A systematic review of literature on teacher attrition and school-related factors that affect it

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Abstract

The retention of teachers is one of the key challenges currently facing schools today. The imperative to bring more teachers into the profession and keep them there has never been more urgent. With Government interventions in England mainly concentrated on the recruitment of teachers into the state sector, little consideration has been given to the scale of teachers leaving or their reasons for doing so. National data masks significant local variations and the overall extent of the attrition problem. Impact from the Retention and Recruitment strategy as a strategic Government driver has yet to be determined. The teacher supply crisis cannot be solved by recruitment drives alone. Reducing teacher attrition could well be the key lever to overcoming the acute recruitment shortage now faced in England. By examining a number of school-related factors, this paper argues that reducing attrition is vital for the sustainability of the teacher workforce, pupil performance and school improvement and the paper concludes by making recommendations for policy makers.

Keywords

Attrition; retention; turnover; workforce; teachers.

Introduction

Retaining teachers is essential for the success and sustainability of schools. Approximately £21 billion is spent each year by state-funded schools in England on teachers (NAO, 2017) and yet schools in the primary (7-11) and secondary sectors (11-18) face acute challenges due to escalating rate of teacher attrition. In this paper I use Kelchtermans' definition of attrition (2017) to mean those teachers who leave teaching for reasons other than retirement. There are well supported arguments for addressing teacher attrition. With rising pupil numbers acute in the secondary sector, shortages in the number of new teachers entering teaching plus insufficient numbers of newly qualified teachers in the system, it is even more important to retain those already in the profession. Increases in teacher numbers in English schools since 2010 have not kept pace with increases in pupil numbers and, as a result, the ratio of pupils to qualified teachers saw an increase from 17.0 in 2013 to 18.7 in 2017 (Sibieta, 2018). The proportion of teachers remaining in teaching in their 50s has decreased markedly from 2010 (Worth et al., 2018) and so keeping good teachers is essential for the stable functioning of schools to maintain a school's culture and learning environment in times of increased performativity (Gallant and Riley, 2017; Towers and Maguire, 2017). Quality teaching is one of the most significant influences on pupil outcomes and schools unable to retain their best teachers are likely to see students' academic results decline (Gallant and Riley, 2017). High teacher turnover in schools is associated with wider disruption through hiring replacements (Atteberry et al., 2016) and increased class sizes (Mocetti, 2012). It has a particularly bad effect on students from disadvantaged backgrounds (Sutton Trust, 2011). There is a negative financial impact on schools through the cost of replacing teachers who leave (Borman and Dowling, 2008). Encouraging more teachers to stay in the profession would not only be more cost effective for schools, but would also strengthen the pool of future teachers entering leadership positions.

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Scale and scope of the issue

Retaining teachers is an international challenge and one that is escalating fast. Empirical studies in the USA (Sutcher *et al.*, 2016); Australia (Buchanan *et al.*, 2018); Canada (Fantilli and McDougall, (2009); Finland (Heikkinen *et al.*, 2012) and Sweden (Linqvist *et al.*, 2014) echo that the issue is not one of recruitment, but of retention.

In England, the numbers of working-age teachers leaving teaching each year have been increasing since 2010. Attrition rates rose from 8 to 9 per cent in primary schools and from 9 to 10 per cent in secondary schools in the period between 2011 and 2017. They rose even faster in this period in special schools, with figures up to 11 per cent. In 2017 the number of teachers leaving the profession was higher than the number entering it for the first time. 400 more full-time teachers left the profession than joined. The number of full-time qualified teachers recorded as leaving the state funded sector for reasons other than retirement was 35,800. This has been an annual increase from 2011 (DfE, 2018a) and higher than the Police and similar to Nursing (Hillary *et al.*, 2018). Stabilising numbers across school phases and types, subjects and diverse geographical areas is complex. The inadequacy of the Teacher Supply Model is obvious. This is the statistical model used by the DfE to estimate the number of trainee teachers required in England in each subject and age phase for one year. The Government accepts they still do not know enough about why so many teachers are leaving before retirement age (NAO, 2017). Scoping studies exploring the drivers behind teacher retention in England have been carried out by the Department for Education (DfE) in a series of commissioned research to identify causes.

Key findings from the analyses are presented below and indicate a range of factors influence the high attrition rates in English schools.

Analysis of teacher supply, retention and mobility (May 2017)	Analysis of school and teacher level factors relating to teacher supply (September 2017)	Analysis of teacher supply, retention and mobility (February 2018)	Analysis of teacher supply, retention and mobility (September 2018)
Teachers with permanent contracts have higher retention rates, both in school and in the system generally	There are a wide range of factors that influence teachers' and schools' decisions relating to teacher supply	70% of teachers were found to stay within commuting distance when changing schools	Approximately 20,000 teachers return to teaching each year, with around 60% having permanent contracts compared to around 95% of the remaining workforce. Returners are also less likely to work full-time
Retention rates increase with age and experience, and are higher outside London and in schools rated 'Good' or 'Outstanding' by Ofsted	The decision to leave teaching is a complex one influenced by numerous factors, but workload and accountability pressure, wanting a change, the school situation	Analysis of teacher supply in relation to the extent of regional ITT provision suggested that in some regions the scale of ITT provision seems lower than demand. Conversely, in some areas the analysis indicated that	Most secondary teachers classed as inactive who return do so within the first few years of leaving (24% of males and 31% of females return within 5 years). the likelihood of returning reduces with each passing year

	and salary	demand appears was	
	considerations are	higher than required	
	important to teachers	to meet local needs	
Deprivation does not seem to be a major driver of in-system retention once other characteristics are controlled for	Workload, government policy and lack of support from leadership were cited as the three main reasons for leaving	to meet local needs	The five year retention rate of female NQTs was 5 percentage points higher than for male NQTs. It was also higher among those under 30
Full-time teachers are less likely to leave the system than part-time teachers, but are more likely to move schools			The overall number of leavers remained stable, but most EBacc subjects had seen an increase in leavers, with the largest increases in Maths and Geography
Holding a more senior post in a school is associated with higher in-system retention			In secondary schools, more teachers left than joined in every subject in 2017, except for Maths and Physics

Figure 1. Department for Education analyses of teacher supply and retention 2010-2017 (Sources: DfE, 2017a, b, c; DfE, 2018 b,c).

Clearly, there are many factors impacting upon teacher retention and it is a complex phenomenon. What is apparent is that common themes occur and re-occur. The issue of retention has been identified since 2010 and known by the Government. It reflects consistency of message, but not consistency of action to address the problem with urgency or commitment. The evidence in Table 1 shows that where there is permanency of contract, there is less mobility and more stability. There is fluctuation in secondary subjects and regional variance across primary and secondary schools and the types of schools. Schools with higher Ofsted ratings retain more teachers and those in more senior positions are retained longer. Early career teachers are the most vulnerable group in the profession and this is supported, and updated by other evidence in the literature.

Early career teachers. Attrition is most acute for teachers in their first five years (Hoigaard et al., 2012; Struyven and Vanthournout, 2014). 20 per cent of new teachers leave within their first 2 years of teaching and 33 per cent leave within their first 5 years in schools in England (Foster, 2019). Around a quarter of newly qualified teachers joining state-funded schools leave in four years (DfE, 2018a). Early career teachers make the decision to leave the profession quickly, typically within three months of when they first consider leaving. By contrast, more experienced teachers are more likely to consider their decision over one to two years (DfE, 2018b). Attrition rates are higher for early career teachers of secondary phase subjects of Maths, Science and Modern Languages (Worth and De Lazzari, 2017). Inexperienced teachers need greater support during the first few years of their career to support their retention (Walker et al., 2019). Early career teachers' sense of self- efficacy is strongly linked to the level of support they receive in school (McIntyre and Hobson, 2016; Spencer et al., 2018). More emotional support is a common reported need and a supportive school culture is critical for their

success and retention in the profession. The Government's Early Career Framework (DfE, 2019b) is a strategic response to meeting the needs of early career teachers and retaining them but its impact on retention is still to be evaluated and determined.

Part-time teachers are more likely to leave the profession than teachers in full-time employment. Retaining such teachers would keep their expertise in the profession and reduce the risk of losing them permanently (Worth *et al.*, 2018). The situation in secondary schools is particularly acute. The leaving rate among part-time teachers in secondary schools (18 per cent in 2016) is considerably higher than among full-time secondary teachers (11 per cent) and is also higher than part-time teachers in primary schools at 14 per cent.

There is an increased trajectory of leavers in all secondary school subjects that adds substantially to the retention figures. Modern Foreign Language (MFL) and science teachers are the most likely to exit, while humanities teachers are the least likely to leave. Multi-academy trusts (MATs) are now an integral feature of England's school landscape. They can, in theory, take a more strategic and flexible approach to recruitment and retention. MATs tend to have a higher than average rate of teachers both leaving the profession and moving school when compared to other schools and reasons suggested for this are stronger models of performance management and school improvement, and the ability to act quickly to remove teachers they identify as underperforming (Worth, 2017). Ofsted rating. The rate leaving the profession is highest in schools rated by the school's inspectorate Ofsted as requiring improvement. Being rated 'Requires Improvement' (RI) appears to have a greater negative association with retention rates (Sims, 2016). Dissatisfied teachers may wish to move to better-performing schools, while leaders of schools that are rated Inadequate will be under pressure to replace poorly performing teachers. Schools in areas of disadvantage and those with a high percentage of minority students face higher levels of teacher attrition (Borman and Dowling 2008; Kooy, 2015; Sellen, 2016).

When teachers leave, where are they going to?

There has been a slight increase in the number of returners to teaching since 2011. Around a third of teachers who leave the teaching profession return over the next five years (Worth *et al.*, 2018). 2015 data showed there were 243,900 qualified teachers aged under 60 who were out of service, but had previously worked as a teacher in the state-sector (DfE, 2017a). Seven per cent of them (17,230) entered teaching as returners in 2016, representing 3.3 per cent of the full-time teacher workforce. Destination statistics show that a reasonable number of teachers who left teaching remain in education. More than half of teachers who leave and do not retire take up a job in the wider education sector (Worth *et al.*, 2015), taking up roles such as education officers or inspectors. Some work in private schools and others take up positions as non-teaching assistants. Almost 3 in 10 leave the UK labour force altogether. Small numbers leave for further study or work abroad and some not in employment leave for caring or maternity reasons.

What is clear from those teachers who return that many retain a deep commitment for the profession after leaving. This then is something of a curate's egg with implications for policy-makers and for school leaders. Teachers stop being teachers not because they want to change direction completely, but because there is something about teaching in particular, that is not sustainable for them. There are inevitable personal factors influencing decisions to leave teaching, like motivation, resilience and family circumstances but these are beyond the scope of this paper. I turn attention now to identify and discuss school characteristics which influence teacher attrition.

School-based factors affecting attrition

Workload

Workload is the crucial factor influencing teachers' decisions to leave the profession and the greatest threat to retention (Worth *et al.*, 2018). An unmanageable workload is the most consistently cited reason teachers give for leaving teaching (DfE, 2018d). Constant changes to curriculum, more time spent on assessment and greater accountability through inspection cycles have steadily increased workload pressures on teachers steadily over years. Addressing the issue of workload is identified as a priority for the Government in the new Recruitment and Retention Strategy (2019a) because of the connection with job satisfaction. A reduction in workload would reduce teachers' average working hours, increase their job satisfaction and improve retention rates (Sims, 2017). It is imperative that the new Strategy tackles this acute issue and results in a reduction in workload for teachers in all age phases.

Teachers in England work longer hours than teachers in most other OECD countries; an average of 48.2 hours per week. Working long hours in teaching is often accepted as normal culture in England: half of full-time teachers work between 40 and 58 hours, and a fifth of teachers report working in excess of 60 hours per week. This is 19 per cent more than in other countries (Sellen, 2016). Teachers who are unable or unwilling to work long hours to keep up with the high workload find their workload becomes unmanageable and are more likely to leave the profession. Indeed, recent research has highlighted that many teachers say that their "level of workload was only manageable because of the long hours that they worked" (DfE, 2018d). The issue, however, is not the number of hours teachers work. The OECD's study in 2013 (Sims, 2017) found that the number of hours worked did not significantly affect job satisfaction, but teachers who reported their workload as 'unmanageable' had lower levels of job satisfaction. How teachers feel about the control they have over their work is critical. Teachers increasingly respond to constant top-down changes and have little control over this situation (Kelchtermans, 2017) which increases stress levels. Sellen (2016) found that teachers who were graded 'Outstanding' and those who felt supported professionally were more likely to feel their workload was under their control and express satisfaction with their job.

Financial compensation

Perhaps unsurprisingly, financial compensation is not the prime reason for leaving teaching. Teachers do not come into teaching for the pay it offers, neither are they entirely motivated by it (Smithers and Robinson, 2003). Anecdotal evidence suggests there are more altruistic reasons for entering and staying in the profession such as making a difference to students' lives. Greater job satisfaction, reduction in working hours and more opportunities for flexible working are more important than money (Bamford and Worth, 2017). In their meta-analysis of the relationship between pay and job satisfaction, Judge *et al.*, (2010) confirm this. Their study found that a sense of worth and professional self-efficacy were more important to teachers than financial reward.

From the figures presented in this paper, it is not unreasonable to assume that teaching may not be an attractive career for many graduates. New graduates can be discouraged from teaching, as their peers may have higher status jobs elsewhere (Childs and Menter, 2013). Compared with other graduate professions, teachers' pay has been steadily declining (Dolton and Tsung-Ping, 2004). Since 2010, the average hourly pay for a teacher has fallen by 15 per cent. Teachers are not paid overtime and are in something of a cleft stick since the Government mandates that teachers will work "such reasonable additional hours as may be necessary to enable the effective discharge of the teacher's professional duties" (DfE 2017d, p.48). Financial recompense is a clear factor in the deterioration in recruitment and retention of teachers (Borman and Dowling 2008; Worth *et al.*, 2015). Uplifts to close pay gaps,

with a priority to support early career teachers in particular, are certain to be welcomed by the profession. Recommendations like those made by the School Teachers' Review Body (2018) continue to support the argument that that a better pay system would help maintain the teacher workforce at all stages.

Working conditions

The working conditions for teachers in schools are associated with high turnover and is supported internationally (Simon and Johnson 2015). Teachers stay in schools they like and where conditions suit them. Under these conditions, schools are supportive and stable places. They are likely to leave where colleagues, including school leaders are less supportive (Brown and Wynn, 2009) and their conditions increase stress levels (Goddard and O'Brien, 2006). Supportive working conditions, effective leadership, opportunities for continued professional development (CPD) and support from experienced mentors can mitigate against teacher attrition. Cultures of mutual trust and respect in strong learning environments are essential for retention (Bryk *et al.*, 2010). Scutt (2019) has recently argued that a positive learning environment is one where there is respect and openness; where there are opportunities for peer collaboration and where teacher evaluation is focused on improving teaching quality. The stresses of teaching are increased considerably in less positive cultures where there is poor pupil behaviour, relationships with colleagues are strained, there is less investment in the development of staff or there is a 'micro-managing' culture.

Teachers need to feel professionally valued in the work and to have professional autonomy. Building recognition for their work and giving them greater autonomy is essential to retain them. Conversely, when teachers do not feel valued, it leads to feelings of disillusionment and dissatisfaction and them leaving the profession (Valtierra and Michalec, 2017). Findings from a large-scale quantitative study on teacher autonomy by Worth and Van den Brande (2020) indicate that autonomy is an important influence on teachers' job satisfaction and retention. Compared with other professions, teachers report having minimal control over their job. Teachers report lower levels of autonomy over what tasks they do, the order in which they carry out tasks, the pace at which they work and their working hours, compared to similar professionals. They reported low autonomy over assessment and feedback, pupil data collection and curriculum content in their phase or subject. Too many new teachers feel that they are unsupported in the profession and cite this as their reason for leaving (Gallant and Ripley, 2014). In contrast, those who received good mentoring during training felt more supported and more able to meet the challenges of teaching. Good mentoring in schools has shown a strong correlation with increased retention (Ingersoll and Strong, 2011; Struyven and Vanthournout, 2014) and is explicit in the Early Career Framework (2019b).

Burnout

Teaching is a 'people' profession, but one where the risk of job-related burnout is high. Increased job demands, pupil behaviour, poor working conditions, work relationships, role conflict and ambiguity, lack of autonomy, poor school ethos and lack of developmental opportunities lead to increased stress, and in turn to burnout (Harmsen *et al.*, 2018). Changes are needed at policy level. The DfE has accepted recommendations of the Teacher Workload Advisory Group (2018) that said the "audit culture" in schools was causing anxiety and staff burnout without improving results. Strategies at school level to reduce teacher burnout include recognizing that the work environment can cause burnout. Failing to redress workload and workplace issues at a school level will only serve to exacerbate the symptoms. Developing a more positive workplace culture around mental health and implementing strategies such as establishing better communication and collaboration and work-life boundaries are urgently needed in schools.

Leadership and continued professional development

There is convincing evidence linking school leadership and teacher attrition (Newton, 2017; Player et al., 2017). Teachers remain in schools with inclusive leadership where they trust their leaders. Leaders' vision and the school culture they establish are key factors in whether teachers leave or remain. Senior leaders establish the ethos of a school as one of collaboration and enthusiasm or one of defeat and fear (Kooy, 2015). Investment in workforce development through high quality continued professional development (CPD) opportunities is essential. It is through professional learning that new skills and knowledge are gained. Authors such as. Furlong (2015) and McIntyre and Hobson (2016) continue to reinforce the characteristics of effective professional development and argue for coaching and mentoring, reflection and building communities of practice as successful ingredients of CPD. High quality CPD, as an entitlement for teachers at all stages of their careers, would be an effective strategy to combat teacher attrition rates.

What is being done and what can be done to reduce attrition? Recommendations

Teacher recruitment and retention is a balancing act between attracting the best entrants to the profession and sustaining them through their careers. In the past, Government efforts have concentrated on the first of these, namely recruitment with too little attention paid to the evidence, both at home and internationally, to the numbers exiting teaching and the causal reasons behind these decisions. This paper has presented a review of much of this evidence. It has shown the reasons why teachers choose to leave as complex and multi-faceted. What we can be sure of, is that teacher attrition is a very real phenomenon, impacting teachers in every phase of our education system. It is now reaching crisis point. Figures presented have 'conveniently' masked the extent of the issue and the variations in schools across the country, where because of the numbers of teachers leaving, the education of pupils and the stability of schools are seriously compromised. Urgent action is needed in policy to address the issue in practice.

The Teacher Recruitment and Retention Strategy in 2019 in England, "represents an adjustment of focus" for the Government and recognises that greater attention must be given to ensuring that teachers stay in the profession (DfE, 2019a). It is one policy strategy that promised some hope. Encouragingly, it acknowledges that teacher supply is a combination of input and output: entry into the profession and the exodus from it. Within the Strategy the Early Career Framework (DfE, 2019b) contains a number of encouraging measures including an entitlement to a two-year package of structured training and support for early career teachers. This may help retention from 2022 onward as the first full cohort of teachers in training will have received this additional support.

More must be done than a Strategy document. In it, the Early Career Framework rightly targets early career teachers who are the most vulnerable group in the profession and have the highest attrition rates. The Government and Ofsted must do more to uplift the profession and raise its status. They must recognise that 'top down' changes to the school system including increased teacher accountability plays an important part in increasing teachers' workload and they must rein this back .Policy makers should consider 'capping' the number of hours teachers work outside of scheduled teaching time. Ofsted should provide greater clarity on its requirements to schools in this new Inspection framework and monitor teacher workload in subsequent school inspections. More notice should be taken of research findings on promoting teacher wellbeing. There is a good case for a salary supplement scheme in England being funded by the Department for Education and which is applicable to all teachers. A more rigorous independent review is needed of steps being taken to determine if schemes such as loan forgiveness programmes in shortage shortages, salary supplements and incentives in maths and science are retaining teachers in schools in deprived areas; the £5000 bonus payment to maths teachers who remain in the profession after three and five years with extra bonuses if they are teaching in target local authorities, are impacting on attrition rates. Greater part-time teaching and flexible working, especially in secondary schools should become the norm rather than

the exception. Schools and senior leadership teams must take responsibility to ensure that working conditions reflect a positive culture where teachers in schools thrive and develop professionally. Collectively, with the focus on school factors, these recommendations may just help halt the sweeping tide of teachers leaving.

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