitoring to identify employment outcomes for teacher graduates, preparedness to teach (as assessed by the tertiary provider) and retention in the teaching workforce.
- 18. That the funding mechanisms and structures for secondary ITE be reviewed to ensure a better match to secondary teacher supply, and a report is produced in time to implement changes for 2019.

NZPPTA recommends:

A. That an independent statutory body take oversight of recruitment into ITE programmes and advice to the ITEs on the number of trainees required each year.

Recruitment Issues across the Career Pathway

Context

- 114. New Zealand's workforce in general is increasingly becoming more flexible and more people are expecting to pursue more than one career across their working life. Education workforce data shows a similar trend in workforce patterns as individuals' career expectations change.
- 115. Like the New Zealand population as a whole³¹, our teaching workforce is ageing and teachers are working longer and retiring later. Since 2001, the proportion of teachers aged 65+ has quadrupled from approximately 2% to around 8% of the workforce. This proportion has now stabilised but it is uncertain how long this will continue.
- 116. If current trends continue, we expect the low numbers of new, permanent full-time (PFT) positions for beginning teachers will continue. At some point, teachers aged 65+ will retire or further reduce their hours in greater numbers. The number of new teachers will be affected by any change in retirement or employment patterns of these older teachers.
- 117. Schools need a steady supply of high quality graduates entering the schooling workforce in permanent jobs, achieving full certification and continuing to build their expertise.
- 118. The workforce data indicates that new graduates are not the first source of teacher supply for schools, that beginning teachers are often employed in temporary roles, and that they experience a high attrition rate.
- 119. The numbers of schooling sector beginning teachers joining the payroll have halved since 2000, but there was an increase from 2014 to 2015.³²
- 120. Few beginning teachers secure PFT employment in their first teaching position. Commencing employment with fixed-term roles (including as relievers) has been a common experience for beginning teachers at least since 2000 (when Ministry's current data series began). We are currently observing a downward trend in the number of beginning teachers joining the payroll in PFT positions in 2015, 22% of beginning secondary teachers were employed in PFT positions, while 27% of beginning secondary teachers were employed as relievers.
- 121. There are difficulties in balancing the ageing workforce with the need to bring in new teachers.

³¹ The recent Household Labour Force Survey published by Statistics New Zealand indicates that the dramatic increase in 65+ workers is expected to continue. Workforce participation (those wanting to work) for those 65 and over is predicted to increase from 142,200 in 2016 to 229,000 in 2023; and to 278,000 by 2028

³² Data analysed does not show whether new teachers joining the payroll are from the previous years' graduates, graduates from several years ago, or teachers from overseas beginning teaching in New Zealand.

What have we heard?

Beginning teachers

- 122. Principals reported that they often have problems recruiting beginning teachers as the first source of supply. They explained two reasons for this one was a lack of applications from beginning teachers and the other was questions about the quality of applicants.
- 123. There are differences between schools some principals noted that they actively approach ITE providers to recruit beginner teachers, while others have very little engagement.
- 124. Principals confirmed that they do often employ beginning teachers in fixed-term positions and they identified a range of reasons behind their increased use of fixed-term appointment:
 - the effects of quarterly funding
 - concerns about roll numbers
 - the increased number of teachers on leave
 - use of operational funding above entitlement
 - Ministry practices and messages around employment in falling roll situations. One principal commented that it creates a very conservative mind set in which schools won't appoint permanently.
- 125. The principals we spoke with suggested strengthening support and initiatives to improve beginner teachers' readiness to teach and ability to re-locate to areas experiencing teacher shortages.
- 126. It was suggested that systematic support and mentoring for beginning teachers in permanent or in fixed-term roles be introduced that better enables a smooth transition into teaching, including the availability of well-trained mentor teachers.
- 127. The Ministry's contracted recruitment agent Education Personnel³³ also observed the need to strengthen support for beginning teachers and the schools that employ them.

Recruitment challenges in specialty subjects

- 128. There is strong evidence to suggest that subject expertise is an important element of quality teaching, in particular at secondary school level. Generalists are not a preferred substitute for specialists, as their pedagogical content knowledge will necessarily be limited, having a detrimental impact on student learning.
- 129. The principals we heard from reported increasing difficulties filling vacant or new positions in general, noting particular pressures in specific subject areas or locations which include the following subjects:
 - Mathematics
 - Science, Physics, Chemistry, Agriculture, Electronics
 - Hard materials, technology

³³ Education Personnel is the Ministry of Education's preferred recruitment agency.

- Languages, including Te Reo Māori
- Business studies.
- 130. Some subjects were mentioned infrequently because they were subjects not widely offered but those schools advertising could not fill them, eg, Agriculture and Samoan. These shortage subjects will not show as clearly in the overall data. Other subjects, like English, were referred to in some regions where the total number of teachers may be high but the demand is higher than can be met in those areas.

Recruitment challenges for certain locations and schools

- 131. Principals from Auckland schools reported increasing difficulty recruiting from out of the area, and more teachers looking to move from the Auckland region, noting housing costs as an inhibiting factor. Increasing 'localisation' of employment within the region, with teachers less prepared to travel across the city or to another location for new jobs, was also noted.
- 132. More generally across New Zealand, some schools find it more difficult than others to recruit the quality staff they need. This is often the experience of small or isolated schools, schools in some geographic locations and schools that face other challenges (eg, reputation challenges). Principals from state-integrated schools noted that their schools have additional problems with recruitment due to the small pools of practicing Catholic teachers who meet the requirements for tagged positions in those schools.
- 133. Principals reported existing incentives³⁴ are either insufficient or are not well matched to the recruitment challenges associated with location, decile and other particular challenges. For example, school housing was seen as one incentive for teachers to move to hard to staff areas.

Current support for schools with recruitment difficulties

- 134. The Ministry contracts an education recruitment agency to assist schools with recruitment difficulties, and with financial assistance to subsidise the cost of agency fees. Despite the cost of the service, demand for recruitment assistance has increased significantly over recent months.
- 135. Voluntary Bonding is currently available for hard to staff schools. The scheme provides lump sum payments to teachers who teach in an eligible subject or school. When first introduced, STM subjects were included in the list of eligible subjects for Voluntary Bonding. The sector has suggested that high demand subjects become eligible for the Voluntary Bonding scheme and have identified that this may go some way to address current recruitment issues.
- 136. Online or distance learning provides greater flexibility in teacher supply as it allows schools the option to employ specialist teachers knowing that they can be supported by the participation of students who are enrolled at other schools. It also increases the ability for some teachers to specialise and enables students to study subjects of their choice even if a suitable specialist teacher is not available in their school. It is an option for isolated or hard to staff schools, and where there are subject shortages.

³⁴ List of incentives can be found in Appendix D.

NZPPTA believes it is appropriate to make recommendations on housing problems as they impact on secondary school teacher supply

- 137. There have been stable or falling rolls in most parts of the country outside Auckland recently. Yet the Ministry has reported that Auckland is now seeing a net movement of secondary teachers to other regions, which is (regardless of the magnitude of the outflow) a significant change from the historical trend. About one third of secondary schools are in the wider Auckland area. Problems in that area are significant at a national level.
- 138. Further, the growth of the housing crisis and its spread to regions outside Auckland will carry with it the factors affecting Auckland into other areas as median house prices in other areas rise in response.
- 139. While there is no evidence that generalised regional payments will have any impact on the housing problem or address the pressure it is creating on recruitment and retention in those areas which are affected, there are solutions that have been applied in the past to similar situations which could be considered.

Concerns about the quality of applicants

- 140. Principals we heard from commented that the poor quality of many applicants sometimes leads them to compromise quality in order to fill a vacancy. While aware that such practice can be detrimental to student learning and engagement, and may also mask the scale of recruitment issues, principals noted that in some cases the recruitment process can add strain to leadership.
- 141. The New Zealand Council for Educational Research (NZCER) report on Secondary Schools in 2015³⁵ found 'many principals (71%) had difficulty finding suitable teachers to fill vacancies', 52% in particular curriculum areas. They found that decile 1-2 schools had the most difficulty recruiting (reported by 75% of principals compared with 17% in decile 9-10 schools).

Pressure on supply of relieving teachers

- 142. Some principals commented that they are finding it increasingly difficult to recruit relieving teachers. This was particularly noted in the Auckland region. They noted that some of the pressure may be due to the number of relievers recruited into permanent and fixed-term roles.
- 143. Principals also highlighted the impact of changes to the Education Council's requirements for certification, particularly the issue of a third provisional practising certificate for teachers who have built their career on day relieving, so have extended periods with provisional certification. The cost of the lump sum, up-front course fee for the Teacher Education Refresh courses (which does not qualify for a student loan) was identified as an issue, particularly for relievers near the end of a career.
- 144. The Ministry's contracted education recruitment agent (Education Personnel) is also involved in administering a pool of relieving teachers (as are other education recruitment agents). The agent also observed that Teacher Education Refresh courses for returning teachers and relievers are often too costly and as a result are deterring some teachers from renewing their registration.

³⁵ Secondary Schools in 2015. Findings from the NZCER Survey. Cathy Wylie and Linda Bonne, May 2016.

145. Education Personnel noted that recognition by the Education Council of prior learning and demonstrated competence for experienced teachers returning to the workforce may increase teacher supply.

International demand for New Zealand teachers

- 146. Internal and external factors impact on teacher supply. For example, the economic situation, workforce demographics and global trends in teacher demand.
- 147. New Zealand teachers are highly regarded in the international teacher market and recruiting agencies are currently seeking New Zealand teachers for roles in the United Kingdom, the Middle East, Asia and Australia. A number of recent reports and media articles show that the global demand for teachers, in particular STM teachers, is increasing.
- 148. In April 2016, nine international agencies were identified as actively recruiting New Zealand teachers on seek.co.nz. They:
 - placed over one hundred advertisements 53 for multiple positions
 - were placing teachers in the United Kingdom, Middle East, China and Australia
 - offer financial incentives for travel, accommodation and relocation costs, plus bonuses.
- 149. International recruitment of teachers is common in many countries. Recruitment targets have not been met by the United Kingdom Department of Education for the last four years and like New Zealand, schools in the United Kingdom are struggling to recruit STM teachers. The National Audit Office (UK) reported a significant increase in their teachers moving to work overseas or in private schools, and predicts that teacher shortages in the United Kingdom will grow, with secondary teaching places particularly hard to fill in the future.
- 150. Australia is also experiencing difficulty filling secondary teacher HOD positions and teacher positions in mathematics, agriculture, and business studies.³⁶ For the first time the Queensland Government is recruiting STM teachers in New Zealand.³⁷
- 151. Projections are for significant growth of international schools delivering their curriculum in English in coming years, with one report predicting a doubling in number of international schools by 2026³⁸, which would require over 400,000 more teachers.³⁹

³⁶ June 2015 NSW Labour Market Research

³⁷ Dominion Post (9/4/2016)

³⁸ Feb 2016, Times Educational Supplement, <u>https://www.tes.com/news/school-news/breaking-news/wilshaw-golden-handcuffs-needed-plug-brain-drain-and-solve-critical</u>

³⁹ Jun 2016, Times Education Supplement <u>https://www.tes.com/news/school-news/breaking-news/exclusive-uk-</u> recruitment-fears-number-teachers-english-speaking

Recruiting overseas teachers into New Zealand schools

- 152. Recruiting overseas teachers is an option used by many countries to address teacher shortages.
- 153. Some principals we heard from noted a general reluctance to hire overseas teachers due to a concern about the lack of fit with a New Zealand school environment/culture, the cost of recruiting and the need to allocate additional support for a newly recruited teacher. However, others reported successful overseas appointments, particularly in subject shortage areas. When recruitment processes are well targeted to address specific shortages the resulting exchange of skills and experience can benefit all parties.
- 154. New Zealand education agencies prefer to focus first on bringing New Zealand teachers home. However, overseas trained teachers from countries with strong language, cultural and educational similarities with New Zealand such as the United Kingdom, Ireland, Australia, Canada and South Africa, can and are making valuable contributions to our schools and students.
- 155. Education Personnel noted that increasing recruitment of overseas teachers provides a key short-term solution to supply pressures. However the agency advised that the processes involved can be lengthy, causing significant delays to schools and the teachers in transit. Streamlining the processes will be required to ensure that overseas recruitment provides a timely solution for schools that are unable to recruit a suitable New Zealand candidate.
- 156. To address current recruitment issues the Ministry is working with NZQA, the Education Council and Immigration NZ, to streamline processes for overseas teachers to teach here.
- 157. NZPPTA notes the comparison in purchasing power between New Zealand secondary teacher salaries and teachers in some of the countries mentioned in a 2015 OECD³⁴ report (see table 1), which would be one factor in a teacher's decision to move into or out of New Zealand schools.
- 158. However, when secondary teachers' salaries⁴⁰ are considered relative to earnings of full-time, full-year New Zealand workers with similar educational attainment, New Zealand teacher salary relativity is better than the OECD average and in many countries mentioned in this report.⁴¹

⁴⁰ Teachers with 15 years experience and typical qualifications.

⁴¹ Source: Education at a Glance 2015: OECD Indicators; Table D3.2b; Reference year 2013.

Table 1: Teacher Salary Comparators

Country	Ratio of secondary teacher salaries to tertiary-educated workers	Upper secondary (PPP ⁴²) salary at 15 years	Upper secondary (PPP) salary at top of scale
Australia	0.91	\$56,315	\$56,474
Canada	1.15	\$67,022	\$67,022
England	0.83	\$47,279	\$47,279
Finland	0.79	\$46,284	\$49,061
Korea	1.31	\$51,489	\$81,897
Japan	Not provided	\$48,546	\$62,542
New Zealand	1.01	\$45,726	\$45,726
OECD Average	0.84	\$44,600	\$52,822

Key themes

- 159. A high rate of appointment of new teachers to relieving and fixed-term positions may increase the attrition rate of new teachers to the profession.⁴³
- 160. Job insecurity may undermine the public perception of teaching as a secure career.
- 161. The quality of induction and mentoring received by those in flexible positions early in their careers may impact on attrition rates and teacher quality.
- 162. The advertising data may not tell the whole story as some schools may not advertise or continue to advertise positions they have been unable to fill and this will likely mask supply issues.
- 163. The wide variability in the induction, mentoring and advice programmes for new teachers, and variable links between ITEs and schools to assist with the recruitment of new teachers is likely to contribute to the loss of new teachers from the system.

164. Retaining teachers early in their teaching career should be supported by:

- early career support, particularly high quality mentoring
- a good fit between the mentor, mentee and particpant school
- fostering a sense of being part of a wider group, through mentoring and school and department culture
- leadership pathways and opportunities

⁴² Purchasing power parity exchange rates (PPP) are the currency exchange rates that equalise the purchasing power of different countries.

⁴³ Fewer than half of graduates start in permanent positions and many have fixed-term appointments. Repeated appointment to fixed-term positions could be linked to migration out of the profession.

- support that is appropriate to the context of the teacher (eg, tailored to small schools, rural schols, small departments).
- 165. Principals may compromise quality where there are supply pressures, in order to fill a vacancy. This is likely to impact on student achievement and the workload of other teachers/leaders in the school. Such compromises are more difficult to address in low decile and rural schools, but was also reported across deciles in Auckland schools.
- 166. Overseas recruitment can be a short-term option for school with supply pressures, however processes need to be streamlined to achieve timely results.

NZPPTA additional commentary

- 167. New teachers are predominantly employed in flexible positions. The high level of flexible appointments early in a teacher's career may be driven in part by insecurity around roll numbers and operational funding and in part by messages given by the Ministry to schools.
- 168. The supply problems in Auckland are linked to housing and rental costs as well as general STM shortages and regional roll growth.
- 169. Schools are suggesting increased remuneration for teachers, the use of scholarships and bonding, increased hard to staff support, assistance with housing and rental costs and assistance with the costs of overseas recruitment to address their supply problems.
- 170. A primary teacher supply surplus is not a solution to secondary specialist shortages.
- 171. The Education Council requirements are acting as a barrier to the supply of reliving teachers.

Agreed recommendations

New appointments recommendations

19. That the Ministry expand the existing assistance for schools needing to recruit overseas teachers in shortage subjects and communicates to all schools the process and supports to enable overseas recruitment when required.

The NZPPTA, NZSPC and SPANZ view is that the recruitment agency costs should be fully funded for schools in need.

- 20. That the Ministry, NZSTA, NZPPTA and the Education Council take a more coordinated approach to ensure the access to, and quality and consistency of, practices to support beginning teachers across the secondary school network to recognise the importance of quality induction and support practices for beginning teachers.
- 21. That PLD and support be available for schools to deliver effective induction and mentoring programmes for beginning teachers.
- 22. That the Ministry facilitate the provision of advice and direction on good employment practice,

including in particular:

- the use of fixed-term appointments
- guidance on what constitutes a "genuine reason" for fixed-term role
- the employment and retention of new teachers.
- 23. That the NZSTA actively encourage schools to include the reason for a fixed-term position when placing advertisements in the Education Gazette.
- 24. That the parties to the STCA and NZSTA meet before the end of 2016 to consider how the existing mechanisms such as incentive allowances and removal expenses, can be used to support recruitment and retention in hard to staff schools.

The NZPPTA view is that this could include significant increases to the High Priority Teacher Supply Allowance (HPSTA) and the Staffing Incentive Allowance (SIA), extending the HPTSA to all schools identified as chronically hard to staff schools and extending its duration, the inclusion in the criteria for reviewing SIA renewal of likely effects of its removal, and extending the eligibility criteria for removals to fixed-term positions that are subsequently appointed to permanent positions and in hard to staff settings.

NZPPTA recommends:

- B. That support with housing and accommodation costs is developed for areas where median house prices in the housing district in which the school is located exceeds seven times the secondary teacher income or where the school is in a hard to staff district.
- C. That the range of housing support mechanisms identified in Appendix D *Previous Initiatives* of this report be options for housing support and that Government work with Kiwibank to develop a no deposit scheme for secondary teachers in housing shortage areas.
- D. That the Ministry take responsibility for the management and maintenance of all school housing stock in hard to staff areas and fund required upgrades.
- E. That the Ministry immediately suspend the policy of selling off school housing stock and move to expand the core supply of school housing in hard to staff areas.
- F. That secondary teacher salary be linked to relative salary movements of other professionals to reflect the importance of relative salary to recruitment and retention.
- G. That either schools be required to state the reason for fixed-term positions when advertising in the Education Gazette, or that the Ministry of Education surveys principals annually for the reasons for fixed-term positions advertised in the Education Gazette.

Retention

- 172. A number of factors impact on teacher retention across the career pathway, many within the scope of the education sector influence, and others not so, such as the economic environment, global trends and personal choices. The sector still needs to anticipate and respond to these latter influences through the mechanisms it does control in order to avoid secondary teacher supply shortages so as to influence personal choices in ways which sustain secondary teacher supply rather than undermine it.
- 173. Secondary teacher shortages have occurred before. Previous working parties and sector advice has recognised the importance of addressing recruitment and retention issues and indentified ways forward.⁴⁴
- 174. The data shows that current retention is not the main element impacting on overall teacher supply issues nationally. While teachers are moving within the sector either to new roles and/or to fulltime or more flexible roles, overall the number, gender and ethnic mix of teachers in the workforce remains relatively stable. In addition, some flow within the sector enables professional opportunities and can inspire and promote new developments.

NZPPTA commentary

NZPPTA does not believe that the retention rates will remain at the levels of the last decade and argues that:

- 175. At the end of the 1990s and early 2000s the rates were running at 10-11% and secondary schools were struggling to fill vacant positions.
- 176. Through 2002 -2007 secondary teacher working conditions were being improved through the introduction of guaranteed non-contact time and relative base scale salaries were boosted by the Alternative Disputes Resolution settlement of 2002 and then salary relativity was maintained through a series of pay adjustments which reflected movement in the median Labour Cost Index..
- 177. Standard teacher supply theory would predict that improved relative salary and improved working conditions would lower teacher losses and improve recruitment. Through this period not only did loss rates fall and stabilise but more than 1200 additional secondary teaching positions were added for 2002-2006 on top staffing required for roll growth.
- 178. The period from 2007 saw the end of relative salary adjustments, the decline in secondary teacher salary in relative terms (greater for middle and senor leadership salaries) and increasing workload pressures reported by secondary teachers. These factors would be expected to trigger a rise in loss rates, but the period coincides with the impact of the global financial crisis, which reduced the availability of other jobs, created significant financial uncertainty. As predicted by supply theory this depressed teacher movement and attrition and reduced the need for recruitment. The Christchurch earthquakes, the failure of a number of investment savings

⁴⁴ Note the Secondary School Staffing Group report 2012 and the Ministerial Reference Group on Secondary Teacher Remuneration 2003 – see Appendix E.

schemes and low interest rates on savings are likely to also have contributed to reducing secondary teacher losses.

- 179. In the period from 2013-2016 secondary teacher salary rates have continued to decline relative to the average wage and secondary teachers are reporting intensifying workload pressures.⁴⁵
- 180. Supply theory would predict that a continuing fall in relative salaries and increased workload in teaching set against increasing economic security and opportunities for alterative employment outside teaching will result in increasing teacher loss rates and declining recruitment.
- 181. The 2016 NZPPTA staffing surveys identified a small increase in staffing losses at the end of 2015 and the start of 2016 and the number of jobs advertised has also increased over the equivalent period in 2015.
- 182. The period from 2016-2019, when there is expected to be a slight reduction overall in teachers numbers but regional roll growth in the Auckland area, where intensification of the housing crisis is making teaching less attractive. In that period localised losses from roll reductions are likely to be met by reductions in fixed-term positions, and from disestablishment of positions held by older teachers and teachers in subject areas that are in oversupply.
- 183. For these contextual reasons NZPPTA does not support the contention that within the current policy settings secondary teacher retention rates will remain at levels we have seen over the last decade, unless there is an economy-wide shock equivalent in impact to the global financial crisis.
- 184. Principals are generally reporting at this stage that while loss rates are relatively low they are having increasing difficulties filling positions which become vacant. The system will need to limit the unnecessary loss of teachers from the system as much as possible (recognising that some turnover is both inevitable and healthy). There is also a decline in the number of ITE students and an increase of one percentage point in the loss rates equates to an additional need for about 250 teachers each year in recruitment (or an increase of about 16% on current recruitment needs).

NZPPTA view is that the ageing workforce may be more of a concern than is indicated in this report:

- 185. There is no data on why there is an increase in teachers staying on past traditional retirement age. Factors such as economic uncertainty, loss of savings, low interest rates on current savings, etc, may be having a temporary impact on that trend.
- 186. A full time teacher who moves to relieving or part-time work leaves a hole in the timetable which has to be filled. That is particularly problematic when the classes to be covered are in subject shortage areas.
- 187. Principals are most concerned about the imminent retirement and loss (in full or part) of teachers of shortage subjects that they will be unable to replace without difficulty.

⁴⁵ From the June quarter 2003 to the June quarter 2015 the relativity for the weekly top of scale salary rate with the weekly median income for wage and salary recorded by Statistics NZ fell from 1.842 to 1.619, a 12.1% reduction in relative salary. 2003 TBS \$56393, median weekly income \$587. 2015 TBS \$74,460, median weekly income \$882.

- 188. Principals are asking end of career teachers to delay retirement, return from retirement or fill fixed tem roles not because this is a choice of the teacher but because the school cannot replace them.
- 189. Individual school decisions can have implications for the wider system.⁴⁶ Researchers more generally have found consistently that the most important factors related to employee turnover are the:
 - compensation structure for employees (salary and benefits);
 - level of administrative support, especially for new employees and those with new responsibilities;
 - degree of conflict and strife within the organisation; and
 - extent of employee input into and influence over organisation policies.

190. The last three aspects are important because they can be affected by school policy and practice.

What we have heard

191. The principals that provided feedback report that schools currently generally have relatively stable staffing but there are concerns about the replacement of staff they lose:

Retention and age of teacher

 the rates of loss of teachers in their first few years of teaching is an issue⁴⁷ and principals are concerned by the impending retirement of many of their teachers, particularly teachers in STM subjects⁴⁸ and losing teachers with the qualities schools value most.

Auckland

• Auckland schools are concerned that the loss of teachers from the region is being influenced by high living/housing costs.

Location and school decile

- low decile and geographically isolated schools struggle to replace staff who leave
- some schools 'poach' staff in subject shortage areas including from low decile schools by high decile schools, and from high decile schools by private schools
- lower decile schools appointing from overseas report losing the immigrant teacher to roles in higher decile schools

⁴⁶ For example in *Teacher turnover and teacher shortages: An organizational analysis* Ingersoll, R M (2001) - Ingersol found that 42% of all departures reported as reasons either job dissatisfaction or the desire to pursue better career prospects (in teaching or another job). American Educational Research Journal, 38, 499-534; "Dissatisfaction underlying migration is most often listed as being due to low salaries, lack of support from the school administration, student discipline problems, and lack of teacher influence over decision-making. Likewise, dissatisfaction underlying attrition is most often reported as being due to low salaries, lack of support from the school administration, lack of student motivation, and student discipline problems. These findings from the self-report data are highly consistent with the results in ... prior regression models..." (Ingersoll, 2001, p 522)

⁴⁷ The number of teachers leaving teaching within the first five years is not increasing; it has remained relatively stable over time.

⁴⁸ Data shows that 50.8% of male relief teachers in 2015 were over 60 years of age compared to 29.8% of female relief teachers.

• retention of the teachers at isolated schools can be dependent on employment options for partners.

Principals also observed that:

- regional subject associations and access to professional development and support positively impacts on retention and teacher effectiveness
- some schools have active retention programmes, while others do not
- when specialists teachers are reserved for senior classes the junior students may not receive quality subject expertise, as specialist subject teachers generally have a higher level of enthusiasm for the subject
- they want improved pay and conditions to attract and retain teachers.

NZCER contribution

- 192. NZCER summarised international research which suggests a focus on reducing attrition and maximising the quality of the secondary teaching workforce to address teacher supply.
- 193. At the attraction, selection and preparation stage the NZCER suggest providing science and maths graduates with views of learning and their subject that will encourage them to teach in engaging ways.
- 194. NZCER retention suggestions include addressing workload, embedding professional development and leadership, allowing time for collaboration with colleagues, supportive interaction with educational leaders, and enabling teacher autonomy in their classrooms, participation in school decision making, and supporting professional learning communities in relation to student outcomes.
- 195. The NZCER also see value in providing standards and performance management, providing national support for strong course innovation and productive networks, and considering the New Zealand curriculum (NZC) and NCEA as a coherent package of curriculum and assessment.

Key agreed themes

- Overall rates of secondary teacher satisfaction are quite high, but there are issues of concern.
- Teacher movement is still relatively low in comparison with historic trends.
- Retention rates remain relatively high, and some schools do not see they have a role in staff retention while others do.
- Decisions at individual school level can have a cumulative and detrimental impact on secondary teacher supply.
- The support, mentoring, professional and career development of teachers is variable and not universally provided.
- Not all schools have active programmes which demonstrate that their workforce is regarded as an asset to be nurtured, supported and developed.

- There is a concern about the supply of trained and qualified relievers for many schools.
- Career pathways are limited, particularly for teachers early in their careers.
- The Education Council requirements are acting as a barrier to the supply of relieving teachers.
- The teacher refresher course requirements and costs are a disincentive for returning teachers.
- There is a strong preference for specialist teachers in secondary schools to maximise the learning experiences of both junior and senior students.
- Principals are calling for improved pay and conditions to attract and retain teachers.

Agreed recommendations

Established teachers recommendations

- 25. That the Ministry establishes, monitors and publishes information on the secondary teacher workforce trends annually, including:
 - Demographics of the workforce
 - Information on the range of occupied positions (ie, level of position, tenure)
 - Flows into and out of the workforce (intakes, losses, movements)
 - Pathways into permanent work for Provisionally Certified Teachers (PCT)
 - Advertised and re-advertised vacancies
 - Data on number of enrolments and graduations from ITEs
 - Gathering information on the number of applicants schools receive when advertising vacancies, such as the Monitoring Teacher Supply survey completed by all state and state-integrated schools at the beginning of each school year.⁴⁹
- 26. That the Ministry investigates other ways in which the current Education Gazette vacancy data could be improved or supplemented to get a better understanding of how vacancies are filled and reasons for vacancies not being filled.

The NZPPTA view is that the number of applicants for positions, and number of applicants considered suitable for the position by the principal should be included in information reported on by the Ministry. Benchmarks for all the above measures should be established and used as a tool for reporting.

- 27. That the Ministry works with the NZSTA and the Education Council to facilitate improved support to boards, principals and schools to lift the quality of engagement with teachers on teacher development and career planning.
- 28. That the Ministry, NZPPTA and NZSTA prioritise teachers seeking to enhance subject knowledge or retrain in shortage subject knowledge and/or pedagogy in the annual review of the criteria for study awards and study grants.

The NZPPTA view is that the Service/Qualification Increment Allowance three year top of scale restriction should be removed for teachers who retrain in subject shortage areas.

⁴⁹ www.educationcounts.govt.nz/publications/series/2519/149551

- 29. That the Ministry and the Education Council consider the support of teachers required to teach in an area for which they are not qualified, eg, access to study support grants or specialist mentoring.
- 30. That the Education Council takes into account the impact of that policy on the availability of 'day' relievers in reviewing registration policy.

The NZPPTA view is that a new certification category should be established for day relief teachers and that this distinction be reflected in the STCA provisions for short term relievers.

- 31. That the Ministry investigates establishing international exchanges to contribute to raising the status of teaching.
- 32. That the Ministry investigates mechanisms to establish and maintain regional pools of specialist teachers in shortage subjects able to take up fixed-term roles to cover teacher absence or short term vacancies.

NZPPTA, NZSPC and SPANZ recommend:

H. That the government consider the impact of a pay parity policy on its ability to respond effectively to supply pressures in the secondary sector.

NZPPTA recommends:

I. That an independent review panel be established to determine the appropriate current level of secondary teacher remuneration at classroom, middle and senior leadership level relative to other professions from which secondary teaching draws or is in competition for graduates.

Career development

- 196. The Ministry, the Education Council, boards, principals and unions have a role in professional and career development.
- 197. The Ministry and the Education Council are determining their respective roles and accountabilities in the system to grow leadership capacity and capability.
- 198. Communities of Learning provide career development but are the source of pressures on the recruitment and retention of middle leaders.

What we have heard

- 199. The schools we heard from did not report difficulties recruiting senior leaders. However, they did note that a 'bottleneck' of recruitment at the middle leadership⁵⁰ level could later impact on the quality of candidates for senior leadership and principal positions. We heard that some schools are making compromises⁵¹ to address hard to fill management roles.
- 200. Principals we heard from generally reported increased difficulty recruiting into middle leadership positions.⁵² Most of the reasons given related to insufficient release time or remuneration for the high workload associated with middle leadership roles. However, we also heard for some teachers that the additional pay relative to the additional responsibility is a small attraction to leadership roles and few saw curriculum leadership as part of a career pathway they were interested in.
- 201. Principals commented that overseas teachers new to New Zealand are generally not seen as candidates for middle leadership positions as they are less likely to be familiar with the New Zealand Curriculum and New Zealand school contexts.
- 202. There are flow-on impacts of not having an effective middle leadership tier on the subject department and on the senior leadership.

- The workload was too demanding (72%)
- There was too much paper work and administration (54%)
- There was not enough money for the responsibility (50%)
- There was not enough money for the additional hours (50%)
- There were too few experienced teachers amongst existing staff (24%).

⁵⁰ Note that middle leadership includes both curriculum and pastoral strands.

⁵¹ For example: A Senior Manager promoted from Head of Department having to retain the curriculum department responsibilities alongside the new senior leadership responsibilities because the school cannot fill the Head of Department role.

 ⁵² The NZCER 2016 report indicates that in 2015: 55% of schools had difficulty finding suitable teachers to fill middle management vacancies. 36% had difficulty in some subject areas, 14% for deans roles and 12% generally. Decile 1 and 2 schools had more general difficulty finding suitable teachers for middle leadership vacancies (40%) than decile 5-6 schools (6%) or decile 9-10 schools (11%). Principals attributed middle leader recruitment difficulties to:

- 203. We heard that recruiting into middle management roles in shortage subject areas or in a hard to staff region is particularly difficult, and that teachers in low decile⁵³ schools consider taking a middle leadership role in another school as a 'promotional pathway'.
- 204. Applicants for middle leadership roles are increasingly negotiating higher numbers of units, particularly in the shortage subjects.
- 205. We heard that the new Community of Learning positions, while offering career pathway opportunities, also have potential to exacerbate the recruitment of middle leaders as they are seen as more attractive roles.
- 206. The Auckland schools we heard from reported the job lacks sufficient incentive to overcome resistance from those out of area to move on promotion for one or two units (\$4,000-\$8,000) because of the high cost of living. Some suggested this was not so for senior leadership positions where the differential might be three or four units (\$12,000-\$16,000) and where the move was more likely to be seen as a significant career step.

Other advice to the Supply Working Group from NZCER

207. The NZCER 2016 report indicated that in 2015 secondary teacher intentions for the next five years that only 20% of classroom teachers and 23% of middle leaders were looking for promotion while 39% of senior leaders had it as a consideration. At the same time 17% of middle leaders were looking to retirement.

Key themes

- Enthusiasm for leadership roles is strong at the senior leadership level but there is declining interest in middle leadership positions.
- Schools report they are not receiving suitably qualified applicants for middle leadership roles and find it increasing difficulty to fill these positions.
- Principals identified the combination of job expectations; workload and remuneration (salary and other) as areas that need to be addressed to assist in recruitment and retention of middle leaders in particular.
- Principal feedback was that the number of units available to schools limits their ability to create individual career pathways for teachers.
- The career pathways available are limited and though the Community of Learning roles will add to these, there is concern amongst principals that these will make recruitment to traditional middle leadership positions more difficult.
- Those in middle leadership positions do not feel that their work is manageable, rewarded and rewarding and do not speak positively about their work and their role.

⁵³ Note: low decile secondary schools are typically small schools

- The support, mentoring and professional development of teachers for roles outside the classroom is lacking, though some schools report active programmes of support for their own staff.
- There is insufficient movement from leadership positions to allow for steady renewal of the profession and for career opportunities for those starting their careers.

Agreed recommendations

Career paths recommendations

33. That the Ministry, NZSTA, NZPPTA, NZSPC, SPANZ and the Education Council consider appropriate solutions to problems with recruitment and retention of middle leaders in regard to remuneration, manageability, PLD, the status of the role and the impact of CoLs.

The NZPPTA view is that remuneration of middle leaders should be reviewed this year; middle leadership units be set by the rate of the Within School Teacher Allowance; the number of leadership payments increased and the value of Senior and Middle Management Allowances raised; unit restriction on holding the SQI be removed; and time allowances for middle leadership be increased.

- 34. That the Ministry and the Education Council, in their development of a leadership growth strategy and the re-design of PLD, consider how PLD can be developed to support and prepare teachers who aspire to middle and senior leadership roles.
- 35. That the Ministry, NZPPTA and NZSTA better communicate the process for recognition of relevant work for teachers returning to teaching.
- 36. That the Ministry and the Education Council improve 'system' opportunities for secondment to organisations or agencies (eg, Ministry, ERO or Education Council) or industry.
- 37. That the Ministry, NZSTA and NZPPTA seek to gain a better understanding of the use of guidance and management time in schools.
- 38. That the Ministry, NZSTA and NZPPTA seek to gain a better understanding of the use of operational funding and locally raised funds for additional staffing, and the implications of this for secondary teacher supply.

Later Career Stage

- 208. In keeping with the wider New Zealand workforce, schooling workforce data shows that teachers are retiring later and are more likely to move into part-time, fixed-term or relieving roles as they join the 60+ age group (see Appendix B *Supporting Ministry of Education data*).
- 209. New Zealand has one of the largest proportions of secondary teachers 50 years of age and older in the OECD (45.4%), so these changing patterns of retirement mean a potentially large number within the workforce may move into more flexible working positions over the next two decades. This will present new challenges for schools to manage.

What we have heard

- 210. Principals we met with were concerned about the ageing workforce and the need to manage the movement of older teachers, to some extent. They suggested that in different circumstances, schools need strategies that will either encourage older teachers to stay or encourage them to leave, for example where:
 - older teachers staying in the workforce are 'blocking' career opportunities for younger teachers, such as opportunities for leadership or to free-up permanent positions
 - a significant proportion of staff in an individual school are older and planning to leave or retire. Schools in this situation need strategies to manage the potential loss of wisdom and expertise
 - older teachers hold key roles in shortage subjects and the school is unable to replace them
 - a number of older teachers in the school move to part-time roles on their way to retirement. In such situations there is a risk that the number of part-timers is difficult to manage and adds to the workload of other teachers.
- 211. Principals suggested the possibility of alternative, more flexible roles for older teachers that do not impact on the requirements of the Government superannuation scheme, where payment is based on the last five years earnings.
- 212. Principals also suggested that refreshment leave or sabbaticals would be helpful, or access to a year's leave that allows older teachers to do something different, eg, gain industry experience.
- 213. The parties see value in exploring further options for end of career teachers in leadership positions to mitigate financial disincentive in leaving a leadership role (particularly for GSF members, given the scheme rules that operate). The purpose would be to support continuing high quality teaching, manage supply flow and encourage timely turnover.

Key themes

- 214. Key themes:
 - retirement patterns among older teachers are changing as they stay longer by stepping into more flexible roles fixed-term, part-time or relieving
 - new retirement patterns among teachers are consistent with the way people are now managing retirement in the wider population
 - the pattern is likely to strengthen as the teaching workforce is ageing
 - the retention of older teachers can impact on the roles available for younger teachers to develop their careers
 - changing retirement patterns present schools with new solutions to supply pressures, but can also present new challenges.

Agreed recommendations

End of career recommendations
39. That the Ministry, NZPPTA and NZSTA work to facilitate improved advice and guidance to schools on managing end of career options.
The NZPPTA view is that the options should include the ability to volunteer for the severance option in the surplus staffing process and that end of career planning be supported by:

pro-rating non-contact time
grand-parenting salary for teachers who relinquish leadership positions with up to two years' advance notice of retirement

• supported GSF contributions for those in the scheme who elect to relinquish units or move to part-time positions.

APPENDICES

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Appendix A: The Secondary Teacher Supply Working Group and processes

Terms of Reference: Secondary Teacher Supply Working Group

Functions

- 1. The working group will:
 - Identify the factors influencing secondary teacher supply
 - Identify the work currently being undertaken on secondary teacher supply
 - Consider secondary teacher supply currently and over the medium term
 - Consider recruitment and retention pressures for teachers who are:
 - a. Full time classroom teachers
 - b. Part time classroom teachers
 - c. Middle management teachers
 - d. Senior management teachers
 - e. Representative of minority populations
 - f. Teachers of different subject specialisms
 - g. Teachers in small and in rural schools
 - h. Teachers in low decile schools
 - i. Teachers in Māori medium schools.
- 2. To provide advice to the Minister of Education on the above matters and on the range of responses which are available to address any issues which may be identified.

Composition

- 3. A Deputy Secretary of the Ministry of Education and the NZPPTA President will co-chair the Secondary Teacher Supply Working Group, which will be composed of:
 - 3 representatives from the Ministry of Education
 - 3 representatives from NZPPTA
 - 3 representatives of employers (principals or board members); including one representing Māori medium schools⁵⁴, one member from NZSTA, or one board member nominated by NZSTA and one principal jointly nominated by NZSPC and SPANZ.
 - 1 representative from the Education Council.

⁵⁴ It was subsequently agreed by the parties to the Secondary Teachers Collective Agreement to vary the Terms of Reference to recognise the difficulties in identifying a representative from the four Maori medium secondary schools.

4. NZPPTA and the Ministry will provide a joint secretariat for the group. The group may from time to time invite representatives of other organisations to assist them by the provision of information relevant to the work of the group.

Timeframe

- 5. The group will convene before 28 February 2016 and will complete its final report to the Minister of Education by 30 June 2016.
- 6. The group will meet bimonthly.
- The group may call any technical meetings required between the Ministry of Education and NZPPTA representatives between meetings to progress work between the monthly meetings.

Processes of the Working Group

- 8. The Working Group met four times from February to June 2016.⁵⁵ It was supported by a technical group which operated between meetings.
- 9. The organisations represented on the group shared data, reports and local and international research.
- 10. Meetings were held with individuals and organisations with knowledge of, and interest in secondary teacher supply. Secondary principals and boards were also invited to make written submissions. The Working Group provided focus questions to those making submissions, but submitters were open to making any comments necessary to reflect their perspective.
- 11. The following meetings were held in Wellington:

Organisation	Date
New Zealand Secondary Principals' Council	23 March
New Zealand Universities	23 March
Secondary Teacher Education Providers	18 March
Subject Association Forum	24 April
New Zealand Council for Education Research	27 April
Graduate School (Skype)	3 May
Education Personnel	26 May

12. Representatives of the Working Group also visited five regions (listed below) in which there were identified supply pressures, to speak directly with principals and representatives of school boards.

Area	Date	Host school
West Coast	9 May	Greymouth High School
Southland	9 May	Southland Boys' High School
Northland	11 May	Tikipunga High School
Porirua Basin	13 May	Aotea College
Auckland East and South	16 May	Edgewater College
Auckland North and West	16 May	Kelston Girls' High School

⁵⁵ 24 February, 4 May, 22 June and (by distance) on 27 June.

- 13. These regions were thought to cover the current supply issues and to be representative of the range of schools and areas that the Group would need to consider. All principals and board chairs of secondary schools in each region were invited to meet with Group representatives.
- 14. For every meeting held a set of notes was shared between the Working Group members.
- 15. Written submissions were received from:
 - NZPPTA ITE Advisory Committee
 - Te Huarahi Māori Motuhake
 - Long Bay College
 - Waiheke High School
 - St Dominic's College
 - Orewa College
 - Roz Palethorpe

Appendix B: Supporting Ministry of Education data

The Ministry uses the teacher payroll data (for state and state-integrated schools only) to generate a range of statistics about teachers. Currently, there are two different approaches that are in use. The first is point in time statistics which report on the number of teachers present in the first pay period in April of each year. These statistics are published on Education Counts at: http://www.educationcounts.govt.nz/statistics/schooling/teaching_staff.

More recently, the Ministry has been using a more comprehensive set of statistics which report on the number of teachers present at any point during the year. These statistics are commonly used for teacher supply as they provide more insight into employment patterns throughout the year. The full year statistics have been used in this report.

It is important to note that the Ministry is currently reviewing its statistics with a view to creating one set of measures rather than the two described above. This will result in all of our teaching statistics being revised, although the general trends discussed here are very unlikely to change.

Schools and school rolls

Sector	Primary	Composite	Secondary	Special	Total
2000	450,204	40,937	236,435	2,113	729,689
2001	449,650	42,428	239,481	2,248	733,807
2002	453,446	44,236	247,819	2,409	747,910
2003	456,736	44,782	257,586	2,605	761,709
2004	450,196	47,264	264,522	2,672	764,654
2005	444,446	47,848	267,712	2,784	762,790
2006	441,770	46,884	269,296	2,795	760,745
2007	439,287	47,707	270,085	2,799	759,878
2008	436,543	48,590	270,149	2,812	758,094
2009	434,857	49,259	273,872	2,871	760,859
2010	435,051	50,524	275,945	2,878	764,398
2011	433,523	50,753	275,524	2,882	762,682
2012	433,136	50,761	273,152	2,911	759,960
2013	435,532	51,573	272,343	2,952	762,400
2014	439,494	52,378	272,313	3,073	767,258
2015	448,240	52,695	272,739	3,141	776,815

Table 1: Student Rolls by School Sector as at 1 July 2000 - 2015

Table 2: Secondary School Roll by Authority & Gender - 1 July 2015

	Secor		
Authority	Male	Female	Total
State: Not integrated	114,762	111,025	225,787
State: Integrated	19,144	19,920	39,064
Private: Fully Reg.	4,581	3,008	7,589
Partnership School	186	113	299
Total	138,673	134,066	272,739

Graph 1: Secondary School Roll – Actual versus Forecast



Ministry forecasts of secondary student rolls suggest a gentle decline in until a mini-baby boom hits in 2020-2025

	Sector				
Authority	Primary	Composite	Secondary	Special	Total
State: Not integrated					2,10
	1,697	99	275	37	8
State: Integrated	233	28	71		332
Private: Fully Reg.	29	40	17		86
Private: Prov.Reg.	1	1			2
Other : Vote Ed.				1	1
Partnership School	3	2	4		9
Total					2,53
	1,963	170	367	38	8

	Sector				
Decile	Primary	Composite	Secondary	Special	Total
Decile 1	209	31	44	5	289
Decile 2	195	21	30	6	252
Decile 3	181	18	36	6	241
Decile 4	181	11	36	9	237
Decile 5	201	9	30	6	246
Decile 6	176	7	49	2	234
Decile 7	191	15	37	1	244
Decile 8	195	15	34	2	246
Decile 9	199	8	35	1	243
Decile 10	224	11	27		262
Not Applicable	11	24	9		44
Total					2,53
	1,963	170	367	38	8

Teaching Demographics

Graph 2: Secondary Teacher Headcount by Job Type (Full Year Data)



Graph 3: Proportion of Secondary Teachers by Job Type (Full Year Headcount)





Graph 4: Age Distribution of Secondary Teachers (excludes unknowns) (Full Year Headcount)







Female	60.6%
Male	39.4%
All teachers	100.0%



Graph 6: Ethnic Distribution of Secondary Teachers (2015 Full Year Headcount)





Vacancy data (based on Ministry of Education data)

The following data shows the number of vacancies or re-advertised vacancies that were published in the Education Gazette. Vacancy data is useful as it provides some insight in to the volume of vacancies that exist. However, vacancy data needs to be interpreted carefully as the way in which a vacancy is filled can affect the future number of vacancies. For example, if a school advertises a vacancy and then fills that vacancy with a teacher from another school that will in turn generate a vacancy at the school that the appointee just left. This chain of vacancies can continue until such time as a teacher is appointed who is not currently working or a decision is made to fill a vacancy through reorganisation of existing staff hours. Generally, the Ministry uses re-advertised vacancies as an indication that schools might be having issues with filling a vacancy. These have the same issue of one vacancy potentially sparking a chain of vacancies but also schools may choose not to readvertise a vacancy as they don't feel that it will get them the applicants they are seeking.



Graph 8: Count of Vacant and Re-advertised Positions for Secondary Schools

Ministry of Education Region	2010	2011	2012	2013	2014	2015
Tai Tokerau	15.6%	4.9%	7.5%	9.9%	12.0%	12.5%
Auckland	6.8%	8.3%	6.9%	6.5%	8.4%	10.5%
Waikato	10.3%	11.3%	8.0%	14.6%	7.7%	7.3%
Bay of Plenty/Rotorua/Taupo	5.4%	2.7%	0.6%	6.0%	3.7%	8.8%
Taranaki/Whanganui/Manawatu	4.9%	6.7%	4.0%	11.4%	11.5%	4.3%
Hawkes Bay/Gisborne	5.4%	11.5%	9.6%	14.6%	6.8%	7.4%
Wellington	7.3%	8.3%	5.5%	6.4%	9.0%	7.4%
Nelson/Marlborough/West						
Coast	3.2%	12.9%	4.2%	11.3%	17.2%	20.3%
Canterbury	3.1%	8.4%	9.9%	11.5%	9.5%	13.9%
Otago/Southland	5.6%	5.2%	13.4%	7.2%	8.5%	9.9%
Total	6.6%	8.0%	7.0%	8.8%	9.0%	10.2%

Title	2010	2011	2012	2013	2014	2015
Principal	8	5	5	3	1	3
Senior						
Management	5	10	15	14	4	8
Middle						
Management	73	73	59	61	64	63
Teachers	144	144	113	153	188	243
Total	230	232	192	231	257	317



Graph 9: Percentage of Re-advertised Adverts / Total Position Count by Title



Note: One vacancy can be counted across multiple subjects, so sum of subjects can be greater than 100%



New Teachers Joining the Payroll



Graph 11: Number of New Secondary Teachers Joining the Payroll (Full Year Headcount)

Graph 12: New Secondary Teachers by their Initial Job Type (Full Year Headcount)


Retention of teachers



Graph 13: Retention of New Secondary Teachers who Started Teaching in 2011 (Full Year Headcount)



Graph 14: Percentage of all Secondary Teachers who left the Payroll (Full Year Headcount)

In 2015, 7.2% of secondary teachers who had been teaching at some point in 2014 were no longer teaching in 2015.



Graph 15: Secondary Teachers Staff Turnover by Decile (2015 Full Year Headcount)

ITE Data

Subject	Grad	Subject	Grad	Subject	Grad	Subject	Grad
	no.		no.		no.		no.
Accounting	8	Drama Jnr	37	Japanese Jnr	5	Physics	13
Agriculture	1	Drama Snr	36	Japanese Snr	4	Psychology	1
Art History	18	Economics	18	Learning Language Jnr	8	Religious Studies Jnr	13
Art Jnr	54	English Jnr	136	Legal studies	1	Religious Studies Snr	12
Art Snr	56	English Snr	124	Maths Jnr	80	Science Jnr	107
Biology	63	Food Tech	7	Maths Snr	47	Science Snr	75
Business Jnr	24	French Jnr	8	Media Sts	25	Social Studies Jnr	217
Business Snr	30	French Snr	6	Music Jnr	48	Social Studies Snr	91
Chemistry	31	Geography	43	Music Snr	41	Soft materials	2
Chinese Jnr	8	German Jnr	4	Nutrition		Spanish Jnr	11
Chinese Snr	7	German Snr	3	Other Technology	21	Spanish Snr	12
Classics	22	Graphics	28	Outdoor Education	17	Te Reo Jnr	31
Computing	8	Hard materials	8	Painting	1	Te Reo Snr	27
Dance Jnr	22	Health	106	PE/Heath Jnr	140	Technology Jnr	50
Dance Snr	17	History	83	PE/Health Snr	125	TESOL	2
Design	1	Horticulture	1	Photography		Tourism	1

Table 8: Subject Specialisms of Secondary Teacher Graduates of 2015*

*Note: One Masters programme with 12 graduates is not included.

*Note: Graduates will have more than one specialist subject, so there will be some double counting in the data.

Appendix C: Summary of New Zealand Universities - Cohort Level 7 qualifications

Summary of New Zealand Universities findings -30-39 year 2013 Cohort Level 7 qualifications

L7 Qualification	Median income 2013 f/t 20-65+	Number	Most common in top 25 list	Top 25 list: main employer	Secondary teaching in top 25 job list	Number 30-39 y.o.	Proportion in secondary teaching	Unemployed in top 25 list	Proportion unemployed
Physics & Astronomy	\$78,000	179	Secondary teaching	Secondary teaching	1	48	26.8%	6	6.7%
Engineering/ related tech	\$86,100	472	NILF*	NER**	13	12	2.5%	10	3.8%
Mathematical sciences	\$79,100	618	NILF	Secondary teaching	2	87	14.1%	4	5.3%
Chemical sciences	\$72,200	348	NILF	Secondary teaching	2	36	10.3%	4	7.8%
Process and resource engineering	\$90,500	388	NILF	Food technologist	-	-	-	10	3.9%
Other natural/physical sciences	\$70,400	708	NILF	Medical lab scientist	10	21	3.0%	5	4.2%
Biological sciences	\$68,000	1386	NILF	Secondary teaching	2	123	8.9%	4	5.2%
Earth Science	\$78,700	181	NILF	Geologist	-	-	-	3	6.6%
Agriculture	\$72,500	657	Dairy farmer	Dairy farmer	-	-	-	10	2.7%
Horticulture	\$65,900	127	Winemaker	Winemaker	-	-	-	24	1-4.7%
Environmental studies	\$64,700	184	NILF	General clerk	25	<6	1-2.7%	12	4.9%
Manufacturing, engineering, technology	\$86,500	178	NILF	Management consultant	12	6	3.4%	2	11.8%
Automotive engineering and technology	\$71,500	33	Motor mechanic	Motor mechanic	22	<6	1.36-15%	24	1.36-15%
Mechanical and industrial engineering and tech	\$86,600	603	Mechanical engineer	Mechanical engineer	-	-	-	15	3.0%
Geomatic engineering	\$95,400	200	Surveyor	Surveyor	20	<6	1-2.5%	-	-
Electrical and electronic engineering and tech	\$85,000	1224	Software engineer	Software engineer	-	-	-	7	5.4%
Architecture and urban environment	\$77,400	1146	Architect	Architect	19	12	1.0%	9	2.6%
Building	\$85,900	386	Quantity surveyor	Quantity surveyor	6	315	3.9%	10	3.1%
Food and hospitality	\$58,600	124	chef	chef	-	-	-	23	1-4%
Language and literature	\$69,000	1854	NILF	secondary teaching	2	201	10.8%	3	7.1%
Communication and media studies	\$63,300	1995	NILF	graphic designer	13	57	2.9%	4	6.6%

*NILF = Not in labour force

**NER= Not elsewhere referenced

Appendix D: Initiatives in secondary teacher recruitment and retention

Study award type	Purpose	No available for 2017	Entitlements
Secondary Teachers' Study Award	To undertake additional study	75	Paid leave at the teachers normal salary for the duration of the study award (max 40 weeks)
Secondary Teachers Sabbaticals	To engage in a balance of professional learning, reflection and rejuvenation	50	10 school weeks paid leave at the teachers normal salary
Secondary Teachers' Study Support Grants	To undertake additional study	100	0.16 FTTE time allowance and reimbursement of up to \$500 towards course fees
Secondary Senior Managers' Sabbaticals	To engage in a balance of professional learning and reflection	10	10 school weeks paid leave at the senior managers normal salary
Secondary Principals' Sabbaticals	To engage in a balance of professional learning, reflection and rejuvenation	45	Either ten, five or three school weeks' paid leave at the principal's normal salary

Within the Secondary Teachers' Collective Agreement 2015-18:

1. Allowances

- High Priority Teacher Staffing Allowance (HPTSA) Annual additional payment of \$2,500 for registered and \$1,500 for provisionally registered teachers in schools which demonstrate recruitment and retention difficulties. Limited to around 400 FTTE per year (primary and secondary). Removal expenses paid into the school and, after a qualifying period of three years, out of the school. Designation might be only for one year. Schools in an area are collectively identified by overall loss rates.
- Staffing Incentive Allowance(SIA) An annual payment of \$1,000 for permanent or long term fixed-term registered teachers in schools with demonstrated staffing difficulties. Designation is for three years. Payment is for a minimum of three years and applies to those with up to four management units. There are removal expenses into and out of HPTSA/SIA schools. Removal expenses paid into the school and, after a qualifying period of three years, out of the school.
- Salary units and Management Allowances Payments for middle and senior management roles and functions support recruitment to leadership positions. A salary unit is worth \$4,000 pa. An allowance is \$1,000 pa. The number available to each school is formula driven.
- *Māori Immersion Teachers Allowance* A payment \$4,000 pa. for teaching in immersion settings and using Te Reo as the medium of teaching for at least 6 hours per week.
- *Study leave* 75 full time equivalent study leave provisions per year.
- Study support grants 100 per year for permanent teachers. The grant provides a time allowance of four hours per week to undertake further study, with reimbursement of \$500 towards fees at completion of a qualification.
- *Paid sabbatical leave* ten weeks for 50 full time teachers per year and ten paid sabbaticals for senior leaders along with constrained entitlements to unpaid refreshment leave (one term after three years or one year after five years in the same school) are in part to improve retention and sustain enthusiasm in the job.

- *Base scale* recognises level of qualification (by differential at maximum salary steps) and teacher training (by a separate, and lower scale for untrained teachers).
- Service and Qualification Increment an additional salary payment of \$2,000 for permanent teachers after three years at their qualifications maximum who have higher qualifications, or who have additional or improved qualifications which have not increasing their salary group. The payment cannot be made to teachers with a permanent unit.
- *Medical and terminal illness retirement options* assist teachers with medical issues to end their teaching career with dignity.
- *Prior work experience* credits recognise prior work experience to allow career changers to start higher on the salary scale.
- *Surplus staffing retraining option* allows teachers to retrain for one year in an area relevant to secondary teaching. Salary is paid, fees and other costs are not. There is no guaranteed position after the retraining.
- *Removals expenses* expenses are reimbursed for shifts to and from hard to staff schools (HPTSA and SIA) and for teacher moving on promotion.
- *Teachers on transfer* experiencing difficulty finding permanent accommodation get interim assistance with rental (on the merits of each case) for up to three months. The subsidy is the excess of the rental over one sixth of the salary.
- *Teacher relieving rates* The maximum step for a reliever (up to six weeks) is step 6 (\$56,741 p.a.) and is paid at the rate of either 1/190 for those employed by the day and 1/950 for those paid by the hour. Rates include holiday pay.
- Beginning teacher advice and guidance time allowance five hours per week for a full time PRT in their first year and 2.5 hours per week for a full time PRT in their second year to support their induction and development.
- *Head of Department time allowance support beginning teachers* one hour per week per provisionally registered teacher to support them in their curriculum content and pedagogy development.

Ministry initiatives

2 Scholarships

Each year the Ministry offers a limited number of scholarships under the TeachNZ brand to encourage people to train as teachers in the areas where there is greatest need.

The stated intention of these scholarships is to encourage talented people with the skills, motivation, and disposition to enter into teacher training, and to support successful teachers to stay in the teaching profession. The scholarships are intended to attract and reward people with the right attributes into teaching as a career. A set of merit-based criteria are used: knowledge of, experience with, and involvement with Māori and Pasifika communities; academic achievement; and suitability and motivation to teach.

All TeachNZ scholarships are bonded. For most scholarships the bond period is usually one year for each year a scholarship is received, unless the student is in the final year of study, when it is for two years. For a TeachNZ Career Changer Scholarship, the bond period is two years for every year the scholarship is received.

The TeachNZ scholarships are intended to focus on areas where teachers are needed. TeachNZ annually reviews data on teaching vacancies and trends in the teaching workforce to make sure the scholarships continue to target areas of need.

The categories, types and number of scholarships vary from year to year. The table below outlines the scholarships that were available for 2016.

TeachNZ Scholarships 2016

Category	Study Type	Number	Fees and Allowances			
Ngā Karahipi Panoni Mahi (Kura Tuarua)	Full time,* up to one year	30	Course fees paid + \$30,000 over the period of study			
Career Changer Secondary (Tipu Whakarito Te Reo Māori me Te Waka Whakarei)						
2016 GRADUATE SCHOLARSHIPS						
Category	Study Type	Number	Fees and Allowances			
Graduate Scholarships (Tipu Whakarito Te Reo Māori me Te Waka Whakarei)	Full time,* up to one year	30	Course fees paid + \$10,000 over the period of study			
2016 KUPE SCHOLARSHIPS FOR MĀORI AND PASIFIKA HIGH ACHIEVERS						
Category	Study Type	Number	Fees and Allowances			
Kupe Scholarships for Māori and Pasifika High Achievers (ECE, Primary and Secondary)	Full time,* up to three years	30	Course fees paid + \$15,000 over the period of study			
2016 SCHOOL LEAVER AND UNDERGRADUATE SCHOLARSHIPS						
Category	Study Type	Number	Fees and Allowances			
Ngā Karahipi Whakarere Kura, Paetahi hoki (Kura Tuarua)	Full time,* up to four years	30	Course fees paid + \$10,000 ove the period of study			
School Leaver and Undergraduate Scholarships Secondary (Tipu Whakarito Te Reo Māori me Te Waka Whakarei)						

3 Recruitment agency

The Ministry contracts the recruitment agency Education Personnel⁵⁶ to provide four programmes of support:

- High vacancy, subject and location funding an on demand service. The service targets smaller, provincial, low decile and schools with high proportion of Māori and Pasifika students. Schools approach the agency who seek funding (\$4,500) from the Ministry for recruitment.
- 2. Job find assistance Beginning teachers can access help via Facebook. They can get online advice on CVs, job market, interviews etc. Seminars are run around the country for ITE final year students.

1:1 assistance is available to selected, best graduates to help them find jobs and to make sure they are not lost to the system. Limited to 30 a year and based on application, references and CVs. A key question asked is whether the candidate is mobile.

- 3. Job find assistance for Māori and Pasifika students similar to the above, but more intensive. There is ten hours of 1:1 support including whatever is needed – support with CVs, teacher registration, etc. Some candidates had been teaching on and off for 18 months but had no documentation to support them getting registration. Sometimes they write to WINZ to ask them to loan money to pay for the teacher registration.
- 4. Schools can approach the agency directly to ask them to look for beginning teachers or Māori speakers and they will recruit these for them for free to encourage schools to employ under-represented groups and to give beginning teachers a good start.

Other current initiatives

Individual schools:

- actively recruit secondary teacher training students from ITE 'open day' events
- seek recruits from overseas
- approach teachers in other schools
- offer subsidised accommodation
- pay additional rates through a variety of mechanisms from their local funding
- offer management units for recruitment
- offer studentships to current senior students to train and return

⁵⁶ It has been the Ministry's preferred recruiter for 19 years, when it was first engaged to help address the then teacher supply crisis. It has been involved in the STA emergency staffing scheme.

Previous Initiatives:

- 1. The Department of Education (the Department) refunded the cost of attending interviews when the teacher was invited by a 'controlling authority'. This made it easier for teachers to visit isolated or distant schools for interviews.
- 2. There was a mobile reserve of relieving teachers refunded by the Department for actual and reasonable expenses incurred in travelling to the school at which the relieving was undertaken and back again after the engagement. This assisted isolated or distant schools with obtaining relievers.
- 3. Prior to Tomorrow's Schools in 1989, accommodation support was provided for secondary teachers in difficult to staff areas and in areas with high housing difficulty in order to ensure there was an adequate supply of teachers. Schemes included:
 - teachers paying double rent while waiting to secure a permanent home could be reimbursed the lower rent by the Department
 - pool housing was available to teachers on transfer
 - the Major State Housing Scheme provided temporary housing for teachers as a priority group in major state housing areas and Otara, Mangere and Porirua
 - houses on acquired sites were made temporarily available for teachers at pool house rates
 - there was a school hostels scheme for single teachers
 - support for education boards holding accommodation open for teachers in key positions pending their arrival
 - teachers with dependents on transfer (or going to staffing incentive schools) could be eligible for loan assistance if the need was demonstrated from the Housing Corporation
 - Housing Corporation would from time to time make available sections on reasonable terms for home building for state servants, including teachers
 - residences were provided for teachers and rents were calculated from a formula that recognised a range of factors.
- 4. Many isolated schools had school housing available, managed by the local office of the Education Department. The Ministry has progressively transferred those houses to the boards, and is currently in the process of transferring or selling the remaining houses. Many boards have sold on the houses because of the cost of maintaining them.
- 5. Teacher recruitment and retention is fundamental to our approach when engaging with schools on their teacher houses.
 - Land Information New Zealand, on behalf of the Ministry, is currently visiting school boards with a large number of teacher houses to identify which teacher houses are still required.
 - They discuss the categorisation of houses. The priority houses for review are non-core houses non-core houses have previously been identified as not required to meet

teacher recruitment and retention because of a number of factors, including a robust rental market in the school's locality

- Feedback from the visits completed to date shows that teacher recruitment and retention is a major discussion point at the briefings
- Teacher houses are only released for sale if the school board is satisfied the house is no longer required for future recruitment and retention.

TEC

Targeted tuition subsidy increases at degree level and above in science subjects (5% increase), agriculture (16% increase) from 2017 may assist in increasing the size of these graduate pools, on which secondary teacher ITE may subsequently draw.

Appendix E: Previous reports

- Issues of teacher supply are to some extent cyclic and we knowledge that some of the issues that influence secondary teacher recruitment and retention have been canvassed in previous reports including the 2003 Ministerial Taskforce report, the 2005 Australian Council Educational Research Report and more recently the 2012 Secondary School Staffing Group Report.
- 2. In 2003 the Ministerial Taskforce Report included in its recommendations for improved recruitment and retention:
 - That prior to the commencement of the 2004 STCA negotiations, an objective mechanism be determined to achieve security for teachers in their current remuneration.
 - That the Government consider implementation of a paid sabbatical scheme when falling student rolls begin to ease pressure on secondary teacher supply. The three other recommendations in relation to non-salary remuneration (provision for medical retirement; a student loan abatement scheme to new teachers in subject areas and in regions with staffing difficulties and a superannuation scheme for secondary teachers) have been implemented.
- 3. The Ministry commissioned Australian Council of Educational Research (ACER) Workload Report 2005 identified fifteen areas as needing improvement. Of those, addressing middle management workload issues and reducing compliance were given highest priority. Middle managers were identified as the group most affected by workload, and this largely related to areas of assessment, curriculum and performance review. Their ability to support and lead their colleagues professionally was seen to be compromised. The amount of time spent on compliance was seen to be a major contributor to workload problems and lack of job satisfaction for all teachers in schools.
- Consequence to this report timetabled non-contact time was introduced in the 2002 Secondary Teachers' Collective which was further enhanced in the subsequent 2004 settlement when additional non-contact time for unit holders was implemented during 2005.

Appendix F:Secondary Teacher Employment conditions

Salary scale

There are eight salary steps for trained secondary teachers with a level 7 subject/specialist qualification which currently starts at \$49,282 and reaches a maximum of \$74,460.

Average secondary teacher remuneration (salary and allowances) was \$75,486 (April 2015).

Relative salary

Top of scale classroom teacher, no units	1.28 times the current average wage of \$58,000
Top of scale middle leader, 2 units	1.42 times the current average wage
Top of scale senior leader, 6 units	1.70 times the current average wage

[Average wage is \$29.47 per hour^[1] which equates to an annual rate of \$61,298 for a full-time employee]

Leadership units and allowances

For 2016 secondary schools are funded for 22,078 units (each worth \$4,000). Units are paid to teachers in addition to the base salary for additional responsibilities. Boards may also make additional payments from their own funding. A further 900 units are generated by Ongoing Resource Staffing (ORS) staffing.

The typical middle leader has one unit. The typical senior leader has five or six units.

Management allowances of \$1,000 for specific leadership duties, to a maximum of two per person. There are currently 14,198 Ministry funded middle and senior management allowances in secondary schools. Boards may also make additional payments from their own funding.

Specific to individual allowances

- *Bus controller's allowance* minimum of \$3.16 per day for the first route and \$1.5 per day for each additional route (one per school).
- Associate teacher allowance \$3.19 for each timetabled hour of teacher student contact.
- *Community of learning roles allowances* \$16,000 for Across Community Teacher and \$8,000 for Within School Teacher roles.
- *Careers advisers' allowance* \$1,500 (one per school).
- Specialist Classroom Teacher allowance \$8,000 (one per school).
- *Māori immersion teachers' allowance -* \$4,000.

^[1] Source: Statistics NZ – March 2016 quarter

• *Special duties increment* – RTLB payment of one additional salary step or \$995 if at top of the scale.

Other conditions

- Employer contribution to retirement savings (3% for Kiwisaver, the Teachers' Retirement Savings Scheme, State Servants' Retirement Savings Scheme, or the National Provident Fund or either 6.5% or 7% for those in Government Superannuation Fund prior to 1991).
- Sick leave provision
- Redundancy provisions

Other professions

Profession	Average Annual Earnings
Accounting Technician	\$45,000 – \$80,000
Auditor	\$55,000 – \$100,000+
Bank Manager	\$55,000 – \$100,000+
Financial Planners	\$35,000 – \$100,000+
Loss Adjustors	\$45,000 – \$100,000+
Management Accountant	\$45,000 - \$100,000+
Teacher	\$45,000 – \$75,000
Educational Psychologist	\$45,000 - \$100,000+
Engineer (Chem./Elect.)	\$45,000 - \$100,000+
Environmental Engineer	\$45,000 - \$100,000
Road Engineer	\$45,000 – \$90,000
Elect. Engineer Technician	\$45,000 – \$90,000
Environmental Scientist	\$45,000 – \$85,000

Profession	Average Annual Earnings
Forestry Scientist	\$45,000 – \$55,000
Industrial Chemist	\$50,000 - \$100,000+
Computing Services Manager	\$55,000 – \$150,000+
Systems Analyst	\$50,000 - \$100,000+
Computer Helpdesk Operator	\$35,000 – \$60,000
Warehouse Manager	\$35,000 – \$55,000
Solicitor	\$50,000 – \$200,000+
Registered Hospital Nurse	\$65,000 basic (5 years' experience in 2016)

Appendix G: Suggestions made in submissions to the Secondary Teacher Supply Working Group

Pre-recruitment

- Improving the status of the profession
- Find ways to grow the size of the graduate pools
- Investigate why students are choosing primary teaching over secondary
- Present teaching as a long term employment/career prospect
- Actively marketing the profession and promote the positive things about teaching job
- Promote teaching as an option across all vocational pathways.
- Target and promote the profession from a young age⁵⁷
- Give school students a realistic and balanced view of teaching as a career

Initial Teacher Education (ITE)

Attracting graduates into ITE

- Scholarships, usually proposed with a period of bonding
- Scholarships alongside bonding linked to hard to staff areas and subjects
- A studentship model of paying people to get a degree and bonding to teaching for a time⁵⁸
- Providing financial support for Masters students
- Raising the bar for entry and creating competition to get into ITE
- Building the pool of available te reo Māori teachers by sponsoring identified students through tertiary studies

Attracting career changers into ITE

- Providing more direct paths into the profession
- Applying the Teach First NZ model with high quality training and the career change students getting paid
- Creating a mechanism for Māori and Pasifika teacher aides to be supported to retrain as teachers

Extending the range of experience ITE students have of schools

- Exposing students to different experiences, different geography, decile, etc, and increasing the numbers of students going to rural/isolated/low decile schools on practicum
- ITEs being more deliberate in directing teacher students to such placements
- Making the Teach First NZ model available to high decile schools with hard to staff subject areas

⁵⁷ A model cited was the Counties Manukau district health board, which identifies its future staffing needs and invests in year 11 students by guiding them into the needed subjects and guaranteeing them a job if they get through to the degree. ⁵⁸ One high decile school offers 50% of course fees to a student each year if they come back to the school as a teacher.

Changing the current ITE model

- Have only two national providers of secondary ITE
- Ensure that system-wide levers to influence ITE intakes to match school needs, eg, set subject quotas
- Address the problems with the system of funding the ITEs to ensure quality of intakes and distribution of graduates.
 - Do not incentivise universities to fill places rather than to select only the best candidates in the subject areas that are in high demand
 - o Remove the financial penalty for ITE providers which fail students
 - The significant cost to student teachers of travel for practicum within a wider region of the university should be covered by the Isolated Schools Practicum Allowance, which needs to be properly resourced
 - The financial incentive needs to be sufficient to attract students to take up practicum placements, where accommodation costs may be high (including Auckland) or when students have to pay to maintain accommodation in their home centre
 - Provision of funded local rental accommodation for student teachers to use on their practicums
 - The Isolated Schools Practicum Allowance funding should be consistent from year to year and the list of schools for which the payment is allowed should be agreed with the providers
 - The Allowance should also be sufficient to cover both the costs to providers of the extra Visiting Teacher costs of travel to isolated places and the travel and accommodation costs to students
 - ITE providers should be funded to compensate for lack of economy of scale in secondary subject areas and avoid over selection of primary students to cross-subsidise the more expensive secondary programmes
- ITE students should be required to have 2 subjects to improve their employability
- ITEs should provide more education and training around classroom management, how to chunk learning, differentiation of learning for different learners, and alternative methods of assessment
- There should be financial support for intensive ESOL support for those with right qualifications to the point where they can manage in the classroom.

Supporting schools with ITE students

- ITE providers being visible in schools and responding appropriately to school concerns and needs
- Providing resourcing to schools which are mentoring ITE students, including assistance to schools which struggle to support a student teacher in the subject because of the inexperience of its own teacher(s)
- Involvement in working successfully with student teachers should be recognised as a specialist skill as a teacher and:
 - \circ recognised through provision of adequate time to do the role, not just money
 - professional recognition of the role⁵⁹

⁵⁹ For example, universities are beginning to recognise these roles by listing Associate/Honorary Lecturers (liaison teachers) in their calendar as staff members, and/or offering university library membership etc.

- Support for schools, particularly small, rural and low decile, to be as involved as possible with the ITE provider
- Providing time or opportunity for teachers to develop the relevant skill set for working with student teachers, eg, through dedicated study awards

School responsibilities

- Schools should provide great role models for student teachers, eg, teachers who are continuing to be engaged in professional learning, constantly reflecting on their practice, using a range of pedagogical approaches, using Te Reo Māori in their practice, etc
- Teachers should be giving regular, timely, meaningful and honest feedback and feed-forward to ITE students, and providing honest assessments to their ITE providers

The NZPPTA ITE advisory committee recommended that:

- ITE students are more carefully selected because poor selection damages the image of teaching
- New teachers should have realistic expectations about the workload
- Studentships with bonds are used to create a commitment to the career
- Incentives are provided for people in industry to retrain to teach
- ITE places are rationed (with subject quotas) to fit the demands in schools
- Scholarships be given to candidates with the qualifications and experience that schools need
- There should be a government strategy to assist universities to explore ways to rationalise through innovative course delivery, collaboration such as videoconferencing, shared delivery across universities for some subjects and in developing Centres of Excellence.

New appointments

- Scholarships \$10k in three parts in three years may just not be enough. Pay a lot more but bond for 4 years and cover the lost wages if they retrain
- Pay students to come back to schools and bond them particularly in those subjects we are short in
- There should be scholarship schemes for people to enter schools, like the rural doctors scheme, in hard to staff areas
- Getting payment off their student loan \$3,500 a year for five years (Voluntary Bonding)
- Introduce an Auckland salary weighting
- Extend the Hard to Staff allowance
- Increase the value of the HPTSA
- Make beginning teachers are aware of the HPSTA
- Offer subsidised housing
- The Ministry must be engaged with the special housing areas and provide teachers with rental/mortgage assistance for new housing areas close to schools, or get developers to put aside low cost houses for teachers and other essential public service workers
- Providing good housing at cheap rates as condition offered to come to rural areas
- Reintroduce rural service/ the country service bar
- Make it easier for people to do the training when on a LAT pay 80% salary for the year of training and release time for the student
- The Catholic Education Office should take responsibility for finding people for integrated schools

- Get rid of the model of schools competing with each other
- Policies which give more security of rolls– less competition, stop buses from other parts of the city taking students out, stop opening charter schools, and manage the failure of nearby primary/intermediate schools
- Strengthen the English language requirements for overseas teachers
- Immigration should skype interview those applying for teachers' jobs here
- Fast-track overseas transition immigration, NZQA, certification, etc, and reduce the costs to the teacher
- Provide schools with financial support towards the costs of recruitment from overseas
- Pay the return costs for New Zealand teachers returning from overseas
- The Ministry should review processes, communications and implied messages on GMFS staffing to avoid triggering hiring on fixed-term
- There should be less vulnerable/bulk funded bits of staffing to reduce the number of fixed-term positions and make it easier to attract teachers.

Established teachers

Suggestions

- Higher value on the steps
- Quicker progression up the salary scale
- Suggest fewer steps on the scale
- Pay hard to staff subjects more
- Pay teachers more to raise the status of teaching
- Pay well and provide time and PLD
- Demystify the salary
- Higher employer Kiwisaver contribution (above 3% the old GSF at 6% is a retention tool)
- Pay health insurance
- Pay teachers for extracurricular
- Address the amount of work required
- Provide more time for the role itself
- Increase entitlement staffing to improve time and conditions
- Improve conditions
- Provide more refreshment leave, more sabbaticals, and access to a year's leave to do something different like gain industry experience
- Improve property
- Principals must be assertive in their support of teachers and ensure they are treated fairly and reasonably in the workplace in aspects of timetabling and workload, respectful relationships and recognition and valuing of both the person and their special attributes
- Where teachers appointed to teach Te Reo lack language proficiency and/or are outside of their iwi boundaries and away from whānau support networks, they should have access to a 'puna reo' support person fluent in the language who can be in the classroom for both teacher and learners to access

- Provide an environment that is accepting and respectful of Māori language, culture and tikanga, spiritual health, whānau relationships, whakapapa and whakawhanaungatanga connections, Te Tiriti o Waitangi and the history of the Māori people in Aotearoa
- Respect the rights of Māori to be active participants in shaping the educational policy in schools for Māori students and their whānau
- Professional development and professional support must be localised and regular to help teachers to develop collaborative practice, to keep informed of new research findings, pedagogy and approaches to language acquisition
- Create a national database of all immersion Te Reo teachers in secondary schools to identify where the support networks should be prioritised and the potential providers available
- Teachers proficient in Te Reo Māori and teaching te reo should be eligible for a language allowance similar to the Māori Teacher Immersion Allowance
- A year off on full pay to retrain in shortage subjects
- Provide PLD to retrain in other subject areas while they remain in the classroom
- Pay to assist teachers to upskill themselves
- The Ministry employ a pool of relievers or create permanent pool of locum relievers to assign from year to year to schools
- The Education Council review its requirements around the teacher refresher programme
- There is another category of teacher certification or a particular grade of practicing certificate for relief teachers who can only work day to day relief, and is not ongoing
- Relievers are paid more.

Career pathways

- Higher value for management units and allowances
- More management units and allowances.
- Greater flexibility in allocation of units.
- Have higher salary steps they can move through quickly, then provide time for roles
- Increase payment for middle management job and address workload
- Grandparent out teachers at the end of career to unblock the flow of young teachers into leadership roles
- Another 10 teachers in every school to release HoDs/middle and senior leaders to allow quality mentoring, time for appraisal, etc
- A provision for stepping down from HoD positions at the end of career
- Making leadership roles more flexible, eg, shared HODship
- Pay to upskill people into middle management
- More resourcing to middle leadership more time, time to mentor, extension of pay scale and broader career options
- More flexibility about those who can apply for the CoL roles and higher remuneration for middle leadership roles needed
- More generous staffing entitlement to improve conditions the job is enormous and the role of the dean in particular poorly rewarded
- There should be financial incentives available for schools to motivate expert middle leaders
- Providing more PLD for both teachers and middle leaders in shortage areas.

End of career

- Address the problem of the government superannuation scheme/Teachers Retirement Saving Scheme (TRSS) problem being based on the last five years' earnings for people dropping back
- Grand-parent units until retirement for end of career teachers who step back into classroom teaching
- Help out those at the end of their career to assist those seeking to start theirs.

Appendix H: New South Wales and California

1. New South Wales initiatives⁶⁰

The New South Wales initiatives are focussed primarily on recruitment, not retention.

Teaching scholarships

Scholarships for teacher training in areas of teacher workforce need. The scholarship is an annual AUD\$5,000 training allowance for the duration of their scholarship and an additional AUD\$3,000 on appointment. Recipients agree to teach in a public school for at least three years.

Incentive scholarship programme

Incentive Scholarships for final year teacher education students not in receipt of a Teacher Education Scholarship to secure the best graduates in identified learning areas of workforce need.

Sponsored training programmes

Sponsored training programmes to enhance the supply of qualified teachers in curriculum and specialist areas of workforce need by supporting qualified teachers to gain approval to teach in a specialist or in a different or additional curriculum area.

Promotion of teaching as a career

A comprehensive and ongoing promotion and recruitment campaign, including a dedicated promotions team which communicates the benefits of teaching in public schools

Incentives scheme for rural NSW

A range of incentives for teachers in rural and remote locations, including rent subsidies of up to 90%.

Rural scholarships

In addition to teacher education scholarships, rural scholarships are available to potential new, high quality teachers prepared to teach in areas of workforce need, specifically in schools in rural and remote locations.

Cadetships

High achieving school leavers are employed as paraprofessionals and placed in a school from the time they commence their initial teacher education programme.

Internships

High achieving final year teacher education students in areas of workforce need are employed as educational paraprofessionals while undertaking, and being paid for, their final year of study.

⁶⁰ NSW Government – 2015 Teaching Workforce Supply and Demand

2. Recommendations to the Californian State Government⁶¹

These recommendations combine recruitment initiatives with some improved retention proposals.

- **1. Reinstate the CalTeach programme** which helped recruit teachers from colleges, other careers, and other States; provided them information about how to become credentialed; and directed them to preparation programmes and districts so that entry into the profession was made simpler and more supported.
- **2.** Create incentives to attract diverse, talented individuals to teach in high-need fields and locations, by funding candidates who prepare for and teach in schools and subject areas experiencing shortages.
- **3.** Create innovative pathways into teaching. Research demonstrates that teachers prefer to teach near where they grew up and attended high school. Locally grown teachers are typically more diverse than the general teaching workforce, often rooted in the community and familiar with cultural contexts.
- 4. Increase access to high-quality teacher preparation programmes that support teacher success in high-need districts and fields. New approaches to training and recruitment are needed to solve shortages in communities and fields that have long-standing challenges with both adequate preparation and adequate supply, which are interrelated. In particular, making more widely available urban and rural teacher residencies that provide teacher candidates with a yearlong apprenticeship teaching alongside an expert mentor teacher, while they take tightly linked credential coursework from a partner preparation program. Residents receive a scholarship and living stipend to enable them to devote the full year to their preparation. They commit to three to five years in the local schools, after which they typically commit to teaching as a long-term career.
- **5.** Ensure that all beginning teachers have access to a high-quality and affordable induction programme through stronger accreditation and strategic programmatic support.
- **6.** Provide incentives that support teachers' ability to stay in or re-enter the profession through strategies like mortgage guarantees, ease of credential renewal, and opportunities to continue teaching and mentoring after retirement.⁶²

3. An increase in salary

⁶¹ Addressing California's Emerging Teacher Shortage: an analysis of source and solutions. Darling-Hammond, Furger, Shields and Sutcher 2016

⁶² Top ten factors rated by former teachers as important in decisions to return to teaching:

^{1.} Availability of full-time teaching positions

^{2.} Ability to maintain teaching retirement benefits

^{4.} Smaller class sizes or smaller student load

^{5.} Easier & less costly renewal of certification

^{6.} State certification reciprocity

^{7.} Availability of part-time teaching positions

^{8.} Availability of suitable childcare options

^{9.} Forgiveness of student loans

^{10.} Housing incentives

- State action to **allow retired teachers to return** to service as teachers or mentors help relieve some shortages and provide mentors who can enable new teachers to survive and succeed.
- **Regulatory streamlining** for teachers re-entering the profession and for teachers entering from other States could expand the pool of prospective teachers.
- State, county, and/or local actions to create **mortgage guarantees** for housing in exchange for service commitments could allow more teachers to remain in the profession and serve in communities with high costs of living. Twenty-five percent of teachers nationwide point to housing incentives as an important factor in their decision to return to teaching. Cupertino Union School District recently announced plans to develop more than 200 units of affordable housing for teachers and staff on district-owned land.
- **7. Improve teaching conditions** by supporting administrative training that helps leaders create productive teaching and learning environments.

Appendix I: NZPPTA Theory of Teacher Supply and Demand

The qualitative staffing needs of secondary schools include requiring teachers who are:

- subject specialist tertiary graduates
- secondary teacher trained
- of suitable character and personal qualities for teaching
- competent in classroom management, pedagogy, assessment for qualifications and formative assessment of students
- strong communicators
- the 'best-fit' applicants for the school and the courses it is offering.

Where choice of appointment is limited or absent, the options are often either not to appoint or to appoint someone less than adequately suited to the position. This means that secondary students are not experiencing the best teaching possible.

Matters of equity arise when only some schools can choose from well qualified applicants with appropriate qualities.

Demand

Demand is the measure of how many teachers are wanted in any year.

For resourcing purposes the government sets a number of full time positions it will pay for, and allocates those FTTE across schools by formula. This resourcing allocation model measures the total number of full time equivalent positions funded nationally. The figure will be change from year to year depending on government policy and student demographics.

However, the total number of teachers needed in the New Zealand school system any year is generated by:

- the number of New Zealand students expected
- the age profile of those students
- the proportion of students who are in Māori immersion education
- the staffing ratios and other formula-driven staffing
- the number of schools operating within the state and state-integrated system
- the staffing required by the number of foreign fee paying students recruited into schools
- the number of other above entitlement teaching staff employed by schools
- the decisions made by local schools about how jobs are to be filled
- the number of teachers needed in the private school system.

Total demand can be disaggregated into the number of teachers required of varying subject specialisms, at middle and senior leadership levels and for desired a demographic of the teaching force.

The actual number of teachers required to fill the jobs will exceed the number of FTTE because of factors such as part-time job share positions and relieving positions.

An increase in aggregate demand between years (eg, through roll increase, improved staffing ratios) will require the employment of more teachers, but even if demand is constant there will be the need for new teachers to replace teachers leaving the service, adjustment for teachers reducing hours and rebalancing between schools and regions, etc.

Supply

Supply refers to the number of teachers or potential teachers qualified and willing to be available. The sources supply of trained and qualified secondary teachers includes:

- Retention of those teachers already in schools
- The return of teachers who had left teaching
- Use of relief pool teachers
- Recruitment of overseas teachers
- Recruitment of teachers from other parts of the sector
- The retraining of teachers from other parts of the sector, or who have been out of the secondary system for some time
- The graduation of newly trained teachers
- The increased use of under-employed teachers within the system.

The balance between demand and supply creates a teacher shortage or surplus and influences the overall quality of appointments into the profession each year.

Factors influencing supply

The decision of qualified people to join the teaching force or to remain in the teaching force is an occupational choice. The interacting factors identified influencing those choices for teachers are:

- relative salary⁶³
- salary profile⁶⁴
- relative career opportunities⁶⁵
- barriers to entry
- perceived non-salary advantages/disadvantages of the job.

People may forego some salary in exchange for non-financial benefits of the job. Conversely when job conditions deteriorate a higher relative salary is required to recruit and retain the same number of teachers with the same qualities.

Teachers and potential teachers will make decisions about immediate gains against long term benefits in making choices between jobs, or between employment and retirement. Factors they may consider include:

- immediate teaching salary v. potential future salary in another job
- student fee costs for teacher students

⁶³ The relative salary (usually compared to equivalent professionals or the average wage) rather than the absolute salary is influential in individual recruitment and retention decisions.

⁶⁴ The salary profile reflects starting salaries and the top of scale salaries and the time taken to move between them.

⁶⁵ The best proxy measure for relative career opportunity is the unemployment rate amongst professional groups. An alternative proxy is the general unemployment rate. When the unemployment rate falls it is more difficult to recruit and retain teachers without adjusting other factors.

- foregone earnings in the teacher education year
- student loan repayments
- superannuation issues
- career prospects in teaching
- job satisfaction
- workload pressures.

Changes in salary profile, relative salary, non-salary considerations, changes in general employment opportunities, etc, will impact on both recruitment and on retention, unless there are compensatory changes.

In general terms the supply of teachers is counter-cyclic to the general business cycle, with falling unemployment and rising general wages triggering pressures in recruitment and retention of secondary teachers and rising unemployment and stagnant or falling general wages reducing pressures, but with these factors having differential impact according to gender, subject qualifications, age and other factors, both individual and situational. For example, research has identified that there are:

- General gender differences. For example males generally are more responsive to changes in the relative secondary teacher wage and also are more responsive to future earnings. They are also more sensitive to changes in career prospects and have lower rates of discount than females
- Subject-linked differences in responses to the supply factors. For example, male and female science graduates appear to be more influenced by alternative career opportunities than other graduates and male science graduates are most responsive to employment opportunities and less responsive to wage changes than arts graduates
- Age-related differences. Older teachers are less likely to leave than those with less time in the profession while late career-changers were more likely to remain in the profession than others when wage factors declined.

In New Zealand there are also identified differences in recruitment and retention of Māori teachers and Pasifika teachers.

Classroom teachers, middle leaders and senior leaders experience different recruitment and retention pressures too.

Meeting the needs of schools is further complicate by variation in the size of the potential pools of teachers of different of subject specialisms. There are far more social science graduates to draw potential teachers from than there are graduates from mathematics courses.

Reticulation

Reticulation is used here to refer to the movement of teachers within schools and between schools and regions, which can be triggered by first appointments, promotion within or between schools, personal circumstances (eg, changes in a partner's employment location), anticipating improving career prospects, or non-financial job considerations. The latter might include:

- preference for a geographical location
- preference for working in urban areas or rural areas
- preference for working in higher decile schools or lower decile schools, etc.

Ideally there will be an even allocation of teachers with the qualities valued by schools across all schools. In practice there are reticulation gradients (eg, disproportionate drifts from low to high decile, rural to urban schools) which results in unmet needs for some schools/regions/roles and an oversupply in others.

Without a full picture of both the national and the local demand and supply, moving to address one may intensify problems for some schools while addressing (or partially addressing) those of others.

Examples of measures to address reticulation imbalances include:

- regional payments (eg, the London Allowance)
- hard to staff payments (currently HPTSA and SIA)
- transfers and removals (currently STCA provisions)
- country service bar (prior to 1989)

Reticulation measures cannot work if they target the wrong cause or if they are not set at a sufficient level to overcome the influencing negative rates of discount. Further, in seeking to address some general supply issue it is important not to intensify existing reticulation problems.

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