RETAINING QUALITY EARLY CAREER TEACHERS: SOME LESSONS FROM THE INTERNATIONAL LITERATURE IN THE AUSTRALIAN CONTEXT

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Abstract

The international literature is clear that a professional school culture and supportive administrative arrangements are essential to the retention and development of quality teachers. In this paper the research and conceptual understandings underpinning this statement are elaborated, with discussions of the nature of quality teaching, teachers' professional practice, and the general nature of the teaching profession. The findings from the literature are then outlined and the data on employment of recent initial teacher education graduates set out. The data shows that the large majority of graduates do not have the employment conditions that the literature indicates are necessary for effective retention and development of quality teachers. The paper concludes with suggestions for policy that could improve not only the retention and development of quality beginning teachers, but also improve the learning conditions of students and the work of the teaching profession as a whole.

Gail Kelly retired as Westpac CEO in November 2014, receiving from the bank around \$13 million in her last year. She had been in banking for 35 years, starting out as a teller at the age of 23. But she began her working life as a school teacher, as she explained to Fran Kelly on ABC Radio National Breakfast:

I went into banking because I landed up really just being unhappy as a teacher - I [was] in the wrong school for me, and I was too young for the responsibilities and challenges that confronted me.... If you are unhappy in what you are doing, you need to make a change. For me it was changing out of that profession, not really knowing at all what I wanted to do [I walked] into a bank in Johannesburg and was accepted and taken on as a teller... [I] did not necessarily think it was going to be my long term future, but from the very outset loved the people element of banking. (Kelly, 14 November 2014)

Introduction

Attracting, retaining and developing quality teachers have been matters of international concern in recent years. In many OECD¹ countries such as Australia, the large cohort of teachers recruited around the 1970s have dominated the profession for four decades, but are moving through retirement age, and thus the teachers recruited and inducted into the profession over the current period will become, in turn, the defining cohort in the profession. In 2011 those aged in their twenties and early thirties were a large cohort that will continue to expand as many new teachers are recruited to replace those retiring (Figure 1).

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¹ The Organisation for Economic Co-operation and Development, founded in 1961 to 'promote policies that will improve the economic and social well-being of people around the world', has 34 member countries and a similar number of partner countries.

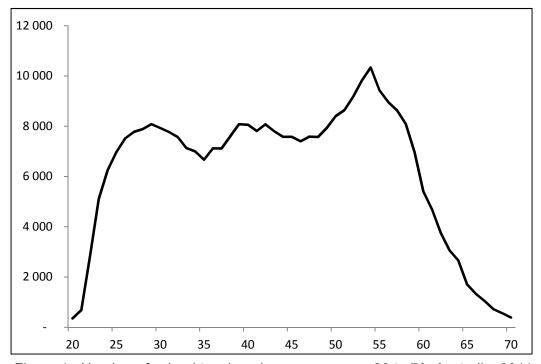


Figure 1. Number of school teachers by one year age, 20 to 70, Australia, 2011

Note: School teachers are those in the Australian and New Zealand Standard Classification of Occupations (ANZSCO) categories of 'School Principals' (1343) and 'School Teachers' (241) excluding the category of 'Early Childhood (Pre-primary) Teachers' (2412). The source is the Australian Bureau of Statistics 2011 Census of Population and Housing, original tables generated using ABS TableBuilder.

Two decades ago, from the late 1980s through the 1990s, the concern was with reinvigorating the existing teaching workforce with new career structures, new institutions intended to strengthen professionalism, and greater clarity about and support for teachers' professional roles (Schools Council of the National Board of Employment Education and Training, 1990). The large peak in the age profile was then aged around 40, and relatively few teachers were retiring or resigning, or even going on extended leave for family reasons (in fact more were returning than leaving). There was thus little requirement for new teachers to replace teachers who were leaving. In addition, there was little requirement for new teachers to grow the total size of the teaching workforce because of slow growth in school student numbers and lack of improvements in staffing levels (there had even been some significant deterioration in staffing levels in some states, notably Victoria, in the early to mid 1990s). Consequently there was little movement in and out of the profession and there were significant promotion bottle-necks. The focus had to be on existing teachers, and addressing concerns with professional stagnation and low morale.

In contrast to the attention to the internal teaching labour market at that time, now attention is given to the external teaching labour market – to attract quality teachers into the profession, ensure their retention, and develop all new teachers to ensure a highly effective profession. Researchers and policy forums around the world have given attention to what appears to work best in the attraction, retention and development of quality teachers (Auguste, Kihn, & Miller, 2010; Darling-Hammond, 2011; Darling-Hammond & Lieberman, 2012; Guarino, Santibañez, & Daley, 2006; Hayes & Behrstock, 2009; Mourshed, Chijioke, & Barber, 2010; National Partnership for Teaching in At-Risk Schools, 2005; OECD, 2005; Productivity Commission, 2012; Sahlberg, 2011; Schleicher, 2011, 2012; Stewart, 2011). The findings on what works best point to the importance of a professional school culture and sustained support for beginning teachers.

Australia, like many other countries, has introduced a range of discrete small scale initiatives concerned with 'attracting the best graduates to teaching through additional pathways' and retaining

them under the national auspices of what was the Smarter Schools National Partnership for Improving Teacher Quality or jurisdiction-level initiatives. The very large majority of potential and new teachers are not touched by these initiatives. Thus the question addressed in this paper is whether or not there is consistency between the findings from the international research and the common practices in Australian schools. This is considered in the context of existing employment conditions for teaching roles such as relief and replacement, and some policy implications are raised.

Defining quality teachers and the professional practice of teaching

It is a matter of controversy how 'quality teachers' are defined. Several different ways of understanding quality teachers in terms of characteristics of individual teachers (or student teachers or graduates) are relevant to the discussion in this paper. At a general level, quality teachers (or potential quality teachers) are (or have the potential to be) highly effective teachers in a range of situations, and they meet (or exceed) the Australian Professional Standards for Teachers at a level appropriate for their professional career stage (Australian Institute for Teaching and School Leadership, 2014).

Quality teachers can also be understood as those who are in a relatively strong position in the labour market: they can readily obtain teaching positions in other locations or sectors, or attractive positions in other occupations or industries, yet they are particularly desirable in certain teaching positions because of their specialist qualifications, high level general abilities or other attributes. In addition to that operational definition, the actual personal characteristics of many highly effective teachers can be considered. Such teachers generally seek high level professional satisfaction from their work, and are not satisfied if they are required simply to follow directions or undertake routine work, and they are especially not satisfied if they consider the directions they are given and overall work environment to be ineffective and unprofessional – they expect to be treated with respect as professionals, and thrive on realistic challenges. The final way of understanding quality teachers that is relevant to this paper is to note that a period of experience significantly increases the effectiveness of teachers, and the quality of that experience makes a significant difference. Thus beginning teachers can be assumed to increase substantially in quality as they develop experience over several years or longer (Boyer & Gillespie, n.d, p. 1.3), and thus the simple fact of retention in itself improves quality, and initial support and professional development substantially further enhances that quality.

While the attraction, retention and development of particularly high quality teachers is vitally important, it is essential that the whole profession is attended to - that as far as possible all teachers become quality teachers, and what they do is quality teaching. There are several central reasons for this. First, every teacher (with very few exceptions) has significant responsibility for the learning outcomes of students, and if particular teachers are less effective in their professional practice their students are disadvantaged - which often means further disadvantage for those already disadvantaged (National Partnership for Teaching in At-Risk Schools, 2005, p. 3). Second, teaching is a collective enterprise. While some short term, measurable student learning outcomes may be largely attributed to certain teachers rather than others², every teacher's effectiveness is influenced by the work of other teachers and the overall culture of their school and of schooling as an institution, and every student will encounter many teachers over their years at school. As Fullan and Hargreaves note in an *Education Week* commentary, 'the more successful countries ... attract and develop the professional capital of all their teachers, in all schools, day after day, year after year' (2012), a matter they elaborate in their book, *Professional capital: Transforming teaching in every school* (Hargreaves & Fullan, 2012, pp. 15-16).

In addition, the teaching profession is very large, and cannot be elite and selective in the same way that a much smaller profession can be – even if it were possible to increase the overall status and attractiveness of the profession towards that of Finland or Singapore. This can be illustrated by comparing tertiary entrance scores for the professional preparation courses of a large profession and a small profession. Assuming identical first preferences in terms of the number of applicants and tertiary entrance scores, a smaller profession, with a smaller number of students entering professional

² For a discussion and critique of some influential 'teacher value-added' publications see Alder (2014).

preparation courses each year, will have higher cut-off scores and higher average scores than a larger profession (assuming selection strictly on the basis of scores) - Box 1 provides an illustration (based on Preston, 2012, p. 6). This is reflected in reality: according to custom data on applicants, offers and acceptances from the Australian Department of Education, in 2012 there were more ATAR-based applicants with scores above 80.00 receiving offers in teacher education (1,785) than in medicine (1,478). It is not surprising, however, that a much higher percentage of offers in medicine compared with offers in education were in the ATAR bands above 80.00 – 86% and 22% respectively.

Box 1. Hypothetical impact of course size on entry scores

A university offers professional preparation courses for two professions. The smaller profession's course (M) has 500 commencing places; the larger profession's course (N) has 1500 commencing places. Both courses are equally attractive, and each receives 1000 first preferences from eligible applicants with an identical spread of tertiary entrance scores, and each applicant gives a second preference to the other course. Places in the courses are filled according to score.

Course M is able to offer half its first preference applicants a place. Thus the cut-off is at the 50 percentile (median) point. All students receiving offers in course M have scores in the top half of all applicants' scores.

Course N offers all its 1000 first preference applicants a place, and, to fill its 1500 places, it makes offers to the 500 applicants who did not receive offers from course M (who all have scores in the bottom half of scores because all places in course M had been filled by applicants with scores in the top half). The cut-off for course M is at the lowest score of all applicants. One third of students receiving offers in course N have scores in the top half, and two thirds of students receiving offers have scores in the bottom half of all applicants' scores.

The professional practice of effective school teaching has several key characteristics: it involves high level professional judgements, and is collective, strategic and democratic (Preston, 1996, 2001). Hargreaves and Fullan have elaborated on the importance of high level professional judgements and the collective nature of teaching in their conceptualisation of 'professional capital' (2012). For them, professional capital has three components; human, social and decisional (p. 3). Human capital refers to the attributes or qualities of individuals - their knowledge, capabilities and commitments. Social capital involves 'networks of trust, information and support', and for professionals such as teachers it is working collaboratively in purposeful and committed ways (p. 91). Decisional capital is the 'ability to make discretionary judgments'; it is the 'capital that professionals acquire and accumulate through structured and unstructured experience, practice and reflection - capital that enables them to make wise judgements in circumstances where there is no fixed rule or piece of incontrovertible evidence to guide them' (pp. 93-94). Such an understanding of professional capital makes clear the inadequacy of a narrow focus on human capital (individual knowledge and capabilities) which is central to much of the mainstream understandings of 'quality teachers' that arises out of neo-classical labour economics. Hargreaves and Fullan make clear that social and decisional capital are important components of the effective professional practice of individual teachers and the profession as a whole.

In addition, it is useful to consider effective teaching as not only collective and involving high level professional judgements, but also as strategic and democratic. I developed these ideas in earlier papers (Preston, 1996, 2001), and they can be best understood by considering students and their communities as well as teachers. The collectivity of teaching involves students as well as other teachers (and others): the complex inter-relationships between all the students in the class (and in the school) and between students and teachers is something teachers need to constantly manage. Teaching is strategic in that:

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The education of particular students is dependent on the inter-relationships between the work of many teachers over many years. Some of those teachers have a direct teaching relationship with the students, while others play a part in curriculum development and creating the structure, culture and climate of schools and the system as a whole... The education of students through schooling occurs over a period of time, and ... the pattern and sequence of inter-relationships between the work of different teachers in part determines the nature and quality of learning. (Preston, 2001, p. 19)

Effective teaching is democratic because effective learning requires respectful and willing collaboration between teachers and students – understanding students as active participants in their own learning, and their families and communities as shaping, facilitating, and, sometimes, hindering that learning. Attention to students and their education, rather than just the attributes of individual teachers, reminds us that disadvantaged students in disadvantaged schools are those who most need the most effective, highly professional teaching: teaching that enables all students to reach their full potential is very different from instructing highly self-motivated and well-prepared students – the 'easily teachable' or 'already taught' as the Schools Council put it (1990, pp. 29, 50).

National data on the attraction and the retention of teachers

Before outlining the findings for the international literature on the attraction and retention of quality teachers, the macro level data on student teachers and their destinations will be briefly outlined. This is relevant for two reasons. First, the size of the teaching profession relative to comparable occupations is important in evaluating evidence of the purported quality of entrants to and members of the profession – a matter raised in the previous section. Second, the data can indicate the broad magnitude of any recent surpluses or shortages of applicants for teaching positions. This is a complex area because of the locational and specialisation-based segmentation of the profession (in terms of the preferences and qualifications or individuals and the locations and requirements of positions), and the poorly documented, insecure employment of most beginning teachers (further considered later in this paper); however, the national data reported in this section is broadly indicative.

Teaching is a large profession, as noted above, and teacher education courses are relatively large – completion numbers larger than pre-registration nursing courses by around 50%, and five times that of courses in medicine. Completions in initial teacher education have increased by 37% between 2001 and 2013, but this is dwarfed by the increase in nursing (112%) and medicine (164%). Data for other professions is only available from 2008, but these all indicate much greater increases than have occurred in teacher education. The 2013 commencement numbers indicate that there have been further increases in intakes, especially in nursing and teaching, but the figures also reflect the much higher attrition rate in those two fields, especially relative to medicine. Table 1 provides details.

A rough estimate of the appropriateness of graduate numbers can be gained from training rates. Training rates are calculated as the number of completions of vocational preparation courses as a percentage of the total workforce. These have been calculated for selected professions for 2011 (the most recent year of readily accessible comparable data on the numbers in each profession in the ABS Census), and are set out in Table 2. It appears from the increases in completions to 2013 that training rates for all these professions have increased, but the increase for teaching has been the least. Whether or not a particular training rate points to an over- or under- supply of graduates depends on many factors. These factors include: the proportion of women in the profession (and thus the need for additional graduates to replace those on family leave and make up the full time load of those working full time); the general 'attachment' to the profession of recent graduates and those who have qualified years previously, reflected particularly in resignation rates on non-renewal of temporary contracts at early and mid career stages (and thus a need for replacement teachers), the age profile of the profession (a peak at around retirement age indicates a greater requirement for graduates to replace those leaving), and the rate of growth in the size of the profession.

This data does not indicate any very large oversupply of initial teacher education graduates, but other data is needed to further clarify the situation. Data in Figure 2 provides an indication of the situation in 2011.

Table 1. Award course commencements and completions for all students by selected professional preparation course, 2013, and completions change 2001-2013 and 2008-2013

	Commer	ncements	Completions				
	Number in 2013	Number in 2013 as a % of ITE	Number in 2013	Number in 2013as a % of ITE	Change 2001 - 2013	Change 2008 - 2013	
Initial Teacher Education	29 595	100%	17 903	100%	37%	8%	
Initial Registration as Nurses	18 989	64%	11 084	62%	112%	26%	
Provisional Registration as a Medical Practitioner	3 612	12%	3 573	20%	164%	67%	
Registration as a Veterinary Surgeon/Practitioner	689	2%	561	3%	-	40%	
Registration as a Dentist	668	2%	601	3%	-	72%	
Clinical Psychology	857	3%	687	4%	-	101%	

Source: Australian Government Department of Education Higher Education Statistics Publications, 'Table 19: Award Course Completions for all students by Special Interest Course, 2001 to 2013', & 'Table 8.1: Commencing Students Enrolled in Special Courses by Gender, Mode of Attendance, Type of Attendance, State and Higher Education Provider, Full Year 2013'.

Table 2. Number in selected professions, professional preparation course completions, and training rates, 2011

	Number in the profession, 2011	Number as a % of school teachers	Completions 2011	Training rate
School teachers	320,289	100%	16 783	5.2%
Registered nurses & midwives	239,291	75%	10 072	4.2%
Medical Practitioners	70,227	22%	3 011	4.3%
Veterinarians	7,233	2%	406	5.6%
Dentists	10,989	3%	428	3.9%
Psychologists	18,603	6%	580	3.1%

Source: Numbers in professions: Australian Bureau of Statistics 2011 Census of Population and Housing, original tables generated using ABS TableBuilder. Completions: Australian Government Department of Education Higher Education Statistics Publications, 'Table 19: Award Course Completions for all students by Special Interest Course, 2001 to 2011'

Note: The numbers in the professions include all those who stated those professions as their occupation, and include a number who were 'away from work' at the time of the Census. The 'training rate' is the number of completions as a percentage of the number in the relevant occupation.

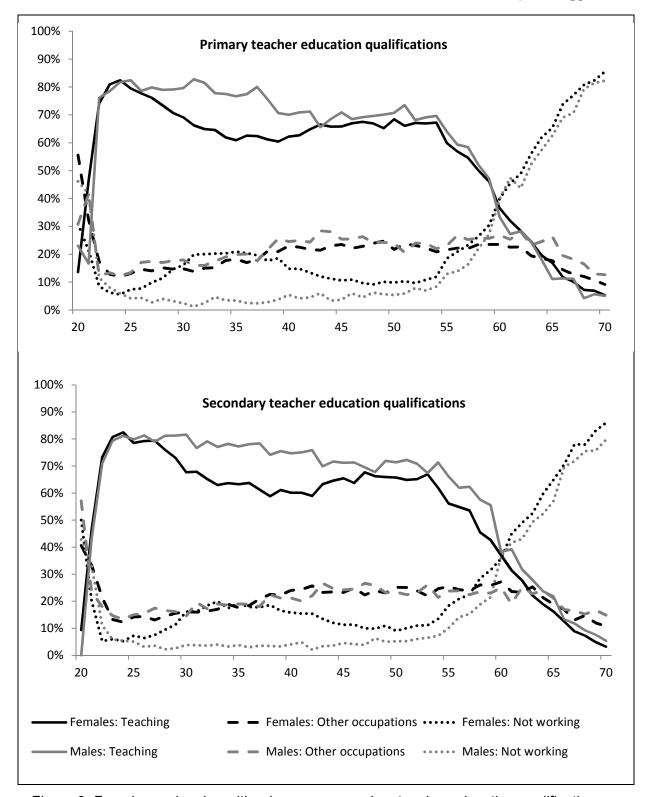


Figure 2. Females and males with primary or secondary teacher education qualifications as their highest qualification: Percentages working as teachers, working in other occupations or not working, at each one year age, 20 to 70, Australia, 2011

Note: Primary and secondary teacher education qualifications are highest qualifications in the Australian Standard Classification of Education (ASCED) fields of education of 'Teacher Education: Primary' (070105) and 'Teacher Education Secondary' (070105) respectively. Definition of Teaching and the data source as for Figure 1.

The data in Figure 2 needs to be treated with some caution because it is only for the populations that report a highest qualification in primary or secondary teacher education (respectively), and there are many teachers, especially secondary teachers, who report their highest qualification simply as 'teacher education', or in their field of specialisation or some other field. Even so, the data indicates that around 80% of initial teacher education graduates enter teaching, and around 10% to 15% enter other occupations. This is broadly corroborated by custom data from Graduate Careers Australia (Preston, 2013). There is a sharp drop in the proportion of women working as teachers as many move out of the labour force. Men with primary or secondary teacher education qualifications as their highest qualification are more likely than women to be teaching because they stay in the workforce at a greater rate. And men (especially with secondary qualifications) are not significantly more likely than women to be working in other occupations.

Like the training rates in Table 2, the data in both graphs of Figure 2 do not indicate any large oversupply of graduates (in 2011), nor any precipitous loss of those with teaching qualifications to other occupations. However, this is not grounds for complacency. In the following section the international findings on the attraction and retention of quality teachers are outlined before some indicators of Australian practice are discussed.

International findings on attraction, retention and development of quality teachers

The general findings on the attraction, retention and development of quality teachers are clear, and a discussion of them takes up the first half of this section. This is followed by a consideration of some particular issues involved in attracting and retaining particularly highly effective individuals. Finally, there is consideration of issues concerned with attraction and retention of teachers of disadvantaged students in disadvantaged schools.

Darling Hammond, drawing from extensive research into teacher policies around the world, concluded that those jurisdictions with high-achieving and equitable schooling tend to have the following practices that support the attraction and retention of quality teachers, and help ensure that the teaching profession as a whole is of high quality:

- High-quality graduate-level teacher education, at government expense, including a year of practice teaching in a clinical school connected to the university
- Mentoring for all beginners in their first year of teaching from expert teachers, coupled with other supports like a reduced teaching load and shared planning
- Equitable salaries (often with additional stipends for hard-to-staff locations) which are competitive with other professions, such as engineering
- Ongoing professional learning embedded in 10 or more hours a week of planning and professional development time. (Darling-Hammond, 2011)

Similar characteristics are set out by Sahlberg in his *Finnish lessons: What can the world learn from educational change in Finland?* (2011). Important characteristics of the highly successful Finnish system include: careful selection of teacher education candidates, teacher education at masters level with no lesser 'alternative' routes; the research basis of teacher education and teaching practice; the highly collaborative nature of teaching practice; the relatively low proportion of teachers' time actually spent in face-to-face teaching (and thus more time for preparation, curriculum development, collaborative activities and school improvement); the professional autonomy of teachers regarding curriculum and assessment, and the high respect accorded the profession (pp. 70 - 95). However, 'induction of a new teacher into a first classroom assignment is relatively less developed', with very variable practices (p. 86) – but new teachers are generally appointed to secure positions.

A central finding regarding what school characteristics attract and retain quality teachers from the international literature is summarized in the conclusion by Liu, Johnson, and Peske of their evaluation of a bonus-based program to attract and retain quality teachers in disadvantaged schools: 'Increasingly, research suggests that the challenge of attracting and retaining new teachers depends on making sure that schools are places where teachers can achieve the intrinsic rewards that a career in

teaching offers. Short of that, no financial inducements will suffice' (2004, p. 234). Of course financial considerations do matter (as Darling-Hammond indicated), but for occupations such as teaching where intrinsic motivation and collaborative practice are important, the principles noted by Kohn (2003) apply: 'Pay people well, pay them fairly, and then do everything possible to help them forget about money'. This is consistent with the developing field of behavioural economics (if not neo-classical labour economics) - Frey and Jegen's 'motivation crowding theory' is associated with the finding that 'monetary incentives or punishments may undermine ... intrinsic motivation' (2001, p. 589).

Boyer and Gillespie, in their report for the New York Department of Education on retaining quality teachers, also emphasise the professional support given to beginning teachers:

Teachers leave when they encounter environments that lack essential professional supports: 1) support from school leadership, 2) organizational structures and workforce conditions that convey respect and value for them, and 3) induction and mentoring programs for new and experienced teachers. (n.d, p. 1.1)

The New Teacher Project (TNTP) in the USA (2012) has been particularly concerned with increasing the retention of effective teachers (the 'irreplaceables'), especially in hard-to-staff schools. They found that 'irreplaceables usually leave for reasons their school could have controlled for' (p. 13), including a lack of positive and effective feedback from principals, a lack of opportunities for professional leadership (p. 16), a culture that does not foster mutual respect and trust, does not communicate high expectations and does not ensure that teachers feel supported (p. 18).

Other work that can illuminate what is needed to attract and retain particularly highly effective teachers is by Ehrhart and Ziegert (2005). They investigated why individuals are attracted to work in particular organisations (they were not concerned specifically with teachers or schools), drawing from the theoretical framework of the self-efficacy component of the social learning theory of Bandura (1977). They concluded that:

self-efficacy plays a role in attraction such that individuals higher in self efficacy are more likely to seek out environments with which they fit, based on their belief that they will be successful. (p. 909)

This implies that the working conditions that would help attract and retain effective teachers are those in which they can successfully achieve their professional goals, however challenging those goals may be. This may be important for all teachers, as Liu, Johnson and Peske conclude (above), but it is especially important for teachers with high self-efficacy – those who believe that they are capable of high levels of achievement, and for whom this is particularly important.

Support for beginning teachers and a positive professional culture are especially important in low SES schools. There has been a common finding that retention rates of beginning teachers in such schools are relatively low, and that higher quality teachers (those with more labour market power) are more likely to leave because they have other ready options (in other schools or sectors, or other occupations). Allen points out in his review of research that, 'consistent with common perceptions, the research literature provides moderate evidence that teacher turnover is greater in schools with relatively higher proportions of low-income, minority and academically low-performing students' (2005, p. vii). Similarly, reporting on Queensland research, Bradley, Green and Leeves (2006) state that 'there is evidence that teachers sort between schools and the better qualified teachers move to better schools, as defined by student and staff composition and performance' (p. 3). However, there is evidence that student characteristics (SES, ethnic background or academic performance) may not be determining factors, but rather what matters are school organisation and culture, which tend to be correlated with student characteristics. A number of researchers had speculated that this might be the case: Hanushek, Kain and Rivkin (2004) found that student characteristics (rather than salary levels) were associated with poor teacher retention, however, they speculated that the real factors might be concerned with working conditions, including: 'disciplinary problems, rigid bureaucracies, poor leadership, high student turnover, and general safety concerns' (p. 351). Guarino, Santibanez and Daley also found in their review of research into teacher recruitment and retention (2006) that 'the research revealed fairly consistent evidence that schools with higher proportions of minority, lowincome, and low-performing students tended to have higher attrition rates' (p. 191 and p. 200), and

cited lack of support from school administrations and student discipline as particular problems (p. 193). Other researchers have investigated further to understand what it is that really affects teachers' preferences among schools. Ingersoll and May (2012) found that it is 'poor organisational conditions' and not student demographics in high poverty schools that led to a high turnover of mathematics and science teachers:

Higher turnover schools are more likely to be high poverty, high minority, and urban. While numerous studies have documented the latter finding, there has been little research on why this is so ... Our data analyses found that organizational conditions statistically accounted for the relationship between school poverty, school urbanicity, and teacher turnover. In other words, the high rates of math and science teacher turnover in high-poverty, urban, public schools do not appear to be a matter of student and school demographic characteristics per se—teachers are not fleeing from poor and minority children—in contrast, teachers are fleeing from the poor organizational conditions disproportionately found in such schools. (p. 458)

In summary, the international literature points to the importance of a respectful professional school culture, effective administrative arrangements, and support for beginning teachers as the predominant factors in their retention and development, especially in low SES schools.

Do Australian staffing practices support the attraction, retention and development of quality teachers?

Australian schools do not have the great differences in per student funding levels that occur in countries such as the United States (leaving aside the particularly high funding levels of many independent schools). While per student funding of Australian disadvantaged schools may not generally be lower than that of other schools, it is well below levels of need, as documented by the Review of Funding for Schooling (Gonski et al., 2011). Australia also does not have overall shortages of teachers (except in some specialisations such as mathematics and physical sciences). However, teacher shortages are more concentrated in disadvantaged schools in Australia than in any other OECD country (OECD, 2013). That is, disadvantaged schools in Australia do not have adequate resourcing compared with other schools, and tend to have more unfilled vacancies and positions filled by casual or short term replacement staff. They are demanding places in which to teach, yet early career teachers (teachers in their first five years of teaching) tend to be disproportionately employed in low SES schools and remote schools (McKenzie, Rowley, Weldon, & Murphy, 2011).

While around 80% of all Australian school teachers have ongoing or permanent positions (McKenzie, et al., 2011), the overwhelming majority of beginning teachers are employed on a short term contract or casual basis. Table 3 sets out Graduate Careers Australia custom data. It shows that only 22% of primary and secondary teacher education graduates who are employed in schools are employed in permanent or on-going positions when the survey was undertaken (usually during the April after completion)³. Thus almost four out of five recent graduates working in schools are employed in insecure and often unsupported positions, without the conditions that the international literature indicates are necessary for the retention and development of quality teachers.

These graduates are unlikely to receive the professional (and personal) induction and support on which a successful career can be built. In addition, they have employment insecurity at a time in their lives when they may be seeking home loans and otherwise establishing their independent financial and social lives, and when many of their graduate peers are entering secure employment (where they are treated with respect as beginning professionals). It is thus to be expected that those quality beginning teachers who are in a strong position in the wider labour market may be more likely to

³ The smaller percentage of primary (relative to secondary) teacher education graduates employed on a permanent basis probably reflects the larger proportion of females in the primary teaching workforce, and thus a larger number of short term replacements required for women on maternity and family leave. The larger percentage of graduates employed on a permanent basis in private schools probably reflects the much larger proportion of hard-to-staff rural and outer urban schools in the public sector, and the private sectors' greater strength in the teaching labour market and their greater ease in selecting and managing the quantity and quality of teachers they require.

leave teaching for occupations in which conditions are better and they can achieve the intrinsic rewards that a professional career offers, to adapt Liu, Johnson, and Peske's words.

Table 3. Graduates of primary and secondary teacher education courses who are working in public or private schools, by the nature of employment contract, Australia 2013

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Working full time	Public primary	Public secondary		Private primary	Private secondary	Private total	Primary total	Secondary total	Grand Total
Permanent or open- ended contract	15%	22%	18%	21%	28%	25%	17%	24%	20%
Fixed-term contract, temporary or casual	48%	50%	49%	52%	40%	45%	49%	47%	48%
% of TOTAL Working full time	63%	72%	67%	73%	68%	70%	66%	71%	68%
Working part time	Public primary	Public secondary	Public total	Private primary	Private secondary	Private total	Primary total	Secondary total	Grand Total
Permanent or open- ended contract	1%	1%	1%	1%	5%	3%	1%	2%	2%
Fixed-term contract, temporary or casual	36%	27%	32%	26%	27%	27%	33%	27%	30%
% of TOTAL working part time	37%	28%	33%	27%	32%	30%	34%	29%	32%
Total working	Public primary	Public secondary		Private primary	Private secondary	Private total	Primary total	Secondary total	Grand Total
Permanent or open- ended contract	16%	23%	19%	22%	33%	28%	18%	27%	22%
Fixed-term contract, temporary or casual	84%	77%	81%	78%	67%	72%	82%	73%	78%
% of TOTAL working	100%	100%	100%	100%	100%	100%	100%	100%	100%

Source: Graduate Careers Australia, Graduate Destination Survey (GDS) 2013 custom data

Note: Initial coding of the GDS responses does not differentiate between initial and post initial teacher education courses (and other pre-service and in-service professional courses, such as in nursing education), though use of the Department of Education's 'Special course type code' for selected professional preparation courses (see Table 1), would make the appropriate distinction. Therefore only graduates aged under 30 are included so that those who undertook post-initial post-graduate programs are generally excluded.

There were four types of employment contract in the questionnaire completed by graduates: 'Permanent or open-ended contract', 'Fixed-term contract more than 12 months', 'Fixed-term contract up to 12 months', and 'Temporary or casual'. Unfortunately the term 'temporary' can mean any contract other than on-going. In particular, in NSW the term is used for limited term contracts, usually up to 12 months. While NSW has a substantially high proportion of graduates in the 'Temporary or casual' category than other states, there is no way of knowing the degree to which all states are affected by graduates who are on fixed term contracts actually responding that they are employed on a 'Temporary or casual' basis. Only around 6% of all graduates responded that they were employed on contracts of more than 12 months. Because of the data quality concerns, the three non-permanent alternatives are combined in this table.

Not only is the employment of so many beginning teachers in insecure and poorly supported positions in the most difficult schools (and classes within schools) likely to lead to poor attraction, retention and development of quality teachers, but it is damaging to their students and to other teachers. These graduates' students are disadvantaged by poor teaching arising from poorly supported, inexperienced graduates in challenging replacement positions, often in schools that are already disadvantaged, and where the students experience a succession of inexperienced relief teachers. Similarly, the new teachers' colleagues in the various schools to which they are assigned are professionally stressed and undermined by the necessity of working with a succession of inexperienced teachers who are without adequate systemic support.

The employment of beginning teachers in insecure and poorly supported positions is a practice that must change. But that is no simple matter. The following section will consider some possibilities.

Policy options

Teachers will continue to require replacement when they go on leave, whether for a brief period of sickness or duties outside school, or for a term or several years of long service leave, secondment, or maternity or family leave. This is especially the case in highly female occupations such as primary teaching. There will continue to be specialist vacancies that take time to permanently fill with appropriated qualified individuals and which need to be temporarily filled by teachers without appropriate qualifications. This is especially the case in highly segmented (by location as well as specialisation) occupations such as secondary teaching in the public sector.

There are two broad policy approaches that could ensure that replacement teaching does not fall to inexperienced beginning teachers just because they are the weakest in the teaching labour market, and that students receive quality teaching at all times.

The first option is to assume that relief work, as a type of teaching contract, will remain with us. The consequent policy objective is to make it attractive to experienced teachers. This would free up ongoing, permanent positions for beginning teachers, and ensure that students were taught by experienced, effective teachers when their regular teachers are away. This would require the professionalisation of relief work, with decent pay, career paths, better conditions (including more permanent relief positions), and professional development and support specific to relief teaching – in short: professional recognition and respect for the specialisation of relief and replacement teaching.

Professionalising such work would lead to greatly improved learning conditions for students of relief and replacement teachers, greatly improved professional working relationships and conditions for the colleagues of relief and replacement teachers, and greatly improved retention and development of early career teachers. And, consequently, it would result in improved attraction of quality teachers, who can observe those who go before them treated with respect and being given the support and opportunity to blossom as highly effective, professional teachers.

Such an approach would require substantial funds (new or redirected) to improve the pay and conditions of relief teachers, and take time and resources to develop the professionalism of relief work with research and professional education and development. A cultural shift in the profession may also be necessary to ensure the appropriate, high level professional recognition and identity of relief teachers.

An alternative approach is to change to a much more collaborative, flexible mode of practice for the profession as a whole, so that teachers who are on leave (whether for a few days or a longer period) are seamlessly replaced (or covered for) by colleagues with whom they have collaborated, and who know the students and the curriculum and what is planned for the lessons. School-level relief occurs to some extent already. But it can unfairly affect some teachers and some schools who carry an inequitable share of relief work, and school-level relief teachers are not necessarily better prepared for the task or more effective than an external relief teacher. What is needed is a qualitative change in teachers' professional practice so that it is less rigid and individualized, with less time in scheduled face-to-face teaching, and flexibility in student learning experiences as well as teachers' activities. More time can be spent in collaboration and team work, allowing easy replacement of absent teachers so there is no disruption of student leaning. Schools and systems with disproportionate numbers of

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absent teachers or vacancies that are not appropriately filled need to receive additional resources and support to ensure that all students receive effective teaching and all teachers have equitable workloads.

The flexible and collaborative professional orientation of the second approach is not fully consistent with the standardisation, market-orientation and test-based accountability and control of much official Australian schooling policy – what Sahlberg has dubbed the Global Education Reform Movement (GERM) (2011, pp. 100 - 106). Thus it may be more difficult to implement than the first approach because it requires national policy reorientation, as well as profession, system and school level cultural change. (Both approaches require changes in industrial arrangements.)

It would be possible to combine the two approaches, as long as focus in kept on ensuring that all beginning teachers are appropriately supported, all students well taught, and the profession as a whole well positioned for the future. There may always be a need for some external relief or replacement teachers, but with highly effective specialists taking such roles they can work seamlessly with teachers within a school to ensure no students are disadvantaged by absent teachers or unfilled vacancies.

Conclusion

In this paper I have explained the importance for the future of the teaching profession (and thus for student learning in our schools) of attracting, retaining and developing quality teachers at this time of generational change as the large 1970s-recruited cohort of teachers moves into retirement. Quality teachers and effective professional teaching practice and complex matters, and the professional practice of effective teaching is best understood as involving high level professional judgements, and being collective, strategic and democratic. Thus it is inappropriate to consider teacher quality simply in terms of the attributes of discrete individuals. The international literature is clear that a professional school culture and supportive administrative arrangements are essential for retention of quality teachers and development of an effective profession. Yet the common practices in employment of beginning teachers in Australia are inconsistent with this: most are employed on insecure casual or short term contracts, often with little support, and frequently with responsibility for difficult students in hard-to-staff schools.

The need for relief positions may be inevitable, but, I have argued, it is not inevitable that inexperienced beginning teachers should fill them. I have suggested two possible policy approaches that could ensure that beginning teachers can access secure, supported positions and all students received effective teaching, even when they do not have a regular teacher. The first involves the professionalisation of relief teaching so that it is attractive to and undertaken by experienced teachers who specialise in relief and replacement work. The second approach involves changing the practice of teaching in schools to become much more flexible and collaborative so that permanent teachers can seamlessly undertake the responsibilities of colleagues who are away or cover temporary vacancies. It is vital for the future of schooling in Australia that the current employment conditions for beginning teachers are changed – whatever approach or combination of approaches is taken up.

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