To what extent are policy framings of “teacher shortage” driven by the marketised nature of the Australian school system?

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ABSTRACT

This paper explores how Australian government policy frames the issue of “teacher shortage”, and the extent to which the marketised nature of the school system accounts for this. Some studies in the international literature suggest that marketisation of school systems may increase inequity amongst schools. Government concern with equity and performance in schools is associated with top-down compliance and accountability, which may result in attrition due to increased workload and loss of autonomy for teachers. An exploration of Australian government data sources found that there are different estimates on the extent of a general teacher shortage, but sources appear to agree that teacher supply is unevenly distributed, and is insufficient for demand in certain areas of need. In this thesis, Australian policy framings of “teacher shortage” are elaborated through Framework Analysis of four contemporary government reports, triangulated with a simple count of key words taken from the international literature on teacher shortages. The analysis finds that the government documents, which are very concerned about equity and performance of students, frame “teacher shortage”, for the most part, as an issue of insufficient teacher quality to deal with student inequity and insufficient quality graduates from quality initial teacher education to go to areas of need, with pre-retirement attrition also of some concern. They do not discuss the marketised nature of the school education system, nor differences in equity and performance based on school sector, when it can be reasonably assumed that marketisation is one factor influencing equity amongst schools. There is also limited attention paid to the impact of top-down compliance and accountability on teacher attrition. This thesis recommends firstly, government intervention to address the marketised nature of the school system in the form of full School Resourcing Standard (SRS) funding for government schools; secondly, collecting and making readily available teacher supply and demand data by sector to make visible the system dynamics from this perspective; and thirdly, to replace the one-way, top-down model of accountability and compliance with a more agile, two-way system.

Key words: accountability; attrition; Australia; autonomy; compliance; disadvantage; government; equity; initial teacher education; marketised; quality; schools; teacher shortage; workload

DECLARATION

I certify that this thesis:

1. does not incorporate without acknowledgment any material previously submitted for a degree or diploma in any university

2. and the research within will not be submitted for any other future degree or diploma without the permission of Flinders University; and

3. to the best of my knowledge and belief, does not contain any material previously published or written by another person except where due reference is made in the text.

Signed.....  .....

Date....31st January 2025

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ABBREVIATIONS

ABS	Australian Bureau of Statistics
ACARA	The Australian Curriculum, Assessment and Reporting Authority
ACT	Australian Capital Territory
AEU	Australian Education Union
AITSL	The Australian Institute for Teaching and School Leadership
ATWD	Australian Teacher Workforce Data project
ESL	English as a Second Language
FTE	Full-Time Equivalent
ITE	Initial Teacher Education
JSA	Jobs and Skills Australia
NAPLAN	National Assessment Program – Literacy and Numeracy
NPG	New Public Governance
NPM	New Public Management
NSRA	National School Reform Agreement
NT	Northern Territory
NTWAP	National Teacher Workforce Action Plan
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
QITE	NEXT STEPS: Report of the Quality Initial Teacher Education Review
SRS	School Resourcing Standard
TEEP	STRONG BEGINNINGS: Report of the Teacher Education Expert Panel
TEMAG	Teacher Education Ministerial Advisory Group

CHAPTER ONE. INTRODUCTION

“It’s a crisis. We don’t have enough teachers in Australia. That’s just the truth of it. This is the most important job in the world and we don’t have enough,” said federal Education Minister, Jason Clare early last year (Campbell, 2024).

There have been many news reports in recent times about a serious teacher shortage in Australia: “Australia's teacher shortage is a generational crisis in the making. How can we turn things around?” from *ABC News* (Longmuir, 2023); “Teacher shortages persisting across the country” from *SBS News* (Jones, 2024); “Australia has a 'full-blown teacher shortage crisis'” from *Sky News* (Kenny, 2024); and “Our research has found a way to help the teacher shortage and boost student learning” (England, 2024) from *The Conversation*. The Australian Education Ministers Meeting, which consists of all state and territory education ministers with the federal minister as chair (Australian Government Department of Education, 2021), has been focusing on “teacher shortage” as a very serious issue. At the same time, it is a contested issue. From time to time, there is a solitary news article with a different view, such as Julie Hare in the *Financial Review*: “Is there really a teacher shortage? The data disagrees” (Hare, 2023).

This study arose from experiencing, firsthand, the ongoing, increasing difficulty of filling teacher positions in the remote, low socioeconomic location in which I live. It focuses on the impact of the marketised nature of the Australian school system on teacher supply and demand, and the effect of this on policy framings of teacher shortage, through exploring how the issue of teacher shortage is framed, or constructed, by four recent Australian government documents. Borrowing from Nelson (2011, p. 191), “framing” involves a central organising idea that may be “valenced” to support a particular position, which implies that the same facts could be presented in different ways. Following from this, possible solutions for a public problem – “policy framings”- flow from the shape and meaning given to the problem (Althaus et al., 2022, p. 56). This thesis explores how Australian government policy “frames” teacher shortages in our significantly marketised school system: how are aspects of teacher shortages which are associated with marketisation viewed by government policy? Are any left out? How is marketisation itself viewed by government policy? The paper defines the term “marketisation” as reducing the role of government through increasing free markets, which implies increasing choice and competition (cf Harvey, 2007, p. 1-2; Register & Grimes, 2013, p. 32). It is associated with maximising school choice to facilitate competition for students, not only between government, Catholic and independent sectors, but also within each sector; and applying private business management systems to the public sector (Christensen & Lægreid, 2013, p. 16-19). The next section outlines the development of a marketised Australian school education system over the past four decades.

1.1 Background

The Australian education system has a marketised character, which has developed over the past four decades. Reported contemporary teacher shortages occur against the backdrop of the transition from an industrial society to modernity in the 1970s (Rodwell, 2018p. 132). German sociologist Ulrich Beck and British sociologist Anthony Giddens, in the 1990s, articulated the concept of “modernity”, associated with a focus on the future instead of the past, and the accompanying notion of “risk society”, which includes considerations of how a nation will minimise future risk, including global economic risk. Australia, for example, has moved into an era of knowledge economy and out of the automotive industry, which had weak international competitiveness (Rodwell, 2018, p. 8). Australia’s four joint declarations on school education between the Commonwealth, and state and territory governments between 1989 and 2019 are future-focused, with a desire for economic prosperity and social cohesion for the nation articulated as goals of equity and excellence for all school students (APH, 1995; Education Council, 2019, p. 3).

The era of transitioning to modernity was accompanied by globalisation, which viewed the world as a single place with a “world economy”, and neoliberal reforms (Rodwell, 2018, p. 5-6) in the wake of 1979/1980 United Kingdom (UK) and United States (US) reforms, which emphasised reducing the role of government, and increasing free markets and free trade (Harvey, 2007, p. 1f). These neoliberal reforms involved adopting management and organisational systems used by private companies into the public sector with the aim of making it more efficient, more effective, more responsive to clients, and more accountable (Christensen & Lægreid, 2013, p. 16f). Tolofari (2005) defines marketisation as this application of business management theories and practices to the public sector, which he further notes “came to be called, in the professional parlance, the New Public Management (NPM)” (Tolofari, 2005, p. 75, in Rodwell, 2018, p. 179). While governments had their direct influence on individual schools reduced under NPM, the accountability aspect of NPM meant they were still able to “set the rules of the game so that all interactions take place in the shadow of hierarchy” through indirect, but effective, instruments of control, sometimes referred to as New Public Governance (NPG) (Butcher & Gilchrist, 2016, p. 46). This resulted in reform with a hybrid character, which promoted decentralisation simultaneously with central control, through accountability for outputs and outcomes (Christensen & Lægreid, 2013, p. 19; Goldfinch & Halligan, 2024, p. 2551). This hybrid character is operationalised by policy-makers creating policy, delegating its implementation to managers, then “hold[ing] them accountable by contract” (Christensen & Lægreid, 2013, p. 19).

Goldfinch and Halligan (2024, p. 2542) report that Australia was an early adopter of marketisation and NPM. Reflecting “commitment to supporting parental choice and diversity in the schooling system” (ACARA, 2021), the Australian Government, by world standards, is a high spender on non-government education. In 2019, the Commonwealth Government spent more than double the

Organisation for Economic Cooperation and Development (OECD) average on the non-government schools sector and, with Chile, had the equal second highest level of expenditure on non-government schools out of 28 OECD countries (Table C2.3, OECD, 2022). In 2022, Australian federal, state and territory governments provided 61.1 per cent of funding to non-government schools, and the remaining 38.9 per cent was from private fees and fundraising (Productivity Commission, 2024). The OECD (2024) report on the Programme for International Student Assessment (PISA) 2022 notes that a relatively high percentage of Australian principals (88.4 per cent) reported that two or more other schools in their area compete for their students, placing Australia fifth out of 80 countries on this measure of competition for students.

Australia's school system is historically comprised of three differently funded sectors: government (public) schools, and non-government (private) schools, comprised of the Catholic sector and the independent sector (Cumming & Mawdsley, 2012, p. 7; Heffernan, 2021). State and territory governments are constitutionally responsible for government schools, which provide education that is free, secular, and open to any child eligible to attend (Gonski, 2012, p. 5). The Commonwealth Government, which has limited constitutional power with regard to schooling, started to have more influence in this area when it began to provide funding to private schools in the 1960s, and this influence grew through national partnerships with state and territory governments from the early 1980s (cf Cumming & Mawdsley, 2012, p. 9; Gonski, 2012, p. 38). Butcher and Gilchrist (2016, p. 46) describe the increasing role of the Commonwealth Government in school education over the past four decades in New Public Governance terms, as the ability to set the rules of the game, in spite of not being directly in charge of individuals and departments, through "the use of its considerable resources".

One method by which the Commonwealth sets the rules of the game is through the implementation of the Schooling Resource Standard (SRS). The SRS is an estimate of how much public funding a school requires to meet its students' educational needs, recognising the requirement for additional funding for disadvantaged students and schools (Australian Government Department of Education, 2024b). The Commonwealth Government, which receives the majority of Australian tax revenue, provides 80 per cent of the SRS to non-government schools and 20 per cent to government schools (ABS, 2024d, p. 87; Australian Government The Treasury, n.d.; Clark, 2019; Gonski, 2012). States and territories provide 20 per cent of the SRS to non-government schools, and are working towards providing 80 per cent of the SRS to government schools (Clark, 2019; Gonski, 2012, p. 87). By 2022, non-government schools in all states and territories except for the Northern Territory (NT) received between 101 and 108 per cent of their share of the SRS. Although Australian Capital Territory (ACT) government schools have received 100 per cent or more of their share of the SRS since 2018, all other state and territory government schools still only received between 80 and 95 per cent of their share by 2023 – see Table A1.1 Appendix 1 (Rorris, 2020-23, p. 5-6).

While Australian governments express high concern for equity, an independent review to inform the next Australian school funding agreement points out that the quasi market-based nature of the Australian education system entrenches disadvantage: compared with similar OECD countries, “Australian schools have some of the highest levels of social segregation, and this trend has worsened over time”; moreover, most schools with high concentrations of socio-educationally disadvantaged students are government schools (Independent Expert Panel, 2023, p. 83). In 2022, government schools received an average of $17,415 per student (combined state and Commonwealth funding), Catholic schools received $15,027 per student, and independent schools received $12,499 per student. These amounts were topped up by fees, charges, parent contributions and other private sources to an average of $18,076 per government school student, $19,681 per Catholic school student, and $25,695 per independent school student (ACARA, 2024a, p. 136). Higher income means a school can afford more teachers.

In summary, historical and economic evolutions in the past five decades have shaped the landscape in which current teacher shortages in Australia are reported. The future focus on potential risks of modernity from the 1970s was accompanied by globalisation and neoliberal reforms in the 1980s. These were associated with increased marketisation of schooling. Marketisation increases social segregation and inequity, and this has been reflected in Australian schools over time, with the largest proportion of disadvantaged students in the government sector. Against this background, this thesis explores to what extent policy framings of teacher shortage are driven by the marketised nature of the Australian education system. It considers how aspects of teacher shortage related to marketisation are viewed by governments, including what is considered, how it is interpreted, and what is left out, and how this viewing, interpretation and exclusion shapes, or frames, government policy.

1.2 Moving forward

To address this question of the extent to which policy framings of teacher shortage are driven by the marketised nature of the Australian school system, this thesis presents international literature on teacher shortages in Chapter 2, including the characteristics of and proposed solutions for teacher supply and demand issues. Chapter 3 analyses official statistics on supply of and demand for teachers to provide a sense of the extent of the problem in Australia – if there is one – in the light of information from the literature in Chapter 2. The thesis then considers how four key Australian Government policy documents frame the issue of teacher shortage, with Chapter 4 explaining the methodology - Ritchie and Spencer’s Framework Approach triangulated with a simple word count of key terms from the literature, then Chapter 5 presents findings from the analyses, explores relationships between policy framings of teacher shortage and the marketised nature of the school system, and makes three recommendations. Chapter 6 concludes.

CHAPTER TWO. LITERATURE REVIEW

This thesis considers the extent to which policy framings of teacher shortage are driven by the marketised nature of the Australian school system. This chapter defines "policy framing", then examines "teacher shortage" from perspectives found in a reading of the literature: uneven distribution of teachers, a result of school inequity, inadequate teacher quality, pre-retirement attrition, and imbalance in the initial teacher education-teacher retirement pipeline. Solutions to the problem proposed in the literature are included.

2.1 Policy framing

Rein and Schön (1996, p. 89) present a "frame" as a "schema of interpretation" which enables the organisation of experience and the determination of actions to be taken for an issue. They note that there can be multiple frames for a given issue – which may be in conflict - and that the choice of frame is crucial for policy and practice. Building on the work of Rein and Schön, Van Hulst and Yanow (2016, p. 92) focus on the process fram*ing* as opposed to fram*es*, which they portray as doing the work of "sense-making; selecting; naming, and categorising; and storytelling". Drawing on these pieces of work, this thesis defines "framing" as the interpretation of issues by individuals or governments, and this interpretation shapes the narrative of what should be done about the issue – that is, the policy. The next sections consider perspectives on "teacher shortage" from the literature.

2.2 Unequal distribution of the teacher workforce, disadvantage, and teacher shortages

Many studies point out that "teacher shortages" are unequally distributed, with highest concentrations in areas where there is more disadvantage, and shortages also in some subject fields and areas, and some geographic locations. Shortages can occur even when there is an overall adequate teacher supply. Schleicher (2011, p. 14) notes that many OECD countries "face shortages of specialist teachers, and shortages in schools serving disadvantaged or isolated communities" even when overall teacher supply and demand are in balance. Similarly, Sutcher et al. (2019, p. 6f) report high shortages in the US, even when the overall teacher labour market is balanced. They note that the greatest shortages are in high-poverty, high-minority schools, and that there are also shortages in special education, mathematics, science, English as a Second Language (ESL), and in regional areas. One aspect of field and subject area shortages is the phenomenon of teaching out-of-field, where teachers work in areas outside their area of training and expertise, such as an English-trained teacher instructing in mathematics. One OECD report refers to out-of-field teaching as a "hidden shortage" because potential vacancies are masked by teachers "teaching a subject in which they are not qualified" (Santiago, 2002, p. 22).

Marketisation is linked with school inequality. Register and Grimes (2013, p. 150f) state that segregation based on race, ethnicity, culture or religion is more likely to exist in a purely private school system because at least some families will select schools based on their racial, ethnic, cultural or religious tastes. They cite evidence of this in the US before the 1950s, and Holland after the 1980s. Marín-Blanco et al. (2023, p. 135), in a study in Denmark, Germany and Sweden, find that one effect of marketisation on schools is "increased segregation … and reduced equity in the school system".

School inequity, in turn, is associated with higher teacher shortages in schools with higher proportions of disadvantaged students, because, on average, teachers prefer not to work in such schools, due to high levels of dissatisfaction and stress. Thomson and Hillman (2020, p. 15) report that, across the OECD, teachers in schools with higher concentrations of disadvantaged students have higher levels of stress, are more dissatisfied with their working conditions, and are more likely to want to move to another school. Mills et al. (2024, p. 289) define hard-to-staff schools as those "in lower socio-economic areas, high culturally and linguistically diverse communities, and [in] … rural, regional, and remote [locations]". Falch & Storm, (2005) in Federičová (2021, p. 103) report that teacher turnover is particularly high in schools with high proportions of "students with special needs, minority students, and students from low socio-economic backgrounds" in Norway. Sutcher et al. (2019, p. 21f) report teacher shortages in high-minority and high-poverty schools in the US, and that initial teacher education (ITE) graduates are more likely to choose well-off schools which have "easier working conditions and better salaries". Ashiedu and Scott-Ladd (2012, p. 23) note that in Western Australia, teacher shortages are more prevalent in public schools, with lack of support for dealing with student behaviour cited as one reason for attrition.

In Australia, a time of particularly strong marketisation was during the Howard Coalition government in the 1990s, when regulations for establishing new private schools were relaxed, resulting in "greater … competition between public and private schools" (Brennan, 2009, p. 350). This competition continues, and even exists between public schools, as reported by Rowe and Perry (2020, p. 50-52), who note that there are public schools with more funding due to higher parent contributions, and these schools have far lower proportions of First Nations students than schools with low or zero funding from parent contributions. They claim that lower-funded schools tend to be under-resourced in terms of learning facilities, learning materials, and "experienced and credentialed teachers" (Rowe & Perry, 2020, p. 47). A different perspective on a link between marketisation and teacher shortage is provided by See et al. (2022, p. 80f) in the UK, who note that, with marketisation, the number of schools available for the same cohort of students increases, so demand for teachers increases, because all schools need a full complement of teachers; demand also increases because schools with higher funding can afford more teachers. Concentrations of teacher shortage in remote and low socio-economic areas (Patil, 2023, p. 308) means that students in these areas "are most likely to be taught by underprepared, inexperienced, and out-of-field teachers", producing even

greater churn (Sutcher et al., 2019, p. 7). Such shortages are associated with poorer student outcomes, which leads to a focus on teacher quality, as will be explored in the next section.

2.3 Shortage of teacher quality

A different perspective on teacher shortage is from the perspective of teacher effectiveness, which is an issue of quality rather than quantity: “an inadequate distribution of teacher quality [rather] than … insufficient numbers of teachers to staff courses” (Santiago, 2002, p. 21). This is a move away from a straightforward head count to determine quantum of teacher shortage. For this reason, some papers, such as Nguyen et al. (2024, p. 15), stress the importance of defining teacher shortages precisely to avoid ambiguity, because “shortage” may refer to the number of teachers available to fill positions, or alternatively, it may refer to a desire for better applicants.

The finding that “teacher quality is the most important within-school aspect explaining student performance” (Rivkin, Hanushek, & Kain, 2000, in Santiago, 2002, p. 82) has led international organisations and governments to focus on the characteristics of effective teachers and teaching. The Australian Government Productivity Commission (2024) defines quality teachers as those who

- Create an environment where all students are expected to learn successfully
- Have a deep understanding of the curriculum and subjects they teach
- Have a repertoire of effective teaching strategies to meet student needs
- Direct their teaching to student needs and readiness
- Provide continuous feedback to students about their learning
- Reflect on their own practice and strive for continuous improvement.

(Productivity Commission, 2024, Part B, Section 4).

To achieve required teacher quality, Santiago (2002, p. 9) recommends that governments create policies to attract and retain “effective candidates, …. exclude … those who lack the skills to teach, [provide] high quality training, [build into schools] performance-based accountability systems”, and standardise curricula. In Australia, according to Meagher et al. (2009, p. 333), “a raft of neoliberal measures” were introduced into schools from the turn of the century to improve teacher quality and accountability: the National Framework for Professional Standards of Teaching in November 2003, the National Professional Standards for Teachers in 2011; the National Assessment Program – Literacy and Numeracy (NAPLAN) in 2008; NAPLAN results were made public on the *MySchool* website from 2010 (Shine, 2015, p. 503); and the national curriculum was developed between 2009 and 2012 (ACARA, 2012, p. 4).

Recall from Chapter 1 that marketisation resulting from neoliberal reforms was associated with decentralisation (New Public Management) coupled with accountability (New Public Governance) (Christensen & Lægreid, 2013, p. 19; Goldfinch & Halligan, 2024, p. 2551). Tomkinson (2016, p.

189) notes that reporting (accountability) sometimes requires an onerous amount of time, resulting in staff "spending a disproportionate amount of their time managing reporting systems rather than delivering services". A negative spinoff of such policies applied to schools with the intention of increasing teacher quality, is increased teacher workload and reduced autonomy which can contribute to teacher attrition, as discussed in the next section.

2.4 Pre-retirement attrition

Pre-retirement attrition – that is, leaving the profession before the age of retirement - especially of early career teachers, is deemed the main reason for teacher shortages by many studies. It usually stems from dissatisfaction with working conditions, and this may relate to high proportions of disadvantaged students as mentioned above, or to top-down government policies aimed at increasing teacher quality, or to factors such as uncompetitive salary and other working conditions.

Santiago (2002, p. 9), considering OECD countries, notes that "young talented teachers leave the profession at higher rates". Ingersoll and Smith (2003, p. 3) claim that attrition is a bigger factor than recruitment in teacher shortages in the US. They compare trying to solve teacher shortages by recruiting more teachers when 40-50 per cent of them leave within a few years to trying to fill a bucket with large holes in the bottom. They note in their study that 29 per cent of those who left did so due to dissatisfaction with working conditions, listing student behaviour, lack of leadership support, and lack of input into decision-making as the main issues (Ingersoll & Smith, 2003, p. 1-3). Federičová (2021, p. 113) finds that attrition rates in European countries are very high for early career teachers, with slightly less than half leaving within five years of commencement. She finds that these attrition rates are similar to those of other professions, but notes that attrition is perceived negatively in education because of the adverse impact on students (Federičová, 2021, p. 103). Patil (2023, p. 218f), in an Australian study, points out that teachers must be incentivised to remain in the profession, with many intending to leave due to issues of wages and workload. Sutcher et al. (2019, p. 27) note that just 13 per cent of attrition in the US from 2013 to 2019 was due to retirement, while 55 per cent was due to dissatisfaction with teaching conditions (class size, salaries), administrative practices (lack of support, lack of autonomy, lack of input into school decision-making), and accountability pressures. While they note a 35 per cent decrease in initial teacher education (ITE) enrolments in the US between 2009 and 2014, they emphasise that attrition is the main cause of teacher shortages, representing from two-thirds to nearly 100 per cent of teacher demand in a year, "swamping" other variables which increase demand, such as reduced student-teacher ratios (p. 23f).

Factors associated with central control through top-down government policies (New Public Governance), such as workload, accountability pressures, and lack of autonomy, are cited by many studies as reasons for teacher attrition. Ashiedu and Scott-Ladd (2012) flag that changing standards for student assessment which are "time-consuming and difficult to implement" can lead to teacher stress and dissatisfaction (Ashiedu & Scott-Ladd, 2012, p. 22). Marín-Blanco et al. (2023) suggest

that New Public Management, although intending to improve student outcomes, has created a lot of teacher stress, replacing teacher skill and autonomy with “compliance, documentation, and formalised performance monitoring” (Marín-Blanco et al., 2023, p. 135). Mills et al. (2024, p. 289f) flag government-imposed requirements, such as “teacher-proof” curricula, which work against trust, autonomy and professionalism of teachers, as causes of teacher attrition. Top-down decision-making processes that do not take into account “teachers’ everyday working reality” is cited as a reason for intention to leave the profession by Räsänen et al. (2020, p. 847). Sutcher et al. (2019, p. 27) flag lack of classroom autonomy and input into decision-making as reasons for teacher attrition. Santiago (2002, p. 29) refers to a “revolving door”, where teachers leave due to dissatisfaction, or to pursue “better jobs” or other careers, with dissatisfaction stemming from low salaries, inadequate support from school leadership, student discipline issues, and limited input into decision-making. Reid (2020, p. 44) states that “… Governments and education departments steer [schools] from a distance”, resulting in intensification of the work of educators while at the same time taking away their autonomy, leading to rising teacher attrition.

Some studies claim a focus on teacher attrition is important because, in addition to being the biggest factor in teacher shortages, it is “policy malleable”, (Sutcher et al., 2019, p. 26). Amongst OECD countries, Santiago (2002, p. 30f) provides examples of policies to reduce teacher shortages: monetary incentives, class size reduction, efforts to create safe and healthy schools, and professional support such as induction and mentoring. Two US studies point to mentoring of early career teachers and allowing teachers to participate in decision-making as important factors to reduce teacher attrition, and concur that improving working conditions would be at least as effective as raising salaries to reduce teacher shortages (Ingersoll & Smith, 2003, p. 4; Sutcher et al., 2019, p. 28). Tomkinson (2016, p. 207) suggests that, rather than one-way top-down systems of control (NPG), there could be a two-way system, where governments receive feedback on the effectiveness of their policies.

Top-down (NPG) measures and associated attrition may contribute to another facet of teacher shortage: lack of diversity in the teacher workforce. In a US study, Davis and Behm Cross (2024, p. 3) highlight that leadership frameworks which measure success in terms of student test data, although important, “obscure historically-unique and culturally-specific ways of leading … and have an overwhelmingly and disproportionately negative impact on youth and teachers of colour”.

Top-down pressures, as discussed in the previous section, are flagged by some studies as a larger factor in teacher attrition than salary. Ashiedu and Scott-Ladd (Ashiedu & Scott-Ladd, 2012p. 24-26) find that intrinsic motivators such as “freedom to be somewhat autonomous”, the joy of working with children, the intellectual stimulation of teaching, and making a positive contribution to society are more important for teacher retention than extrinsic motivators, such as job security and salary,

though these are still important. According to Patil (2023, p. 319), lack of professional autonomy is a greater reason for teachers leaving the profession than inadequate salaries.

Top-down requirements are greatest, and pre-retirement attrition most acute, in schools with high proportions of disadvantaged students. Mills et al. (2024, p. 297) note that top-down government requirements such as standardised curricula is experienced most keenly in hard-to-staff schools. Sutcher et al. (2019, p. 24f) claim attrition rates are highest for early career teachers and teachers in high-poverty schools and districts. Thomson and Hillman (2020, p. xiii) report that the main source of stress for teachers, "by far", across the OECD, is too much administrative work, and that this stress is highest in schools with large proportions of disadvantaged students; further, the difference in teacher stress levels between schools with low proportions of disadvantaged students and those with high proportions in Australia is by far the largest in the OECD. While pre-retirement attrition is considered by many sources to be perhaps the main reason for teacher shortages, particularly in low socioeconomic schools and districts, nevertheless, imbalance between ITE graduates and teachers retiring is another contributor to teacher shortages, and this will be explored in the next section.

2.5 Imbalance in recruitment and teacher retirement

Some studies cite an ageing workforce at one end and insufficient new recruits into teacher training at the other as a major cause of shortages. Santiago (2002, p. 8) states that in a great number of OECD countries, "the age profile of teachers is skewed towards the older end of the age-range" while at the same time, the dimension of salary has made teaching less attractive as a career for potential candidates for the profession. Schleicher (2011, p. 18) notes that large numbers of teachers in many advanced economies are reaching retirement age. Lamboy (2023, p. 170) notes a 35 per cent decline in candidates for traditional teacher education programs between the 2008-2009 and 2018-2019 academic years in the US. Sutcher et al. (2019, p. 18), also focusing on the US, note a 35 per cent reduction in initial teacher education (ITE) enrolments between 2009 and 2014, and a 23 per cent reduction in teacher education completions in the same period.

An underlying assumption in the desire to improve teacher quality is that recruitment of high achieving school-leavers will produce high quality teachers. Goss and Sonnemann (2019, p. 8) claim that "the best evidence shows that … high achievers make better teachers". On the other hand, Mills et al. (2024, p. 295) suggest that focusing on recruiting only high performers could exacerbate teacher shortages, because in some locations, "40% of teachers leave after four years", and such recruits may not have the skills to cope in hard-to-staff locations. Fahey (2022, p. 2) claims that "teachers' success during ITE is a better predictor of their effectiveness in the classroom than their performance in school exit exams", so is in favour of high quality ITE rather than selection of high-

performers from school. Mason and Matas (2015, p. 55) find that early career attrition in Australia is associated with inadequate ITE.

A number of studies claim that the low status of the teaching profession is a reason for less candidates entering ITE. Ashiedu and Scott-Ladd (2012, p. 27) point out that the teaching profession needs to be seen as worthwhile in the eyes of the community to be attractive as a career. Shine (2015, p. 510-512) finds that Australian newspapers present an overwhelmingly negative image of teaching as a job and transmit a message that teachers are low achievers. Patil (2023, p. 311) concurs that “media perceptions have damaged the status of the teaching profession”. Shine (2015, p. 511-512) suggests that giving teachers a voice could improve the status of teaching, because teachers themselves tend to talk about their profession positively. She recommends affording teachers and principals the opportunity to have a voice in debates about education, so allowing them “to publicly promote the positive aspects of their job”.

While the Australian Government wishes to attract high achievers into teaching, there has been a steady decline in such candidates over the past 30 years, being discouraged by the low status of the profession, a perceived lack of intellectual challenge, and salary not commensurate with what they could earn in other careers (Goss & Sonnemann, 2019, p. 18-20). Further, Santiago (2002, p. 26) notes that in OECD countries there are more career options for women than there used to be, especially “bright, capable women who had formerly provided public school systems with a low-cost pool of talented teachers”.

Improved teacher salaries are suggested by many studies as a policy response to teacher shortages, because uncompetitive salaries are claimed to make teaching less attractive as a career choice, leading to fewer recruits to ITE, or to teacher attrition for better paying careers (for example, Ashiedu & Scott-Ladd, 2012, p. 27; Lamboy, 2023, p. 169; Santiago, 2002, p. 8). Fahey (2022, p. 35) disagrees, pointing out that overall teacher salaries in Australia are relatively high by international standards, but that salaries in areas of shortage, such as mathematics and science, are lower than salaries which could be earned in other mathematics or science fields. He suggests flexible, subject-specific salaries to rectify this problem. Goss and Sonnemann (2019, p. 26) concur that, to attract high achievers to teaching, “salaries need to be competitive with what they can earn in other professions”. Mills et al. (2024, p. 297) disagree with this proposed solution of differentiated salaries, claiming it would “disrupt collegiality [and] build resentment amongst those not receiving such recognition”.

2.6 In summary

The international literature surveyed in this chapter suggests that teacher shortages are likely to be unevenly distributed, and that there can be sectoral shortages even when overall supply and demand is in balance. Apart from being highest in schools with high proportions of disadvantaged students,

teacher attrition and shortages are high amongst early career teachers, and also in some subject areas and fields, such as mathematics, science and special education, and in regional, rural and remote areas. Pre-retirement attrition is thought by many studies to perhaps be the greatest contributor to teacher shortages, especially in the early years of teachers' careers, and it is highest in schools with large proportions of disadvantaged students. In addition, more-advantaged schools have higher funding, so can afford more or better-paid teachers. In the past two decades, international organisations and governments have focused on teacher shortage from the perspective of teacher quality rather than a head count of teachers. Aiming to raise teacher quality, some countries have moved to focus on recruiting high-achievers into initial teacher education (ITE), and many have applied top-down controls, such as standardised curricula and assessments. Such top-down controls (associated with New Public Governance) reduce teacher autonomy and voice, and increase workload – two factors implicated in pre-retirement attrition. While non-competitiveness of salary, low status of the profession, and less candidates for ITE along with an ageing workforce are contributors to teacher shortages, pre-retirement attrition is seen as the greatest factor by a number of studies.

Marketisation of schools through the implementation of New Public Management techniques, and the imposition of New Public Governance, may be connected with teacher shortages in two ways: firstly, marketisation increases inequity amongst schools, and teachers, on average, prefer not to work in schools with high levels of disadvantage; secondly, governments try to increase teacher quality to improve student equity and performance through top-down compliance and accountability systems, and this is felt the most strongly in schools with high levels of disadvantage. Such top-down measures reduce teacher autonomy and are associated with increasing teacher attrition.

A marketised school education system in Australia encourages choice and competition through reduction in the government sector, and growth in non-government schools. Based on the reading of the international literature in this chapter and information in Section 1.1, this may perhaps result in increasing inequality between the government and non-government sectors, with an increasing proportion of disadvantaged students in government schools, and greater teacher attrition from the most disadvantaged schools, which are likely to be government schools. Chapter 3 provides and analyses statistics around teacher supply and demand in Australia, examining the extent and characteristics of a teacher shortage, if there is one.

CHAPTER THREE. STATISTICS ON TEACHER SUPPLY AND DEMAND IN AUSTRALIA

This chapter provides a picture of teacher supply and demand in Australia from available national official statistics. Many sources concur that it is difficult to obtain clear information on the complex area of teacher supply and demand in Australia (for example, Australian Government Department of Education, 2022a, p. 10; Productivity Commission, 2022, p. 16; TEMAG, 2014, p. 50). The Australian Government Department of Education (2022a, p. 10) states that "despite longstanding reports of shortages facing the Australian schooling system, there is little systemic national data and modelling to assess the volume and nature of the supply and demand of teachers in Australia". In this chapter, data from three peak Australian Government bodies, the Australian Bureau of Statistics (ABS), the Australian Institute for Teaching and School Leadership (AITSL), and Jobs and Skills Australia (JSA), which gather different data on supply of and demand for teachers, is presented. Next, information on potential teacher shortages due to pre-retirement attrition, lack of diversity in the workforce, and imbalance between initial teacher education (ITE) graduates and retirements, is discussed. Finally, statistics relating to unequal distribution of the teacher workforce are presented.

3.1 Is there a teacher shortage? Three views.

The annual Schools Releases of the ABS (2024) count staff *in schools*, and define "teaching staff" as "principals, deputy principals, campus principals and senior teachers mainly involved in administration", with casual teaching staff, teacher aides and assistants, and specialist support staff excluded. Data are collected through the National Schools Statistics Collection, which sources information from all schools in Australia (government and non-government) through Commonwealth, state, and territory education departments (ABS, 2024). ABS data indicate that full time equivalent (FTE) student enrolments in Australia are increasing due to migration, in spite of low fertility rates in the population (ABS, 2023a, 2023b), and that the FTE number of teachers in schools is also increasing. In fact, while the FTE number of students has increased by about 40 per cent since 1975, the FTE number of teachers in schools increased by about 104 per cent in this time. Thus, the FTE number of teachers in schools has been rising at a greater rate than the FTE number of students, at least since 1975 (ABS, 1990-2023), as shown in Figure 3.1.

Figure removed due to copyright restriction.

Figure 3.1: Cumulative per cent change in number of FTE students and FTE teachers in Australian schools from 1975 to 2023 (with base year 1975).

Source: ABS (1960-2023).

AITSL provides a different view on teacher shortage in Australia. AITSL was commissioned in 2015 with the task of providing advice to the Education Council on initial teacher education (ITE) and the teacher workforce, due to imbalances in supply and demand, and "a lack of consistent and timely national teacher data" (AITSL, 2017a). To carry out this task, AITSL created the Australian Teacher Workforce Data project (ATWD) in 2017. The ATWD counts *all* registered teachers, whether full time or part-time, those who work in schools, in early childhood settings, who are on extended leave, and who are between positions; it also includes teachers in casual employment, who comprise 16 per cent of the whole teacher workforce (AITSL, 2024b). Data sources for the ATWD are teacher registration figures from state and territory regulatory authorities, ITE data from the Australian Government Department of Education, and individual teacher data from the opt-in annual ATWD Teacher Survey, advertised to all registered teachers through email by state and territory teacher regulatory authorities (AITSL, 2017a, 2017b). AITSL (2024b) reports 544,000 *registered* teachers in Australia in 2022. (In comparison, the ABS (2023c) reports there were 307,228 *FTE teachers in schools* that year). Using data from 2019 and 2020, the ATWD reported that the increase in the number of registered teachers in 2020 was not sufficiently large to maintain supply due to only 88 per cent of registered teachers being active in classrooms, a 1.5 per cent increase in student numbers, and the time fraction that teachers were available to work (non-contact time) (AITSL,

2024b). Assumedly, a contributor to this 88 per cent figure is school leaders with no teaching load, with the proportion of middle leaders with no teaching load almost tripling between 2019 and 2022 from 8 per cent to 22 per cent, and the proportion of senior leaders with no teaching load almost doubling in the same period, from 31 per cent to 56 per cent (AITSL, 2024b). The ATWD stated that an increase of 2.4 per cent in registered teachers (equal to about 12,500 teachers) in 2020 was required to maintain a constant level of supply, but the number of registered teachers only grew by 0.2 per cent across the states and territories (AITSL, 2024b).

Jobs and Skills Australia (JSA) provides a third perspective on teacher shortage. JSA (2023, p. 2) was established in 2022 to provide advice to the federal government on Australia's current and emerging labour market, including workforce needs and priorities. It defines an occupation as being in shortage when employers are unable to fill vacancies, have considerable difficulty filling them, or cannot meet specialised needs within the occupation. A body of evidence for this is garnered from data modelling, statistical analysis of the labour market, employer surveys, engagement with stakeholder groups, regional labour market representative bodies, Commonwealth, state and territory governments, and Jobs and Skills Councils. JSA determined that primary and secondary school teachers have been in the top twenty large-employing occupations to be in shortage in Australia since 2021 JSA (2023, p. 15). It found that a primary driver of shortage is the "long training gap", which refers to the time required to achieve a tertiary qualification to teach (JSA, 2024, p. 51). JSA (2023, p. 16ff) further notes that occupations with a gender skew of more than 80 per cent of one gender tend to be in shortage, and that "Primary School Teacher" is the occupation with the second highest proportion of females in the workforce (85%), with Child Care Workers the highest (97%) and Hairdressers third (84%).

3.2 Comparing conclusions about teacher shortage

In this section, conclusions about teacher shortage from the perspective of the ABS, the ATWD and JSA are compared. Total teacher shortage, which includes the sum of the three education sectors (government, Catholic, and independent) is considered, because sector-specific data on teacher shortage are not available. The period 2019-2020 is focused upon, because the most recent available data from the ATWD project are for those years (AITSL, 2024b).

According to ABS data, in the period 2019-2020, the number of FTE teachers in schools increased by 2.9 per cent, which is approximately 8,220 FTE teachers, and the number of FTE students increased by 1.5 per cent (ABS, 2020, 2021) (refer to calculations in Appendix 2). On the other hand, the ATWD stated that an increase of 2.4 per cent in registered teachers (approximately 12,500 teachers) was required to maintain a constant level of supply, but that the number of registered teachers only grew by 0.2 per cent across the states and territories (AITSL, 2024b). Using this information from the ATWD, it was calculated that there were approximately 11,460 too few teachers in 2020 – see Appendix 2 for calculations. For the ATWD, factors negatively impacting teacher

supply between 2019 and 2020 were a decrease in registered teachers active in classrooms from 91 per cent in 2019 to 88 per cent in 2020; a 1.5 per cent increase in the number of students; growth in the number of registered teachers of just 0.2 per cent across the states and territories; 5 per cent of the 16,500 2019 ITE graduates not registering to teach in 2020; the time fraction that teachers were available to work; and an exit of 1.28 per cent of registered teachers (approximately 6,000 teachers) from the profession (AITSL, 2024b). Meanwhile, using job vacancies information, JSA (2023, p. 20) found that, in 2023, there were vacancy fill rates at threshold level for education professionals (because schools have to fill positions, for example, with casual relief teachers), possibly signalling no shortage. However, this information, in conjunction with stakeholder feedback and broader data analysis, indicated high turnover, so JSA determined that education is a profession "very much in shortage", and found Primary School Teacher and Secondary School Teacher to be two of the four largest occupations to be in shortage (JSA, 2023, p. 15).

Thus, figures from the ABS, ATWD and JSA indicate different views on teacher shortage, based on different data sources. While ABS figures indicate FTE teacher supply had been increasing at a greater rate than the rate of increase of FTE students, and a potential teacher surplus, ATWD figures, using different data sources, indicated that the supply of registered teachers did not keep up with demand in 2019-2020. Note, that ABS data do not take into account that only 88 per cent of teachers are active in classrooms and time fractions that teachers are available to work, while the ATWD does take this into account (AITSL, 2024b). JSA data concluded there was a shortage in 2023 due to high turnover.

3.3 Teacher attrition, lack of diversity, and ITE/retirement imbalance

As noted in Chapter 2, many sources suggest that attrition is a significant cause of teacher shortages. One factor associated with attrition is top-down government policies (New Public Governance) that lead to higher teacher workload and loss of autonomy. The ATWD quantified actual attrition (as opposed to "intention" to leave) by comparing the percentage of teachers who said in 2019 they intended to leave the profession in one year or less (2.4 per cent) with the average rate of discontinuation of registration in 2020 (1.28 per cent) and made an approximation between the two limits of a 2 per cent actual attrition rate (AITSL, 2024b). The Victorian Department of Education (2024, p. 20) found that in 2022 there was an attrition rate of 4.9 per cent from the Victorian Institute of Teaching register. With regard to attrition rates of neophyte teachers, AITSL (2024b), using teacher registration data, found that, since 2012, for each subsequent year after graduation, the percentage of initial teacher education (ITE) graduates who remained registered declined by an average of 1.28 %.

Chapter 2 also associated top-down government policies in schools with reduced diversity in the teacher workforce. The Australian teacher workforce is less diverse than the overall population: in 2018, 17 per cent of the teacher workforce was born overseas while 29 per cent of the Australian

population was born overseas (AITSL, 2021, p. 17); and in 2019, 2 per cent of teachers identified as First Nations (AITSL, 2021p. 18) while 5.7 per cent of students were First Nations (ABS, 2019).

Chapter 2 found that imbalance between ITE graduates and teachers retiring was a contributor to teacher shortages. In Australia, there was an average upward trend in ITE completions between 2006 and 2017, a sharp decline between 2017 and 2020, and a slight upward movement in 2021, as shown in Figure 3.2 (AITSL, 2024a). Data for 2022-2023 are not yet available. Of particular concern is that ITE completions between 2017 and 2021 did not keep pace with growth in school student numbers (AITSL, 2024a). Numerical estimates of teacher shortage are rare in the government literature, but two are provided in relation to ITE graduates: the Australian Government Department of Education (2022a, p. 3) forecasts a shortfall of 4,100 secondary school ITE graduates between 2021 and 2025; and the Victorian Department of Education (2024) forecasts a 25 per cent decline in ITE graduates up to 2028 (p. 55), which will provide an adequate supply of teachers for Victorian primary schools (p. 39), but a shortfall of 5,036 secondary teachers in that period (p. 16).

Figure 3.2: Initial Teacher Education (ITE) completions 2006-2021.
Source: AITSL (2024a).

The Australian teacher workforce is ageing, with the median age of teachers increasing and a decreasing proportion of young people entering the profession (ABS, 2022). Many teachers move into casual roles as they get closer to retirement, with 34 per cent of teachers aged over 60 in casual roles in 2020 (AITSL, 2024b). This group made up over 40 per cent of the relief teacher pool in 2022 (AITSL, 2024b). Hence, there is a decreasing supply of casual teachers as older teachers retire. The ACT Teacher Shortage Taskforce Final Report (ACT Education Directorate and AEU (ACT Branch), 2022, p. 3) supports this view, noting a 35.7 per cent decrease in casual relief staff between 2016 and 2022, resulting in the current casual relief pool no longer meeting the day-to-day staffing requirements in schools.

3.4 Unequal distribution of the teacher workforce

The Australian Government Department of Education (2022a, p. 13) points out that a balance between supply and demand in the teacher workforce does not automatically ensure schools can recruit the teachers they need, and that there is evidence of shortages in certain subjects, in regional, rural and remote locations, and in schools with a high proportion of disadvantaged students. As mentioned in Chapter 2, teaching out-of-field is evidence of teacher shortages. It is particularly an issue in secondary schools, with one-in-five secondary teachers teaching out-of-field in 2022 (AITSL, 2024b). The Australian Government Department of Education (2022a, p. 8) states that 40 per cent of mathematics and 29 per cent of science classes were being taught by out-of-field teachers (year not indicated).

There have been ongoing teacher shortages in regional, rural and remote locations for decades. The Productivity Commission (2012, p. 10) noted that, in spite of “large surpluses of primary teachers” in metropolitan areas, there were “longstanding shortages” in rural and remote areas. This, the report said, reflects the “limited mobility that characterises the teaching workforce” (p. 65). This limited mobility to staff rural and remote areas is a persistent issue. In the early 1990s, the Curriculum Corporation (1991, p. 21) stated there were teacher surpluses in some areas such as primary teaching and some secondary subjects, and shortages in others, including rural areas. The Victorian Department of Education (2024, p. 42) states that currently, even with no immediate forecast teacher shortages in Victorian primary schools, there are vacancies in regional and remote areas.

As noted in Chapter 2, marketisation may be associated with increasing inequity in schools. Although there have been overall increases in the number of students, and the number of teachers has increased at a greater rate, as discussed above, there are sectoral differences. The ATWD and JSA do not report sectoral differences in teacher supply and demand, but the ABS and Australian Curriculum, Assessment and Reporting Authority (ACARA) provide data on this. Broken down according to school sector, data from the ABS and ACARA indicate a significant drop in government school student numbers from the early 1980s, accompanied by growth in student numbers in the independent and Catholic sectors. Figure 3.3 shows change in FTE student numbers by sector, taking 1975 as a common starting point to allow comparison. In addition, there has been considerable reduction in the number of government schools since the mid-1980s, accompanied by ongoing strong growth in the independent sector, and a small increase in the Catholic sector, as shown in Figure 3.4, taking 1975 as a common starting point to allow comparison. The drop in the number of government schools and increase in the number of independent schools from the 1980s may represent increasing marketisation of the school system in this time.

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Figure 3.3: Change in number of FTE students (thousands) in Australian schools since 1975, by sector.
Sources: ABS (1960-2023); (ACARA, 2024a).

Figure removed due to copyright restriction.

Figure 3.4: Change in number of Australian schools since 1975, by sector.
Sources: ABS (1960-2023); (ACARA, 2024a).

From the perspective of student-teacher ratios, which is the average number of FTE students per FTE teacher, independent schools have consistently had the lowest ratio of the three sectors, while Catholic schools had the highest ratio in 1975, which fell to match that of government schools by 2023, as shown in Figure 3.5.

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Figure 3.5: Student-teacher ratio 1975-2023, by sector.
Sources: ABS (1960-2023); (ACARA, 2024a).

Government schools have the highest proportion of students attending remote or very remote schools, from disadvantaged backgrounds, with disability, and of First Nations background. In 2022, 31.4 per cent of government school students were from a low socio-economic background, compared with 13.2 per cent of students in non-government schools; and 2.3 per cent of government school students attended a remote or very remote school, compared with 0.9 per cent of students in non-government schools (Productivity Commission, 2024, Part B, Section 4). In 2023, 81.8 percent of First Nations students attended government schools, 11.3 percent attended Catholic schools and 6.9 percent attended independent schools (ACARA, 2024b); and the proportions of students in the different school systems with disability were 25.5 percent in government schools, 21.8 percent in Catholic schools and 21.9 percent in independent schools (ACARA, 2024b). Given this context, it is noteworthy that are no readily available data on teacher shortages by school sector.

3.5 In summary

Amongst three key government bodies which collect different data to determine teacher supply and demand, there are different views on teacher shortage. Data from the Australian Bureau of Statistics (ABS) on full time equivalent (FTE) teachers in schools indicate a teacher surplus, with the FTE number of teachers rising proportionally more quickly than the FTE number of students, and the student-teacher ratio decreasing, at least since the mid-1970s. However, ABS data do not take into

account the rapidly growing middle and senior leadership group in schools with no direct teaching responsibilities, nor teacher non-contact time. On the other hand, the Australian Teacher Workforce Data Project (ATWD), with data based on *all* registered teachers in Australia, and Jobs and Skills Australia (JSA), which considers fill rates of job vacancies and turnover, both indicate a significant overall teacher shortage.

Data from government sources demonstrate, firstly, a trend over the past 40 years of decreasing numbers of government schools and a relatively slower growth in student numbers, compared with increasing numbers of schools and students in the better funded Catholic and independent sectors. Secondly, government schools have higher proportions of disadvantaged students. Thirdly, reports that use government data show that there are higher levels of teacher shortage in disadvantaged schools. From this, it can be inferred that government schools, on average, will have higher levels of teacher shortage. There are no readily available data on teacher shortages by sector to confirm this, or to provide a scale to the issue. It is noteworthy that the ATWD project, which was specifically created to investigate teacher supply and demand in Australia, does not collect or make available sector-specific data. Finally, it is proposed that the marketised nature of the school education system plays a part in driving inequality in teacher shortages. This thesis will now examine how four government documents frame teacher shortages, and whether or how they take into account the marketised nature of the system in explaining shortages.

CHAPTER FOUR. METHODOLOGY

Chapter 2 concluded that there is perhaps a connection between marketisation of schools, on the one hand, and teacher shortages on the other. Chapter 3 demonstrated that the growing importance of non-government schools suggests increased marketisation in the Australian school system. Although precise data on teacher supply and demand by school sector (government, Catholic, and independent) do not appear to be reported, it is inferred that government schools, on average, will have higher levels of teacher shortage since they have the highest proportion of disadvantaged students, but there are no readily accessible data to determine the degree to which this is the case. Returning to the research question, "To what extent are policy framings of teacher shortage driven by the marketised nature of the Australian school system?", this chapter explains how the qualitative tool, Ritchie and Spencer's Framework Analysis Ritchie and Spencer (1994b), with some input from Braun and Clarke's Thematic Analysis (Braun & Clarke, 2006), accompanied by a simple word count, were utilised to gather information about policy framings of teacher shortage in four government documents.

This thesis is not trying to redesign a marketised education system into something else, given that the current system has been with us for four decades and is so normalised that it is taken for granted (Reid, 2020, p. xxii). For this reason, an approach which focuses on the construction of problems, such as Bardach and Patashnik's positivist *Eightfold path* (Bardach & Patashnik, 2023), or one which scrutinses the forms of "truth" we take for granted, such Bacchi's poststructuralist and retrospective What is the Problem Represented to be? (Bacchi, 2009, p. 215), were not utilised. Rather, this thesis focuses on exploring the school education system as it is, and gaining a perspective on the dynamics of this significantly marketised system through examining how four government documents frame teacher shortage.

To gain a sense of how governments frame "teacher shortage", four contemporary Australian government documents which are driving current policy in teacher workforce were chosen. First, the National School Reform Agreement (NSRA) (Australian Government Department of Education, 2023a) was chosen because it is a key document, connected to the *Australian Education Act 2013,* which drives current national schooling policy. Secondly, the National Teacher Workforce Action Plan (NTWAP) (Australian Government Department of Education, 2022b) was chosen because it urgently addresses the current issue of teacher shortage. Thirdly, NEXT STEPS: Report of the Quality Initial Teacher Education Review (QITE) (Australian Government Department of Education, 2022c) was chosen because it reviews initial teacher education (ITE), which is the main pipeline for teacher supply. Finally, STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (TEEP) (Australian Government Department of Education, 2023b), was chosen because it builds on recommendations from the QITE report.

Following the examination of statistics in Chapter 3, the methodology began with a positivist approach, applying a simple word count of key words related to "teacher shortage" from Chapter 2 to the four government documents. Schwartz et al. (2013, p. 1) point out that word count is a "simple and scalable" approach, but it is a crude method and data can be noisy. It is useful in this instance to give a rough indication of which concepts from the literature occur in each document, and their relative importance, and also to indicate which concepts are absent from the documents. Next, a qualitative analysis was carried out utilising Ritchie and Spencer's Framework Analysis (Ritchie & Spencer, 1994b), together with Braun and Clarke's Thematic Analysis (Braun & Clarke, 2006), to build a picture from the documents themselves of how they each present "teacher shortage". Finally, results of the Framework Analysis were triangulated with data from the word count, along with information from Chapters 2 and 3, to produce narratives depicting how the documents frame "teacher shortage".

Ritchie and Spencer's Framework Analysis (1994b, p. 176) systematically builds a set of themes and subthemes from texts, allowing associations within cases or comparisons between cases, and steps of analysis are recorded, making it transparent and accessible to others. It consists of five stages: initially, "familiarisation" involves immersion in the data, noting key ideas and recurrent themes; secondly, "identifying a thematic framework" involves using the original research question as a guide to set up an index (thematic framework) from the key ideas and recurrent themes of the first stage. The same set of themes and subthemes is used for all the documents to help identify convergences and divergences amongst data sources; thirdly, during "indexing", all the textual data are mapped to the core themes of the thematic framework; fourthly, during "charting", data are rearranged under the core themes; and finally, during "mapping and interpretation", the charts and research notes are reviewed, data sets of different cases are compared and contrasted, and patterns, connections, and explanations are sought (Ritchie & Spencer, 1994b, p. 179-186).

In this study, two parts of Braun and Clarke's Thematic Analysis which relate to telling the story of data, were added to the final Framework "mapping and interpretation" stage, as outlined below. Braun and Clarke's method includes six "phases": familiarisation; generating initial codes; searching for themes; reviewing themes; defining and naming themes; and producing a report. Of particular use to the current study is Braun and Clarke's emphasis on the importance of *writing* as an integral part of an analysis and not just something that occurs at the end. They also give concrete, practical descriptions of how to distinguish one theme from another, and a definition of a "code" (Braun & Clarke, 2006, p. 86f). This information was used to enhance the Framework method used in this study, as explained below.

The qualitative data analysis software package, NVivo, was utilised to assist with the Framework Analysis. NVivo provides a practical and comprehensive means of annotating documents, coding each against a common set of themes and subthemes, adding or amending themes or subthemes

when necessary, and exporting to an Excel spreadsheet to enable within-document associations and between-document comparisons (cf Adu, 2023).

4.1 The process used in this study

Initially, a word count was carried out on each of the documents using words denoting key concepts related to teacher shortage in Chapter 2. The results were tabled, then later compared with results from the Framework Analysis. Next, the Framework Analysis was carried out, as set out in Table 4.1 and described below.

Table 4.1 Framework process used in this study.

Step	Framework	NVivo
1.	**Familiarisation** This involved "immersion in the data" and being very familiar with every part (cf Ritchie & Spencer, 1994b, p. 179)	One project with one case was set up for each of the four documents. Documents were annotated.
2.	**Identify a thematic framework**	- Under "Codes", created "parent" codes: - Generated subthemes under each theme. - Ticked "Aggregate coding from children" at both levels to ensure the number of references to a particular code were counted by NVivo. (Adu, 2023).
3.	**Indexing**	- Coded each document against subthemes.
4.	**Charting and mapping** Created a table in Excel as shown in Figure A3.1	- Exported codebook, including numbers of references.
5a.	**Interpretation** Narrative – 1) Under each theme, wrote a narrative for each of the government documents 2) under each theme, wrote a "theme summary", putting together the individual theme narratives for each	It was valuable to open themes or subthemes in NVivo, especially those with multiple references, as a reminder of content, when writing the narratives for each of the documents.

	of the four documents, allowing comparison and contrast, thus identifying "the story" that each theme tells (Braun & Clarke, 2006, p. 92).	
5b.	Using the theme narratives (5a (1) above), produced an in-a-nutshell summary for each document.	

Stage 1: Familiarisation

The four government documents were read several times, and key themes noted. Each document was imported into NVivo as one "project", and one "case". Treating each document as one case allowed independent examination of each for its framing of "teacher shortage", and comparison with the other documents later in the process.

Stage 2: Identifying a thematic framework

Recurrent themes and subthemes in the four documents which were identified during "Familiarisation" were listed, then shaped into a set of themes, with their subthemes, as shown in Chapter 5. The same framework was used for all four documents, enabling comparison of different frequencies of occurrence of subthemes (including "not at all"). Themes and subthemes were chosen from the overarching perspective of the research question: To what extent are policy framings of "teacher shortage" driven by the marketised nature of the Australian school system? For each project in NVivo (that is, for each document), a "parent code" was created for each theme, with subthemes listed under each as "children codes".

Stage 3: Indexing

The content of each document was indexed, or coded, against the themes and subthemes, in NVivo. A useful definition of "codes" (subtheme) is provided by Braun and Clarke (2006, p. 88): the most basic element of the data that can be "assessed in a meaningful way" in relation to the research question. They are not as broad as themes. Anything which was considered to relate to one of the themes in some way was coded as a subtheme. Sections of documents clearly unrelated to the research question were not coded (*cf* Adu, 2023). Information which is repeated, such as beginning of chapter introductions, executive summaries and other summaries, was coded just once. Appendices were not coded. Terms of reference for the two expert panel reports were coded, because they provided the purpose of the documents. During indexing, the process of coding with NVivo helped with "sifting and organizing" themes and subthemes (Ritchie & Spencer, 1994a, p. 182) so that there was a single thematic framework which covered all four documents.

Stage 4: Charting and mapping

Once a document was coded against the thematic framework, the Codebook from NVivo was exported, including numbers of references. A table was created in Excel with the themes as headings and their subthemes underneath, as shown in Figure A3.1, Appendix 3. The number of references coded against each subtheme was recorded.

Stage 5: Interpretation

The "interpretation" part of this stage was crucially important, and the information provided by NVivo formed only part of the picture, indicating which subthemes *may* be more important in a given document, based on the reference count. At this point, Braun and Clarke's emphasis on writing as "an integral part of analysis" (Braun & Clarke, 2006, p. 86) provided a useful strategy to assist with "weighing up the salience and dynamics of issues" (Ritchie & Spencer, 1994a, p. 186) and interpreting the whole data set. A narrative of "the story that each theme tells" was written under the theme-subtheme set for each document, adapted from Braun and Clarke's fifth phase, "defining and naming themes" (Braun & Clarke, 2006, p. 92) and taking into account the number of references for each subtheme according to NVivo. This narrative assisted with understanding how each document depicted each theme. Next, a theme summary was produced from the individual theme narratives of the four documents, comparing and contrasting information in these theme narratives. Thirdly, adapting suggestions from Braun and Clarke's final report phase, to tell the story "within and across themes … and … make an argument in relation to [the] research question" (Braun & Clarke, 2006, p. 93), an in-a-nutshell overview was produced for each document, pulling together the narratives for the individual themes. Finally, the in-a-nutshell summaries were triangulated with the word counts, and any other relevant information from the original texts and Chapters 2 and 3, which included keeping in mind "the overall picture" as described by Ritchie and Spencer, which in this case was to determine how the documents frame "teacher shortage" and if this is driven by the marketised nature of the Australian school system (Ritchie & Spencer, 1994a, p. 186).

4.2 Inclusions, ethical considerations, validity and reliability, and limitations

Secondary data sources only were utilised in this study (Ritchie & Spencer, 1994b, p. 175; Van Thiel, 2014, p. 102), so ethics approval was not required. In qualitative research, subjectivity is a source of interference for validity (measuring what a study says it is measuring) and reliability (accuracy and repeatability) (Van Thiel, 2014, p. 48-51). In social science research, such as this, the most difficult thing to achieve is the "replicability" aspect of reliability. Denyer and Tranfield (2009, p. 678-679) argue that in qualitative research, "transparency" should replace replicability, through the researcher "being open and explicit about the … methods employed", making a clear link in findings "between the evidence found and the [researcher's] conclusions and recommendations". Transparency was maintained as far as possible throughout this paper through making the data "visible and accessible

to others”(Ritchie & Spencer, 1994b, p. 182). For example, themes and subthemes were all noted, and the information coded against each subtheme is recorded in NVivo.

A limitation of this methodology is it does not attempt to question either “teacher shortage” as an issue, nor marketisation of the school system, hence other possible contributors to inequity and teacher supply and demand issues are not considered. In addition, the simple word count includes all terms in each document, while the Framework Analysis explores themes and subthemes, and where there is repetition, a concept is only considered once. Also, a word mentioned just once may nevertheless signal high importance of an issue, such as in a sentence outlining a document’s purpose, or a concept may be discussed using different terms – though I did try to include relevant synonyms. Nevertheless, the scale of word counts still gives some sense of the possible relative importance of particular terms, and which concepts are at least mentioned and helps indicate silences when words are not mentioned at all.

CHAPTER FIVE. FINDINGS AND DISCUSSION – HOW DO AUSTRALIAN GOVERNMENT POLICY DOCUMENTS CHARACTERISE TEACHER SHORTAGES?

This chapter presents the findings from Ritchie and Spencer's Framework Analysis of four government documents, triangulated with simple word counts of key concepts from Chapter 2, and information in the original documents and Chapters 2 and 3, and examines the extent to which (if at all) the marketised nature of the Australian education system drives policy framings of teacher shortage. Each of the four contemporary government documents explored in this study has a specific purpose (outlined in more detail in Table A4.2a in Appendix 4). The National School Reform Agreement (NSRA) aims to build a high quality, equitable schooling system through reforms based on collaboration of state, territory and Commonwealth governments. It does this through setting national outcomes and targets to track progress, and has considerable clout, being tied to the *Australian Education Act 2013*, which includes government funding arrangements for schools (Australian Government Department of Education, 2023a). The National Teacher Workforce Action Plan (NTWAP) seeks urgently to remedy the claimed national teacher shortage, while at the same time maintaining a quality workforce (Australian Government Department of Education, 2022b). NEXT STEPS: Report of the Quality Initial Teacher Education Review (QITE) focuses on initial teacher education (ITE), as the main source of teacher supply, seeking to attract the best and brightest into teaching, and prepare them in the best way possible to be quality teachers, to remain in the profession, and to go to areas of need (Australian Government Department of Education, 2022c). STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (TEEP) builds on the recommendations of the QITE report (Australian Government Department of Education, 2023b).

5.1 Simple word counts of key teacher shortage terms

Terms relating to teacher shortage from the literature review in Chapter 2 were chosen for the word count - see Table A4.1 in Appendix 4. This process aimed to gain some understanding of how each document frames "teacher shortage" using word count as a rough lens from the international literature. The top three word counts, based on number of occurrences, and any notable absences, are presented below. The number in brackets after the acronym for each document indicates the number of times the word occurred. Note that the QITE and TEEP reports are much longer documents than the NSRA and NTWAP, so they have larger word counts.

Word counts found that "initial teacher education/ITE" is signalled as a major focus for three of the documents, being the most often occurring from the list of words, in the NTWAP (43), the QITE review (523), and the TEEP review (679). On the other hand, "non-government schools" is signalled as a major focus for the NSRA, being its most commonly occurring term (32). "Quality" is signalled as an important focus for all four documents: it is the second most common term in the NSRA (14),

the QITE review (212), and the TEEP review (323), and the third most common term in the NTWAP (36). “Supply” or “demand” has significant focus for the NTWAP (second most common term - 45) and the QITE review (third most common term - 104). “Inequity” / “equity” is the third most common term in the NSRA (13). The third most common term in the TEEP review is “effective” (101), which is interpreted in this instance as a market-related term. The terms “choice”, “competition”, and “marketisation” are not mentioned by any of the documents in relation to schools, but there is some mention of these terms in the QITE and TEEP reports related to ITE providers. Thus, “ITE” and “quality” are signalled as important terms in all four documents, “non-government schools” is an important focus for the NSRA, and marketisation terms “choice”, “competition”, and “marketisation” are not mentioned by any of the documents in relation to schools.

5.2 Framework Approach

This section begins by presenting the thematic framework devised iteratively from the four documents. Next, through indexing, charting and mapping each document to the thematic framework, theme summaries, then individual document in-a-nutshell summaries were produced.

A thematic framework was formed from the themes and subthemes identified in the four government documents during Familiarisation, and fine-tuned during Indexing, with the final framework shown in Table 5.1. In addition, the overall purpose of each document was recorded (see Table A4.2a in Appendix 4 for details). The theme “Purpose of schools” includes foundational government views on the reason for schooling (see Table A4.2b in Appendix 4). The theme “Defining teacher shortages” groups definitions of “teacher shortage” into six areas, supply/demand imbalance, ITE completion rate, teachers not in workforce, unequal distribution, lack of diversity and quality issues (see Table A4.2c in Appendix 4). The theme “Government policy and teacher shortages” includes policies around teacher quality, student outcomes, ITE, the non-government sector, and funding of schools (see Table A4.2d in Appendix 4). Finally, the theme “Teachers, potential teachers and teacher shortages” includes attitudes and behaviours of potential teachers which may stop them from becoming teachers, or lead teachers to leave the profession (see Table A4.2e in Appendix 4). To enable comparison and contrast, the same thematic framework was used for all four documents.

Table 5.1 Thematic framework: themes and subthemes arrived at through Framework analysis of the four government documents.

Themes	Purpose of schools	Defining teacher shortages	Government policy and teacher shortages	Teachers, potential teachers and teacher shortages
Sub-themes	*Economic prosperity, future challenges *Equity and excellence – student outcomes *International recognition *Stability, social cohesion	*Supply/demand imbalance: national shortage *Supply: ITE completion rate *Supply: teachers not in workforce *Unequal distribution *Lack of diversity *Quality teaching for student outcomes; teachers crucial for student outcomes	*Accountability and compliance *Culture of continuous improvement *Government / non-government disparity *ITE alternative models *ITE best and brightest *ITE diverse cohorts *ITE mid-career professionals *ITE quality *Need better data *Non-government sector importance *Non-government sector no sanctions *Non-government sector requirements *SRS Standardised curriculum, assessment, reporting for funding *Student outcomes general *Student outcomes priority equity cohorts	*Status of profession *Teacher autonomy *Workload, hours of work

Next, during Indexing, the number of occurrences of each subtheme was recorded for each document. Note that these occurrences represent the most basic elements of the data relating to specific subthemes (cf Braun & Clarke, 2006, p. 88), so are different to word counts, which involve

counting identical individual units. Nevertheless, similar to word counts, the number of mentions does not automatically signal level of importance. For example, occurrences in the subtheme “equity and excellence” may only occur once or twice, but may underpin the whole document, being the goals of *National Declarations on Schooling*. Below, some of the key results are presented. The numbers indicate the number of occurrences of a subtheme. See Table A4.2a for Purpose of document (noted in the introduction to this chapter), and Tables A4.2b-e in Appendix 4 for full details of themes and subthemes.

Six of the subthemes occurred in all four documents, signalling these were focuses were held in common (the numbers here represent the number of occurrences of the subtheme). Under the theme “Purpose of schools”, all documents included the subtheme “equity and excellence” (NSRA 2; NTWAP 1; QITE 3; TEEP 1); under the theme “Defining teacher shortages”, all documents included the subthemes “unequal distribution” (NSRA 1; NTWAP 6; QITE 5; TEEP 3) and “quality teachers” (NSRA 2; NTWAP 4; QITE 7; TEEP 3); and under the theme “Government policy and teacher shortages”, all documents included the subthemes “ITE best and brightest” (NSRA 1; NTWAP 2; QITE 16; TEEP 2), “ITE quality” (NSRA 1; NTWAP 5; QITE 7; TEEP 3), and “need better data” (NSRA 4; NTWAP 6; QITE 1; TEEP 3). For the NSRA, “accountability/compliance” was a significant focus (17) but it was minimal or absent for the other documents (NTWAP 1; QITE 1; TEEP 0); and the subtheme “student outcomes/priority equity cohorts” was included by NSRA (7).

Using the information from Indexing of subthemes, each overarching theme was summarised for each document, applying Braun and Clarke’s recommendation to write as part of an analysis (Braun & Clarke, 2006, p. 86). The commonalities and contrasts between the documents according to each theme was then presented in a theme summary narrative – see Tables A4.2b-e in Appendix 4 for full details. Key results are noted here: excellence and equity is of fundamental importance to the four documents, as is “quality”, in relation to teachers, ITE and schools, with quality teachers required for excellent and equitable student outcomes. All four documents are concerned about teacher shortages due to unequal distribution of the workforce, and the NSRA points out "priority equity cohorts" as of particular concern. Under the theme “Government policy and teacher shortages”, the NSRA presents reforms which government systems must comply with to receive Commonwealth funding, focusing on excellence and equity in student outcomes to be achieved through standardised curriculum, assessments and reporting, and a culture of continuous improvement. All four documents wish to strengthen ITE and to attract the “best and brightest” to ITE, as the key to developing quality teachers who will go to places of need. Under the theme “Teachers, potential teachers and teacher shortages”, workload is noted as a concern for teachers and prospective teachers by the NSRA, and the NTWAP and QITE reports. Status of the profession is recognised by the NTWAP, and the QITE and TEEP reports as a deterrent for some, including high achieving individuals, from becoming teachers, and a potential cause of teacher attrition. The NSRA is the only one of the documents which alludes to teacher autonomy, but it is presented as doing as one is required to do (Australian

Government Department of Education, 2023a, p. 4). Thus, “quality”, “ITE”, and unequal distribution of the teacher workforce are of concern for all four documents. All see attracting the best and brightest to ITE as a solution to teacher shortages.

The next step in the Framework Analysis was to go back to the individual theme narratives for each document, (Table A4.2a-e) and collate these into an in-a-nutshell summary for the whole document. The in-a-nutshell summaries are presented in Table A4.3 in Appendix 4. Following this, the in-a-nutshell summaries and word counts were triangulated, as detailed in the next section.

5.3 Triangulation, and the framing of “teacher shortage”

This section begins by reviewing information on teacher shortage and marketisation of schools from Chapters 2 and 3. Then it considers the in-a-nutshell document summaries triangulated with word counts, information from Chapters 2 and 3, and the original texts where needed, to build a picture of how the concept of “teacher shortage” is framed by each of the four government documents. Next, all the information is put together to present an overall view on how teacher shortage is framed by the policy documents. Finally, the way in which policy documents respond to the marketised nature of the Australian school education system is considered.

Chapter 2 concluded that marketisation of schools and its associate, New Public Governance (NPG), are connected with teacher shortages for two reasons: firstly, marketisation increases inequity and teachers, on average, prefer not to work in schools with high levels of disadvantage; secondly, government attempts to improve student equity and performance by increasing teacher quality through top-down compliance and accountability (NPG) may have the effect of reducing teacher autonomy, which is associated with increased teacher attrition, and this is felt the most strongly in schools with high levels of disadvantage. Chapter 3 suggests that the marketised nature of the Australian school education system may drive teacher shortages to some extent, and infers that shortages are higher, on average, in government schools, but the degree of this is unable to be determined due to there being no readily available data on teacher shortages by sector.

The National School Reform Agreement (NSRA) (Australian Government Department of Education, 2023a) sets national outcomes for schooling with national targets to track progress, and it is tied to requirements of the *Education Act* (p. 3-4). This document is particularly concerned about inequitable outcomes for “priority cohort students” (important focus in Framework Analysis confirmed by third highest word count (13)), and frames teacher shortage as an issue of inadequate teacher quality (a Framework Analysis focus triangulated with second highest word count (14)), to be achieved through recruiting the best and brightest into ITE, and a top-down improvement agenda (associated with NPG), which government education systems must comply with as a condition of receiving Commonwealth funding. From Chapter 2, this reduces teacher autonomy, which is associated with teacher attrition. The NSRA emphasises the importance of the non-government sector (significant

focus in Framework Analysis, triangulated with highest word count (32)), encourages it to participate in the NSRA reforms, but the Commonwealth, which provides 80 per cent of government funding for this sector, will not impose sanctions if it does not (p. 4). In addition, the NSRA strongly supports a marketised education system, seemingly favouring the non-government sector, which potentially could lead to further growing inequity between government and non-government school systems, with the latter receiving the full government SRS allocation since 2022 except in the NT (Rorris, 2020-23, p. 6). Based on information from the international literature, this may perhaps to be associated with continued higher teacher attrition from government schools, relating to school inequity and higher proportions of disadvantaged students in government schools.

The National Teacher Workforce Action Plan (NTWAP) (Australian Government Department of Education, 2022b, p. 3f) opens with the statement, “We have a teacher shortage right across the country”. It signals high concern about a national teacher shortage in the Framework Analysis, triangulated with highest word count (45), but, according to the Framework Analysis, it is most concerned about unequal distribution of the teacher workforce. It is very concerned about ITE from the perspectives of completion rates, and quality of ITE, with attraction of the best and brightest along with diverse cohorts and mid-career professional to ITE signalled as needed, and “Strengthening ITE” is its second of five priorities. It is also very concerned about teacher attrition rates, with “Keeping the teachers we have” its third priority. The need for teacher quality is a key underlying issue signalled by the Framework Analysis and confirmed by third highest word count (36). The NTWAP is the only one of the four documents which mentions disadvantage in government schools – mentioned just once. It makes equal mention of the government and non-government sectors, and gives attention to concerns of teachers, including workload, salary and status of the profession.

For NEXT STEPS: Report of the Quality Initial Teacher Education Review (QITE), ITE is unsurprisingly by far the greatest focus, with concern about ITE completions, and suggestions of the need for more ITE quality, including through attraction of the best and brightest, diverse cohorts and mid-career professionals, and quality induction, to produce quality teachers determined by the Framework Analysis, concurring with the highest word count for “ITE” (523), and the second highest word count (212) for “quality”. The QITE report is concerned about inadequate teacher supply (third highest word count - 104), seeing this as an issue of two few ITE candidates and completers, lack of quality ITE candidates, unequal distribution in rural, regional and remote locations and lack of ITE candidates from those locations, and lack of diversity in the teacher workforce, with relatively less mention of inequity, disadvantage and low socioeconomic situations. The QITE report pays significant attention to teacher workload, compliance requirements, salaries and status of the profession from the perspective that these can discourage potential ITE candidates. While this document mentions the non-government sector 22 times, this is mainly referencing sources of information from submissions to their consultation; otherwise, there is equal mention of government

and non-government sectors. The QITE report's concern about attrition is mainly in relation to attrition of ITE candidates. There is mention of marketisation terms "choice" and "competitive", but only in relation to ITE providers (not schools).

Similar to the QITE report, by far the greatest concern of STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (TEEP) (Australian Government Department of Education, 2023b) is ITE (highest word count (679)), with particularly high concern for ITE quality in the Framework Analysis (coded 38 times), triangulated with the second highest word count for "quality" (323), with high quality candidates and high quality ITE seen as the foundation for quality teachers who stay for the long term. The TEEP report is concerned about teacher shortages in regional and remote locations, and wishes to support people from those locations to become teachers, and to support other ITE candidates to work in those locations. The TEEP report is concerned about lack of diversity in the teacher workforce, about attrition of ITE candidates and early career teachers, and about status of the profession in terms of its attractiveness for potential ITE candidates. There is a significant marketisation, New Public Management, and New Public Governance thread running through the TEEP report, but in relation to ITE, not schools: mandated core content of ITE programs, national ITE quality indicators and accreditation, financial incentives for ITE performance, competition between higher education providers, and a high concern for the *effectiveness* of ITE (third highest word count (101)).

Putting all the information together, all four documents assume there is unequal distribution of the teacher workforce, with concern about inequity of outcomes for disadvantaged cohorts of students – including those in regional, rural and remote locations, First Nations students, students with disability, and students from educationally disadvantaged backgrounds – which implies teacher shortages in these contexts. All four documents infer that quality teachers is the solution to inequity, and that this will be achieved through attracting high quality candidates to high quality ITE, which, it is assumed, will produce quality teachers who will go to places of need and remain in the profession for the long term; this implies that teacher shortage is perceived as an inadequacy of teacher quality. Quality is deemed to be achieved through top-down accountability and compliance, as set forth in the NSRA. Such top-down processes, associated with New Public Governance, reduce teacher autonomy and increase workload, which the international literature associates with pre-retirement attrition of teachers. The NTWAP has high concern for pre-retirement attrition, and the NSRA has a commitment for Ministers to produce a teacher workforce strategy to address workforce needs (Australian Government Department of Education, 2023a, p. 23); the QITE and TEEP reports focus on attrition of ITE candidates. According to the international literature, pre-retirement attrition is a significant contributor to teacher shortages. Marketisation of the school system, and its consequences – top-down accountability and compliance - are not directly mentioned by any of the documents, nor do any of the reports give any indication that the inequity they are concerned about could result from the marketised school system – except for a solitary statement in the NTWAP about

government schools “facing systemic disadvantage” (Australian Government Department of Education, 2022b, p. 15).

In sum, the four government documents frame “teacher shortage” as a facet of unequal distribution of the workforce, as inadequate teacher quality to compensate for inequity amongst students, and as insufficient ITE completions, with pre-retirement attrition also recognised as an issue. Proposed solutions are, firstly, attracting the best and brightest to high quality ITE, whom, it is assumed, will make quality teachers, go to areas of need, and stay in the profession for the long term; and secondly, top-down compliance and accountability (NPG) to increase teacher quality to compensate for student inequity. The documents are silent about the marketised nature of the Australian education system, apart from the one mention of systematic disadvantage in government schools in the NTWAP, so their policy framings appear not to be at all driven by it. This is surprising, given that the Australian school education system is a significantly marketised system, with amongst the highest levels of government money contributed to non-government schools in the OECD, as pointed out in Chapter 1, and the proportion of non-government schools steadily growing for the past four decades, as indicated in Chapter 3. However, the documents do grapple significantly with a possible *consequence* of marketisation, namely, inequity.

It may be that there is a Catch-22 situation occurring, in which greater inequity in schools leads to higher teacher shortages in the most disadvantaged schools (recall from Chapter 2 that, on average, teachers prefer not to work in schools with high levels of disadvantage), leading to poorer student outcomes in those schools hence increased inequity; meanwhile, governments are very concerned about inequity, and respond with greater top-down accountability and control (NPG) to improve teacher quality in order to reduce student inequity, but this results in increased pre-retirement attrition, leading to greater teacher shortages, and so on. Furthermore, by not framing marketisation as a possible factor in teacher shortages, governments may be missing an important determinant for actions to be taken, that is, policy design, for this issue.

5.4 Three recommendations

The Matthew Effect describes situations where initial advantage leads to further advantage, and initial disadvantage leads to further disadvantage, leading to widening gaps (Rigney, 2010, p. vii). School education in Australia appears to reflect the Matthew Effect: we have schools which are better funded, have more teachers, less disadvantaged students, and less teacher turnover, and schools which have less funding, less teachers, more disadvantaged students, and more teacher turnover, and the gap appears to be widening (Independent Expert Panel, 2023, p. 83). This applies particularly to independent schools versus government schools, but as mentioned in Chapter 2, this dynamic is at play amongst government schools as well (Rowe & Perry, 2020, p. 50-52). Rigney (2010, p. 101f) suggests that government intervention, often in the form of taxation or payments of some sort, is essential to address Matthew effects which are “deemed to be socially destructive”.

For the Australian education system, full School Resourcing Standard (SRS) funding for government schools is an obvious first recommendation. As a second recommendation, improved information on teacher supply and demand data broken down by sector (government, Catholic, independent), cross-referenced with data by location, should be made available, for example, by the ATWD. Thirdly, the one-way, central-control model of accountability and compliance to achieve teacher quality could be replaced by a more agile, two-way system, in line with the suggestion of Tomkinson (2016, p. 207) mentioned in Chapter 2, so that the quest for better student outcomes could become a two-way process between educators at the coalface and governments. This would give teachers back their autonomy and voice (thus perhaps reducing pre-retirement attrition), allow a place-based, collaborative approach between educators and governments, and enable governments to reflect on the successfulness or otherwise of their improvement strategies, such as standardised curricula and assessments for disadvantaged students in all contexts.

CHAPTER SIX. CONCLUSION

This study finds that the scale of a teacher shortage in Australia varies, from surplus to moderate shortage, according to different data collected by different organisations. Data from the ABS indicate a surplus, though these data do not take account of the increasing trend of school leaders with no teaching role and increasing teacher non-contact time. The Australian Teacher Workforce Data project (ATWD) and Jobs and Skills Australia (JSA) suggest there is a significant shortage. There is a general consensus that teacher shortages are unevenly distributed, with greatest shortages in schools with high proportions of disadvantaged students, and shortages also in rural, regional and remote locations, and some subject areas. The highest proportions of disadvantaged students are in government schools, and, by inference, the highest teacher shortages, on average, will be in government schools, though there are no readily accessible data on this.

The international literature suggests that marketisation may be associated with inequity in schools; pre-retirement attrition, due mainly to dissatisfaction, is perhaps a significant cause of teacher shortages; and attrition is greatest in schools with high proportions of disadvantaged students, with teachers, on average, preferring not to work in such schools. Governments are very concerned about student equity and performance, and attempt to increase these by increasing teacher quality through top-down compliance and accountability, with the latter being aspects of New Public Governance, which is associated with marketisation. Such top-down measures reduce teacher autonomy and increase workload, and these are associated with increased teacher dissatisfaction, therefore, attrition; further, such measures are felt the most strongly in schools with high levels of disadvantage, leading potentially to highest attrition in those schools.

Seeking to determine to the extent to which policy framings of teacher shortage are driven by the marketised nature of the Australian school system, this study finds that four contemporary government school education documents do not dwell on the marketised nature of the Australian education system, apart from one mention of systematic disadvantage in government schools in the National Teacher Workforce Action Plan. Although Australia has a significantly marketised school education system, with one of the highest levels of government funding for the non-government sector in the OECD, and a growing proportion of non-government schools for the past four decades, government policy framings of teacher shortage appear not to take marketisation into account. This thesis argues that the marketised nature of the Australian school education system may contribute to teacher shortages. By not framing marketisation as a factor in teacher shortages, governments may be missing an important determinant for policy design. However, government policy does grapple with a possible *consequence* of marketisation, namely, inequity and the accompanying unequal distribution of the teacher workforce. Teacher shortages are framed particularly as an issue of inadequate teacher quality to compensate for student inequity, and as insufficient quality ITE completions to produce quality teachers who will go to areas of need.

The contribution of this study to the literature is the suggestion that the problem of “teacher shortage” in Australia may in part be a symptom of inequity resulting from the marketised nature of the school education system, and that by not considering marketisation as a possible factor in teacher shortages, government policy may be missing an important piece of information for policy design. Related to this, shortages are, on average, likely to be highest in government schools. A limitation of this study is that there are no readily available data on teacher shortage by sector (government, non-government) to confirm the situation is as the study suggests.

A further study of teacher supply and demand which gathers data by sector across states and territories to examine if the data support the conjectures of this thesis, would be valuable, as would be a study comparing teacher shortages in Australia with other countries which spend no public money on private education, such as Finland, Norway and Sweden (Table C 2.3, OECD, 2022). Other potential areas for future study include: why there is a rapidly growing middle and senior leadership group in schools with no teaching responsibilities? What proportion of high achieving school leavers make good teachers? Is attrition from teaching in the first five years of employment similar to that of other professions, in Australia?

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APPENDICES

Appendix 1 – Share of publicly funded STS by sector and year

Table A1.1 Share of publicly funded SRS by sector and year.

Data from Rorris (2020-23, p. 6).

Government schools

Figure removed due to copyright restriction.

Non-government schools

Figure removed due to copyright restriction.

Appendix 2. Teacher supply and demand calculations

Increase in FTE students and FTE teachers in schools between 2019 and 2020 according to ABS data

Figure removed due to copyright restriction.

(Data sources: ABS, 2020, 2021).

Number of new teachers needed in 2020 according to ATWD data

Figure removed due to copyright restriction.

(Data source: AITSL, 2024b).

Appendix 3. Methods

Figure A3.1 Layout of data using Ritchie and Spencer's Framework Approach (Ritchie & Spencer, 1994b), with input from Braun and Clark for narratives (Braun & Clarke, 2006) and NVivo

Figure removed due to copyright restriction.

Appendix 4. Results

Table A4.1 Word counts in the four government documents based on terms related to teacher shortage in the literature review.

Word counts					
	NSRA	***NTWAP***	***QITE***	***TEEP***	***Averages***
ITE	2	43	523	679	312
quality	14	36	212	323	146
Ineffective /effective	3	12	76	101	48
supply / demand	2	45	104	22	43
remote	5	29	38	26	25
regional	6	23	40	26	24
diverse/diversity	0	4	54	33	23
Non-government school(s)	32	30	22	3	22
rural	5	26	32	7	18
excellent/excellence	4	15	29	22	18
Government school(s)	11	33	2	4	13
status	0	4	31	6	10
choice / competition / marketisation	0	0	12	27	10
responsive	0	9	6	22	9
workload	0	30	3	3	9
equity / inequity	13	0	9	4	7
attrition	1	2	11	11	6
accountability / compliance	6	1	2	13	6
Salary / salaries	0	2	18	0	5
disadvantage	4	2	9	2	4
teacher shortage	0	3	5	0	2
efficient / inefficient	1	0	0	4	1
retirement	0	3	1	0	1
low SES	0	0	2	2	1
hard to staff	1	1	1	1	1
autonomy/autonomous	0	0	2	2	1
out-of-field	1	0	1	0	1
dissatisfaction	0	0	0	0	0

Key

NSRA	National School Reform Agreement (2023)
NTWAP	National Teacher Workforce Action Plan (2022)
QITE	NEXT STEPS: Report of the Quality Initial Teacher Education Review (2022)
TEEP	STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (2023)

Table A4.2a Framework Analysis: Themes, subthemes, individual narratives by document, then summary narratives for all documents by theme: Purpose of document.

Theme/key idea	Purpose of document			
	NRSA	***NTWAP***	***QITE***	***TEEP***
No. mentions of purpose	1	3	3	3
Individual narrative for each document	COAG (precursor to the Education Ministers' Meeting - EMM) established the National School Reform Agreement, which is a set of strategic education reforms in areas where national collaboration will have the biggest impact, builds on current reforms efforts, complements state and territory leadership and supports local implementation. Sets national reform direction and underpins Commonwealth funding for schooling for the period 2019-2024. The aims of this reform are outlined in the Purpose of Schooling from the perspective of this document.	The document is an Action Plan which sets out actions governments will take to respond to teacher workforce challenges. The document is to be flexible and agile, adapting to needs, and recognises actions jurisdictions are already putting into place.	This report is the result of a review of ITE launched by The Hon Alan Tudge MP, Minister for Education and Youth, with the scope of attracting and selecting high-quality candidates into ITE and best preparing them to become effective teachers. It builds on the TEMAG (Teacher Education Ministerial Advisory Group) Review.	Purpose is to explore how to attract high-quality candidates into ITE and how best to prepare them for long and successful teaching careers. Builds on the recommendations of the QITE report.

Theme summary narrative for all four documents	The NSRA aims to build a high quality, equitable schooling system through reforms based on collaboration of state, territory and Commonwealth governments. The NTWAP seeks to remedy national teacher shortage, while still aiming for a quality workforce. The QITE and TEEP reports focus on ITE as the main source of teacher supply - how to attract the best and brightest into teaching, and preparing them in the best way possible to be quality teachers, to remain in the profession, and to go to areas of need.

Key

NSRA National School Reform Agreement (2023)

NTWAP National Teacher Workforce Action Plan (2022)

QITE NEXT STEPS: Report of the Quality Initial Teacher Education Review (2022)

TEEP STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (2023)

Table A4.2b Framework Analysis: Themes, subthemes, individual narratives by document, then summary narratives for all documents by theme: Purpose of schools.

Theme	**Purpose of schools**			
Subthemes	***NSRA***	***NTWAP***	***QITE***	***TEEP***
	Number of occurrences of subthemes per document			
Economic prosperity, future challenges	1	0	0	2
Equity and excellence - student outcomes	2	1	3	1
International recognition	1	0	4	0
Stability, social cohesion	1	0	0	1
	0	0	0	1
Individual narrative for each document	A high quality, equitable schooling system will equip Australians to succeed in an increasingly complex world, and underpin Australia's future stability, economic prosperity and social cohesion. This is necessary for schooling in Australia to be considered a high quality and equitable system by international standards by 2025. The founding principles for schooling shared by all Australian governments are equity and excellence	Excellence and equity of student outcomes is implied throughout the document, with the word "quality" in relation to teacher preparation and teaching mentioned 36 times.	This review of ITE is the result of government concern about Australia's declining PISA outcomes, both in absolute terms and compared with other countries, leading to concerns about Australia's international reputation for educational excellence and equity. Quality teaching is identified as a key focus to return Australia to the top group of nations.	Australia's competitiveness, economic strength and prosperity ultimately starts with teachers in schools. Teachers are crucial to achieving excellence and equity in education, and social cohesion.

	(*Melbourne Declaration*). Of particular concern of this Agreement are priority equity cohorts, which include Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with disability and students from educationally disadvantaged backgrounds.			
Theme summary narrative for all four documents	Excellence and equity of student outcomes are of fundamental importance to the four documents, in part, so that Australia will be recognised internationally as having a high quality and equitable education system. “Quality”, in relation to teachers, ITE and schools, is a key concept in all four documents. The National School Reform Agreement points out "priority equity cohorts" as of particular concern, mentioning this term 8 times. This cohort includes “Aboriginal and Torres Strait Islander students, students living in regional, rural and remote locations, students with disability and students from educationally disadvantaged backgrounds” (Australian Government Department of Education, 2023a, p. 4).			

NSRA National School Reform Agreement (2023)

NTWAP National Teacher Workforce Action Plan (2022)

QITE NEXT STEPS: Report of the Quality Initial Teacher Education Review (2022)

TEEP STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (2023)

Table A4.2c Framework Analysis: Themes, subthemes, individual narratives by document, then summary narratives for all documents by theme: Defining teacher shortages.

Theme	**Defining teacher shortages**			
Subthemes	***NSRA***	***NTWAP***	***QITE***	***TEEP***
	Number of occurrences of subthemes per document			
Supply/demand: national shortage	0	4	1	5
Supply: ITE completions	0	1	2	4
Supply: teachers not in workforce	0	1	0	0
Unequal distribution	1	6	5	3
Lack of diversity	0	0	2	0
Quality teachers	2	4	7	3
Individual narrative for each document	This document sees teacher shortage as an issue of quality and unequal distribution: the "best and brightest" need to be attracted to and retained in the teaching workforce (quality), and, teachers need to be attracted to "areas of need" for equitable outcomes for "priority cohorts".	This document raises an alarm about a national teacher shortage with its Foreword's opening sentence, "We have a teacher shortage right across the country". The Plan notes a shortage in workforce diversity at a national level. It also notes shortages due to unequal distribution, such as in regional, rural and remote locations and some subject areas, and the need for more effective means of attracting teachers to areas of need. Of national teacher	There are national challenges to teacher supply, with the proportion of young high achievers choosing teaching declining and ITE completion rates as low as 34 per cent. In addition, there are shortages due to unequal distribution, and more needs to be done to attract teachers to areas of need, where demand is exceeding supply. There should be incentives to attract more candidates from regional, rural and remote locations because they	About one in five beginning teachers leaves within the first three years of entering the profession. ITE quality needs to be increased to boost graduation rates and have graduates better prepared for teaching. Quality ITE and practical experience will help attract teachers to and retain them in areas of need, including regional and remote locations.

		workforce concern is low ITE completion rates of about 50 per cent, and there is a suggestion to promote teaching to attract back people who are registered but not working as teachers.	understand living in those localities.	
Theme summary narrative for all four documents	All four documents are particularly concerned about teacher shortages due to unequal distribution of the workforce: in some subject areas, for First Nations students, students in regional, rural and remote areas, and locations with high proportions of students from educationally disadvantaged backgrounds. All emphasise the need to attract teachers to such locations. The NTWAP, QITE, and TEEP signal concern about low ITE completion rates. The NTWAP signals a lack of diversity in the workforce as an element of teacher shortage. All four documents emphasis the necessity of quality teaching for excellent and equitable student outcomes.			

Key

NSRA National School Reform Agreement (2023)

NTWAP National Teacher Workforce Action Plan (2022)

QITE NEXT STEPS: Report of the Quality Initial Teacher Education Review (2022)

TEEP STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (2023)

Table A4.2d Framework Analysis: Themes, subthemes, individual narratives by document, then summary narratives for all documents by theme: government policy and teacher shortages.

Theme	**Government policy and teacher shortages**			
Subthemes	***NSRA***	***NTWAP***	***QITE***	***TEEP***
	Number of occurrences of subthemes per document			
Accountability/ compliance	17	1	1	0
Culture of continuous improvement	2	0	3	1
Government - non-government disparity	0	1	0	0
ITE- alternative models	0	0	8	0
ITE best / brightest	1	2	16	2
ITE diverse cohorts	0	3	10	6
ITE government funding	0	2	0	2
ITE mid-career professionals		2	10	13
ITE quality	1	5	17	38
Need better data	4	6	1	3
Non-government sector importance	1	0	0	0
Non-government sector no sanctions	2	0	0	0
Non-government sector requirements	5	0	0	0

SRS (School Resourcing Standard)	3	0	0	0
Standardised curriculum, assessment, reporting for funding	2	1	0	0
Student outcomes - general	9	0	0	0
Student outcomes - priority equity cohorts	7	0	0	1
Individual narrative for each document	This agreement is predicated on compliance and accountability of states and territories to the Commonwealth, to carry out agreed reform actions, including standardised national curriculum, teaching standards, and assessments; and public reporting, all of which are focused on building a culture of continuous improvement, and improving student outcomes, including those of priority equity cohorts. This is a requirement for government funding in the government sector. The Commonwealth recognises the importance of the non-government sector, and encourages its participation in this reform; however, there are no sanctions if non-government schools do not comply. This agreement supports teaching and school improvement through	ITE is seen as the key to developing quality teachers. Barriers to ITE are considered - need for paid placements, responsive LANTITE test, and quality placements. There is a need to attract high achieving school leavers and mid-career professionals to teaching, and to increase the diversity of the teaching workforce. The importance of mentoring and induction for early career teachers is recognised, with national guidelines to be developed for school leaders. ACARA is to find ways to support implementation of the National Curriculum.	This review aims to ensure ITE is evidence-based and practical, to produce classroom-ready graduates. To help teachers be most effective, ITE needs high quality, diverse candidates who have good ITE preparation and good induction once in schools. Selection processes are important, but can disadvantage some cohorts. Alternative pathways to teaching, and accelerated or employment-based pathways for mid-career professionals should be expanded. The report expresses concern that six years after TEMAG, some of the requirements have still not been implemented by	Quality of ITE is the main theme of this document. It is seen as *the* best way to help beginning teachers to be successful: high quality practical experience; more relevant content; and made consistent across Australia. The role of mentor teachers is critical. Mentor teachers need training and time-support. Mid-career ITE programs need to be better promoted. Loss of income during ITE and cost of ITE are barriers to mid-career entrants. Costs of ITE programs and inadequate government funding impacts negatively on ITE program and placement quality.

	strengthening ITE accreditation and attracting the best and brightest into teaching.		higher education providers.	
Theme summary narrative for all four documents	The NSRA presents reforms which government systems must comply with to receive Commonwealth funding. In relation to the non-government sector, the Agreement notes that the Commonwealth recognises the importance of this sector, that it desires that non-government schools take up the reforms, but that there are no sanctions if they do not. The reforms focus on achieving excellence and equity in student outcomes through standardised curriculum, assessments and reporting, and a culture of continuous improvement. All four documents wish to strengthen ITE and to attract the "best and brightest" to ITE, as the key to developing quality teachers (Australian Government Department of Education, 2023a, p. 9). The NTWAP, QITE and TEEP see mid-career professionals as a potential quality group to target for ITE.			

Key

NSRA National School Reform Agreement (2023)

NTWAP National Teacher Workforce Action Plan (2022)

QITE NEXT STEPS: Report of the Quality Initial Teacher Education Review (2022)

TEEP STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (2023)

Table A4.2e Framework Analysis: Themes, subthemes, individual narratives by document, then summary narratives for all documents by theme: Teachers, potential teachers and teacher shortages.

Theme	**Teachers, potential teachers and teacher shortages**			
Subthemes	***NSRA***	***NTWAP***	***QITE***	***TEEP***
	Number of occurrences of subthemes per document			
ITE induction, mentoring	0	1	2	11
Job security	0	2	0	0
Lack of career pathways	0	2	3	0
Lack of resourcing	0	2	0	0
Registration and visa obstacles	0	1	0	0
Salary	0	1	3	0
Status of profession		5	13	1
Teacher autonomy	1	0	0	0
Workload, hours of work	2	4	3	0

Individual narrative for each document	Governments recognise there are competing demands on teachers' and school leaders' time. Existing reporting processes and data sources will be used for reporting requirements under this agreement as far as possible to minimise reporting burdens on school systems and individual schools. Teacher autonomy is recognised in the sense of 'so long as they are doing what will improve student outcomes'.	The plan emphasises the importance of raising the status of teaching, and it ensured that teachers and school leaders were consulted and their feedback taken on board. Obstacles, such as interstate teacher registration and visas need to be removed. Workload is understood to be a major issue for teachers. Job security is an issue, and jurisdictions are asked to try to boost permanent positions. Lack of career pathways is another issue which stakeholders are asked to explore. Salary needs to be revisited to ensure it is fair.	The status of the teaching profession needs to be elevated, misconceptions corrected and negative public rhetoric stopped so that more high quality candidates are attracted to the profession. The review finds that workload is recognised by most stakeholders as a concern for the teaching profession. Workload, and perceptions of workload, are a deterrent to potential candidates for teaching. It also recognises that more career pathways would be beneficial to teaching as a career. Further, most stakeholders had concerns about teacher salaries.	About one in five beginning teachers leaves within the first three years of entering the profession. ITE quality needs to be increased to boost graduation rates and have graduates better prepared for teaching. Quality ITE and practical experience will help attract and retain teachers to areas of need including regional and remote locations. During the pandemic, many parents were deeply impressed with what they realised teachers do.
Theme summary narrative for all four documents	Three of the documents recognise workload as a major issue of concern to teachers, and workload is recognised as a major concern for teachers and prospective teachers. Status of the profession is recognised by the NTWAP, QITE, and TEEP as a deterrent for some, including high achieving individuals, from becoming teachers, and a potential cause of teacher attrition. Induction and mentoring are needed to support early career teacher to remain in the profession. Lack of career pathways, job security and salary are mentioned as other issues of concern for teachers or prospective teachers. Autonomy of teachers is recognised by the National School Reform Agreement, provided they still comply with reforms and student outcomes improve.			

Key

NSRA National School Reform Agreement (2023)

NTWAP National Teacher Workforce Action Plan (2022)

QITE NEXT STEPS: Report of the Quality Initial Teacher Education Review (2022)

TEEP STRONG BEGINNINGS: Report of the Teacher Education Expert Panel (2023)

Table A4.3 Framework Analysis: in-a-nutshell summary for each document.

(i) The *National School Reform Agreement* (2023) (NSRA) School education in Australia is underpinned by government belief that a high quality, equitable system is necessary for the nation's future stability, economic prosperity, social cohesion and its related international reputation for equity and excellence in schooling. The Agreement considers high quality ITE which recruits the best and brightest as necessary to support this. For this Agreement, "teacher shortage" is an issue of teacher quality (in terms of ability to achieve excellent and equitable student outcomes), and of unequal distribution, with high concern for "priority equity cohorts", including students who are First Nations, students in regional, rural and remote locations, students with disability, and students from educationally disadvantaged backgrounds. The Agreement stipulates that receipt of Commonwealth funding requires state and territory compliance with and accountability for reforms, including implementation of standardised national curriculum, national teaching standards, and national assessments, within a culture of continuous improvement. The Agreement recognises the non-government sector as very important, and wishes to influence this sector to implement reforms in the Agreement, but without the use of sanctions. There is some acknowledgement of teacher workload, and teacher autonomy is recognised to the extent of doing what the reforms require to improve student outcomes.
(i) The *National Teacher Workforce Action Plan* (2022) (NTWAP) This document raises the alarm about a national teacher shortage. Of concern are low ITE completion rates, a lack of teacher workforce diversity, and shortages in regional, rural and remote locations and some subject areas. The focus of the Action Plan is on developing quality teachers and attracting a diverse cohort to teaching. It considers the need to attract high achieving school leavers and mid-career professionals to teaching, and emphases that they need to be supported, such as with paid placements, a more responsive LANTITE test, and national induction guidelines to support early career teachers. The Action Plan requires that negative aspects of teaching conditions be addressed, especially workload, job security, lack of career pathways and salary. Government schools which face systematic disadvantage are to be supported financially so teachers can better support students.
(i) *NEXT STEPS: Report of the Quality Initial Teacher Education Review* (2022) (QITE) This report is underpinned by a concern about Australia's declining PISA outcomes and its related international reputation. Quality teaching is seen as the most important in-school

factor to returning Australia to the top group of nations in educational excellence and equity. Quality ITE is a core part of quality teaching - with the quality ITE seen as selecting the right candidates (high quality and diverse), high quality ITE preparation and high quality induction for neophyte teachers in schools. This report sees "teacher shortage" as 1) a national supply issue, with perceptions of workload, inadequate salaries and lack of career pathways in teaching deterring potential ITE candidates, and ITE completion rates as low as 34 per cent; 2) as a national quality issue, with the low status of the profession resulting in high quality candidates not being attracted to it, including a declining proportion of young high achievers choosing teaching as a career; and 3) as an issue of unequal distribution, with demand exceeding supply in areas of need, such as regional, rural and remote locations. The report is concerned that many ITE courses are not based on the latest evidence, and that six years after the Teacher Education Ministerial Advisory Group (TEMAG) Review, some of the requirements have still not been implemented by higher education providers.

(i) *STRONG BEGINNINGS: Report of the Teacher Education Expert Panel* (2023) (TEEP)

The purpose of this document is to explore how to attract high-quality candidates into ITE and how best to prepare them for long and successful careers. Australia's competitiveness, economic strength and prosperity ultimately starts with teachers in schools. Teachers are crucial to achieving excellence and equity in education and social cohesion, and their importance for excellent student outcomes cannot be overstated. About one in five beginning teachers leaves within the first three years of entering the profession. ITE quality, including high quality practical experience, are seen as the best way to help beginning teachers to successfully transition to teaching and remain in the profession for the long term. High quality ITE and high quality practical experience are also the best way to attract teachers to areas of need, including regional and remote locations, and to retain them there. The panel found that ITE was often not sufficiently equipping candidates for teaching, and quality needed to be strengthened, with more relevant content, and made consistent across Australia. Practical experience was also often inadequate, and sometimes limited due to school staff shortages. The role of mentor teachers is critical to the quality of practical experience, and these mentor teachers need training and support in terms of time to mentor. Mid-career ITE programs need to be better promoted so people know about them. Loss of income during ITE and cost of ITE are barriers to mid-career entrants. Costs of ITE programs and inadequate government funding impacts negatively on ITE program and placement quality.