ATTRITION OF RECENT QUEENSLAND GRADUATE TEACHERS November 2013





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Queensland College of Teachers GPO Box 702 Brisbane Queensland 4001 Australia

(+617) 3377 4777 1300 720 944 (for callers outside the Brisbane metropolitan area) www.qct.edu.au

EXECUTIVE SUMMARY

This project, undertaken by the Queensland College of Teachers (QCT), involved conducting research into the attrition of recent Queensland graduate teachers from the QCT Register of teachers. The aims of the project were to determine the proportion of Queensland graduate teachers whose names were removed from the register of teachers within four years of initially being granted registration, identify why recent Queensland graduate teachers leave teaching, what we can learn from their opinions and experiences and develop recommendations for action by the QCT to reduce the attrition rate of these teachers.

The project involved:

- · undertaking a literature review;
- analysing data drawn from the register of teachers;
- collating and analysing data obtained from a survey of Queensland graduate teachers who were no longer registered with the QCT; and
- conducting interviews with a small number of survey respondents.

KEY FINDINGS

The estimates in the literature of the proportion of beginning teachers who leave the profession within the first five years after commencing teaching in Australia range from 8% to 50%. It is most likely that significant numbers of beginning teachers who leave the profession within five years of commencing teaching do not return to the profession. Of those initially granted provisional registration in Queensland from 2006 to 2008, 13.5% had their names removed from the QCT Register within four years of being granted registration.

There does not appear to be evidence that the attrition rates of beginning professionals in teaching are higher than rates in other professions. It is likely though that greater proportions of talented teachers than less talented teachers leave teaching. Teacher attrition also exacerbates teacher shortages in specific disciplines and some geographic areas. In particular, the literature suggests the shortages of specialist teachers are compounded by teacher attrition as secondary teachers of science, special education and mathematics are the most likely to leave teaching.

Around 20% of Queensland graduate teachers who applied for teaching positions in state schools in Queensland in 2011, 2012 and 2013 were appointed to permanent positions. Due to the independent nature

of employing authorities in the non-state school sector comparable information about permanent employment of beginning teachers is not available. Graduate applicants who were not employed in permanent or ongoing temporary teaching positions are likely to seek employment outside of teaching.

A 2007 House of Representatives inquiry into teacher education identified that the key factor contributing to attrition of beginning teachers is the inadequate level of support they are given such as induction and mentoring. The nature of casual teaching also means that casual teachers often receive less support. Reviews of teaching and studies of teacher attrition commonly recommend that the retention and effectiveness of beginning teachers would increase if they were provided with more adequate support in their first few years of teaching. Survey participants clearly indicated that, as beginning teachers they needed more support.

QCT Register data – 2006 to 2012

The QCT Register data analysed in this project produced the following information about Queensland graduate teachers granted provisional registration in 2006 to 2012:

- an average of 3,500 Queensland graduate teachers were granted provisional registration each year;
- less than a quarter (23.7%) were male;
- about half (49.6%) were aged under 25 years and 30% were aged 25 to 34 years at the time they were registered. Nearly 80% of graduates were under the age of 35; and
- just over three-quarters (76.6%) of Queensland graduate teachers who were initially granted provisional registration in 2006 to 2008 were granted full registration within four years.

The attrition rate of recent Queensland graduate teachers from the QCT Register has increased with successive cohorts: from 11.7% of those registered in 2006 to 15.2% of those registered in 2008. This trend appears to be continuing.

On average, 30% of these teachers had been granted full registration by the time they had left the profession in Queensland and had therefore taught in a Queensland school or equivalent setting for at least 200 days and had obtained a recommendation from a principal that they met the professional standards for full registration. Of those Queensland graduate teachers who were initially registered in 2006, the proportion who had moved to full registration was 53.3%.

The attrition rate of males from the register within four years (14.5%) was slightly higher than that of females (13.2%). The attrition rate of males steadily rose with age for those initially granted provisional registration in 2006 to 2008 from 13% of those who were aged under 25 years at the time they were initially registered to 26% of those aged over 54 years at the time they were initially granted provisional registration. Of the females initially registered in 2006 to 2008, the attrition rate rose from 11% of those aged under 25 to 20% of those aged over 54 years, with an early peak of 18% for those aged 25 to 34 years at the time provisional registration was initially granted.

Survey results

Queensland graduate teachers who were not registered with the QCT at the time of this study were invited to participate in a survey. Of 2,597 individuals who were sent an email invitation, 386 submitted complete responses.

The group of respondents included males and females of various ages and registration status (provisional registration and full registration) at the time their names were removed from the QCT Register. Respondents had completed their teaching qualifications across all Queensland initial teacher education providers; had various teaching specialisations; had taught in state schools and non-state schools throughout Queensland; and had been employed on casual, contract and permanent bases.

The survey data was analysed and information identified about teaching specialisation, reasons for becoming a teacher and leaving the profession, employment as a teacher, and beginning teacher support.

Respondents became teachers because they were passionate about joining the profession. The two reasons most frequently selected for becoming a teacher were: I wanted to make a difference in children's lives and I thought I would be a good teacher.

Their teacher education programs variously prepared them to teach the following levels of education:

- Early Childhood (9.6%)
- Preparatory Year to Year Three (14.8%)
- Primary (36.0%)
- Middle Years of Schooling (24.6%)
- Secondary (45.1%)
- Vocational Education and Training (3.4%)

Considerably fewer males than females completed a program which focused on Early Childhood, Prep to Year Three or Primary.

The preference of males for secondary teaching is apparent from the fact that 63.2% of male Queensland graduate teachers who participated in the survey had qualified to teach in secondary schools where as only 37.2% of female participants had done so.

Significantly higher proportions of males had qualified as secondary teachers specialising in information communication and technology, design and technology, mathematics, chemistry and physics compared to the proportions of female secondary teachers who had specialised in those subject areas.

Nearly three-quarters (74.4%) of survey respondents had taught in schools at some time after they had qualified as teachers. A further 12.4% had actively sought but had not gained employment as teachers in schools and 21.8% of respondents were teaching in schools outside Queensland.

Of the respondents who had held registration for at least four years, 4.8% had taught for four years or more and 48.1% had taught for less than one year.

Of those who had been employed in a Queensland school the majority (63.9%) had gained their first teaching appointment in Brisbane or in adjoining urban areas. About 74% had been employed initially in a state school and 26% in a non-state school. Interestingly:

- nearly 30% had gained a permanent teaching position in Queensland; and
- just over 70% had been employed as casual/relief teachers and a similar percentage indicated that they had been employed as teachers on contract.

The percentage of teachers who had been employed on a permanent basis in a school was higher for those who had completed an initial teacher education program which focused on Vocational Education and Training, Secondary and the Middle Years of Schooling than for those whose program focused on Early Childhood or Primary. Of primary trained teachers who responded to the survey 82.4% had not gained a permanent teaching position. About 28% of respondents stated that they were not teaching in Queensland at the time of the survey because they had not gained continued employment even though they had actively sought it.

The responses of the 71 teachers who had gained permanent employment in a Queensland school show that apart from one activity – *Informal support when requested* – these teachers had limited participation in professional development and support activities for beginning teachers:

- 49.3% had not observed another teacher's lessons;
- 33.8% had not been observed by another teacher and then given feedback on their teaching;
- 28.8% had not participated in professional development related to beginning teacher needs; and
- 21.1% had not participated in an induction program for beginning teachers.

Lower proportions of those employed on a casual or contract basis participated in support activities, compared to those who gained permanent employment. For each support activity apart from *Informal support when requested* a significant 65% or more of teachers who had been employed on a casual or contract basis indicated that they had not participated in support activities.

Of the teachers who had observed other teachers' lessons, 85.2% found this activity effective in supporting them as a beginning teacher. However, only 37% of respondents stated that they had an opportunity to participate in this activity. Participation in professional network/s or communities of practice was regarded as effective by 66.7% of respondents, with only 60.7% of permanently employed teachers and 29.9% of teachers who had not gained permanent employment having participated in this activity.

In contrast, about half (49.5%) of those who had participated in regular meetings with their Head of Department, Principal or others found this activity to be effective in supporting them as a beginning teacher. Only 54.9% of the respondents who had participated in an induction program for beginning teachers found it effective in supporting them as a beginning teacher.

More than 30% of survey respondents rated the following as *Very Important* in relation to their decision to leave teaching:

- family/personal reasons;
- · heavy workload of teaching;
- the stressful nature of teaching;
- student behaviour;
- inadequate professional support within school; and
- decided to pursue employment opportunities outside teaching.

Survey respondents identified the following types of support that, had they been available, may have helped them to stay in the profession in Queensland:

- support from experienced teachers, particularly in the areas of planning and with resources;
- an allocated mentor, with time to support them;
- stable ongoing employment at one school, as opposed to short-term contracts at a number of different schools;
- manageable classes, not the classes that other teachers wished to avoid;
- access to online resources and support; and
- being supported through participation in an online community.

Of the respondents who were not currently teaching, three-quarters were not likely at all to seek employment as a teacher in a Queensland school in the next five years.

RECOMMENDATIONS AND FUTURE DIRECTIONS FOR THE QCT

It is recommended that the QCT, as the regulator of the teaching profession in Queensland:

- Provide the methodology used for this research to other Australian teacher regulatory authorities for their use in undertaking similar research in their own jurisdictions.
- Either separately, or in partnership with teacher employers and teacher education providers, develop new and promote existing online professional development resources for both mentors and beginning teachers, particularly those who are employed on a contract or casual/relief basis.
- Facilitate online communities of practice, through the use of digital technologies, to support beginning teachers, particularly those who are employed on a contract or casual/relief basis.
- 4. Provide results of this research to key stakeholders, such as major employers and principal associations, and participate in discussions, particularly in relation to actions that stakeholders could pursue to support beginning teachers and reduce the early attrition from the profession of Queensland graduate teachers.
- Use the methodology developed in this project to regularly survey recent Queensland graduate teachers to follow trends in attrition rates and use this information for strategic planning on an ongoing basis.

Given that this project has delivered a research methodology for examining and analysing Queensland graduate teacher attrition, the QCT is well placed as the professional registration authority to continue monitoring and analysing teacher attrition from the Register of teachers. Further research the QCT could conduct, which would add to the body of information around understanding our beginning teachers in Queensland and how to support them includes:

- surveying recent Queensland graduate teachers who are registered but are not teaching to obtain additional data and information related to attrition;
- surveying Queensland graduate teachers who are currently registered and have continued to teach beyond four years to find out why they have continued teaching; and
- monitoring trends in attrition of recent graduate teachers, including information about what may be occurring nationally.

ACKNOWLEDGEMENTS

The Queensland College of Teachers (QCT) is proud to present this research report on attrition of recent Queensland graduate teachers. The report is the result of a major research project undertaken by the QCT in 2013.

This report provides valuable insight into the complex issue of beginning teacher attrition rates and strategies that can be pursued to support Queensland graduate teachers in their first years on entering the teaching profession in Queensland.

This report would not have been possible without the efforts of a number of people. In particular, the following people who contributed to the project and to the preparation of this report:

- The Queensland graduate teachers who participated in the survey and in particular, those who gave willingly of their time and details of their experiences as beginning teachers by also participating in interviews.
- The members of the Project Reference Group (listed in Appendix 6).
- The Department of Education, Training and Employment for the provision of data related to the number of applications for teacher employment from Queensland graduates and the number of appointments of those applicants to permanent and temporary teaching positions.
- Staff members of the QCT who assisted in drawing the data and providing information technology support, the writing, editing and analysis of the research report, and the preparation and design of the final report. Most significantly, Marilyn Cole (Senior Registration Officer) who prepared the report, was instrumental in the design of the survey, undertook the interviews and managed the project.

INTRODUCTION

The QCT works in the best interests of school students, the public and the profession. It protects students by ensuring approved teachers¹ are qualified, current in their practice and suitable to teach.

Established by the Queensland Government on 1 January 2006, the QCT is governed by the *Education* (Queensland College of Teachers) Act 2005 (the Act), and builds on the work of previous authorities, namely the Board of Teacher Education (1971 – 1989) and the Board of Teacher Registration (1989 – 2005).

The QCT is the regulatory body for the teaching profession in Queensland. It is principally funded by Queensland teachers through registration fees.

The QCT's functions include:

- granting teacher registration or permission to teach to eligible persons;
- accrediting and monitoring initial teacher education programs;
- developing and applying professional standards for entry to, and continuing membership of, the teaching profession;
- keeping a register of, and records relating to, approved teachers and providing data from the register to other persons, as required or permitted under the Act; and
- undertaking or supporting reviews and research relevant to the regulation of the teaching profession, including reviews and research commissioned and funded by the Minister.

TEACHER REGISTRATION

At the end of 2012 there were 98,633 approved teachers on the QCT Register. There are two categories of teacher registration in Queensland, provisional registration and full registration. Of the total number of registered teachers as at 31 December 2012, 14.3% had provisional registration and the remainder had full registration. The proportion of registered teachers with provisional registration has remained constant for the past few years.²

Under the Act, the initial period of provisional registration is two years. Before the end of that period a person holding provisional registration can give notice to the QCT to extend their provisional registration for a further two-year period. Only one extension of provisional registration is possible.

Registration ends if a provisionally registered teacher does not meet the requirements for full registration by the end of their second two-year period of provisional registration. These teachers need to re-apply for registration in order to teach in Queensland.

To obtain full registration, a provisionally registered teacher must teach in an acceptable setting for a minimum of one year (200 days) and demonstrate that they have met the *Australian Professional Standards for Teachers* at the Proficient Career Stage. The process involves an assessment against the Standards and a recommendation for full registration by a suitable reviewer such as the teacher's principal. in 2012, 3,206 provisionally registered teachers gained full registration.

During 2012 a total of 556 provisionally registered teachers had their extended period of provisional registration come to an end. Of this group 440 did not re-apply for registration by 31 December 2012.

¹ An approved teacher is a person who is either a registered teacher or holds a permission to teach. Please refer to the glossary in Appendix 5 for further explanations of this and other torms.

² The source of this data was the 2012 QCT Annual Report. Additional data is presented in the QCT REGISTER DATA section of this report.

INITIAL TEACHER EDUCATION

The QCT is responsible for accrediting and monitoring initial teacher education programs offered by Queensland teacher education providers for the purposes of teacher registration in Queensland.

During the period 2005 to 2011 there were ten institutions in Queensland offering initial teacher education programs that were accredited by the QCT for the purposes of teacher registration. These are listed in Table 1.

Teacher Education Provider	Campus Location/s	Additional Information
Australian Catholic University	Brisbane	National university with a number of campuses across Australia.
Bond University	Gold Coast	Private university which no longer offers initial teacher education programs. The final enrolments into an accredited teacher education program were accepted in 2009.
Central Queensland University	Bundaberg Emerald Gladstone Mackay Noosa Heads Rockhampton	Regional university.
Christian Heritage College	Brisbane	Metropolitan higher education provider.
Griffith University	Brisbane Logan Gold Coast	Large metropolitan university.
James Cook University	Cairns Townsville Thursday Island	Regional university.
Queensland University of Technology	Brisbane Caboolture	Large metropolitan university.
University of Queensland	Brisbane Ipswich	Large metropolitan university. Initial teacher education programs are offered within the School of Education and the School of Human Movement Studies.
University of Southern Queensland	Hervey Bay Springfield Toowoomba	Regional university.
University of the Sunshine Coast	Sippy Downs	The university's first teacher education graduates completed their program towards the end of 2006.

Table 1 Queensland teacher education providers

At the end of 2012 there were 98 633 approved teachers on the QCT Register-14.3% had provisional registration.

RESEARCH

Each year the QCT undertakes research relevant to the regulation of the teaching profession. In 2013, the QCT researched the attrition of recent Queensland graduate teachers³ from the Register within the first four years of being granted provisional registration as a teacher in Queensland. The research involved analysing data and information to quantify attrition rates and to identify factors contributing to the attrition of these early career teachers.

This research provides information and data to ensure that the QCT has a sound analytical base and reliable data for future strategic planning and policy development to address factors contributing to attrition rates of recent Queensland graduate teachers from the register. The project aimed to answer questions such as:

- Why do recent Queensland graduate teachers leave the profession?
- What can we learn from their experiences and opinions?
- What are the concerning issues and trends?
- What can we do to reduce the number of recent Queensland graduate teachers leaving the profession?

PROJECT OVERVIEW

The focuses of the research were attrition rates of Queensland graduate teachers who were granted provisional registration in Queensland during the period 2006 to 2012 and the identification of factors that contributed to this attrition.

The project included:

- undertaking a literature review including contemporary research on the subject of attrition rates of beginning teachers and causation factors;
- analysing data held by the QCT in respect to the research cohort:
- devising and implementing an electronic survey; and
- conducting focus interviews with a sample of individuals from the research cohort.

The findings of this report are based on data and information collected in relation to 386 beginning teachers who were no longer teaching in Queensland. This contrasts with other research undertaken in the area of beginning teacher attrition which generally involves teachers who are currently teaching or small numbers of teachers who have left the profession.

The report provides the findings of the project, suggestions for future directions in the area of beginning teacher attrition and recommendations for future strategic planning and policy development to address factors contributing to attrition rates of recent Queensland graduate teachers.

³ For this project, a recent Queensland graduate teacher is defined as a person who completed an initial teacher education program in Queensland, accredited by the QCT, from 2005-2011.

LITERATURE REVIEW

The issue of teacher attrition, particularly for recent graduates, has been studied extensively. The main focus of the literature review for this project was on Australian studies reported in the past ten years.

While accurate figures are difficult to obtain, estimates of the proportion of beginning teachers who leave the profession within the first five years after commencing teaching in Australia range from 8% to 50%.

According to the New South Wales (NSW) 2012-2013 Budget Estimates Paper, the percentage of newly appointed teachers in NSW public schools who resigned from their position within their first five years was 9.6% in 2009, 9.1% in 2010, and 8.0% in 2011 and was forecast to reach 10.0% in 2012 (NSW Government, 2012).

A submission from the Australian Government Department of Education, Science and Training to a House of Representatives inquiry into teacher education in 2007 stated that up to 25% of beginning teachers may leave teaching within the first five years (House of Representatives Standing Committee on Education and Vocational Training, 2007).

Research on beginning teacher attrition in Australia being conducted by Dr Philip Riley and colleagues reportedly reveals that 40% to 50% of new teachers leave within the first five years of commencing teaching (Haesler, 2012; Gallant & Riley, in publication).

An explanation for the absence of definite numbers regarding teacher attrition is that there is no systematic

tracking of teachers' movements from one educational system to another (Skilbeck & Connell, 2004).

Teacher registration attrition data does not provide an accurate picture of who has left teaching. There are two reasons for this:

- Teachers whose registration has lapsed in a particular State or Territory may continue teaching in schools in another Australian State or Territory or overseas; and
- 2. Many teachers leave teaching but remain registered, sometimes in more than one jurisdiction.

Furthermore, teacher employers would have data on teachers who leave their employment, but it is unlikely that the employer would know whether those teachers leave the profession or take up a teaching position with another employer in the same or another jurisdiction.

While the estimated figures related to beginning teacher attrition provide cause for concern, what is just as alarming is the number of beginning teachers who are teaching but intend to leave the profession. A report of a survey of 1,351 teachers in their first three years of teaching found that 24% of respondents intended to leave teaching within one to five years (Australian Primary Principals Association, 2007). In a national survey conducted by the Australian Education Union in 2008 involving 1,545 beginning teachers who were teaching in public schools, 50.6% indicated that they would not be teaching in the public school system in ten years' time (Australian Education Union, 2008).

Mayer (2006) suggested that some young teachers may leave the profession to pursue other career options and perhaps return to teaching later; in the case of women, they may leave to have children and

Estimates of the proportion of beginning teachers who leave the profession within the first five years after commencing teaching in Australia range from 8% to 50%.

then return to teaching (Skilbeck & Connell, 2004; OECD, 2005). However, it is likely that a significant number of beginning teachers who leave within the first five years of commencing teaching do not return to the profession.

The National Teacher Workforce Dataset Working Group is currently undertaking a longitudinal teacher workforce study for workforce planning purposes (Productivity Commission, 2012). One of the areas under investigation in this study is teacher attrition. This may improve the availability and accuracy of data in this area.

WHY IS ATTRITION OF BEGINNING TEACHERS AN ISSUE?

While data is difficult to obtain, there does not appear to be any evidence that the attrition rates of beginning professionals in teaching are higher than the rates in other professions (Productivity Commission, 2012).

However, there are a number of reasons that beginning teacher attrition is a problem. For example, it results in:

- loss of expertise to employers as those who leave are likely to be replaced by even less experienced teachers;
- partially lost investment in initial teacher education; and
- increased teacher shortages, particularly in some teaching areas (Productivity Commission, 2012; House of Representatives Standing Committee on Education and Vocational Training, 2007).

In addition, it was reported to the Senate inquiry, Teaching and learning – maximising our investment in Australian schools, undertaken by the Education, Employment and Workplace Relations References Committee, that greater proportions of talented teachers than less talented teachers leave teaching (Commonwealth of Australia, 2013). Henke, Chen and Geis (2000) also noted it is the 'best and brightest' new teachers who are most likely to leave. This is possibly because they are more likely to find alternative employment which they consider has enhanced conditions and/or pay levels compared to those they had as a teacher.

One of the issues associated with high teacher attrition is that it can result in teacher shortages, particularly in specific disciplines and some geographical areas.

The State School Teachers' Union of Western Australia (SSTUWA) stated that 80% of vacancies in Western Australian public schools at the beginning of 2007 and 2008 were for secondary teachers, the majority of which were in science, English, mathematics, and design and technology (cited in Fetherstone & Lummis, 2012).

According to Ashiedu & Scott-Ladd (2012), teacher shortages in Western Australia are most apparent in specific subject areas such as English as a second language, mathematics and the sciences as well as in remote areas.

The Assistant Director-General (Human Resources), Department of Education, Training and Employment (DETE), Queensland, was reported as noting that in recent years the number of primary teachers graduating in Queensland had far exceeded DETE's need. At the same time, there are shortages of qualified teachers in certain specialist areas (e.g. mathematics, science, design and technology, and the teaching of students with disabilities) and in certain geographical areas (Caldwell & Sutton, 2010; Chilcott, 2012; Productivity

Commission, 2012; Queensland Audit Office, 2013). The shortages of specialist teachers are compounded by teacher attrition as secondary teachers of science, special education and mathematics are the most likely to leave teaching (Ashiedu and Scott-Ladd, 2012).

It has been suggested that teacher shortages will continue to grow in the future, particularly for some specialist teachers, in schools with disadvantaged students and in schools in isolated communities (OECD, 2011; Productivity Commission, 2012).

The systemic solutions to teacher shortages often involve lowering standards (e.g. lowering entry requirements into teacher education courses) or intensifying the workload for teachers (e.g. by increasing class sizes or requiring teachers to teach outside their area of expertise). This may result in a lowering of the quality of teaching and learning (OECD, 2005).

According to the *Staff in Australia's Schools 2010* survey, the most common strategies for dealing with staff shortages were to:

- require teachers to teach outside their area of expertise;
- combine classes across year levels; or
- recruit teachers on short term contracts (McKenzie et al., 2011).

WHAT ATTRACTS PEOPLE TO TEACHING?

There are intrinsic and extrinsic reasons that attract individuals to teaching. Intrinsic reasons include: to make a valuable contribution to society; enjoyment of working with children; the fulfilment of sharing knowledge; and the desire to make a difference to children's lives. Some of the extrinsic reasons are: job security; potential benefits such as longer holidays, family-friendly conditions and the potential for promotion (Ashiedu & Scott-Ladd, 2012).

The extent to which the desires inherent in the above reasons are fulfilled for beginning teachers will affect their job satisfaction and ultimately influence their decision to remain in teaching or to leave (Ashiedu & Scott-Ladd, 2012).

Year	Number of Qld graduate teachers who applied for a teaching position in a DETE school	Number of Qld graduate teachers who received a permanent appointment to a DETE school	Percentage of Qld graduate teachers who received a permanent appointment to a DETE school
2011	2419	443	18.3
2012	2219	459	20.7
2013	1894	431	22.8

Table 2 Queensland graduate teachers who applied for teaching positions with DETE 2011 – 2013 and the number given permanent appointments in the year they applied (Source DETE 2013)

There does not appear to be any evidence that the attrition rates of beginning professionals in teaching are higher than the rates in other professions.

WHY DO BEGINNING TEACHERS LEAVE THE PROFESSION?

Reasons that beginning teachers leave teaching include:

- · perceived poor working conditions;
- · feeling inadequately prepared for teaching;
- inadequate support within their school;
- perceived heavy workload or poor work-life balance;
- burn-out:
- feelings of inadequacy or inability to achieve what they had hoped to as a teacher;
- ability to have higher pay or better conditions in another profession;
- limited employment opportunities;
- the low status of the profession; and
- family and personal reasons.

(Ashiedu & Scott-Ladd, 2012; Fetherstone & Lummis, 2012; House of Representatives Standing Committee on Education and Vocational Training, 2007; Skilbeck & Connell, 2003; Skilbeck & Connell, 2004; Buchanan, 2010).

Employment opportunities

A 2002 report for the Victorian Institute of Teachers cited in *Australia's Teachers: Australia's Future – Agenda for Action* found that 65% of graduate teachers who are available for full-time employment would be employed as teachers in schools (Department of Education, Science and Training, 2003).

Data provided by DETE, which employs teachers to teach in state schools and is the single largest employer of teachers in Queensland schools, shows that around 20% of Queensland graduate teachers who applied for a teaching position in 2011, 2012 or 2013 were appointed to a permanent position – see Table 2 (DETE correspondence, 2013).

Applicants who did not gain a permanent position with DETE may have gained a permanent position in a non-state school or may have ventured outside Queensland to teach. Others may have been employed in temporary (contract) positions or on a casual/relief basis in schools.

The number of Queensland graduates who applied for and were appointed to permanent teaching positions in non-state schools across Queensland was not available.

Graduate applicants who are not employed in permanent or ongoing temporary teaching positions are likely to seek employment outside of teaching. This would apply even more so to mature graduates who may be more likely than younger graduates to have family responsibilities which restrict them from seeking teaching opportunities that require relocation. They may also be more likely to have financial commitments such as a mortgage, which require a consistent income. Many of those that obtain employment outside of teaching may never return to the profession.

Support for beginning teachers

Support for beginning teachers such as induction, formal mentoring and relevant professional development is essential to reducing teacher attrition. A 2007 House of Representatives inquiry into teacher education identified that the key factor contributing to attrition of beginning teachers is the inadequate level of support they are given (House of Representatives Standing Committee on Education and Vocational Training, 2007). In a study involving 21 Australian teachers who had left the profession, lack of support was the most common reason given for leaving teaching (Buchanan, 2010).

Most graduates who are not employed as teachers on a permanent or long-term contract basis after graduation will try to obtain casual (relief) teaching employment (Jenkins, Smith & Maxwell, 2009). Casual teachers are essential to ensure learning continues when the classroom teacher is absent (Lunay & Lock, 2006). Casual employment often involves teaching on a day-to-day basis across a number of schools. The nature of casual teaching means that casual teachers often receive less support to achieve success (Jenkins et al., 2009). This is particularly concerning, since according to research, students in some parts of Australia spend the equivalent of up to one year of their school life with casual teachers (Lunay & Lock, 2006).

In recent years it has been reported that there is an imbalance between the intake of applicants to initial teacher education programs in Queensland and the number and type of teaching vacancies in Queensland schools. In particular, there has been an oversupply of primary teacher graduates (Caldwell & Sutton, 2010; Chilcott, 2012; Productivity Commission, 2012; Queensland Audit Office, 2013). Many primary teacher graduates then, do not secure a permanent teaching position after graduation and would therefore be unlikely to receive a well-structured, long-term induction program. According to Caldwell and Sutton (2010, p. 109): Induction rarely occurs for teachers who have a succession of contract appointments.

Difficulty with obtaining support may also be compounded for teachers in small schools, particularly in isolated communities, due to the low number of experienced colleagues in their school and the lack of other schools nearby (Jenkins et al., 2009).

A recent study related to the retention of beginning teachers in NSW public schools found that five of the ten most important factors influencing beginning teachers' decisions to stay in teaching involved support from their school and colleagues, such as mentoring and structured supervision (Schuck et al., 2011).

Workload

The workload required of teachers is often given as a reason they decide to leave the profession. In a survey of more than 15,000 Australian teachers conducted in 2010, the factor most frequently chosen from 16 possible factors as important in primary school teachers' decision to leave teaching prior to retirement age was the workload is too heavy (McKenzie et al., 2011, p. 88).

In an Australian survey of 1,545 beginning teachers teaching in public schools, the professional concern most often expressed was 'workload'. Workload was also given as a common reason for leaving teaching (Australian Education Union, 2008).

It is acknowledged that workloads of teachers have consistently risen due to the increasingly complex nature of teachers' work and the expanded responsibilities of teachers (OECD, 2005, p. 2):

The demands on schools and teachers are becoming more complex. Society now expects schools to deal effectively with different languages and student backgrounds, to be sensitive to culture and gender issues, to promote tolerance and social cohesion, to respond effectively to disadvantaged students and students with learning or behavioural problems, to use new technologies, and to keep pace with rapidly developing fields of knowledge and approaches to student assessment. Teachers need to be capable

Graduate teachers who are not employed in permanent or ongoing temporary teaching positions are likely to seek employment outside of teaching.

of preparing students for a society and an economy in which they will be expected to be self-directed learners, able and motivated to keep learning over a lifetime.

The Australian Professional Standards for Teachers, which describe the professional knowledge, professional practice and professional engagement required of teachers, further illustrate the complex nature of teaching today (AITSL, 2011).

Concerningly, beginning teachers are reported as having full teaching loads of larger and more difficult classes than their more experienced colleagues (Skilbeck & Connell, 2004). This compounds the workload issue for beginning teachers who due to their limited experience and lesser repertoire of teaching strategies, already have increased workloads compared to more experienced teachers.

RETAINING BEGINNING TEACHERS

Reviews of teaching and studies of teacher attrition commonly recommend that the retention and effectiveness of beginning teachers would increase if they were provided with more adequate support in their first few years of teaching. Such support could include:

- structured induction;
- mentoring by trained mentors who have the time to mentor effectively;
- reduced workloads;
- continued links with their teacher education provider;
- not being placed in the more difficult and unpopular locations or allocated the more challenging classes; and
- a collegial climate in their school.

(Skilbeck & Connell, 2003; House of Representatives Standing Committee on Education and Vocational Training, 2007; Buchanan, 2010; Joseph, 2011; OECD, 2011; Commonwealth of Australia, 2013)

METHODOLOGY

The aims of this project were to analyse attrition rates and determine contributing factors for Queensland graduate teachers.

The methodology involved collecting and analysing data available through the QCT Register of approved teachers, constructing a survey and delivering it to recent Queensland graduate teachers who were no longer registered in Queensland and conducting one-to-one interviews with a small number of survey respondents.

COLLECTION AND ANALYSIS OF DATA

For the purpose of this project, the data drawn from the QCT database pertained to previously registered Queensland graduate teachers who:

- were initially granted provisional registration in Queensland during the period 2006 to 2012; and
- had completed their initial teacher education qualification during the period 2005 to 2011.

The data analysed included the number of Queensland graduate teachers who:

- were initially granted provisional registration each year from 2006 to 2012; and
- were removed from the Register each year both overall figures and a break down according to: gender; age; teacher education provider at which initial teaching qualification was completed; and registration status (provisional registration or full registration).

The particular focus of this project was data regarding the teachers in this group who were not registered in Queensland at the time the data was drawn on 8 March 2013.

SURVEY OF RECENT QUEENSLAND GRADUATE TEACHERS

A survey was constructed for the purpose of collecting information from Queensland graduate teachers who had been previously registered but were not registered at the time the survey was launched. The survey sought information on gender, age, details of initial teacher education qualification completed, reasons for becoming a teacher, details of teaching experience, current teaching situation, and if they were no longer teaching, the reasons why.

The survey instrument was developed using an online survey software tool available through *SoGo Survey*. Invited participants were provided with a unique access link to the survey which allowed them to complete and submit responses to the questionnaire. Question types ranged from single and multiple select options to rating style and open-ended responses.

In cases where survey questions included a list of options to select from or respond to, for example, Q9 What were the main reasons you decided to become a teacher?, the options provided were based on those commonly identified in previous research.

Queensland graduate teachers for whom the QCT had a valid email address who had completed their initial teacher education qualification during the period 2005 to 2011, were initially granted provisional registration during the period 2006 to 2012, and were not registered at the time of the survey, were invited by email to participate in the survey. Participation was voluntary and an opt-out option was provided.

A survey was constructed for the purpose of collecting information from Queensland graduate teachers who had been previously registered but were not registered at the time the survey was launched.

Queensland graduate teachers who were born in Canada were removed from the invited participant group. The reason for this is that there are a number of graduate-entry initial teacher education programs in Queensland which have considerable numbers of Canadian students who completed their undergraduate degrees in Canada. The majority of these students return to teach in Canada soon after graduation and do not seek employment as teachers in Queensland schools. However, many apply for teacher registration with the QCT since holding registration in the jurisdiction in which they qualified as a teacher is one of the requirements for registration as a teacher in a number of Canadian provinces.

The Queensland graduate teachers who were invited to participate in the survey had been removed from the register up to seven years ago. Therefore, some of the contact details were likely to be out-of-date. Where a person's email address was clearly not in use any more, e.g. it was one that had been issued by their former Queensland school or employer, the QCT telephoned the person to ask them if they would be able to provide a current email address. While this did not eliminate all out-of-date email addresses it was an attempt to maximise the number of email invitations that reached recipients.

In total, 2,597 invitations to participate in the survey were sent by email on 31 May 2013. The survey was open for two weeks. Reminder emails were sent to non-participants one week after the survey was launched and three days prior to the survey closing.

The survey questionnaire can be found in Appendix 1.

FOLLOW UP INTERVIEWS WITH SELECTED SURVEY RESPONDENTS

A small number of survey respondents who indicated that they were not currently teaching in a school were invited to participate in one-to-one semi-structured follow-up telephone interviews. Interviews were recorded and transcribed using an external transcription service. Extracts from each interview are provided in the report.

The individuals who were invited to participate were recent Queensland graduate teachers who had taught in Queensland schools for at least one year full-time or the part-time equivalent. A representative sample was selected on the basis of gender, age, the teacher education provider at which their initial teacher education qualification had been completed, state or non-state teaching experience and whether they had progressed to full registration. Participants were teachers who had left teaching by choice, not because they were unable to gain ongoing employment as a teacher in Queensland.

The number of respondents invited to participate in the interviews was deliberately kept small as the purpose was to obtain in-depth information about actual individual experiences.

Interview questions were designed to find out what respondents found helpful in supporting them as beginning teachers and what they believed could have been done to support them more effectively.

The questions asked in the interviews can be found in Appendix 2.

QCT REGISTER DATA

One of the functions of the QCT under the Act is to keep a register of and records relating to approved teachers in Queensland.

The register is kept in the form of an electronic data base. The QCT is required to make part of the register publicly available.⁴

A teacher's name would be removed from the publicly available part of the register when their registration ended, when they failed to pay their annual teacher registration fee or they requested in writing that their name be removed from the register.⁵ A teacher's name can also be removed from the register if their registration was cancelled as a result of disciplinary action.

APPROVED TEACHERS

Table 3 shows the number of approved teachers on the register on 31 December 2012, as compared with the previous four years.

Year	Number of approved teachers
2008	96,985
2009	98,429
2010	97,086
2011	97,098
2012	98,633

Table 3 Approved teachers in Queensland 2008 – 2012

Location and employment

At the end of 2012, approximately 95.3% of approved teachers had Queensland addresses, while 3.4% had interstate addresses (over half of these being in New South Wales), and just over one per cent were located overseas.

According to data from the register, 62% of approved teachers were known to be employed in permanent or long-term temporary teaching positions in Queensland schools at the end of 2012.

Of all approved teachers who were recorded on the register as having a permanent or long-term temporary teaching position in a Queensland school, 67.3% were in state schools and 32.7% were in non-state schools. Table 4 shows the distribution of teachers across employment sectors.⁶

Employment Sector	Percentage of those in permanent or long-term temporary employment	
Non-State Primary	15.8	
Non-State Secondary	16.9	
State Primary	43.5	
State Secondary	23.8	

Table 4 Approved teachers by employment sector with permanent or long-term temporary teaching positions in 2012

Of those teaching in schools in 2012, about 93% held full registration and 7% held provisional registration. This proportion has remained steady when compared to recent years.

Of those teaching in schools in 2012, about 93% held full registration and 7% held provisional registration.

⁴ The publicly available part of the register can be accessed from the QCT website, www.qct.edu.au.

⁵ These teachers are able to re-apply for teacher registration if they wish but would be granted registration only if they meet the eliqibility requirements in place at the time they re-apply.

⁶ The QCT relies on registered teachers and their employers to update details about a teacher's employment in a school.

Age Range (Years)	Percentage of approved teachers in each age range	Percentage of approved teachers in each age range who were male	Percentage of approved teachers in each age range who were female
Under 25	4.4	17.4	82.6
25-29	10.8	20.4	79.6
30-34	12.3	23.1	76.9
35-39	11.4	23.0	77.0
40-44	13.1	22.9	77.1
45-49	12.0	23.8	76.2
50-54	12.1	25.7	74.3
55-59	12.0	28.5	71.5
Over 60	11.9	34.5	65.5

 Table 5
 Age profile of approved teachers as at 31 December 2012

Age profile and gender

Table 6 shows the mean average age of applicants and approved teachers in 2012. The mean average age of applicants and registered teachers has remained constant from 2009 to 2012.

	Mean average age (2012)
All applicants	33.3
Approved teachers on the Register	43.7
Female applicants	32.8
Male applicants	34.9

 $\begin{tabular}{ll} \textbf{Table 6} Mean average age of applicants and approved teachers in Queensland - 2012 \end{tabular}$

Table 5 shows the gender breakdown of approved teachers by age range. Overall, as at 31 December 2012 three-quarters (75.6%) of teachers on the register were female and 48% of teachers were 45 years of age or older.

DATA DRAWN FROM THE QCT REGISTER FOR THE PROJECT

For the purpose of this project, the data drawn from the QCT Register pertained to previously registered Queensland graduate teachers who:

- were initially granted provisional registration in Queensland during the period 2006 to 2012; and
- had completed their initial teacher education qualification during the period 2005 to 2011.

The particular focus of this project was data regarding the teachers in this group who were not registered as teachers in Queensland at the time the data was drawn on 8 March 2013.

Limitations of the data drawn

The data available from QCT records is accurate in terms of registration as a teacher in Queensland. However, while the data is to some extent indicative of the number of teachers who are currently employed in Queensland schools, the data does not provide accurate figures on teachers entering and leaving the teaching profession.

For example, around 38% of teachers on the QCT Register in 2012 were not teaching in Queensland schools on a permanent or long-term contract basis. Those not in permanent or long-term teaching positions include relief and short-term contract teachers; teachers employed in other educational institutions (e.g. TAFE, universities, kindergartens); teachers on extended leave; teachers who were no longer employed in a school but were employed in education-related positions (e.g. curriculum development, system administration, education programs in cultural institutions); teachers teaching interstate or overseas; as well as retired teachers and those in other fields of employment who maintain teacher registration for a variety of reasons.

The data presented in this report was drawn from the QCT data base for the purpose of providing information about beginning teacher attrition from the register. However, it needs to be kept in mind that attrition from the QCT Register of teachers does not necessarily equate to attrition from the teaching profession as some of the Queensland graduate teachers who were no longer registered in Queensland at the time the data was drawn may have been teaching in a school outside Queensland. Furthermore, there would be a number of Queensland graduate teachers who were registered at the time the data was drawn but were not teaching in schools at that time.

The data for this project was drawn from the QCT data base on 8 March 2013 and represents information from a point in time. Some of the figures are dynamic and will continue to change.

Queensland graduate teachers registered 2006 – 2012

Queensland graduate teachers whose initial registration date was between 1 January 2006 and 8 March 2009 would have been registered for a total of four years or more at the time the data was drawn (8 March 2013). For those Queensland graduate teachers it is possible to determine the percentages who had progressed to full registration within four years of being granted provisional registration (see Table 7). On average, just over three-quarters (76.6%) of Queensland graduate teachers moved to full registration within four years.

Initial registration year	Number of Qld graduate teachers granted provisional registration	Number of Qld graduate teachers granted full registration within 4 years of being granted provisional registration	Percentage of Qld graduate teachers granted full registration within 4 years of being granted provisional registration
2006	4362	3300	75.7
2007	4094	3230	78.9
2008	3683	2771	75.2

Table 7 Queensland graduate teachers initially granted provisional registration 2006 – 2008 and granted full registration within four years

Queensland graduate teachers who had an initial registration date after 8 March 2009 would have been registered for less than four years at the time the data was drawn. Therefore, the number of those Queensland graduate teachers who progress to full registration within their four year period of provisional registration will continue to increase. Table 8 shows the percentages as at 8 March 2013.

76.6% of Queensland graduate teachers move to full registration within four years.

⁷ The source of this data was the 2012 QCT Annual Report.

⁸ The QCT relies on registered teachers and their employers to update details about a teacher's employment in a school.

Initial registration year	Number of Qld graduate teachers granted provisional registration	Number of Qld graduate teachers granted full registration as at 8 March 2013	Percentage of Old graduate teachers granted full registration as at 8 March 2013
2009	3,102	1,948	62.8
2010	3,321	1,549	46.6
2011	3,356	788	23.5
2012	2,993	46	1.5

Table 8 Queensland graduate teachers initially granted provisional registration 2009 – 2012 and granted full registration as at 8 March 2013

Almost one-half of Queensland graduate teachers are under 25 years old and around 30% are aged 25 to 34 years at the time they are initially granted provisional registration (see Table 9). Nearly 80% of Queensland graduates granted provisional registration were under 35 years of age.

Age at the time provisional registration was initially granted	Number of Old graduate teachers granted provisional registration 2006 – 2012	Percentage of all Qld graduate teachers
Under 25	12,366	49.6
25-34	7,281	29.2
35-44	3,778	15.2
45-54	1,331	5.3
Over 54	155	0.6
Total	24,911	

 $\begin{tabular}{ll} \textbf{Table 9} & \textbf{Queensland graduate teachers by age when initially granted} \\ & \textbf{provisional registration in } 2006-2012 \\ \end{tabular}$

Queensland graduate teachers removed from the register 2006 – 2012

The percentage of Queensland graduates whose names were removed from the register within four years after being granted registration has increased with successive cohorts: from 11.7% of the graduates initially registered in 2006; to 14.0% of the graduates initially registered in 2007; and to 15.2% of the graduates initially registered in 2008.

Overall, 13.5% of Queensland graduate teachers who were registered from 2006 to 2008 were removed from the register within four years (see Table 10).

Initial registration year	Number of Qld graduate teachers granted provisional registration	Number of Qld graduate teachers removed from the register within 4 years	Percentage of Old graduate teachers removed from the register within 4 years
2006	4,362	509	11.7
2007	4,094	573	14.0
2008	3,683	558	15.2
Total	12,139	1,640	13.5

Table 10 Queensland graduate teachers initially granted provisional registration 2006 – 2008 and removed from the register within four years

Of the 3,102 Queensland graduate teachers initially granted registration in 2009, 14.8% had been removed from the register as at 8 March 2013. Those who were initially granted registration after 8 March 2009 would have been registered for less than four years at the time the data was drawn. Therefore, the number of Queensland graduate teachers initially granted registration in 2009 who come off the register within four years will continue to increase. Based on the current figure of 14.8%, the trend of increasing attrition rates apparent from 2006 to 2008 appears to be continuing (see Table 11).

Initial registration year	Number of Qld graduate teachers granted provisional registration	Number of Qld graduate teachers re- moved from the register as of 8 March 2013	Percentage of Old graduate teachers removed from the register as of 8 March 2013
2009	3,102	459	14.8
2010	3,321	367	11.1
2011	3,356	254	7.6
2012	2,993	30	1.0

Table 11 Queensland graduate teachers initially granted provisional registration 2009 – 2012 and removed from the register as at 8 March 2013

Males make up around one-quarter of the total number of Queensland graduate teachers who are granted provisional registration in Queensland.

The percentages of male graduate teachers whose names were removed from the register within four years after being granted provisional registration are higher than the percentages of female graduate teachers whose names were removed from the register. The difference increased each year from 2006 to 2008.

Overall, 13.2% of female and 14.5% of male Queensland graduate teachers who were registered from 2006 to 2008 were removed from the register within four years (see Table 12).

The ages of Queensland graduates in Figure 1 represent the ages of Queensland graduates at the time they were initially granted provisional registration. The percentage of graduates who came off the register within four years after being granted provisional registration varies for each age range. There were peaks for the graduates who were aged 25 to 34 years at the time they were granted provisional registration. The percentage drop-off steadily rose for each age group from 35 to 44 onwards with another peak for those who were aged 54 years or more at the time they were granted provisional registration.

It is possible that the peak for those in the 25 to 34 years age range is due to teachers leaving the profession to experience other career options or to travel and, for female teachers, to take time out of teaching to have children (OECD, 2005; Mayer, 2006).

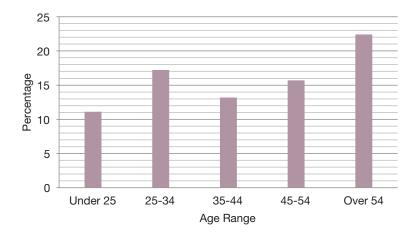


Figure 1 Queensland graduate teachers initially granted provisional registration in 2006 – 2008 and removed from the register within four years, by age when initially granted provisional registration

Males make up around onequarter of the total number of Queensland graduate teachers who are granted provisional registration in Queensland.

Initial registration year	Gender	Number of Qld graduate teachers granted provisional registration	Number of Qld graduate teachers removed from the register within 4 years	Percentage of Qld graduate teachers removed from the register within 4 years
2006	Female	3,313	382	11.5
2000	Male	1,049	127	12.1
2007	Female	3,081	418	13.6
	Male	1,013	155	15.3
2008	Female	2,806	415	11.3
2006	Male	877	143	16.3
Total	Female	9,200	1,215	13.2
	Male	2,939	425	14.5

Table 12 Queensland graduate teachers initially granted provisional registration 2006 – 2008 and removed from the register within four years, by gender

According to data obtained from the register of teachers, 21.1% of Queensland graduate teachers who were granted provisional registration in 2006 to 2012 were aged 35 years or over. Obtaining a stable income may be a greater imperative for these graduates who could be more likely than younger graduates to have financial commitments such as a mortgage and family commitments which restrict them from seeking teaching opportunities that require relocation. These graduates

then, are potentially more likely to seek employment outside teaching if they are unable to secure permanent employment as a teacher. This along with teachers deciding to retire would explain the increasing attrition rates from 35 to 44 years and onwards.

Of the Queensland graduate teachers initially granted provisional registration in 2006 to 2008, the percentage of males whose names were removed from the

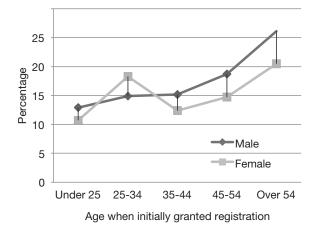


Figure 2 Queensland graduate teachers initially granted provisional registration in 2006 – 2008 and removed from the register within four years, by gender and age

register within four years of being registered was higher than the percentage of females whose names were removed from the register within four years of being registered in all age groups apart from those who were aged 25 to 34 years at the time they initially registered, as Figure 2 shows. The peak for female teachers in this age range may be due to their taking time out of teaching to have children (OECD, 2005; Mayer, 2006).

Of the Queensland graduate teachers who were initially granted provisional registration from 2006 to 2008, 30% of those whose names were removed from the register had been granted full registration, as shown in Table 13. Of those who were initially registered in 2006, the proportion was 54.2%.

Year initially granted provisional registration	Number of Qld graduate teachers removed from the register within 4 years	Number of Qld graduate teachers who had full registration at the time registration ended	Percentage of Qld graduate teachers who had full registration at the time registration ended
2006	509	276	54.2
2007	573	142	24.8
2008	558	74	13.3

Table 13 Queensland graduate teachers initially granted provisional registration in 2006 – 2008 and removed from the register within four years. by full registration status

Teacher education providers

The number of Queensland graduate teachers granted provisional registration with the QCT varies for each Queensland teacher education provider, as shown in Table 14.

The data in Table 14 does not include graduates who completed their non-education undergraduate degree in Canada prior to completing a graduate-entry initial teacher education program in Queensland. The reason for this is that there are a number of graduate-entry initial teacher education programs in Queensland which have considerable numbers of Canadian students who completed their undergraduate degrees in Canada. The majority of these students return to teach in Canada soon after graduation and do not seek employment as teachers in Queensland schools. However, many apply for teacher registration with the QCT since holding registration in the jurisdiction in which they qualified as a teacher is one of the requirements for registration as a teacher in a number of Canadian provinces.

There would be a number of individuals who successfully completed their initial teacher education program but who did not apply for teacher registration in Queensland. The data in Table 14 indicates the number of graduates who applied for and were granted registration, not the number of teacher education graduates from each institution.

The reasons for fluctuations from one year to another in the numbers of Queensland graduate teachers from particular institutions who apply for and are granted registration may be related to the number of applications for enrolment in teacher education programs. Where fluctuations are more pronounced this could be due to changes to course offerings or the mode through which courses are accessed (e.g. external, online study) or changes to program quotas and entry requirements imposed by the individual teacher education provider.

30% of those whose names were removed from the register had been granted full registration.

Teacher education provider at which initial	Number of graduate teachers granted provisional registration						
teacher education program was completed	2006	2007	2008	2009	2010	2011	2012
Australian Catholic University	151	147	185	86	188	118	136
Bond University ¹	22	40	52	26	2	3	0
Central Queensland University	549	454	364	265	240	222	188
Christian Heritage College	34	36	33	37	35	34	38
Griffith University	948	837	791	778	882	916	794
James Cook University	298	406	332	270	159	267	178
Queensland University of Technology	1,555	992	1,026	927	896	874	737
University of Queensland	452	418	329	235	285	251	299
University of Southern Queensland	342	573	409	360	470	428	444
University of the Sunshine Coast ²	11	190	162	113	153	235	168
Total	4,362	4,093	3,683	3,097	3,310	3,348	2,982

² The University of the Sunshine Coast's first teacher education graduates completed their program towards the end of 2006.

Teacher education provider at which initial teacher education program was completed	Number of Qld graduate teachers granted provi- sional registration in 2006 – 2008	Number of Qld graduate teachers removed from the register within 4 years	Percentage of Qld grad- uate teachers removed from the register within 4 years
Australian Catholic University	483	49	10.1
Bond University	114	50	43.9
Central Queensland University	1,367	131	9.6
Christian Heritage College	103	6	5.8
Griffith University	2,576	308	12.0
James Cook University	1,036	127	12.3
Queensland University of Technology	3,573	547	15.3
University of Queensland	1,199	167	13.9
University of Southern Queensland	1,324	164	12.4
University of the Sunshine Coast	363	91	25.1
Total	12,138	1,640	13.5

Table 15 Queensland graduate teachers initially granted provisional registration in 2006 – 2008 and removed from the register within four years, by teacher education provider

Table 14 Queensland graduate teachers initially granted provisional registration 2006 – 2012, by teacher education provider

1 Bond University no longer offers initial teacher education programs. The final enrolments into an accredited teacher education program were accepted in 2009.

It is possible that changes to requirements for approval of initial teacher education programs by the QCT have resulted in differences in the number of students enrolled in initial teacher education programs. For example, from 2006 (and under transition arrangements in 2005), graduate-entry teacher education programs were required to be a minimum of one year in duration. Previously, graduate-entry teacher education programs were required to be two years in duration.

The percentages of graduate teachers initially registered in 2006 to 2008 who were removed from the register within four years after being granted provisional registration varied considerably across institutions, as shown in Table 15.

The factors that might have affected the percentage of graduates who came off the register for each teacher education provider could include: the particular demographic characteristics of the graduates at the institution; the number of teaching positions available in the geographical location of the teacher education provider, for example, there would be lower demand for teachers in Brisbane, the Sunshine Coast and the Gold Coast; the number of graduates who are international students and who leave Australia soon after completion of their teacher education program; and the partnerships that the institution has with teacher employers.

The smaller the number of graduates from a teacher education provider, the greater will be the increase in percentage for each person who comes off the register. Therefore, caution should be exercised when making comparisons of teacher education providers where the number of graduates granted registration varies considerably.

The percentages of graduate teachers initially registered in 2006 to 2008 who were removed from the register within four years after being granted provisional registration varied considerably across institutions

SURVEY

A survey was developed for the purpose of collecting information from recent Queensland graduate teachers who had been previously registered as teachers in Queensland but were not registered at the time the survey was launched.

These teachers were invited to participate in the survey because as they are no longer registered as teachers in Queensland it follows that they would not currently be teaching in Queensland schools. One of the aims of the survey was to find out why they were no longer teaching in Queensland schools.

In total, 2,597 email invitations were sent. Of these, 2,184 were successfully delivered; 771 (35.3%) of the emails were read; 13 recipients opted out; and 386 complete responses and six incomplete responses were received.

The 386 complete responses represent 14.9% of those who were emailed an invitation and 17.7% of those who received the email invitation.

The survey questionnaire can be found in Appendix 1.

Survey results have been analysed on the basis of findings such as demographics, initial teacher education program, reasons for becoming a teacher, employment, support and reasons for leaving teaching.

DEMOGRAPHICS

Of the 386 respondents, 269 (69.7%) were female and 117 (30.3%) were male. This correlates quite closely with the proportions of females and males among teachers who were initially granted provisional registration from 2006 to 2008 and who came off the register of teachers within four years. Females made up 74.1% of those who came off the register and males 25.9%.

The two age groups with the highest numbers of respondents were the 25 to 29 year olds (33.9% of respondents) and 30 to 39 year olds (37.8%). The 40 to 49 year olds made up 16.3% of the total number of respondents and the 50 to 59 year olds 8.3%. Those under 25 years old and those over 60 years old comprised 2.6% and 1.0% respectively.9

INITIAL TEACHER EDUCATION PROGRAM

More than 60% of respondents completed their initial teacher education program between 2005 and 2008.

All Queensland institutions offering QCT accredited teacher education programs at the time were represented among the institutions at which respondents had completed their initial teacher education programs. The proportion of respondents from each teacher education provider generally reflects the proportion of teachers who came off the register from each teacher education provider.

Respondents' teacher education programs variously prepared them to teach the following levels of education:

- Early Childhood (9.6%)
- Preparatory Year (Prep) to Year Three (14.8%)
- Primary (36.0%)
- Middle Years of Schooling (24.6%)
- Secondary (45.1%)
- Vocational Education and Training (3.4%)

⁹ Due to rounding of decimals the total may not equal 100%

A number of respondents indicated that their teacher education program had focused on more than one level of schooling. There were considerably fewer males than females who completed a program which focused on Early Childhood, Prep to Year Three or Primary. Of male participants, 63.2% had qualified to teach in secondary schools compared to 37.2% of the females.

Teacher education programs included specialisations across a large range of subjects with those recording the highest proportions of respondents being: Multiple subject areas (Early Childhood, Primary, Middle Years) – 44.6%; and the core subject areas: English – 19.2%; mathematics – 18.7%; science and studies of society and environment – both 17.6%.

Subject area specialisation included in initial teacher education program	Percentage of male secondary teachers who specialised in each subject area	Percentage of female secondary teachers who specialised in each subject area
Information Communication & Technology	27.3	4.1
Design & Technology	3.6	1.4
Mathematics	29.1	14.9
Chemistry	14.5	8.1
Physics	3.6	1.4

Table 16 Queensland graduate secondary teachers who specialised in a particular subject area, by gender

Reason for becoming a teacher	Percentage of all respondents who selected this reason from most popular to least popular	Percentage of females who selected this reason (with ranking indicated in brackets)	Percentage of males who selected this reason (with ranking indicated in brackets)
I wanted to make a difference in children's lives	49.0%	49.4% (1)	47.9% (2)
I thought I would be a good teacher	42.5%	39.8% (2)	48.7% (1)
I thought I would enjoy working with children	31.1%	31.2% (3)	30.8% (4)
I always wanted to be a teacher	25.6%	30.5% (4)	14.5% (6)
I wanted to share my knowledge	25.6%	20.4% (6)	37.6% (3)
It's a family friendly career	17.1%	20.8% (5)	8.5% (9)
Job security	16.6%	14.5% (8)	21.4% (5)
So I could teach anywhere in the world	16.6%	17.5% (7)	14.5% (6)
I was not satisfied with my career prior to becoming a teacher	10.9%	10.4% (9)	12.0% (8)
Potential for career advancement	4.9%	4.5% (10)	6.0% (10)
School holidays	3.9%	3.7% (11)	4.3% (11)
It was a stepping stone to another career	2.3%	2.2% (12)	2.6% (12)
Salary	1.0%	1.5% (13)	0% (14)
I did not gain entry into other courses	0.8%	0.4% (14)	1.7% (13)

Table 17 Reasons selected by Queensland graduate teachers for becoming a teacher

Of male participants, 63.2% had qualified to teach in secondary schools compared to 37.2% of the females.

The percentages of male respondents who had qualified as secondary teachers and who had specialised in information communication and technology, design and technology, mathematics, chemistry and physics were higher than the percentages of female secondary teachers who had specialised in those subject areas. Table 16 shows the gender split by subject area.

REASONS FOR BECOMING A TEACHER

Research suggests that a teacher's reasons for entering the profession and the extent to which the desires inherent in the reasons are fulfilled will affect their job satisfaction and ultimately influence their decision to remain in teaching or to leave (Ashiedu & Scott-Ladd, 2012).

The survey allowed respondents to select up to three reasons why they had decided to become a teacher. The three most popular reasons for becoming a teacher were: I wanted to make a difference in children's lives (selected by 49.0% of respondents); I thought I would be a good teacher (selected by 42.5% of respondents); and I thought I would enjoy working with children (selected by 31.1% of respondents). The least frequent responses were: I did not gain entry into other courses; Salary; and It was a stepping stone to another career. Table 17 includes details on overall responses and a ranking of responses by gender.

The two reasons most frequently selected by both males and females for becoming a teacher were: *I wanted to make a difference in children's lives* and *I thought I would be a good teacher.* For males the third most frequently chosen reason was *I wanted to share my knowledge* (selected by 37.6% of male respondents) and for females it was *I thought I would enjoy working with children* (selected by 31.2% of

female respondents). Of the females, 20.8% selected *It's a family friendly career* as one of the reasons they decided to become a teacher. Of the males, 8.5% selected *It's a family friendly career* as one of the reasons they decided to become a teacher.

EMPLOYMENT AS A TEACHER

Of the 386 respondents, 287 (74.4%) had been employed in a school at some time following completion of their initial teaching qualification. The duration of the teaching experience varied widely – from less than one year to more than five years.

Of the 386 respondents, 99 (25.6%) had never been employed to teach in a school. Around half of those (48) had actively sought but had not gained teaching employment in schools.

Of the 287 respondents who had taught in schools, 203 were not teaching in a school at the time they participated in the survey. When combined with the 99 respondents who had never taught in a school, this gives a total of 302 respondents who were not teaching in a school at the time they completed the survey questionnaire. This represents 78.2% of the 386 survey respondents. The remaining 84 respondents were teaching in a school outside Queensland when they participated in the survey.

Of the 287 teachers who had taught in schools, 238 were employed as a teacher at some time in a Queensland school. Geographical locations of these teachers' first teaching positions in Queensland schools varied widely. The majority gained their first teaching appointment in the State's capital city, Brisbane, or in adjoining urban areas (Gold and Sunshine Coasts, Logan, Redcliffe, Ipswich), as Table 18 shows.

Geographical location of first teaching position	Number of teachers
Brisbane	87
Gold Coast	19
Far North Queensland (Cairns, Cape York Peninsula, Torres Strait Islands)	19
Sunshine Coast	18
North Queensland (Townsville, Mackay, Bowen)	18
Coastal cities (Rockhampton, Gladstone, Bundaberg, Hervey Bay)	16
Towns in Western Queensland	14
Logan	12
Darling Downs (including Toowoomba)	10
North West Queensland	8
Redcliffe	8
lpswich	8
Not provided	1
Total	238

Table 18 The geographical location of teachers' first teaching positions in Queensland schools

NATURE OF TEACHING EMPLOYMENT

Of the 238 respondents who had taught in Queensland schools, 168 (70.6%) had been employed as casual/relief teachers; coincidently 168 (70.6%) also indicated that they had been employed as teachers on contract; and 71 (29.8%) had gained permanent teaching positions in Queensland. Many respondents had been employed in more than one of these ways. For example, beginning teachers may be initially employed on a temporary

contract and then secure a permanent appointment on completion of the contract.

The percentage of teachers who had been employed on a permanent basis in a school was higher for those who had completed an initial teacher education program which focused on the middle years of schooling, secondary schooling or vocational education and training than it was for those who had completed a program which focused on early childhood, early years or primary schooling, as shown in Table 19.

Level of schooling / phase of learning on which initial teacher education program focused	Gained permanent employment	Did not gain permanent employment
Early Childhood	17.6%	82.4%
Early Years (Prep to Year 3)	24.1%	75.9%
Primary	17.6%	82.4%
Middle Years of Schooling	30.5%	69.5%
Secondary	41.5%	58.5%
Vocational Education	66.7%	33.3%
Other (e.g. Prep - Year 10)	40.0%	60.0%
Total	29.8%	70.2%

Table 19 Percentage of teachers who did or did not gain permanent employment in a Queensland school according to the level of schooling / phase of learning their initial teacher education program focused on

Of the respondents who had taught in Queensland schools, 73.9% indicated that the first school in which they had taught was a state school and the remaining 26.1% had been employed initially in a non-state school. Of all Queensland registered teachers in 2012 who had a permanent position or long-term contract, 67.3% had positions in state schools and 32.7% were in non-state schools. Comparing these percentages indicates that state schools employ a relatively higher proportion of beginning teachers than do non-state schools.

The percentage of teachers who had been employed on a permanent basis in a school was higher for those who had completed an initial teacher education program which focused on the middle years of schooling, secondary schooling or vocational education and training.

DURATION OF TEACHING EMPLOYMENT

Less than five per cent of the survey respondents who had held registration for at least four years had taught in Queensland for four years or more; 48.1% of those who had held registration for at least four years had taught for less than one year.

Slightly more than a quarter (27.7%) of the 238 teachers who had taught in Queensland schools were not teaching in Queensland at the time of the survey because they had not gained continued employment even though they had actively sought it.

SUPPORT AS A BEGINNING TEACHER

Respondents who had taught in Queensland schools were provided with a list of support activities which, according to previous research, are or should be

provided to beginning teachers in Queensland schools, such as an induction program, structured support from an allocated mentor, lesson observations and professional development (Caldwell & Sutton, 2010). They were asked to indicate whether they had participated in each activity, and if they had, whether or not they considered that it had been effective in supporting them as a beginning teacher.

Of the 238 participants who had taught in Queensland schools, there were 71 respondents who indicated that they had been employed on a permanent basis in a Queensland school and 167 who had not gained permanent employment in a Queensland school. Respondents in both groups indicated that they had only limited access to many of the support activities suggested.

Support activity	Percentage who had	participated in activity
	Gained permanent employment in a Queensland school (Total – 71)	Did not gain permanent employment in a Queensland school (Total – 167)
Informal support when requested	90.1	70.7
School/employer induction program for beginning teachers	78.9	27.5
Regular meetings with Head of Department, Principal or others to support you as a beginning teacher	76.1	32.9
School/employer induction program for teachers new to a school	74.6	30.5
Professional development related to your individual needs	73.2	32.9
Professional development related to beginning teacher needs	71.8	34.1
Lesson observations by other teachers with feedback	66.2	32.3
Structured support from an allocated mentor	66.2	30.5
Professional network/s or Communities of Practice	60.6	29.9
Observations of other teachers' lessons	50.7	31.1
Continued contact with and/or support from my higher education institution	26.8	16.2

Table 20 Percentage of respondents who participated in support activities according to whether they had gained permanent employment in a Queensland school or not

The responses of the 71 teachers who had gained permanent employment in a Queensland school show that apart from one activity – *Informal support when requested* – these teachers' participation in the support activities was limited:

- 49.3% had not observed another teacher's lessons;
- 33.8% had not been observed by another teacher and then given feedback on their teaching;
- 28.2% had not participated in professional development related to beginning teacher needs; and
- 21.1% had not participated in an induction program for beginning teachers.

Worryingly, as Table 20 shows, lower proportions of the 167 beginning teachers who were employed on a casual or contract basis participated in support activities, compared to those who gained permanent employment. For each support activity apart from *Informal support when requested*, 65% or more of teachers who had been employed on a casual or contract basis indicated that

they had not participated in them. Participation in support activities is worthwhile only when the activity is effective in supporting beginning teachers.

Table 21 shows the percentage of respondents who had participated in each activity when they were teaching in a Queensland school and whether or not they found the activity effective in supporting them as a beginning teacher.

Of the teachers who had observed other teachers' lessons, 85.2% found this activity effective in supporting them as a beginning teacher. However, only 37% of respondents stated that they had an opportunity to participate in this activity. Participation in professional network/s or communities of practice was regarded as effective by 66.7% of respondents, with only 60.7% of permanently employed teachers and 29.9% of teachers who had not gained permanent employment saying they had participated in this activity.

Activity	Percentage who had participated in activity	Percentage of those who participated who felt the activity was effective
Observations of other teachers' lessons	37.0	85.2
Informal support when requested	76.5	80.8
School/employer induction program for teachers new to a school	43.7	67.3
Professional network/s or Communities of Practice	39.1	66.7
Professional development related to beginning teacher needs	45.4	63.9
Professional development related to your individual needs	45.0	63.6
Lesson observations by other teachers with feedback	42.4	62.4
Structured support from an allocated mentor	41.2	60.2
School/employer induction program for beginning teachers	42.9	54.9
Regular meetings with Head of Department, Principal or others for support as a beginning teacher	45.8	49.5
Continued contact with and/or support from higher education institution	19.3	37.0

Table 21 Number of respondents who participated in support activities and whether or not they considered them to be effective in supporting them as a beginning teacher

Lower proportions of beginning teachers employed on a casual or contract basis participated in support activities compared to those in permanent employment. In contrast, of the respondents who had participated in regular meetings with their Head of Department, Principal or others to support them as a beginning teacher, only 49.5% found this activity to be effective. Only 54.9% of the respondents who had participated in an induction program for beginning teachers found it effective.

REASONS FOR LEAVING TEACHING

Of the 238 survey respondents who had taught in Queensland schools but were no longer teaching in Queensland, 27.7% indicated that this was because they had not gained continued employment as a teacher in a Queensland school.

The remaining 172 respondents were given the opportunity to state why they had decided that they would no longer teach in a Queensland school. Responses have been provided in full in Appendix 3.

The reasons given for leaving have been grouped under common themes such as inadequate support, workload, conditions/resources, relocated to another state/country, and personal/family. The two areas which had the highest number of comments were inadequate support and workload.

Some of the comments related to the area of inadequate support were:

- No beginning teacher support was offered.
- I was given zero support as a beginning teacher and absolutely no mentoring or feedback at all.
- When I started teaching I was not provided with the required support after continually asking for assistance in a very difficult remote school.
- I felt unsupported in the role and helpless in being able to achieve the outcomes I wanted for my classes.
- I was overwhelmed with my teaching position as a

- Grade 2 teacher when I was middle school trained. I actively sort [sic] out assistance. However, it was often lacking or non-existent. I decided to leave the Grade 2 Class, at the end of term 1, to try and seek high school work.
- The school where I gained a permanent, full-time position lacked an effective induction program for beginning teachers, including a lack of a mentoring program.
- I was appalled at the lack of support.

Examples of comments related to workload were:

- The workload was too high and it consumed my life. I was working six days a week as well as after school to ensure that I produced the best lessons for my students as possible [sic] and all needs were catered for. Teaching became too stressful and affected my health.
- The workload was too much. I loved teaching. I still today miss the kids. But I could have a happier easier life doing other work. Normal jobs you get to walk away from at the end of [the] day and switch off. Teaching follows you home. There is constant pressure to plan [for] tomorrow.
- I felt overburdened by the workload required to meet the needs of my students and to assist them in developing into healthy, happy and active participants in society.
- I was expected to take on the workload of a much more experienced teacher. I also felt that more experienced teachers still had unrealistic workloads with little support.
- I was overwhelmed by the amount of work required for class preparation.

Respondents were asked to indicate the importance (*Very Important*, *Somewhat Important* or *Not Important* / *Not Relevant*) of a number of factors in relation to their decision to discontinue teaching.

More than 30% of respondents rated the following *Very Important* in relation to their decision to leave teaching:

- Family/personal reasons;
- · Heavy workload of teaching;
- · The stressful nature of teaching;
- · Student behaviour;
- Inadequate professional support within school; and
- I decided to pursue employment opportunities outside teaching.

WHAT CAN BE DONE TO KEEP GRADUATE TEACHERS IN QUEENSLAND SCHOOLS?

Respondents were invited to suggest what could be done to increase the retention of graduate teachers in Queensland schools. Responses such as providing increased support and effective mentoring as well as reducing beginning teacher workload were closely related to the reasons given for leaving teaching. Other suggestions made for increasing the retention of Queensland graduate teachers were: addressing issues that come with being employed on short-term contracts or as a casual/relief teacher such as the lack of support provided and the lack of job security, increasing the pay level for beginning teachers and providing incentives for beginning teachers to go to remote locations along with adequate professional support and suitable housing.

FUTURE INTENTIONS IN RELATION TO TEACHING

Respondents who had indicated that they were not teaching at the time they participated in the survey were asked to indicate the likelihood that they would seek employment as a teacher in a school in Australia or overseas or specifically in Queensland within the next five and the next ten years.

Of respondents who were not currently teaching, over two-thirds said they were not likely at all to seek employment as a teacher in schools in Australia or overseas within the next five years, and three-quarters were not likely at all to seek employment in Queensland schools within the next five years. The results are provided in Tables 22 and 23.

	How likely is it that you will seek employment as a teacher in schools in Australia or overseas					
Very likely Somewhat Not likely likely at all						
(a)	within the next five years?	7.9%	24.5%	67.5%		
(b)	within the next ten years?	10.6%	29.5%	59.9%		

Table 22 Likelihood of seeking employment in schools in Australia or overseas in the next five and the next ten years

How likely is it that you will seek employment as a teacher in Queensland schools					
		Very likely	Somewhat likely	Not likely at all	
(a)	within the next five years?	4.6%	20.9%	74.5%	
(b)	within the next ten years?	7.6%	25.5%	66.9%	

Table 23 Likelihood of seeking employment in Queensland schools in the next five and the next ten years

More detailed survey results can be found in Appendix 3.

Of respondents who were not currently teaching, over two-thirds said they were not likely at all to seek employment as a teacher in schools in Australia or overseas within the next five years.

INTERVIEWS

Eleven survey respondents who indicated that they were not currently teaching in a school were invited to participate in one-to-one semi-structured interviews.

The individuals who were invited to participate were recent Queensland graduate teachers who had taught in Queensland schools for at least one year after completing their initial teacher education qualification. They were teachers who had made a choice to leave teaching for a variety of reasons.

Five individuals responded to the invitation and were interviewed by telephone. Pseudonyms have been used in the following interview summaries to protect the confidentiality of participants.

Interview questions were designed to expand on the findings of the survey and in particular to obtain in-depth information about what had been helpful in supporting these individuals as beginning teachers and what could have been done to support them more effectively.

The questions asked in the interviews can be found in Appendix 2.

INTERVIEW 1 - SIMON

Simon completed a one-year Graduate Diploma of Education (Middle Years) at a Brisbane university when he was aged in his late twenties. He taught for more than one year on a contract at a Preparatory Year to Year 12 non-state school in Brisbane which had several hundred students. Simon had progressed to full registration during his period of teaching.

In the survey questionnaire, Simon had given as the reason he was no longer teaching: "I felt unsupported in the role and helpless in being able to achieve the outcomes I wanted for my classes. I also felt overburdened by the workload required to meet the needs of my students".

He felt that the professional experience component was the most useful aspect of his teacher education program. He believed that it would have been beneficial to him if his program had been more heavily weighted towards 'practical' time compared to 'theoretical' time. He would have valued the opportunity to learn more during his teacher education program about planning and developing a longer-term curriculum program, such as for a semester or year of teaching.

The number of students in Simon's classes ranged from 18 to 24 and he felt that this made teaching more manageable for him than it would have been with larger classes, particularly "...when the students became rowdy or had an off day, you didn't feel like you were fighting a war."

He would have appreciated more support in the area of curriculum and lesson planning so that he could devote more time to building relationships with students and developing his approach to classroom management. He felt that as a first year teacher it would have been helpful to have regular teacher aide support in his classroom.

INTERVIEW 2 - MATTHEW

Matthew completed a Bachelor of Education (Primary) at a regional Queensland university when he was in his late forties. This program prepared graduates to teach at both primary school and junior secondary school levels. Matthew taught for more than three years in state and non-state secondary schools in a regional Queensland city. He had been employed on contracts and as a relief teacher and had also been appointed to a permanent position.

The reasons Matthew had left teaching were related to the lack of respect he felt students and parents had for teachers; the "unrealistic workload" expected of teachers; and the "stress of meeting the needs of many".

Matthew thought it would have been valuable to be able to devote the final year of his teacher education program to a team-teaching situation in a school. He envisaged something like an extended practicum, where there was always an experienced teacher in the classroom to provide support and guidance. Ideally, that support would be ongoing after he had started teaching by having an experienced mentor allocated to provide support, even perhaps available to be with him in a classroom teaching situation, not just at the end of the day.

He felt that he would have benefited from having more time for, and support with, planning and assistance in dealing with parents. Like basically I was doing all my planning after school and at home and it was just taking up so much of my time. It... you know, if I had someone to support me in my planning a bit more to cut down the hours that I was putting into it. It's just phenomenal the amount of time you put into planning. Another thing [would be] maybe a bit of extra [teacher] aide time so that there is someone there I could turn to.

Another area is managing parents. I had a few problems in that area. You weren't really trained that much on managing parents.

Matthew noted that beginning teachers often experience high levels of stress due to the workload and demands of teaching and suggested that this could be alleviated if they were given support, such as counselling services, to manage that stress.

... beginning teachers often experience high levels of stress due to the workload and demands of teaching.

INTERVIEW 3 - ZOE

Zoe completed a Graduate Diploma of Education (Secondary) at a Brisbane university in her late twenties. She had completed a Bachelor degree around ten years prior to that. Her teaching areas were studies of society and environment, history and languages other than English. Zoe taught in state and non-state schools in several regional Queensland cities. She had been employed on contracts and as a relief teacher and had also been appointed to a permanent position. Zoe had a total of one year of teaching experience.

In the survey questionnaire, Zoe had responded with the following, when asked why she was not currently teaching in a Queensland school –

The school where I gained a permanent, full-time position lacked an effective induction program for beginning teachers and there was a lack of a mentoring program or tradition. [Having] a full-time workload from the beginning was also a factor [that affected my decision]. I lacked the necessary skills and found it difficult to acquire them. [There was a] lack of clear and easy communication with the Head of Department [and I felt] a sense of aloneness.

With regard to her teacher education program, Zoe observed that as her lecturers and tutors were all experienced teachers they were able to focus on what was really important. She thought that the program she completed was excellent and found it useful, interesting and well presented.

However she said that -

...even though it was all excellent stuff it was just, you really had two semesters and half of each of those semesters [was] spent in the schools on prac [sic] and so it felt like it wasn't enough in a way and like it just went too quickly. I think if it was ... a year and a half or even two years [long], spread out a little bit more and [was] a bit more like the Bachelor [of Education program] perhaps, I think that might have helped me particularly.

When Zoe was teaching on a three month contract she had been allocated a mentor who had been a great support. She had the following to say about her mentor:

...she was very patient and compassionate and she was always there to give information and she would often give me tips or information she'd found. She'd give a lot of positive feedback. ...and she shared, we shared resources, she included me in the department meetings ... and she discussed the resources and the content of the program with me and what I might expect from different classes, ... what to look out for and so forth.

She also found being observed by another teacher and getting feedback useful...

I had another teacher come in for an observation, I think just once and she wasn't actually from that subject area so that was quite good. She was able to give objective feedback on it and she was just very professional. I suppose she gave it more as a colleague than as someone who was my supervisor because she wasn't my supervisor, she was just another teacher and that was very good. So it was just very practical information and she pointed out things that were really useful for me but was positive and encouraging about it at the same time.

Zoe also commented on the collegial ethos within the school which helped her to feel supported and "part of it all".

This contrasted with Zoe's experience when she was appointed to a permanent position in another school where there was no formal induction program for beginning teachers and nor did she have a mentor.

Zoe felt that her experience as a beginning teacher would have been enhanced if her teaching load was reduced. She also felt that beginning teachers should be given classes that were selected to allow them to have success and improve more quickly. She felt that some more experienced teachers had "...that mentality of let's, you know, throw her in at the deep end and she can learn to swim...".

INTERVIEW 4 - JARROD

Jarrod completed a one-year Graduate Diploma of Education (Secondary) at a Brisbane university following completion of undergraduate studies which he commenced immediately after leaving secondary school. His teaching areas were information communication and technology, design and technology, mathematics, science and biology. Jarrod taught for more than one year in total, on contracts and as a relief teacher, in a number of non-state schools in Brisbane. He progressed to full registration during that period.

Jarrod had indicated in the survey questionnaire that he loved teaching but left because the "...workload was too much" and there was the "constant pressure of planning [for] tomorrow". However, he stated that he would have continued to teach in the short-term at least, if he had been appointed to a permanent position.

Jarrod considered that the practical component of his teacher education program was helpful during his first year of teaching and that: "Going through the curriculum gave me a pretty good understanding of the things I should be teaching".

He felt that being employed on one contract after another at different schools with different students made it more difficult for him as a beginning teacher compared to those who had permanent employment. Furthermore, the lack of ongoing job security that came with being employed on contracts and the fact that he had other career options outside of teaching led to his decision to leave teaching.

Jarrod suggested that had he been provided with additional assistance with planning, his workload would have been reduced and this would have supported him more effectively as a beginning teacher.

...with additional assistance with planning, his workload would have been reduced and this would have supported him more effectively as a beginning teacher.

INTERVIEW 5 - BIANCA

Bianca completed a Graduate Diploma of Education (Secondary) at a Brisbane university when she was in her mid-thirties. She had previously completed undergraduate studies in business. Bianca taught for more than four years in three state secondary schools in the Brisbane area.

Bianca stated in the survey questionnaire that she had left teaching because she felt she had not been given adequate support as a beginning teacher.

With regard to her teacher education program Bianca felt that it had provided excellent coverage of the curriculum requirements for the subjects she would be teaching. However, she would have liked more in some areas:

I would have preferred a lot more on behaviour management, dealing with special needs students and I would have really loved some, some additional learning in counselling and how to support the students when you had troubled students, how to deal with it.

Bianca suggested that one of the issues for beginning teachers when they are employed initially on a contract is that they seem to be allocated the classes that other more experienced teachers don't want:

I think when you're a contract teacher, you're given what's left over so the permanent teachers tend to take the cream of the crop and the contract teachers get all the subjects that the permanent teachers don't want. That's the feeling that I got from my, you know, my eighteen months / two years. ... it felt like the more experienced teachers felt like they could take the best classes and you're a new teacher so you're going to have the challenging classes. Where really you know, it should be a mixture or it should be the reverse.

She went on to say:

I just think it would be nice to have a mixture of everything and you know, to actually teach in the areas that you're an expert in and to have the load shared amongst the whole faculty, rather than one or two teachers being given all the year eight classes or just all the year nine classes.

Bianca would have appreciated more feedback on her performance as a teacher:

I'm a big believer in having someone, I suppose, do a performance review on you. I think that there could be a lot more performance reviews done on [beginning teachers] to support us so we can become better at what we do. I'm never challenged by having someone come into my classroom and sit in there for half an hour and give me some pointers on how I can improve.

She felt that time was not available to discuss what support she needed as a beginning teacher:

I think as a teacher they don't sit down with you in the first month or in the first three months or in the first six months and then after that every three months to say: How's it going? How can I support you? What are your problems? Do you need some extra help here? Is there additional professional development you could do? Do you want to go and sit in another classroom and see how another teacher deals with behaviour management issues? ...it doesn't work that way because I suppose a teacher's so busy teaching that there isn't time to deal with the nurturing side of it all.

Bianca would have liked to have been able to observe excellent teachers in action:

I would have loved to have had the opportunity to sit in on, say, the classrooms of the top five teachers in the school to see how they dealt with situations, even if it was videoed or whatever. Just to have something where I could have learnt some other strategies rather than what I was hearing on the grapevine.

One of the areas where Bianca felt supported by colleagues was when they were willing to share resources. However, she experienced a culture in which there was often a lack of willingness to share.

Bianca would have liked a mentor who had a few years more experience than she did: someone who understood what it was like for her as a beginning teacher and could suggest some strategies to try if she was having difficulty with her teaching.

She participated in some online groups and found that helpful:

I became a part of a few online groups where we would share some of our assessment pieces and things like that.

Bianca was surprised that there was no exit interview when she resigned from her teaching position and felt that it would be useful for employers to collect information on why teachers leave teaching.

SUMMARY

The responses to the interview questions provide information about what the five participants found helpful in supporting them as beginning teachers and suggestions about what they believe could have been provided to support them more effectively.

The interview participants came from different backgrounds prior to qualifying as teachers. They had experienced a variety of teacher education programs as well as locations and types of schools. It is clear from the experiences that the interviewees described that the amount of support they had received varied from one school to another. However, there are a number of common themes related to what they found or would find effective in supporting them as beginning teachers.

Some of the common themes related to effective support were:

- Being provided with support from experienced teachers, particularly in the areas of planning and with resources;
- Having an allocated mentor who had time to support them;
- Having stable ongoing employment at one school, as opposed to short term contracts at a number of different schools;
- Being allocated more manageable classes, not the classes that other teachers wished to avoid; and
- Having access to online resources and support or being part of an online community.

...there was no exit interview when she resigned from her teaching position and felt that it would be useful for employers to collect information on why teachers leave teaching.

CONCLUSIONS & RECOMMENDATIONS

This was the first research project undertaken by the QCT where a substantial component of the research relied on the integrity of the data held on the QCT Register of teachers.

The data held by the QCT is based on registration status and represents a repository of information on all current and previously registered teachers in Queensland, regardless of their employment circumstances. The QCT data is unique in that it is cross-sectoral and able to be separated into various cohorts depending on the data required. This project has established the platform for the QCT to continue to pursue in-depth analysis of the valuable registration data held.

The findings of this study were derived from QCT data related to Queensland graduate teachers, a survey of Queensland graduate teachers who were no longer registered with the QCT and interviews with five survey participants who were no longer teaching. Due to the comprehensiveness of the QCT data in relation to approved teachers in Queensland and the fact that the information obtained in the survey came from a large representative group of Queensland graduate teachers, the QCT is confident about the validity and reliability of the findings of this study. The details provided by the interviewees reinforced the findings of the survey and highlighted the human element of the issues under study in the project.

This study focused on attrition of Queensland graduate teachers; however, the literature confirms that the issue of attrition of beginning teachers from the teaching profession is evident throughout Australia. During discussions with other Australian teacher registration authorities, significant interest was expressed in

utilising the methodology developed and used for this project in order to undertake similar research in their own jurisdictions. Given the keen interest from Australian teacher registration authorities in the methodology, it is recommended that the QCT –

1 Provide the methodology used for this research to other Australian teacher regulatory authorities for their use in undertaking similar research in their own jurisdictions.

From the QCT register data analysed in this project the following information about Queensland graduate teachers granted provisional registration in 2006 to 2012 was ascertained:

- on average, just over 3,500 Queensland graduate teachers were granted provisional registration each year;
- less than a quarter (23.7%) were male;
- about half (49.6%) were aged under 25 years and 30% were aged 25 to 34 years at the time they were registered, while nearly 80% of graduates were under the age of 35; and
- on average just over three-quarters (76.6%) of Queensland graduate teachers who were initially granted provisional registration in 2006 to 2008 were granted full registration within four years.

The literature review identified that estimates of the proportion of beginning teachers who leave the profession within the first five years after commencing teaching in Australia range from 8% to 50%. It is most likely that significant numbers of beginning teachers who leave the profession within five years of commencing teaching do not return to the profession. Of those initially granted provisional registration in Queensland from 2006 to 2008, 13.5% had their names removed from the QCT Register within four years of being granted registration.

There does not appear to be evidence that the attrition rates of beginning professionals in teaching are higher than rates in other professions. The research suggests that it is likely that a greater proportion of talented teachers than less talented teachers leave teaching. Teacher attrition also exacerbates teacher shortages in specific disciplines and some geographic areas. In particular, the shortages of specialist teachers are compounded by teacher attrition as secondary teachers of science, special education and mathematics are the most likely to leave teaching.

The attrition rate of recent Queensland graduate teachers from the teaching profession in Queensland increased with successive cohorts: from 11.7% of those registered in 2006 to 15.2% of those registered in 2008. This trend appears to be continuing.

The proportion of males whose names were removed from the register within four years (14.5%) was slightly higher than that of females (13.2%). The attrition rate of males steadily rose with age for those initially granted provisional registration in 2006 to 2008 from 13% of those who were aged under 25 years at the time they were initially registered to 26% of those aged over 54 years at the time they were initially granted provisional registration. Of the females initially registered in 2006 to 2008, the attrition rate rose from 11% of those aged under 25 to 20% of those aged over 54 years old, with an early peak of 18% for those aged 25 to 34 years old at the time provisional registration was initially granted.

Around 20% of Queensland graduate teachers who applied for teaching position in state schools in Queensland in 2011, 2012 and 2013 were appointed to permanent position. Due to the independent nature of employing authorities in the non-state school sector comparable information about permanent employment

of beginning teachers is not available. Graduate applicants who were not employed in permanent or ongoing temporary teaching positions are likely to have sought employment outside of teaching.

A 2007 House of Representatives inquiry into teacher education identified that the key factor contributing to attrition of beginning teachers is the inadequate level of support they are given. The nature of casual teaching also means that casual teachers often receive less support. Reviews of teaching and studies of teacher attrition commonly recommend that the retention and effectiveness of beginning teachers would increase if they were provided with more adequate support in their first few years of teaching. Survey participants clearly indicated a need for better support as beginning teachers.

Some attrition of beginning teachers from the teaching profession is normal and can be positive. For example, it may be preferable for teachers to leave if teaching is not what they expected or they are not coping with the demands of teaching despite being provided with adequate support and guidance. However, 28.9% of Queensland graduate teachers who were initially granted provisional registration from 2006 to 2008 and were no longer registered at the time the survey for this project was launched had met the requirements for full registration. Of those who were initially registered in 2006, the proportion was 53.3%. This illustrates that high proportions of effective Queensland graduate teachers are not continuing to teach in Queensland schools.

The literature suggests that a teacher's reasons for entering the profession and the extent to which the desires inherent in the reasons are fulfilled will affect their job satisfaction and ultimately influence their decision to remain in teaching or to leave. Survey respondents

The attrition rate of recent Queensland graduate teachers from the teaching profession in Queensland has increased with successive cohorts.

became teachers because they were passionate about joining the profession. The two reasons most frequently selected for becoming a teacher were: I wanted to make a difference in children's lives and I thought I would be a good teacher. Whether or not these respondents' high expectations were met during the first years of their teaching experience would have influenced their decision to leave the profession.

Survey respondents' teacher education programs variously prepared them to teach the following levels of education:

- Early Childhood (9.6%)
- Prep to Year Three (14.8%)
- Primary (36.0%)
- Middle Years of Schooling (24.6%)
- Secondary (45.1%)
- Vocational Education and Training (3.4%)

Considerably fewer males than females completed a program which focused on Early Childhood, Prep to Year Three or Primary while significantly higher proportions of males who had qualified as secondary teachers specialised in information communication and technology, design and technology, mathematics, chemistry and physics compared to the proportions of female secondary teachers who had specialised in those subject areas.

The preference of males for secondary teaching is apparent from the fact that 63.2% of male Queensland graduate teachers who participated in the survey had qualified to teach in secondary schools where as only 37.2% of female participants had done so.

Males are more likely to have specialised in secondary subjects where there are shortages of qualified teachers, such as mathematics, science and information communication and technology.

Nearly three-quarters (74.4%) of survey respondents had taught in schools at some time after they had qualified as teachers. A further 12.4% had actively sought but had not gained employment as teachers in schools and 21.8% of respondents were teaching in schools outside Queensland.

Of the respondents who had held registration for at least four years 4.8% had taught for four years or more and 48.1% had taught for less than one year.

Of the 386 respondents 78.2% were not teaching in a school at the time of the survey. Of the 302 respondents who were not teaching in a school, 29.5% were not teaching in a school because they had not gained continued employment as a teacher even though they had actively sought it.

Of those who had been employed in a Queensland school the majority (63.9%) had gained their first teaching appointment in Brisbane or in adjoining urban areas. About 74% had been employed initially in a state school and 26% in a non-state school. Nearly 30% had gained a permanent teaching position in Queensland

and just over 70% had been employed at some time as casual/relief teachers, while a similar percentage indicated that they had been employed at some time as teachers on a contract.

The percentage of teachers who had been employed on a permanent basis in a Queensland school was higher for those who had completed an initial teacher education program which focused on vocational education and training, secondary schooling and the middle years of schooling. Of primary trained teachers 82.4% had not gained a permanent teaching position in a Queensland school.

The responses of the 71 teachers who had gained permanent employment in a Queensland school show that apart from one activity – *Informal support when requested* – these teachers had limited participation in professional development and support activities for beginning teachers:

- 49.3% had not observed another teacher's lessons;
- 33.8% had not been observed by another teacher and then given feedback on their teaching;
- 28.8% had not participated in professional development related to beginning teacher needs; and
- 21.1% had not participated in an induction program for beginning teachers.

Lower proportions of those employed on a casual or contract basis participated in support activities, compared to those who gained permanent employment. For each support activity apart from *Informal support when requested* a significant 65% or more of teachers who had been employed on a casual or contract basis indicated that they had not participated in support activities.

Observation of other teachers' lessons is a highly valued support activity for beginning teachers, but this type of support is not always available.

Of the teachers who had observed other teachers' lessons, 85.2% found this activity effective in supporting them as a beginning teacher. However, only 37% of respondents stated that they had an opportunity to participate in this activity. Participation in professional network/s or communities of practice was regarded as effective by 66.7% of respondents, with only 60.7% of permanently employed teachers and 29.9% of teachers who had not gained permanent employment having participated in this activity.

In contrast, about half (49.5%) of those who had participated in regular meetings with their Head of Department, Principal or others found this activity to be effective in supporting them as a beginning teacher. Only 54.9% of the respondents who had participated in an induction program for beginning teachers found it effective in supporting them as a beginning teacher. It was interesting to find the more traditional forms of support such as meetings and induction programs were rated significantly less effective by survey respondents than observing other teachers' lessons and participation in professional networks or communities of practice.

Some of the survey respondents indicated that support such as induction and mentoring was provided to them. However, many did not receive such support. For nine of the eleven support activities nominated in the survey, more than 30% of respondents who had participated in them, felt that the activities were not effective in supporting them as a beginning teacher. Therefore, it appears that there is inconsistency across Queensland schools in relation to the amount and

Observation of other teachers' lessons is a highly valued support activity for beginning teachers, but this type of support is not always available.

effectiveness of formal support provided to beginning teachers. For those on casual or temporary employment arrangements the support they are able to access is even further diminished. One of the suggestions given by survey respondents to address the need for support was to facilitate online communities of practice.

The findings from the survey were echoed by those individuals who participated in interviews.

To enhance the support provided to beginning teachers, it is recommended that the QCT:

- 2 Either separately, or in partnership with teacher employers and teacher education providers, develop new and promote existing online professional development resources for both mentors and beginning teachers, particularly those who are employed on a contract or casual/relief basis; and
- 3 Facilitate online communities of practice, through the use of digital technologies, to support beginning teachers, particularly those who are employed on a contract or casual/relief basis,

The reasons survey respondents cited for leaving the teaching profession are consistent with other contemporary research and literature. For those respondents who were able to gain continued employment as a teacher in schools, but had decided to leave teaching, the factors that they rated most frequently as *Very Important* in relation to their decision to leave teaching were:

- family/personal reasons;
- heavy workload of teaching;
- · the stressful nature of teaching;
- student behaviour;
- inadequate professional support within school; and
- decided to pursue employment opportunities outside teaching.

These results are not dissimilar to other research regarding beginning teacher attrition which revealed that the most common reasons that beginning teachers leave teaching are inadequate support, heavy workload, inability to achieve what they hoped to as a teacher, feeling inadequately prepared for teaching, and limited employment opportunities.

Of the respondents who were not currently teaching, three-quarters were not likely at all to seek employment as a teacher in a Queensland school in the next five years.

Concerningly, beginning teachers are reported as having full teaching loads of larger and more difficult classes than their more experienced colleagues. This compounds the workload issue for beginning teachers who, due to their limited experience and lesser repertoire of teaching strategies, already have increased workload associated with teaching preparation compared to more experienced teachers.

The literature review, survey results and comments in the interviews suggested a number of actions that could reduce the attrition of Queensland graduate teachers early in their teaching career. The reality is that most of these options are in the hands of teacher employers and difficult for them to address, particularly given the changing dynamics of their current permanent teaching staff, the reliance on casual, relief and contract staff to fill temporary vacancies and the resulting lack of continuity of employment for some beginning teachers. Survey participants suggested that the following strategies

may have made a difference in their experience and ultimately their decision to leave the teaching profession:

- provide adequate support such as structured induction, mentoring from suitable experienced teachers and resources for all graduate teachers, including those employed as casual/relief teachers and on temporary contracts;
- avoid appointing graduate teachers to more difficultto-staff schools;
- allocate manageable classes to graduate teachers, not classes that other teachers wish to avoid;
- ensure that the number of Queensland graduate teachers correlates with the demand for teachers in Queensland schools and increase the provision of permanent teaching positions for Queensland graduate teachers; and
- promote the availability of online communities of practice to support beginning teachers.

Given the negative effects of beginning teacher attrition include loss of investment into initial teacher education, loss of expertise, and increased teacher shortages in specialisations, key stakeholders should have a keen interest in pursuing an understanding about how beginning teachers can be supported. It is recommended that the QCT:

4 Provide results of this research to key stakeholders, such as major employers and principal associations, and participate in discussions, particularly in relation to actions that stakeholders could pursue to support beginning teachers and reduce the early attrition from the profession of Queensland graduate teachers. This research has provided information and data to ensure that the QCT has a sound analytical base and reliable data for future strategic planning and policy development associated with supporting beginning teachers. The methodology is also able to be shared and implemented by other registration authorities. The QCT now holds a significant body of information and evidence about issues associated with the attrition of recent Queensland graduate teachers from the profession. The research report is a compendium of statistics and survey results. A base-line of statistics about the attrition of beginning teachers from the profession in Queensland has been established and can be used to track trends and the effect of any strategies implemented to reduce the attrition of beginning teachers from the profession in Queensland. It is recommended that the QCT:

5 Use the methodology developed in this project to regularly survey recent Queensland graduate teachers to follow trends in attrition rates and use this information for strategic planning on an ongoing basis.

It is acknowledged that because survey participants were people who had left teaching in Queensland that their experiences and views of teaching in Queensland may be more likely to be negative than those of their counterparts who have remained registered in Queensland.

Given the negative effects of beginning teacher attrition, key stakeholders should have a keen interest in pursuing an understanding about how beginning teachers can be supported.

Given that this project has delivered a research methodology for examining and analysing Queensland graduate teacher attrition, the QCT is well placed as the professional registration authority to continue monitoring and analysing teacher attrition from the register of teachers. Further research the QCT could conduct, which would add to the body of information around understanding our beginning teachers in Queensland and how to support them includes:

- surveying recent Queensland graduate teachers who are registered but are not teaching to obtain additional data and information related to attrition;
- surveying Queensland graduate teachers who are currently registered and have continued to teach beyond four years to find out why they have continued teaching; and
- monitoring trends in attrition of recent graduate teachers, including information about what may be occurring nationally.

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