Who wants to be a teacher?
Supporting the transition, wellbeing, and retention of new teachers

FINAL RESEARCH REPORT
April 2018

Matthew Burgess
Jacob Keech
Professor Paula Brough
Dr Amy Hawkes
Acknowledgements

This project was conducted within the Occupational Health Psychology Research Laboratory, School of Applied Psychology and the Centre for Work, Organisation, and Wellbeing at Griffith University, Brisbane, Australia. This research was conducted with the support of the Queensland Department of Education through an Education Horizon research grant but does not necessarily reflect the views of the Department or the Queensland Government. This funding is gratefully acknowledged.

We would like to acknowledge the support and assistance of our partners:

- The Queensland Education and Leadership Institute (QELi)
- The Queensland Teachers Union (QTU)
- The Independent Education Union – Queensland and Northern Territory Branch (IEUA-QNT)

We would also like to acknowledge the significant time and effort contributed by schools, principals, mentors and beginning teachers in participating in this research study.

To cite this document:


© 2018 M. Burgess, J. Keech, P. Brough and A. Hawkes – Griffith University: Brisbane, Australia

The contents of this document are the opinions of the listed authors and do not necessarily reflect the opinions of our partner organisations, the Department of Education or the Queensland Government.

Please direct all correspondence to

Professor Paula Brough
School of Applied Psychology,
Griffith University
176 Messines Ridge Rd,
Mount Gravatt, 4122
Brisbane, Australia
email: p.brough@griffith.edu.au
Main Findings

In 2017 Griffith University conducted research on the issues of a) beginning teacher wellbeing and turnover intentions and b) the influence of mentoring and other factors on work-related wellbeing. The main findings of this research are:

Turnover intentions occur early in beginning teachers’ employment
A substantial proportion (28%) of beginning teachers reported high turnover intentions after their first semester of teaching. We examined why beginning teachers leave and identified that beginning teachers balance various factors when deciding whether the career is for them. Briefly, these are:

- The demands of the job and the support they receive to manage these demands.
- Whether they obtain the intrinsic rewards they expected from teaching.

Mentoring is an effective preventative measure for reducing turnover intentions
We found that mentoring is an effective means of reducing turnover intentions of beginning teachers. Key conclusions from our research include:

- The quality of the working partnership between mentor and beginning teacher is paramount. Frequency of mentoring (in the absence of quality) had little influence on beginning teachers.
- Mentoring does not directly reduce turnover intentions. Rather, good quality mentoring prevents a loss of enthusiasm in beginning teacher, and in turn leads to lower turnover intentions.
- The benefits of mentoring are initially small, but accumulate over time. Substantial differences emerge between beginning teachers when quality mentoring is experienced over the longer term.

High job demands and low levels of resources reduce beginning teacher wellbeing
We found that those beginning teachers with higher levels of job demands combined with lower levels of job resources such as little support from colleagues and less time to plan and reflect at work experienced lower work-related wellbeing. Our research identified that:

- Teaching is a highly demanding job. Beginning teachers are generally expected to meet the same standards and perform at the same level as more experienced teachers.
- There are substantial additional demands placed on beginning teachers (e.g., learning their craft, adjusting to their new roles and the school environment) that may not be being recognised in workload considerations.
- Supportive colleagues and additional time can have a strong positive impact on beginning teachers long term work-related wellbeing, and higher job demands can have a negative impact on work-related wellbeing.

Regular recovery experiences improve beginning teacher wellbeing
We found that those beginning teachers who took time to mentally separate themselves from their work on some evenings and weekends had greater wellbeing. Further, those that participated in enjoyable activities outside of work (e.g., hobbies, sports) felt a greater sense of work-related wellbeing, physical health, and experienced less symptoms of cognitive fatigue at work. Our research identified that:

- Most beginning teachers struggled to take time off and this had negative impacts for their health and wellbeing.
- As the semester advanced, beginning teachers began to recognise the need to prioritise taking time out for their own wellbeing and for sustaining their effectiveness as a teacher.
- Many beginning teachers recognised that they needed to become strategic about how they use their free time considering the high amount of work they needed to do outside of school hours.
Executive Summary

Background

It is estimated that between 8% and 50% of beginning teachers in Queensland leave the profession in the first five years\(^1\). National workforce data indicate that heavy workload is cited as one of the most common reasons for an individual’s choice in leaving\(^2\). Supporting this, a previous study in Queensland schools identified that approximately 24% of teachers were simultaneously burned-out and engaged\(^3\). Our pilot data also indicated that in Queensland, 36% of teachers who responded were thinking about leaving the profession, and an additional 25% were actively searching for alternative employment.

Within this context, Griffith University applied for an Education Horizon research grant to research the issues of a) beginning teacher wellbeing and turnover intentions and b) the influence of mentoring and other factors on work-related wellbeing. This report outlines the results of the mixed methods research project.

Implications

Our research indicates that early in their career, a substantial proportion (28%) of beginning teachers consider or are actively seeking alternative employment. Our detailed qualitative investigation revealed that turnover intentions are based on balancing three key elements. (1) The demands and pressures placed upon them, (2) the support they receive to meet these demands and pressures, and (3) the extent to which they have the opportunity to obtain the intrinsic rewards they seek from teaching. Initiatives to reduce turnover amongst beginning teachers will likely need to address the balance of these three components.

Our research also indicates that a quality mentoring program can reduce turnover intentions. The effects of such a program, however, relies on mentors and beginning teachers developing effective working partnerships over a longer-term period (i.e., greater than 6-months). Our research suggests that policy makers can expect initiatives that increase the quality of the mentoring relationships formed will increase the effectiveness of the mentoring program overall.

Our final implication is regarding effective recovery. Our research indicates that beginning teachers may benefit from initiatives that encourage them to maximise the recovery experiences during non-work times. Regularly mentally detaching from work and participating in fulfilling activities that are not work-related (e.g., sports or hobbies) can have substantial benefits for beginning teachers’ work-related wellbeing. Furthermore, effective recovery can reduce symptoms of cognitive fatigue at work and improve beginning teachers’ sense of physical health.

For school leadership

Our research indicates that mentoring is an effective strategy that can help schools to retain beginning teachers. Schools can expect to not realise the benefits immediately. Our research indicates that the benefits of mentoring accumulate over the longer-term (i.e., more than 6-months) and help beginning teachers to maintain their enthusiasm. The key to effective mentoring is the development of a quality partnership between the mentor and beginning teacher. The longer-term differences for beginning teachers with this quality partnership are substantial.

\(^{1}\) Queensland College of Teachers (2013). *Attrition of recent Queensland graduate teachers*. Brisbane, Australia: Queensland College of Teachers.


Our research also identifies that careful consideration should be taken over the job demands of beginning teachers. Many teachers and mentors reported schools underestimating the substantial effort required by beginning teachers in learning their craft. Strategies such as minimising extra-curricular requirements and reduced teaching loads may be effective in supporting beginning teachers to spend enough time developing their skills. Beyond this, promoting a school culture in which staff provide support is also critical in retaining effective beginning teachers.

For beginning teachers

Many of the implications of our research reflect aspects out of the immediate control of beginning teachers. This next set of implications identifies how our research can inform individual beginning teachers to maintain their work-related wellbeing. Our research indicates that beginning teachers should expect their transition into teaching to be highly demanding, with significant time and effort required outside of school hours. Seeking and developing a quality partnership with mentors, and seeking the support of willing colleagues is essential to meet these demands.

In addition to schools supporting beginning teachers, beginning teachers should seek to prioritise recovery experiences early in the first semester. Managing their own work-related wellbeing, cognitive fatigue and sense of physical health will require dedicated effort during non-work time to mentally separate themselves from teaching. There are also substantial health and work-related benefits for a beginning teacher regularly making the time for non-work-related activities that generate a sense of success or achievement (e.g., hobbies, sport).

Research Methods

This project employed a mixed method, multi-source, and longitudinal approach via two studies.

Study 1 used intensive longitudinal methods. This involved tracking 105 beginning teachers for 19 weeks from the 4th week of Term 1, 2017 to the end of Term 2, 2017. This method allows for the week-to-week fluctuations in wellbeing to be observed, revealing underlying differences between different teachers and trends over the semester. Advanced multilevel and longitudinal analytics were employed to analyse this data.

Study 2 employed a series of three semi-structured interviews between matched pairs (dyads) of beginning teachers and their mentor. A total of 72 hours of recorded interviews were conducted over three waves with 12 beginning teachers and 11 mentors, all of which were interviewed individually. These interviews were transcribed verbatim and each phrase or sentence coded to ensure a comprehensive analysis of the data. These codes were then analysed using thematic analysis and longitudinal and dyadic paired techniques.

Results

Section 1: Why beginning teachers leave

- The decision to stay or leave is determined by whether the beginning teacher believes the high pressures are worthwhile for the intrinsically rewarding aspects of teaching.
- Whether beginning teachers felt they were supported to meet their job demands was more important than the actual amount of work itself. Those beginning with more support from their colleagues and time to plan and reflect had reduced turnover intentions.
- Many beginning teachers were surprised at the proportion of their time spent on administrative tasks as compared to the more intrinsically rewarding tasks such as connecting with and educating students.
- In our sample, a substantial proportion (28%) of beginning teachers reported considering leaving after the first semester (i.e., approximately 6-months after starting their first full-time teaching role).
Section 2: Mentoring Beginning Teachers

- Mentoring by experienced teachers, when it is a high-quality working partnership between the beginning and experienced teacher, is effective at reducing beginning teacher turnover intentions at 6-months.
- The effects of mentoring are small but accumulate over time.
- Mentors do not directly influence beginning teacher’s decisions to stay or leave, but rather support beginning teachers to maintain their enthusiasm for teaching. It is through the accumulation of these benefits that mentors reduce the turnover intentions of beginning teachers.

Section 3: Beginning teacher work-related wellbeing

- Beginning teachers reported that their first semester of teaching was highly demanding. The combination of the normally demanding role of a teacher with the expectations that beginning teachers meet the same standards as experienced teachers was challenging. In addition, as beginning teachers there was substantial additional work required to learn their craft and become a part of the school had substantial impacts on all beginning teachers.
- There were clear differences between beginning teachers in the extent to which they received support to meet these demands – termed job resources. Some beginning teachers reported having supportive colleagues, developed an effective partnership with their mentor, and were given reduced teaching loads whereas others did not enjoy these supports.
- The differences in job demands and job resources from week-to-week and from teacher to teacher was reflected in the patterns observed as we monitored beginning teacher wellbeing over their first semester. From week-to-week and over the long term, higher job demands reduced wellbeing, and higher job resources increased wellbeing. These effects were not mutually exclusive.

Section 4: Non-work activities and wellbeing

- Beginning teachers reported difficulty switching off from work, as well as working long hours and not making time for other activities.
- Those beginning teachers that psychologically detached from work more regularly reported fewer symptoms of cognitive fatigue over the semester.
- Those beginning teachers that participated in rewarding activities (e.g., playing sport, hobbies) and who felt in control of how they spent their non-work time reported increased work-related wellbeing, reduced symptoms of cognitive fatigue at work, and reported feeling more physically health overall.
- Mentors unanimously agreed that recovery experiences (e.g., switching off, making time for enjoyable activities outside of work) were important for teachers in maintaining their wellbeing. Most beginning teachers only came to realise the importance of this towards the end of the semester.

Future research

From the findings of our research, we have identified a number of future research questions.

- Do the drivers of turnover intentions identified translate to beginning teacher turnover?
- How does mentoring influence beginning teacher performance?
- Does mentoring have positive impacts for mentors?
- Are trend declines in wellbeing an early indicator of teacher burnout?
- Are their differences between metropolitan and regional schools or public and private schools?
- Can training enhance recovery and improve teacher wellbeing?

Using the now successfully demonstrated methods and analytics in the current study, we expect that future research addressing these topics will lead to benefits for policy makers, schools and individual teachers.
Main Report

Background

It is estimated that between 8% and 50% of beginning teachers in Queensland leave the profession in the first five years\(^1\). National workforce data indicate that heavy workload is cited as one of the most common reasons for an individual’s choice in leaving\(^2\). Supporting this, a previous study in Queensland schools identified that approximately 24% of teachers were simultaneously burned-out and engaged\(^3\). Our pilot data also indicated that in Queensland, 36% of teachers who responded were thinking about leaving the profession, and an additional 25% were actively searching for alternative employment.

To address these issues, the Australian Institute for Teaching and School Leadership recommended that all beginning teachers receive mentoring within the first two years of teaching. In 2016, the Queensland Department of Education instituted a mentoring program for all beginning teachers on a permanent or long-term contract. Likewise, many non-state schools have implemented mentoring programs of their own.

Within this context, Griffith University applied for a Queensland Government Education Horizon research grant to investigate the issues of a) beginning teacher wellbeing and turnover intentions and b) the influence of mentoring on wellbeing. This report outlines the results of a mixed methods evaluation of beginning teacher wellbeing and mentoring with rigorous longitudinal multi-source design.

- **Study 1** refers to a quantitative intensive longitudinal survey of a cohort of beginning teachers to monitor the influence of mentoring and other key factors on beginning teacher wellbeing across the first two terms.

- **Study 2** refers to a multi-source qualitative study of a set of beginning teachers and their mentors at three points throughout the first semester. It aims to provide an in-depth and detailed exploration of known issues for beginning teachers, including why beginning teachers leave, the demands facing beginning teachers, what beginning teachers do to cope with these demands and how the school system supports beginning teachers.
Conclusions and Implications

For policy makers

Our research indicates that early in their career, a substantial proportion (28%) of beginning teachers consider or are actively seeking alternative employment. Our detailed qualitative investigation revealed that turnover intentions are based on the balance between: (1) the demands and pressures placed upon them, (2) the support they receive to meet these demands and pressures, and (3) the extent to which they have the opportunity to obtain the intrinsic rewards they seek from teaching. Initiatives to reduce turnover amongst beginning teachers will likely need to address this balance. In particular:

Beginning teacher mentoring programs
A quality mentoring program can reduce turnover intentions. There are many examples of the current beginning teachers mentoring program in Queensland achieving this goal. The effects of such a program, however, relies on mentors and beginning teachers developing effective working partnerships over a longer-term period (i.e., greater than 6-months). Our research suggests initiatives that increase the quality of the mentoring relationships formed will increase the effectiveness of the mentoring program overall.

Improving beginning teacher recovery experiences
Our final implication for policy makers is regarding effective recovery. Our research indicates that beginning teachers may benefit from initiatives that encourage them to maximise the recovery experiences during non-work times. Regularly mentally detaching from work and participating in fulfilling activities that are not work-related (e.g., sports or hobbies) can have substantial benefits for beginning teachers’ work-related wellbeing. Furthermore, effective recovery can reduce symptoms of cognitive fatigue at work and improve beginning teachers’ sense of physical health.

For school leadership

Mentoring
Our research indicates that mentoring is an effective strategy that can help schools to retain beginning teachers. Schools can expect, however, to not immediately realise the benefits. We found that the benefits of mentoring accumulate over the longer-term (i.e., more than 6-months) and help beginning teachers to maintain their enthusiasm. The key to effective mentoring is the development of a quality partnership between the mentor and beginning teacher. The longer-term differences for beginning teachers with this quality partnership are substantial and likely long-lasting.

Beginning teacher workload and developing a supportive culture
Our research also identifies that careful consideration should be taken over the job demands of beginning teachers. Many teachers and mentors reported schools underestimating the substantial effort required by beginning teachers in learning their craft. Strategies such as minimising extra-curricular requirements and reduced teaching loads may be effective in supporting beginning teachers to spend enough time developing their skills. Beyond this, promoting a school culture in which staff provide support is also critical in retaining effective beginning teachers.
For beginning teachers

Seek support to manage heavy workloads
Many of the implications of our research reflect aspects out of the immediate control of beginning teachers. This next set of implications identifies how our research can inform individual beginning teachers to maintain their work-related wellbeing. Our research indicates that beginning teachers should expect their transition into teaching to be highly demanding, with significant time and effort required outside of school hours. Seeking and developing a quality partnership with mentors, and seeking the support of willing colleagues is essential to meet these demands.

Prioritise recovery experiences during non-work time
Without negating the need for support for beginning teachers, our research indicates that beginning teachers should seek to prioritise recovery experiences early in the first semester. Managing their own work-related wellbeing, cognitive fatigue and sense of physical health will require dedicated effort during non-work time to mentally separate themselves from teaching. There are also substantial health and work-related benefits for a beginning teacher regularly making the time for non-work-related activities that generate a sense of success or achievement (e.g., hobbies, sport).
Research Methods

The quantitative component of this study involved an intensive longitudinal design. Recent advancements in technology for data collection and predictive multi-level analytics have made monitoring participants’ wellbeing over time a viable method. Previous studies have largely focused on simple cross-sectional surveys. These are limited in that they only capture differences between participants at a single point in time. Yet teachers report that there are substantial ‘ups and downs’ throughout the school year. This rigorous approach allows for more complex and comprehensive predictive modelling of participants’ experiences. Week-to-week fluctuations can be accounted and controlled for to reveal underlying long-term trends and differences in beginning teacher wellbeing.

One-hundred and five beginning teachers consented to be monitored weekly across a 19-week period, spanning from Week 4 of Term 1, 2017 through to Week 10 of Term 2, 2017. Participants were signalled at the end of each week and invited to participate in a short ‘pulse survey.’ Valid and reliable instruments were used to measure the constructs, including:

- **Key Outcomes** such as work-related subjective wellbeing, physical health, and cognitive fatigue
- **Job demands** such as emotional, intellectual and physical demands at work
- **Job resources** such as collegial support and time to reflect
- **Mentoring** quality and quantity for those with mentors
- **Recovery experiences** after work, weekends and school holidays
- **Turnover intentions** measured during the Term 2 – Term 3 school holidays.

![Diagram]

The final sample of participants consisted of a mixture of primary, secondary and special school beginning teachers from a range of backgrounds. The majority of beginning teachers were female and employed within the state-school system. Participants were employed in a mixture of metropolitan and regional schools of different sizes. Due to the recruitment approach, beginning teachers in this study were more likely to be on longer term or permanent contracts.

* All instruments were subjected to a further multi-level confirmatory factor analysis to test the validity and reliability of the construct measurement. Technical notes and results of this psychometric analysis are available from the corresponding author.
The qualitative component of this research used a rigorous and comprehensive multi-source longitudinal design. Data was collected using semi-structured interviews from mentors and beginning teachers in the first term, Term 1 – 2 school holidays, and Term 2 – 3 school holidays. A purposeful sampling technique was used to ensure that there was a diversity of viewpoints and experiences from the mentor and beginning teacher pairs. The advantages of the overall approach include:

- **Multiple sources** (beginning teachers and mentors) ensures that the analysis can consider the experience of those starting teaching and can combine this with mentors that have a greater understanding of the context, profession and expectations.
- **Dyadic (paired) design** allows for an exploration of the similarities and differences in perspectives between beginning teachers and their mentors and the consequences of any differences. It also increases the rigour of conclusions drawn.
- **Broad sampling** ranging from small regional schools to large elite private institutions ensures that the study can capture the similarities and differences in the experience of beginning teachers and mentors in a variety of settings.
- **Multiple interviews** increase the depth and breadth of the data, whilst also allowing for increased rigour. Unanticipated themes or issues raised in earlier interviews can be included in subsequent interview schedules to determine whether it is relevant in all contexts.
- **Interview techniques** such as confirming summaries were employed which improves rigour and increases confidence in the data provided.

Twenty-five participants (14 beginning teachers, 11 mentors) were interested in participating in three concurrent interviews (early in term 1, mid-semester school holidays, and after term 2) of which 23 (12 beginning teachers, 11 mentors) completed the interviews.

**Analysis**

The following section reports the results of the analyses of the two studies. A strength of this research project is that the qualitative and quantitative components are complimentary. Results for each study as they relate to each topic are therefore presented in conjunction.

Study 1 was analysed using longitudinal multi-level modelling and multi-level mediation analyses. These techniques are a sophisticated set of predictive analytic techniques that allow for the exploration of transient, cumulative and indirect effects within the data. This analytic method has two principal advantages. First being able to find effects not readily observable with the research methods typically employed. Second, providing more nuanced and detailed conclusions than is readily available with the “dashboard metric” approaches typically used with survey methodology.

Study 2 was analysed using thematic analysis\(^5\). The 72-hours of recorded interviews were transcribed verbatim and each phrase or sentence coded to ensure no information was lost. The generated codes were then analysed to generate key themes and form conclusions for the results. This analytic method has two principal advantages. First the comprehensive and detailed coding ensures both manifest and underlying themes in participants responses are captured and reported. Second, the multi-source multi-wave interviews allows for comparisons of responses and increases the accuracy and reliability of the conclusions.

Results

Section 1: Why beginning teachers leave

Our first research question for this study was to understand why beginning teachers leave. In our third set of interviews (mid-2017) with a diverse group of beginning teachers and their mentors, we probed this topic in detail. Results of the thematic analysis are:

Beginning teachers’ turnover intentions are based on a rational calculation: Do the rewards balance the demands? The role of a beginning teacher is both very challenging (or stressful) and rewarding. Both beginning teachers and mentors described that beginning teachers stay because of the intrinsic rewards. The workload, however, is described as intense and beginning teachers leave because they do not feel appropriately supported to manage this workload. Whether a beginning teacher feels these are balanced is key to understanding beginning teacher turnover intentions. When facing consistently high demands, beginning teachers need to feel that their efforts are worthwhile.

Beginning teachers leave when they are not supported to meet the demands of teaching. Both mentors and beginning teachers were clear that a lack of support to meet the high demands on beginning teachers was a determinant of beginning teachers leaving. Despite their own schooling experience and placements during the initial teacher education, many of the beginning teachers described experiencing shock and surprise at the composition of the demands of their new vocation.

Turning specifically to the demands–rewards balance we identified as critical to turnover intentions, beginning teachers had unrealistic expectations regarding the proportion of time they would spend teaching. Teachers spent less time connecting with and educating students than they expected. On the other hand, they spent much more time on administrative tasks such as collecting and analysing data, entering records into administrative systems, keeping in regular communication with parents, etc.

One beginning teacher felt that administrative tasks were such a large component of their role that they remarked: “Teaching gets in the way of my real job.” Mentors indicated they believed this phenomenon has been relatively recent and that it was a core explanation for the high levels of turnover amongst beginning teachers. They remarked “I think because if it was just walking into a classroom and spending time with kids and teaching them what you know about your particular subject then I think it will be quite an enjoyable job and a rewarding job”.

The intrinsic rewards encourage beginning teachers to stay. Our analysis indicates that teachers regard the most meaningful and rewarding aspect of teaching to be seeing the difference they are making for students. Beyond this core intrinsic reward, we also find that working with like-minded colleagues, working in a dynamic workplace (i.e., the potential for constant learning, growth and the experience of diversity) is something beginning teachers find rewarding.

The intrinsic rewards of teaching may be more important for beginning teachers’ turnover intentions. We asked the mentors to comment on whether their beginning teacher mentee has experienced the intrinsic rewards of teaching in their role. Whilst some did, others did not. In part this may explain early career turnover intentions. One teacher described that whereas more experienced teachers have memories of the meaningful impacts they have made to draw upon during difficult times, many beginning teachers do not—leading them to question whether their efforts were worth it.
To what extent do beginning teachers consider leaving during their first semester? To investigate this question, we turn to the quantitative predictive modelling. We measured beginning teacher turnover intentions during the mid-year school holidays (approximately 6-months after participants starting teaching). It is important to note that:

- Turnover intentions do not always result in voluntary turnover.
- Turnover intentions, however, are a strong driver that does increase the likelihood of voluntary turnover, and this likelihood increases the longer the turnover intentions are held⁶.

Our results indicate that a substantial proportion of beginning teachers have high turnover intentions after 6 months of teaching. Turnover intentions were measured with a valid and reliable instrument used in our previous research. We conducted a latent class analysis, identifying that with respect to turnover intentions, there were three groups (or segments) of beginning teachers at the 6-month point. The majority of beginning teachers reported low turnover intentions but a substantial proportion had high turnover intentions at 6-months⁷.

- Beginning teachers who reported no thoughts or intentions of leaving (72%)
- Beginning teachers who reported frequently thinking about leaving (16%)
- Beginning teachers who reported actively seeking alternative employment (12%)

Supporting the qualitative evidence, we monitored two principal means of support provided to beginning teachers to meet their demands: the support of colleagues, and having time to reflect and problem solve. Our analysis indicates that in the first semester, those beginning teachers that reported having a collegial and supportive environment, combined with regular time at work to plan, reflect and problem solve (e.g., during spares) were less likely to report thinking about leaving or actively seeking alternative employment. Results of our model⁸ indicated that:

- A moderate effect of a beginning teacher’s ratings of the collegial and supportive environment of the school in the first semester with lower turnover intentions at approximately 6-months
- Some evidence that those regularly reporting having more time to plan and problem solve at work (e.g., those on reduced teaching loads and more spares) in the first semester had lower turnover intentions at approximately 6-months

In addition to these factors, we identified that beginning teacher work-related hedonic wellbeing was an important predictor of turnover intentions. More specifically, those beginning teachers who maintained higher enthusiasm and experienced less stress and anxiety over the semester were less likely to report thinking about leaving or actively seeking alternative employment at 6-months. Our analysis indicates that:

- Beginning teachers who had a greater trend decline in excitement and enthusiasm over the semester were more likely to have higher turnover intentions than those that maintained their trend enthusiasm (p <.01).
- Beginning teachers that experienced generally higher stress and anxiety on average over the preceding semester were more likely to want to leave after 6-months (p <.01).
- The influence of these wellbeing factors was over and above the influence of having a collegial and supportive environment and time to plan and reflect.


⁷ Note. The nature of our participant recruitment does not allow us to draw conclusions regarding whether the proportion of teachers in each group are representative of beginning teachers. We note, however that these results are consistent with other research.

⁸ The technical components of full statistical model is beyond the scope of the current report. A summary of the key interpretations is provided. The models are available from the authors upon request and are currently being prepared for publication in international peer reviewed outlets.
Section 2: Mentoring Beginning Teachers

An additional job resource provided by many schools was the allocation of an experienced mentor teacher to support the beginning teacher. We examined whether this mentoring program improved beginning teacher wellbeing and reduced turnover intentions within early-career teachers. To explore this, our analysis examined:

- The number of times a beginning teacher met with their mentor over the semester.
- A measure of the quality of the working relationship between mentor and beginning teacher.
- Differences in beginning teacher’s trend enthusiasm over the first semester.
- Turnover intentions after Term 2—approximately 6-months into the teacher’s career.

**Mentoring and beginning teacher turnover.** We conclude that mentoring reduces beginning teacher turnover. A strength of our intensive longitudinal design is that we are able to detect effects not readily apparent with normal survey methods. Our analysis identified that mentors did not have a direct influence on whether a beginning teacher intended to stay or leave, but rather had an indirect influence on beginning teacher’s turnover intentions. Results of our analysis indicate that:

- **Quality mentoring prevents a loss of enthusiasm.** Overall, most beginning teachers reported a trend decline in their enthusiasm over the semester, however there were differences between beginning teachers in the rate of this decline. Those beginning teachers that rated a higher quality mentoring relationship maintained higher enthusiasm over the semester (a buffering effect of mentoring), whereas those with a poor-quality mentoring relationship experienced a more rapid decline in their enthusiasm at work.

- **Quality mentoring has small but cumulative effects.** Week-by-week the influence of mentoring was small but accumulated over time. By the end of the first semester, the differences in enthusiasm between those with quality mentoring and those with lower quality mentoring were more marked.

- **Quality mentoring’s effects on enthusiasm translate to reduced turnover intentions.** Mentoring was found to have an indirect influence on beginning teacher’s turnover intentions. Whilst no direct effect of mentoring was observed on turnover intentions, those that reported higher quality mentoring maintained enthusiasm over the semester, and subsequently had lower turnover intentions at the end of Term 2. Likewise, those that reported a lower quality mentoring relationship reported a more rapid decline in their enthusiasm at work, and subsequently reported greater intention to leave after Term 2.

Our interviews shed further light on how this indirect effect occurs. When describing why beginning teachers leave, none reported having a quality mentor in and of itself as a reason for staying. Rather beginning teachers described the support mentors provide. We asked mentors to describe how they support beginning teachers. Some made a conscious effort to facilitate the process of beginning teachers experiencing the rewards of teaching, and this was strongly endorsed as beneficial by the beginning teacher they mentored. For example:

- One mentor regularly focused on noticing the small positive gains the beginning teachers made. They remarked on the immediate and visible effects of doing this observing that,

  “Even in [giving] a passing comment, like ‘well done, how you got those kids into the room - they were nice and settled’, [I could see the beginning teacher] ‘stand a bit taller’.”

---

9 Research typically examine direct influences (i.e., how do mentors directly influence whether beginning teachers feel the rewards and demands balance), and in doing so will likely miss the indirect influences of mentoring on turnover intentions.
Like many mentors, one mentor regularly observed their beginning teacher’s lessons. A key priority for this mentor, however, was to initially (i.e., first few weeks), only provide positive and encouraging feedback. They explained that from their experience of having another beginning teacher leave, they learned it was important for a beginning teacher to feel that their teaching is effective from very early on.

Other strategies adopted include mentors showcasing their beginning teacher’s successes to other colleagues and administration, mentors encouraging beginning teachers to acknowledge and celebrate their small wins, and mentors sharing their own stories about their early career.

The extent to which these types of supports were provided, however varied. To this point, our analysis has alluded to the requirement for mentoring to be of a high quality to have a certain effect. Using our quantitative data, we examined whether the quality of the working relationship between the mentor was significant. Furthermore, we incorporated a quantity measure of mentoring, to determine whether initiatives to increase the interaction between mentors and beginning teachers would have positive benefits. The key conclusions from our analysis are:

- The quality of the working relationship between the beginning teacher and mentor was the most important factor. Regardless of the frequency of meeting, a quality working relationship between mentor and beginning teacher had positive effects.
- Further, the quantity of meetings had no effect on either beginning teacher enthusiasm, sense of dejection, sense of calm, anxiety, or turnover intentions.

Of note, however, is that the qualitative analyses revealed that somewhat regular contact or the mentor being accessible for ‘needs-based’ support is required for the relationship to develop to a point where it is considered positive by the beginning teacher.

“Over six months I have only met them 10 times and then I see them at a staff meeting every fortnight, we are sitting across the room, I don’t get to speak to them, so definitely it impacts on the ability to build a relationship...I still see them as an acquaintance. I would not go to them if I was having a bad day or something like that at school, I would go to people I am close with rather than them”.

Some beginning teachers who experienced a mentoring relationship that did not have the opportunity to develop due to lack of contact also described feeling less supported overall, and unless experiencing the rewards of teaching was supported in other ways, they also tended to describe that they did not feel their efforts were worthwhile.

“I think that generally teachers feel underappreciated and that they are not recognised as professionals and that their job is not important, but it is one of the most important jobs and nobody really sees it as that in society unless you actually are a teacher, it is a thankless job, even if you are doing a really important one”.
Section 3: Work-related wellbeing

The third aim of this research project was to examine beginning teacher wellbeing over the first semester.

We asked both beginning teachers and their mentors to describe their work-related wellbeing over the semester. Beginning teachers experienced high levels of stress and many felt overwhelmed. They reported reduced psychological wellbeing, an inability to stop thinking about work, and exhaustion from long hours. Second-career beginning teachers helped to put these experiences into the context of the general workforce:

“I’ve had plenty of other jobs in plenty of other [high stress] industries and I’ve never felt quite as overwhelmed as I have as a teacher”.

Additional symptoms of stress reported included increased illnesses, headaches/migraines, grinding/clenching teeth causing pain, sleep disturbance and lethargy, acne, mouth ulcers, and gastrointestinal symptoms. Behavioural consequences that influence health were also described including: reduced exercise, poor diet, alcohol consumption, and postponing care of physical health until school holidays.

“I do get sick a lot quicker I have found, just because I am not looking after myself when I am stressed or trying to complete something for the class”.

With the scope of the demands and less opportunities than anticipated to experience the intrinsic rewards of the job, it is logical that some beginning teachers may begin to consider turnover early in their career. However, the provision of adequate resources and support for beginning teachers in learning the job and navigating these demands can help to mitigate their impact on wellbeing and can assist beginning teachers in experiencing these intrinsic rewards. Resources described as valuable by beginning teachers included: a collegial and supportive school environment, feeling supported by the school leadership team, time for lesson planning, and reflecting and improving their teaching in working hours.

A limitation of many studies investigating wellbeing is that many aspects of the workplace lead to transient fluctuations in wellbeing (e.g., changes from week-to-week) and longer-term impacts. The intensive longitudinal method study was used to overcome this limitation by monitoring participants wellbeing levels over the first semester. We monitored beginning teachers’ work-related hedonic wellbeing every week for 18 weeks. Results of our analysis identified that:

- The first semester of a beginning teacher’s career was characterised with a mix of high levels of anxiety and enthusiasm, some dejection, and relatively lower levels of feeling calm and at ease.
- Beginning teachers experienced significant ‘ups and downs’ in their wellbeing across the semester.

Combining our intensive longitudinal method with our predictive analytic techniques, we were able to reveal the underlying trends in beginning teachers’ wellbeing over the semester (i.e., controlling for the transient fluctuations in wellbeing from week-to-week). Our analyses indicate that once transient effects were accounted for we observed clear underlying trends in wellbeing over time for the full cohort of beginning teachers. Specifically:

- There was a trend decline in levels of both dejection and anxiety within the cohort over the semester
- There was also a trend decline in enthusiasm within the cohort over the semester.
- Some evidence of a small positive trend increase in the cohort’s sense of calm over the semester.

Despite clear cohort effects, it is important to note that there were also differences between beginning teachers in wellbeing. Specifically:

- Some beginning teachers reported higher average hedonic wellbeing over the semester than others.
Likewise, some reported more rapid trend increases and trend decreases in hedonic wellbeing than other beginning teachers over the semester.

The identification of both transient fluctuations in wellbeing from week-to-week and underlying trends over time presents three further questions:

1. What reduces beginning teacher wellbeing?
2. What increases beginning teacher wellbeing?
3. What are the long-term outcomes of this trend?

We did not collect data beyond the second semester, and so the final question is beyond the scope of the current project (see Further Research – Are trend declines in wellbeing an early indicator of teacher burnout?). The following sections however, address how job demands and job resources influence beginning teacher wellbeing.

Job Demands

Over the course of the study, beginning teachers reported working 30–83 hours per week, an average of 50.23 hours. The long hours and intensity of the workload was described in detail by many beginning teachers in our qualitative study. The qualitative interviews indicated that beginning teachers often experience all of the demands of more experienced teachers, while simultaneously navigating a range of additional demands unique to beginning teachers.

Most beginning teachers reported being expected to teach at the same level as more experienced teachers. As with all teachers, beginning teachers were required to:

- Plan and prepare lessons and participate in face-to-face teaching (with only some on reduced teaching loads), and marking.
- Manage student behaviour.
- Non-teaching tasks such as meetings and yard duties.
- Administration and reporting.
- Extracurricular activities (although in some cases there was a greater expectation on experienced teachers).
- Professional development.
- Supporting students/pastoral care.

We queried this with the mentors and many confirmed that the only tasks that beginning teachers were not required to do in their first semester were to supervise pre-service teachers, mentor other beginning teachers, and engage in leadership roles (e.g., HOD, unit/assessment leaders, year level coordinators).

In addition to the typical role of a teacher, there were substantial additional demands placed upon beginning teachers. Significant additional time and effort was required of beginning teachers simply because they were new to the profession and their job. This included:

- Professional development, such as learning and refining their classroom and behaviour management skills, meeting provisional registration requirements, and developing their general professional skills (e.g., learning to prioritise demands).
- Identifying, developing, testing and revising a range of strategies for managing student behaviour.
- Learning how to complete the administrative component of their role, such as learning department and school administrative processes, systems and tasks (in addition to actually doing these administrative tasks).
- Creating resources (e.g., unit plans, worksheets, assessments) and learning content (particularly when teaching out of area).
- Building relationships with students, colleagues, parents, and more broadly building their reputation as a teacher within the school.
Additional pressures arising from insecure employment. For example, in some cases, beginning teachers dedicated substantial time to extracurricular activities—either as an expectation at the school, or as a means of trying to increase the chance of their contract being extended or probation satisfied.

A small number of mentors also indicated that beginning teachers are often given more difficult classes at their schools because more experienced teachers prefer not to teach them.

Furthermore, many mentors remarked that much of this additional work is generally not formally recognised and taken into account when determining the beginning teachers’ workload (particularly for those schools who place beginning teachers on full face-to-face teaching loads).

Job Resources

Whilst all beginning teachers reported high job demands, their capacity to deal with these demands varied. Much of this was due to types of job resources available to support beginning teachers in meeting these job demands. Results of our qualitative interviews identified that the key job resources reported by beginning teachers include:

A collegial and supportive school environment, which was valued by the beginning teachers who experienced it.

“I have a couple of colleagues in the office that I definitely feel they are on the same page as me, very supportive in terms of, I can ask them anything and they will help me out and they have similar values and beliefs”.

The collegial environment was either a factor of the school culture as a whole, or was facilitated by mentors, line managers, or collaborative beginning teacher programs. Specifically, some mentors or line managers made an effort to connect beginning teachers with colleagues who can further support them, and some beginning teachers found working collaboratively with other beginning teachers and members of the leadership team at regular beginning teacher meetings to be useful. The few beginning teachers who indicated a lack of positive or collegial environment indicated that this had negative consequences for them.

Feeling supported by the school leadership team, which was particularly positive for beginning teachers that experienced it. For example, a beginning teacher described: “It has been a very positive experience, much better than what I would’ve thought….I was expecting to go into a school and maybe meet the principal a few times but not to actually have the principal and deputy always there, a phone call away, ready to assist or observe. I thought I would be more on my own, but it has actually been really helpful having them there.”

Time for lesson planning and administration in school hours was also valued by beginning teachers who had a reduced workload. Beginning teachers who were aware of other teachers afforded this support indicated the value it would have for them. Mentors of beginning teachers not afforded a reduced workload commonly presented a case for why this would be beneficial,

“I wish she had a lighter load, as a first-year teacher I think it is a big task giving them a full-time load and I think that she would feel more confident about dealing with lots of things if she had more time to properly process stuff”.

“Beginning teachers need to be observed and to observe more teaching”. Time for reflecting and upon improving teaching emerged as important and desired in descriptions from both beginning teachers and mentors. As one beginning teacher who had little time to reflect given a heavy administrative workload, reflected:

“I know I am not a great teacher, I know I can be, but right now I am not a great teacher. I’m still learning and tweaking, and I do not have enough time in my opinion to make as good lessons as I am capable of, because I spend so much time doing everything else. So, I am less likely to see the rewards of teaching because I am not quite good at it yet”.

---

17 | Page
The influence of job demands and job resources on beginning teacher wellbeing

In our quantitative study, we monitored beginning teachers’ job demands, such as having difficult interactions, complex tasks and/or standing up all day and job resources, having supportive colleagues and having time to plan and think.

We conclude that job demands and job resources have an important influence on beginning teacher wellbeing. Our analysis indicated that increases or decreases in job demands and job resources from week-to-week influenced the transient changes in wellbeing (i.e., the ups and downs) experienced by beginning teachers. Furthermore, the influence of job demands and job resources, also leads to long term differences in beginning teacher wellbeing.

- Higher job demands reduces wellbeing.
- Higher job resources increase wellbeing.

Of note is that our analysis identified that these two factors were not mutually exclusive. Accounting for the transient changes in job demands, job resources, and wellbeing, we observed that beginning teachers at schools with higher job demands overall had lower overall wellbeing during the semester. Beginning teachers at schools with a more supportive and collegial environment, however, were observed to have higher wellbeing over the semester.
Section 4: Recreation activities and wellbeing

This final section of the results examines beginning teacher’s use of recovery strategies to maintain their own wellbeing. Whereas Section 1-3 have principally focused on the influence of the job design, school culture and mentors influence on beginning teacher’s wellbeing, this section examines how effective use of non-work time can positively influence a beginning teachers’ experience of the first semester.

The effective use of weekends, evenings and school holidays (termed non-work time) are a key contributor to health and wellbeing. The interviews revealed that all mentors recognised the importance of taking time out to recover and detach from work. We also observed that over the course of the semester, beginning teachers gradually developed a recognition that it was important to prioritise taking time out for recovery. Reflecting on their experience so far, a beginning teacher described:

“I have also learned the importance of separating work and home life so I no longer bring the work at home with me. I try to leave everything at school. If that means staying back late then so be it, but once I get home I know that I can just tune out and not have to focus on anything school-related”.

To examine the use of recovery strategies during non-work time and their effects on work-related wellbeing our quantitative analysis focuses on the following concepts – measured on a weekly basis:

- Four recovery experiences – psychologically detaching from work, relaxing after work, participating in activities (e.g., sports or hobbies), and having control over how one uses their non-work time,
- Work-related hedonic wellbeing,
- Work-related cognitive fatigue – the extent to which a beginning teacher experiences lapses of attention and absent mindedness at work,
- Subjective physical health – the extent to which a beginning teacher feels physically healthy and well.

As per the previous analyses we accounted for the week-to-week fluctuations in health, fatigue and wellbeing to reveal the underlying absolute differences and trends in these variables over the semester. In addition, we examined the influence of the school holidays on work-related wellbeing, work-related cognitive fatigue and subjective physical health.

Winding down from work: psychological detachment and relaxation

The capacity for teachers to bring work home means that in addition to physically leaving work, it is important for teachers to psychologically detach from work. Beyond this, actively trying to relax after work and during weekends was also expected to have positive effects on health and wellbeing. Many beginning teachers’ found detachment was challenging to attain and that they were unable or rarely able to stop thinking about teaching.

“I am always checking my emails to make sure I have not missed anything from students or parents or staff, and I am always planning for the next day in my head and thinking what happened that day, I am never ‘not thinking’ about school”.

We conclude that psychological detachment and active relaxation is an effective short-term strategy for beginning teachers to manage their work-related wellbeing, physical health and work-related cognitive fatigue. Our quantitative study monitored beginning teacher recovery experiences, health and wellbeing weekly over their first semester. Results indicate that beginning teachers can expect to experience “ups and downs” from week to week in their wellbeing, cognitive fatigue and physical health. Psychologically detaching from their work and relaxing are effective at managing these fluctuations. Specifically:

- We identified that in those weeks in which they thought less about work during non-work time, beginning teacher’s felt more calm and content, less stressed and anxious, and experienced lower cognitive fatigue.
• Similarly, in those weeks in which a beginning teacher actively relaxed during non-work time, they felt more 
enthusiastic, more calm and content, less stressed and anxious, experienced less cognitive fatigue and felt a 
greater sense of physical health that week.

From a long-term perspective, we conclude that regular psychological detachment during non-work time had positive 
cumulative benefits for beginning teacher’s underlying cognitive fatigue levels. Accounting for the week-to-week 
fluctuations, our analysis identified that:

• Regular psychological detachment from work was associated with a greater sense of calm overall throughout 
the semester, and having a greater sense of physical health.
• There was a cumulative benefit in frequent psychological detachment, buffering the increase in cognitive 
fatigue symptoms that many beginning teachers experienced over the semester.

Non-work recreation time: the effects of mastery experiences and a sense of control

Whether an individual has autonomy to determine how they use their non-work time, and the activities that they 
choose to engage are important determinants of health and wellbeing. We identified that mastery experiences such as 
pursuing activities that give them a sense of achievement and satisfaction (e.g., team sports, hobbies) and having a 
sense of control over one’s non-work life had long term positive effects on beginning teacher’s health, work-related 
wellbeing, and cognitive fatigue.

Our qualitative interviews recorded a number of examples of mastery activities engaged in by beginning teachers. 
They described enjoying a range of activities such as spending time with friends and family, streaming movies and 
television shows, exercise, team sports, reading books.

In our quantitative analysis, we found that participating in mastery activities, and having a sense of control over non-
work time has positive short term effects on beginning teachers work-related wellbeing, physical health and cognitive 
fatigue. Specific results include:

• In those weeks in which beginning teachers reported participating in more mastery experiences during their 
non-work time they also reported in that week: more enthusiasm, a greater sense of calm, reduced feelings 
of anxiety, less dejection, reduced symptoms of cognitive fatigue, and a greater sense of physical health.
• In those weeks in which beginning teachers reported more control over how they spent their non-work time – they also reported more enthusiasm about work, fewer symptoms of cognitive fatigue, and a greater sense of physical health.

From a longer-term perspective, we conclude that beginning teachers having control over how they spend their non-
work time, and participating in mastery experiences can improve work-related wellbeing, and reduce cognitive fatigue 
symptoms.

• Beginning teachers that reported having an overall greater sense of control over how they spend their non-
work time over the semester reported lower overall negative work-related wellbeing.
• Beginning teachers that reported participating more regularly in mastery activities (e.g., sports, hobbies) 
during non-work time reported greater positive work-related wellbeing.
We did identify an important caveat however. Whilst mastery experiences do result in an overall lower level of cognitive fatigue symptoms, over time high levels of mastery experiences can be fatiguing. Feeling a sense of control over how one uses their non-work time can be an important buffer. For most beginning teachers, symptoms of cognitive fatigue increased over the semester, however there were differences in the rate of this increase. Our analysis identified that:

- High levels of mastery experiences during the semester accelerated the increase in cognitive fatigue
- However high levels of control over non-work time had the reverse effect of reducing the trend increase in cognitive fatigue

**Prioritising Recovery**

In our interviews, we asked beginning teachers what advice they would give to the next cohort of beginning teachers. They indicated that recovery was difficult to make time for, but they indicated that recovery was extremely important. They suggested that recognition of its importance was not enough and that they actively needed to take steps to prioritise and make it happen. This included learning to decide on the tasks that need to be completed on a particular day and then being comfortable with then ending work for the day. Some beginning teachers reported that they needed to become strategic about how they recovered from work (particularly with making time for mastery experiences). For example:

“Coming home I would [normally] be straight into the night chores, making dinner, do laundry, and then work and all of that. [Now] instead I come home, put down my things, and my kids and I would go outside, ride bikes, play handball... Now I have more strategies that include my kids [and help us] all wind down at the end of the day before we move on, so that has helped”

At the end of the semester, while recognising the importance of recovery, some beginning teachers still described that they were having difficulty maintaining regular recovery activities.
Further Research

Through this research, we have generated further questions and research directions that build upon the results of this study. Future research questions that could be addressed include:

Do the drivers of turnover intentions translate to actual turnover?

Our research identified that job demands, job resources, work-related wellbeing and mentoring all had effects on subsequent turnover intentions after 6-months. Can these factors be used to develop a predictive model of the risk of beginning teachers leaving a school or the profession? Techniques such as survival analysis can be combined with our intensive longitudinal method to model the key risk factors of beginning teacher turnover. Such research could further workforce planning and policy shifts to reduce the high levels of turnover amongst beginning teachers.

How does mentoring influence beginning teacher performance?

The focus of this current study was on the effects of mentors on beginning teachers’ work-related wellbeing. The role of teacher performance in beginning teacher wellbeing and turnover intentions, and the ease and effectiveness of mentoring however was a core theme that emerged from the interviews. Research into this area could inform mentor training and effectiveness of beginning teachers.

Does mentoring have positive impacts for mentors?

Our research investigated the effects of mentoring on the beginning teachers as recipients. However emerging research indicates that mentoring can have positive effects on work-related wellbeing, performance, turnover and leadership capacity of the mentors themselves. There was certainly some indication of this within our qualitative study. Research into this area could reveal further benefits of a mentoring program for the profession.

Are trend declines in wellbeing an early indicator of burnout?

Our research identified that levels of both positive and negative emotions had had an underlying negative trend – beginning teachers reported feeling less emotions as the semester occurred. Emotional exhaustion is a key component of burnout—a primary issue for the teaching profession. Using this new intensive longitudinal approach, we believe it would be of interest to determine whether these underlying trajectories predict subsequent burnout. Such research could provide lead indicators for employee burnout, the development of risk models, and identification of mechanisms for preventative action.

Are their differences between metropolitan and regional schools?

The qualitative interviews identified that there were substantial differences between schools whose student bodies had different socioeconomic backgrounds. Beyond this, we also identified differences in the size and experience of workforces in regional vs. metropolitan areas and public vs. private schools. Our current study did not have enough participants from different areas to make valid comparisons, however future larger scale studies that included more regional and remote teachers may help to identify any differences in the needs of teachers in these contexts.

Can training enhance recovery and improve teacher wellbeing?

Our study clearly identified that early and regular recovery experiences during non-work times had substantial influences on work-related outcomes. In addition, almost all of the beginning teachers in our interviews came to recognise and prioritise the importance of recovery experiences towards the end of term 2. Future research could look to run simple training programs to persuade beginning teachers to prioritise recovery earlier in their first year – which would help to prevent the substantial reduction in work-related wellbeing over the term.