

Challenges to teacher resilience: conditions count

Qing Gu^{*} and Christopher Day

University of Nottingham, UK

Drawing upon findings of a four-year national research project on variations in the work and lives of teachers in England, this paper provides empirical evidence which contributes to understandings about the importance of resilience in teachers' work. The experience of resilience as perceived by teachers in this research was that it was neither innate nor stable and was much more than a capacity to survive and thrive in extremely adverse circumstances. Rather, it was perceived as being closely allied to their everyday capacity to sustain their educational purposes and successfully manage the unavoidable uncertainties which are inherent in the practice of being a teacher. Their capacity to be resilient fluctuated as a result of the influences of the personal, relational and organisational settings in which they worked. The findings have implications for initial and in-service professional development programmes, school leadership and the quality retention of teachers.

Introduction

To teach, and to teach at one's best over time, has always required resilience. To date, however, there has been little research which has investigated the ways in which teachers' capacity to be resilient may be nurtured, sustained or eroded over time as they experience different conditions in their work and lives. One much documented test of resilience for many teachers is the results driven, performativity and new public management cultures of school environments in this century (Ball, 2000, 2003; Tolofari, 2005) in which roles have become diversified and intensified and workloads of teachers have increased and which is claimed to have threatened their sense of autonomy (Hargreaves & Fullan, 1998). There have been changes, also, in the way that quality is defined by governments which emphasise quality in terms of demonstrable performance and measurable outcomes which are regularly policed through performance management systems internally and national teaching standards and school inspections and student tests and examinations externally.

^{*}Corresponding author. School of Education, University of Nottingham, Jubilee Campus, Nottingham, NG8 1BB, UK. Email: Qing.Gu@nottingham.ac.uk

This paper draws upon analyses of twice yearly semi-structured face-to-face interview data from 300 teachers in different phases of their careers in a range of primary and secondary schools in England over a consecutive three year period. For many of these teachers, their sense of resilience was perceived to be a necessary condition for sustaining their capacity to teach to their best. However, it was found to have fluctuated to varying degrees as a result of interactions with individuals and the contexts in which they worked and lived. The paper discusses the ways in which teachers perceived that their capacities to be resilient were influenced not only by their biographies and the strength of their educational values, but also by factors embedded in the socio-cultural and policy contexts of teaching and in different personal, relational and organisational conditions of their work and lives. The paper concludes with a consideration of the implications of the findings for pre-service and in-service programmes, school leadership and the quality retention of teachers.

Changes in teaching environments in the twenty-first century which challenge the ‘quality retention’ of teachers

The quality of teaching is determined not just by the ‘quality’ of the teachers—although that is clearly critical—but also the environment in which they work. Able teachers are not necessarily going to reach their potential in settings that do not provide appropriate support or sufficient challenge or reward. (OECD, 2005, p. 9)

There is evidence which suggests that not only policy (Ball, 2003) but also school socio-economic location and environment (Troman & Woods, 2000; Stoll & Louis, 2007) affect teachers and their working lives. Efforts to improve school climate and teacher–student relations in schools, particularly larger schools in disadvantaged communities, are found to be highly important in increasing teachers’ job satisfaction and productivity (Lazear, 2000; OECD, 2009).

There is evidence, also, that changes in the values, norms and expectations and conditions of society have resulted in increasing alienation from schools as sites for learning by a significant minority of students from disadvantaged backgrounds (SEU, 1998, 2001; Parsons, 1999; McDonald & Marsh, 2005; OECD 2005a). Four recently published research reports together demonstrate graphically the continuing educational and life disadvantages experienced by children and young people in the UK and the importance of schools in contributing to the improvement of these (Child Poverty Action Group, 2009; Day *et al.*, 2009; DCSF, 2009; The Sutton Trust, 2009). These and other similar accounts (Lindsey, 2007; Layard & Dunn, 2009; McLaughlin & Clarke, 2009; NEF, 2009) represent a real and present challenge to teachers in their efforts to educate. One phenomenon which may be associated with this is a perceived decline in pupils’ classroom behaviour. In a recent survey of teachers in England, nearly 40% of teachers of the 1000 questioned had considered leaving the profession because of disruptive pupil behaviour; and more than a fifth said they had

developed mental health problems as a result (ATL, 2010). The effects, also, of what has been called the 'screen culture' of children and young people have resulted in changes in the social dynamics of the teacher–learner relationships in the classroom (Greenfield, 2008). It is not surprising, therefore, that teaching in England in the twenty-first century has become rated as one of the most stressful professions (HSE, 2000, 2011; PWC, 2001; Nash, 2005). The problem is especially pressing among beginning teachers, with an estimated 30–50% drop-out rates of teachers within five years of qualification in England (Burghes *et al.*, 2009). Similar figures have been reported in the USA (Darling-Hammond, 1997; Ingersoll, 2003; Kados & Johnson, 2007) and other OECD countries (OECD, 2005b, 2011).

These outward, more easily measurable signs of attrition and stress among teachers in their early years may mask a considerably more important problem among teachers in the middle and later years of their careers who stay in the profession but whose capacity for resilience may become eroded to the extent that survival in the classroom rather than the continuing pursuit of quality becomes the main concern. Although some reports indicate that those with strong beliefs about their core purposes and values retain their commitment and resilience because of their inner strengths, support from colleagues and their leaders, or a combination of these (OECD, 2005b; Day *et al.*, 2007; Day & Gu, 2010), was found to be essential in contributing to the development of individual and collective resilience (Day *et al.*, 2011a). As yet, research which focuses directly upon investigating conditions which retain or act against retaining the resilience of the existing majority of the more experienced teachers seems to have been largely neglected, despite the mantra that all students in all contexts, as Edwards (2003) observes, 'deserve to be taught by enthusiastic, motivated individuals' (2003, p. 11). Teachers' commitment and enthusiasm are qualities that are harder to measure but are seen to be more directly related to the quality of teaching and learning than the traditional emphases on qualifications and years of experience (OECD, 2011).

Thus, at a time when the age profile of teachers in many countries is skewed towards those with more than 20 years' experience (Aaronson, 2008; Chevalier & Dolton, 2004; Grissmer & Kirby, 1997; Guttman, 2001; Matheson, 2007; OECD, 2005b), and in which most of these would be unlikely to feel able to change career for financial and domestic reasons, there is an urgent need to investigate further the ways in which the personal, relational and organisational conditions of teachers' work and lives mediate the socio-cultural and policy demands and challenges for teachers. Understandings of the central role of workplace conditions in supporting and enabling teachers to manage the interactions between work and life over the course of a career and in different contexts are likely to provide a better understanding of the factors that enable or do not enable them to sustain their sense of resilience in the profession; and through these, contribute to knowledge of reasons for variations in what we will call the 'quality retention' of teachers (Day *et al.*, 2007).

Resilience: advances in understandings

Themes of ‘teacher attrition’ or ‘stress’ have dominated the educational research literature over the last decade (e.g., Kyriacou, 2000; Troman & Woods, 2001; Ingersoll, 2003; Smithers & Robinson, 2003, 2005; Wassell & LaVan, 2009). It is advances in understandings of the nature of resilience in other disciplines that have provided important conceptual additions to understandings of teachers’ resilience. Such research generally suggests that resilience itself is an unstable construct (Rutter, 1990; Cicchetti, 1993; Masten *et al.*, 1999) involving psychological, behavioural and cognitive (academically or professionally) functioning as well as emotional regulation (Greenberg, 2006; Luthar & Brown, 2007) within a range of personal, relational and organisational settings.

A critical overview of empirical findings from different disciplines over time suggests that there are shared core considerations in the way resilience is conceptualised between disciplines. First and foremost, much previous research on resilience presupposes the presence of threat to the status quo, a positive response to conditions of significant adversity (Masten & Garmezy, 1985; Cicchetti & Garmezy, 1993; Masten *et al.*, 1999; Luthar *et al.*, 2000). Secondly, it suggests that resilience is not a quality that is innate or fixed. Rather, it can be learned and acquired (Higgins, 1994). Associated with this is the third consideration that the personal characteristics, competences and positive influences of the social environment in which the individual works and lives, independently and together, interact to contribute to the process of resilience building (Gordon *et al.*, 2000; Rutter, 2006; Zucker, 2006). Indeed, Luthar *et al.* (2000) assert that the term ‘resilience’ should always be used when referring to a dynamic ‘process or phenomenon of competence’ which encompasses ‘positive adaptation within the context of significant adversity’ (2000, p. 554).

Thus, there is a considerable body of research in which resilience is acknowledged to be a relative, multidimensional and developmental construct (Rutter, 1990; Howard *et al.*, 1999; Luthar *et al.*, 2000). It is a phenomenon which is influenced by individual circumstance, situation and environment and which involves far more complex components than specific personal accounts of internal traits or assets alone claim. It is not a static state because ‘there is no question that all individuals—resilient or otherwise—show fluctuations over time within particular adjustment domains’ (Luthar *et al.*, 2000, p. 551). The nature and extent of resilience is best understood, then, as a dynamic within a social system of interrelationships (Benard, 1995; Luthar *et al.*, 2000). This is particularly relevant to understandings of resilience among adults over their work and life span.

Teacher resilience

Although resilience among children has been well studied by researchers from multiple disciplines, there remains limited empirical work on resilience in teachers. Luthar and Brown’s (2007) critique of the existing research on resilience in adults,

together with evidence from research on associations between teachers' commitment, resilience and effectiveness (Day *et al.*, 2006, 2007), provide a useful basis for a nuanced conceptualisation of the dynamic nature of teacher resilience. They suggest that it is inaccurate to imply that resilience in adults is associated with personal attributes only (Luthar & Brown, 2007).

This is supported by a range of research which has focussed upon individual values, the role of significant others and leadership in schools. For example, moral purposes and ethical values provide important intellectual, emotional and spiritual strengths which enable teachers to be resilient. The desire to make a difference to the lives of the children has encouraged many teachers who decide to stay in teaching to be 'vocationally and professionally committed' (Nias, 1999, p. 225) over the course of their careers (Hansen, 1995; Day, 2004; OECD, 2005b). Thus teacher resilience is also associated with the strength and conviction of their vocation. However, the evidence is that these can become eroded over time, particularly when teachers no longer experience a profound connection with their students, colleagues and leaders (Johnson, 2004; Palmer, 2007). Judgement and recognition by these 'significant others' (Luthar & Brown, 2007, p. 941) of their effectiveness in their major roles are found to be an important influence on teachers' sense of resilience (Day *et al.*, 2007; Day & Gu, 2010). Over time the educational literature has also been consistent in suggesting that in-school management support for teachers' learning and development, leadership trust and positive feedback from parents and pupils are key positive influences on their motivation and resilience (Huberman, 1993; Webb *et al.*, 2004; Brunetti, 2006; Leithwood *et al.*, 2006; Day *et al.*, 2007; Day & Gu, 2010; Castro *et al.*, 2010; Meister & Ahrens, 2011).

The research reported in this paper takes account of these considerations and provides additional understandings which are based upon the perceptions of 300 teachers over a period of three years. It provides new empirical evidence about the nature of teacher resilience as a product of the interaction between personal biographies and events, vocation and values and professional work-based relational and organisational factors; and probes the complex relations between these multiple levels of internal and external factors which influence the resilience building processes among teachers. It argues that teacher resilience is not primarily associated with the capacity to 'bounce back' or recover from highly traumatic experiences and events but, rather, the capacity to maintain equilibrium and a sense of commitment and agency in the everyday worlds in which teachers teach.

The initial study

The key aim of the original VITAE study from which the data in this paper are drawn was to investigate variations in teachers' work, lives and effectiveness and identify factors that contribute to the variations (Day *et al.*, 2006, 2007). The research recognised that effectiveness involves both teachers' perceptions of their own effectiveness and their impact on students' progress and attainments.

An initial teacher survey in seven local authorities (LA) which were nationally and geographically representative and included both large shire counties and authorities in ethnically diverse and deprived inner cities assisted in the selection of samples of 100 schools and 300 case study teachers for the study. Half of the sample were primary teachers (Year 2 and 6; aged 7 and 11) from 75 primary schools. The secondary teachers taught English or mathematics to Year 9 (aged 14) in 25 schools. These teachers were representative of the national profile in terms of age, experience and gender. The schools themselves were selected to be representative in terms of level of social disadvantage (measured by percentage of pupils eligible for free school meals and attainment levels). The choice of teachers in Years 2, 6, and 9 was such that the key stage national curriculum test results could be used as pupil outcome measures.

The research reported here focuses on how teachers interpreted their lived experiences and constructed the meanings of their experiences within the contexts in which they worked. It is thus positioned in the phenomenological research tradition in which the researchers aim to identify the essence of the experiences as related by the research participants (Creswell, 2003) and reveal in detail the ways in which the participants interpret their experiences, construct their worlds and create their meaning (Merriam, 2002). The data concerning teachers' perceived effectiveness were collected through twice yearly semi-structured, face-to-face interviews over a consecutive three-year period. These longitudinal interview data provided us with rich descriptions of teachers' perceptions of the variations in their work, lives and effectiveness over time and were used as the main evidence for the study. These were supplemented at various stages of the research by document analysis and interviews with school leaders and groups of students.

Detailed narrative portraits of teachers' work and lives over time were then constructed to see whether patterns emerged over a three-year period in terms of perceived and relative effectiveness vary and, if so, why. These portraits, which included information regarding, for example, teachers' professional life phases, perceived professional identities, sense of commitment and resilience, and pupils' views and their value added attainment data, were shown to teachers during the final round of interviews as a means of validating researchers' interpretation of results. Measures of teachers' relative effectiveness as expressed through improvements in students' progress and attainment which were collected through matching baseline test results at the beginning of the year with students' national curriculum results at the end were used in the portraits to show associations between teachers' sense of resilience, their perceived effectiveness and the progress and attainments of their pupils in English and mathematics. Portraits of the 300 teachers were then used as an essential database for further cross-case analyses focussed upon teachers' professional life phases, commitment and resilience. These validated portraits presented teachers' own accounts of the reality of their work and lives and it is these portraits from which this paper draws its warrant.

Challenges in sustaining teacher resilience: conditions count

Full details of the results of the VITAE research have been published elsewhere (Day *et al.*, 2006, 2007; Day & Gu, 2010). For the purpose of this paper we provide a summary of evidence related to teacher resilience only.

Associations between teachers' perceived commitment and resilience and their professional life phases and schools' socio-economic context were explored in the research (details of these results and other related associations see Day *et al.*, 2006, Chapter 8; Day *et al.*, 2007, Chapters 5 and 10). The division of six professional life phases defined by number of years of teaching (0–3 years, 4–7 years, 8–15 years, 16–23 years, 24–30 years, and 31+ years) was grounded in our empirical data, collected and analysed over the three-year fieldwork phase of VITAE and informed by an extensive review of previous studies on teachers' careers and professional development. Although years of experience generally relates closely to a teacher's age, some teachers had less experience than might be expected for their age, as a result of being late entrants to teaching or through taking a career break.

Of the 300 teachers in the original VITAE study, 218 (73%) in all six professional life phases were able to be resilient over the three-year period of the fieldwork, some in the face of challenging workplace environments. However, in each professional life phase there were a number to whom this did not apply. The data showed that these teachers were working under considerable persistent and negative pressures and that these were largely connected to poor relationships with school leadership and colleagues, deteriorating pupil behaviour and attitudes, lack of parental support, the effects of government policies and unanticipated life events which had led to a weakening of their core commitment and educational values (see Day *et al.*, 2006, pp. 197–221; Day *et al.*, 2007, Chapter 7).

Because in the VITAE study the number of teachers in certain professional life phases was small for purposes of conducting further quantitative analyses, we combined the six professional life phases into three broad groups: early career teachers (0–3 and 4–7), middle career teachers (8–15 and 16–23), and late career teachers (24–30 and 31+). This enabled the exploration of variations in teachers' perceived commitment and resilience levels according to these broader professional life phase groupings. Analyses suggested that teachers within early and middle phases of their professional lives were more likely to retain their sense of resilience than those in late careers (Figure 1). For later years teachers, external demands from government policies and school-based factors such as disruptive pupil behaviour, increased paperwork, heavy workloads and the consequent long working hours, coupled with poor health, were perceived to have constantly changed their capacities to be resilient (see Day & Gu, 2010, Chapter 3). Where there was a lack of support within the workplace conditions, and staff collegiality and leadership support in particular, 44% of teachers in the final phase of their professional lives reported a diminishing sense of resilience and their struggle to teach to their best.

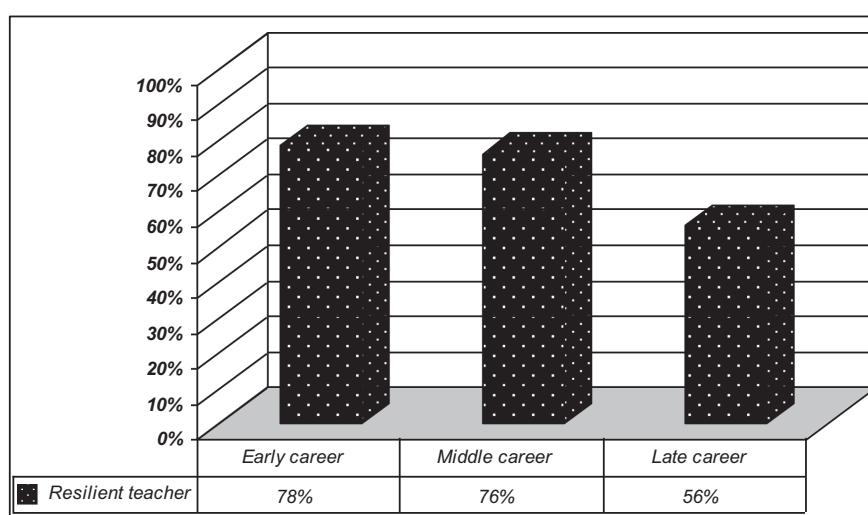


Figure 1. Teacher resilience and teachers' professional life phases

Thus, teachers' capacities to be resilient were perceived by them to be influenced—positively or negatively—by a range of mediating factors embedded in the personal, relational and organisational conditions in their workplaces.

Teachers' resilience was also found to be associated with the socioeconomic contexts of the school, as measured by percentage of pupils eligible for free school meals (FSM). Those working in socioeconomically disadvantaged schools (i.e., FSM 3 and 4 schools: 21–35% and 36%+ of pupils eligible for free school meals) were more likely to report unstable, fluctuated personal, situational and professional scenarios than those who worked in FSM 1 and 2 schools (0–8% and 9–20% of pupils eligible for free school meals) (see Day *et al.*, 2006, p. 226). However, although analysis of teachers' portraits suggested that the more extreme the scenario, the more energy it took a teacher to sustain their capacity to be resilient (Gu & Day, 2007), the perception of resilience among teachers was not always directly connected to school context as measured by the school FSM. For example, Figure 2 shows that the large majority of teachers in FSM4 schools were still resilient. The data showed that many of these teachers were committed by a strong sense of vocation and a disposition to working with pupils from disadvantaged backgrounds and that this contributed to their capacity to be resilient. A team spirit was also perceived by these teachers as an essential condition for them to survive and thrive in challenging workplace contexts (see Day *et al.*, 2006, 2007).

For those in all professional life phases and all school contexts who managed to sustain their resilience, the relational conditions of their workplace contexts were reported as the most important contributing factor. Around 75% or more of resilient teachers in each of the six professional life phases rated supportive relationships with their colleagues as a positive critical influence on their capacity to maintain their original vocation or call to teach (Day & Gu, 2010). Additionally,

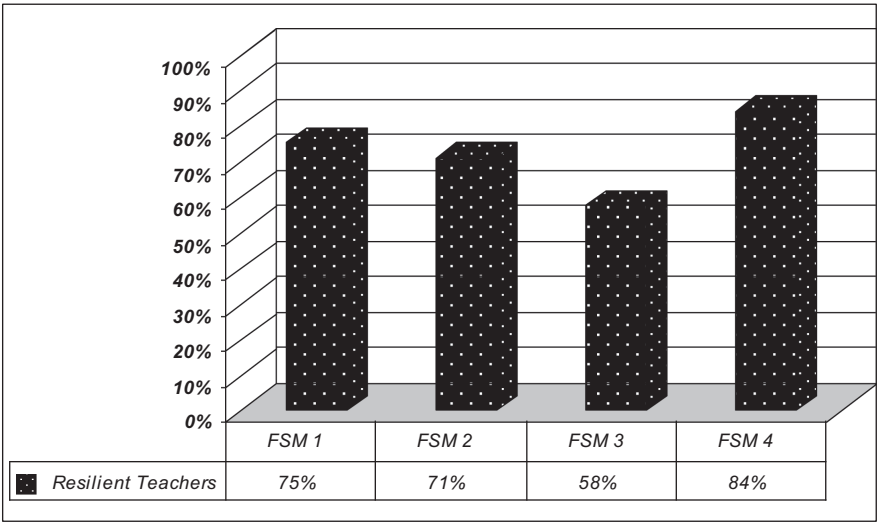


Figure 2. Teacher resilience and school contexts (measured by % of pupils eligible for free school meals)

leadership recognition and support were shown to be key influences. Between 58% and 93% of highly committed teachers across the six professional life phases emphasised the important contribution of professional and personal leadership support to their capacity to teach to their best despite challenges and/or setbacks in their everyday school life (Day & Gu, 2010).

For the purposes of this paper, portraits of one beginning teacher and one mid career teacher have been selected from the 218 teachers who reported a high level of resilience over the three year fieldwork period in order to provide a detailed account of the ways in which personal, relational and organisational histories and current contexts impacted upon their capacity to be resilient. Their profiles are typical of the teachers who reported similar experiences of how their sense of vocation and commitment and effectiveness had been sustained as a result of the support from the workplace conditions.

Portrait of a beginning teacher: schools matter

In this first example we show how the professional development and growth of beginning teachers is perceived by them to benefit from the support of strong school leadership and the collaborative school cultures which good leaders create, shape and transform. It is within such positive working environments that this beginning teacher felt that she was able to build her resilience, efficacy and commitment, and continue to enjoy the achievement of her pupils and the advancement of her professional life.

Pat was 26 years old, a classroom teacher and science coordinator at her first school, where she had taught for three years. Prior to this, she had run a ‘parent and toddler’ (small child) group.

Her school was an urban, moderate socio-economic status primary school of 220 pupils. It served an ethnically diverse community. She described herself as having reached 'the point in my life where I wanted a promotion'. After two years of teaching in her current school, Pat was promoted to become a member of the senior leadership team. She was loved by her pupils whose progress was well beyond expectations during the life time of the VITAE project.

Gaining strength from the inner calling to teach

Pat had always enjoyed working with the children whom she described as 'delightful'. Despite that she often felt 'absolutely exhausted', she continued to derive immense pleasure and rewards from the learning and growth of her pupils. Her confidence and sense of efficacy had greatly increased as a consequence of their good results.

I just love it, just to see the smallest sign of progression, moving a child on, even just a little bit, motivation, building confidence and independence is a big part of how I make a difference in their lives... It just gives you a buzz to keep going, even when a lesson that has been terrifically planned goes pear shaped. It's enjoyable, but it is also exhausting. It's not having enough hours in the day, but you want it to be right.

Her love for the children did not stop at the school gate. She was planning to learn to play the piano 'or some sort of musical instrument' in her spare time, so that her students could 'enjoy it in the classroom'.

Connecting with students and colleagues

Pat's sense of resilience did not result entirely from the strong commitment which she brought to her work. It was further built and sustained as a result of a number of factors in the school environment. First among these were the good relationships which she enjoyed with her pupils. She felt that the general improvement of children across the school had enhanced her relationships with the pupils in her class. Although their socio-economic background imposed some challenges to her teaching in the classroom, she was pleased that the overall behaviour of children in the school was generally quite good: 'Discipline has improved and this is mainly due to raised expectations. Also, everyone deals with problem behaviour in this school, rather than any one teacher'. Over the three year period of our contact with her, Pat also consistently described the staff at her school as extremely supportive of one another, both professionally and socially. Her teaching colleagues helped to keep her commitment and motivation strong.

Improved self-efficacy: the leadership effect

Very shortly after Pat first joined the school, it was placed in 'special measures' (under threat of closure because it was failing to meet basic educational standards). However, one year later, under the leadership of a new head and deputy

head, it had emerged from this. This had an important influence on refocusing the teaching, with more freedom to develop the children's skills 'without sticking to too rigid a timetable'. Thus, over her time the school had improved, and after two very difficult years, in Pat's words, 'the school is now "getting somewhere"'. Her upward commitment trajectory paralleled this.

As part of her growing self-efficacy, Pat had become more aware of not letting herself slip behind because 'if you let something slip, it builds up and builds up—so you don't feel good about yourself anyway'. As such, she set herself targets and was getting more organised.

Support and recognition from strong leadership and the transformation of negative cultures in her school had consolidated her long-term commitment to teaching. Not surprisingly, she had highly positive views on the school leadership: 'Everything seems to filter down really well, and everything seems to be discussed openly, and decisions then made as a whole staff. Everyone is allowed to develop'. She described the new head as 'exceptional':

With our new head there is a lot more support for your own development in the sense of your position in the school. It's the encouragement or making decisions for the school. Also, the literacy adviser from the local authority is wonderful; team teaching, observations together, very good.

Although she was still 'juggling' her family life, Pat felt that her passion for teaching continued to grow. One particularly important boost to her confidence, enthusiasm and commitment was her promotion to the senior leadership team which was seen as recognition for her potential and appreciation of her work from school management. Her perception was that this internal promotion, combined with positive external and internal professional feedback and professional and personal support from school management and her colleagues, had spurred her on even more: 'OK, I can make it even better'.

Portrait of a mid-career teacher: sustaining resilience, commitment and effectiveness against the odds

This second example illustrates how the detrimental effects of nation-wide reforms and inspections, together with age-related family commitments, may lead teachers in the key mid-career phase of their professional lives to struggle with work-life tensions. It also shows that, in addition to leadership support, a sense of belonging to a collegial staff community is perceived by them to have a critical positive effect upon their commitment and intellectual and emotional development, particularly for those who strive to survive and succeed in schools serving highly deprived communities.

Katherine, 37 years old, was head of English in an 11–16 medium size comprehensive school. Her school was situated in an urban community of socio-economic disadvantage which had a well above average proportion (23%) of pupils on the special educational needs register. She had been teaching in this school for three years, having

previously worked in two others. She was eight months pregnant when she had begun the job, and inherited a department that had been without a leader for two years. Her pupils, whose progress was beyond expectations during the life time of the VITAE project, expressed affection for Katherine.

The inner sense of vocation that sustains resilience

Katherine came from a teaching family and had always loved the idea of working with children. It was not surprising that she decided to choose teaching as a life-long career because she found it stimulating and rewarding. She had a deep interest in her subject and also loved the opportunity to help children learn. Having been in teaching for 14 years, she felt that such vocation and passion for teaching had remained high.

She described herself as a career-driven person, always wanting to give her best to the learning and growth of her pupils. When she first joined her current school her motivation was very high. She enjoyed her responsibilities as head of English, but she knew that she would not have been able to maintain her enthusiasm for the job without the understanding and support of her partner who gave her space to work at home, particularly when they were settling into their new house and their life with a second child.

Relationships count

For Katherine, her school was a social place where relationships with committed colleagues and pupils played a very large part in fulfilling her every working day with job satisfaction and joy. She described pupils in her current school as 'a breath of fresh air' with whom she established good relationships. Such positive relationships and her positive attitude towards them helped create a healthy environment in the classroom where pupils were enthusiastic about learning. Given that many parents in her school did not have 'high enough expectations' of their children, Katherine was particularly pleased with the rapport that she had achieved with her pupils and its positive effects on their learning and progress.

When she first took over the role as head of department, Katherine felt that there was not 'a team'. This was because prior to her arrival, there had been an acting head of department and over this time there had also been curriculum changes. She was ambitious to foster team spirit through modelling and sharing good practice but wished that she had more time to pull everyone together. Nevertheless, she was pleased with the outcome of her efforts and enjoyed good relationships with her colleagues. These were particularly important to her during the school inspection and at times when her workload volume and complexity became too intense.

An external inspection of the school worked against her effectiveness and confidence as a teacher. She was exhausted and overloaded and experienced a crisis of confidence. She felt a loss of control and as a result she lamented that she did not 'really feel that good as a teacher'.

My motivation has never wavered, but my effectiveness has. Despite being totally over-worked, I am now feeling positive about September. My confidence as a classroom teacher, however, is low at the moment... I need time to consolidate and need a personal confidence boost from somewhere.

During the same period, despite the fact that she was still highly committed to her job, Katherine suffered from serious tensions that arose from managing a busy home and work life simultaneously such that she even considered moving to part-time work. She realised that with two children and a full-time job, her social life had 'gone completely out the window'. Working all weekend and during holiday times was, for her, 'a reality'. Support from her colleagues helped her to learn to use a variety of strategies to manage, cope and maintain her sense of effectiveness at work and as a result, she saw her self confidence restored.

School leadership matters

When Katherine first joined her current school, she was full of enthusiasm and felt that her effectiveness rose rapidly. Her job satisfaction fluctuated over the year but she concluded that that was mainly because she was still a newcomer to the school.

Katherine felt that the structure and the senior leadership of the school made an important contribution in helping her survive and succeed, particularly during her early period in the school. 'If something is passed on through the system, it will be dealt with very quickly. So you know you've got back up'. She added that the senior leadership team (SLT) were approachable about both school and personal issues. Knowing that they would support the staff 100 per cent had helped create a 'person-centred' school culture which, in her view, brought the whole staff together as a team.

Katherine was particularly grateful for the professional and personal support she received from the principal. This helped her survive through and achieve a good result from the school inspection. She was expecting her second child during that period and felt that 'If it hadn't been for the intervention of the head and his support, I think I probably would have had a nervous breakdown'.

The inspection which had caused so much concern to Katherine had resulted in highly positive results in the end and this had boosted her 'confidence, pride and added motivation'. Katherine felt that that she had been recovering since then and had successfully rebuilt her confidence and reinforced her positive relationships with colleagues. After having recovered from a dip in her sense of effectiveness during those difficult times, then, she was now considering taking on management training to prepare herself for further promotion.

Discussion

What these illustrations and portraits of many other teachers in the VITAE research show is that resilience is perceived by them as a capacity which is

influenced not by one but by different combinations of factors embedded in the individual, relational and organisational conditions in which they work and live (Day *et al.*, 2007; Gu & Day, 2007; Day & Gu, 2010).

Resilience and teachers' vocational selves

Both Pat and Katherine, like most of the teachers in the study who were in different phases of their professional lives (Day *et al.*, 2006, 2007), reported an initial strong calling to teach and continued enjoyment of working with children and watching them grow. Their intrinsic motivation and emotional commitment to provide the best service for their students was associated with an ethic of care for the wellbeing of their students which was at the heart of what they did and how they lived their lives in the profession. However, to continue to exercise care over a professional life span demands considerable intellectual and emotional commitment. Palmer (1998) proposed three important interwoven paths in the inner landscape of the teaching self: intellectual, emotional and spiritual. He explained that the teacher's inner quest to help pupils learn, their feelings and emotions which promote or hinder the relationships between them and their pupils and their hearts' longing to be connected with the work of teaching form the essence of their inner terrain. In developing his view, we argue that a key notion that connects the three paths of the teacher's inner world is that of 'vocation' or 'calling'. The testimony of the four teachers in Hansen's classic study (1995) suggests that teaching as a vocation presupposes many of the meanings 'characteristically associated with helping others learn and improve themselves intellectually and morally' (1995, p. 15). Such enthusiasm and love for the children not only drew Pat and Katherine into teaching, but also provided them with the inner strength to continue to teach to their best in the face of the challenges created by work-life tensions. Teachers' inner vocational drive, as Hansen (1995) observes, 'turns the focus of perception in such a way that the challenges and the complexities in teaching become *sources of interest* in the work, rather than barriers or frustrating obstacles to be overcome' (1995, p. 144). The 'buzz' that Pat derived from her exhausting teaching life and Katherine's joy from teaching her beloved subject confirm and go beyond Hansen's findings.

Resilience in the relational setting: learning and developing together

For Katherine, 'team spirit' which encouraged peer support and sharing of good practice was an important contributing influence on her positive professional outlook, particularly when pressures at work combined with personal circumstances began to pose a serious threat to her capacity to maintain her effectiveness in the classroom and her department. Compared with her more experienced colleagues like Katherine, Pat was experiencing two distinct but interrelated challenges: one was to develop a sense of professional self and efficacy in her interactions with her colleagues, pupils and parents and the other was to develop a sense of belonging

during her socialisation into the school community and the profession. Thus, for Pat, the supportive and collegial culture in her school played a particularly important role in nurturing the growth of her professional self, character and maturity. Her strong sense of vocation was mediated by such a positive social environment and, as a result, Pat was able to continue to enjoy her love and enthusiasm for teaching even though her job demanded considerable intellectual, physical and emotional energy and commitment from her. In her study of American high school teachers, Nieto (2003) also found that to be able to learn and develop in a learning community serves as an important incentive that keeps teachers going in the contemporary contexts of teaching. Margolis (2008), too, concluded in a study which sought to make sense of the complexities of teachers' careers in the light of changes in social and economic forces, that opportunities which promote teachers' learning and enable them to share their gifts with others in the profession keep 'good teachers' teaching (2008, pp. 160–161).

In positive psychology, particular attention has been given to the importance of relationship-based assets and their contribution to resilience (Masten, 2001; Gorman, 2005; Luthans *et al.*, 2007). Luthar (2006) suggests that 'Resilience rests, fundamentally, on relationships' (2006, p. 780).

Relationships lie at the 'roots' of resilience: when everyday relationships reflect ongoing abuse, rancor, and insecurity, this profoundly threatens resilience as well as the personal attributes that might otherwise have fostered it. Conversely, the present of support, love, and security fosters resilience in part, by reinforcing people's innate strengths (such as self-efficacy, positive emotions and emotion regulation) with these personally attributes measured biologically and/or behaviourally. (Luthar & Brown, 2007, p. 947)

Goodwin (2005), also from a psychological perspective, maintains that 'close relationships act as important 'social glue', helping people deal with the uncertainties of their changing world' (2005, p. 615, cited in Edwards, 2007, p. 8). Neuroscientists' discovery of the social brain reveals that 'we are wired to connect' (Goleman, 2007, p. 4) and provides a biological basis for understanding the nature and confirming the importance of good quality relationships in maintaining a sense of positive identity, well being and effectiveness in our daily work and lives:

Surely much of what makes life worth living comes down to our feelings of well-being—our happiness and sense of fulfilment. And good quality relationships are one of the strongest sources of such feelings... In a sense, resonant relationships are like emotional vitamins, sustaining us through tough times and nourishing us daily. (Goleman, 2007, p. 312)

It is perhaps, then, not surprising that more than 75% of the 300 teachers in the original study, like Katherine and Pat, shared the perception that supportive relationships with their colleagues functioned as a positive critical influence on their capacity to maintain their original call to teach and perform effectively in the face of anticipated and unanticipated tensions, crises, conflicts and challenges that are embedded in their every ordinary school day (Day *et al.*, 2007; Day & Gu,

2010). In particular, the presence, quality and range of opportunities which promoted relationships of trust and shared values and visions amongst the staff were perceived by these teachers as having fostered the strength of a collective capacity for joint work.

The importance of building collective strength and confidence in communities of teachers is that teachers are able to 'interact knowledgeably and assertively with the bearers of innovation and reform' (Hargreaves, 1994, p. 195). This is because trusting and open professional networks may function as a valuable asset, or 'social capital', which not only enable teachers to build a sense of belonging in the school community, but also provide intellectual, spiritual and emotional resources for teachers' professional development. Bryk and Schneider (2002) maintained that teachers' interpersonal worlds are organised around distinct sets of role relationships: 'teachers with students, teachers with other teachers, teachers with parents and with their school principal' (2002, p. 20). They found that a trusting relationship between teachers in particular, was of vital importance in building their collective sense of resilience and contributing to strong associations between positive relationships, trust and pupil attainment in elementary schools. Schaufeli and Bakker (2004), also, found the obverse, that a lack of social support from colleagues could lead to teachers' emotional exhaustion and depersonalisation.

For teachers working in schools in socio-economically challenging circumstances in particular, staff collegiality and mutual trust and support are of profound importance in sustaining their morale, sense of efficacy, well-being and effectiveness (Day *et al.*, 2007; also Peterson *et al.*, 2008). As Katherine's portrait shows, when working in a school serving socioeconomically disadvantaged communities where a lack of parental support was a constant external challenge, positive relational bonds with pupils and colleagues played an essential role in creating an optimal condition for sustaining pupils' engagement in learning and also, building a strong team spirit and collective efficacy beliefs amongst teachers. Goddard *et al.* (2004) argue that such 'robust sense of group capability' establishes expectations (cultural norms) for success which, in turn, encourage 'organisational members to work resiliently toward desired ends' (2004, p. 8). In education, these desired ends have to be related to students' progress and achievement.

Resilience in the organisational setting: school leadership matters

The story of Pat shows how those who had an 'easy beginning' (Huberman, 1993) in their teaching careers benefited from the recognition and support of strong, 'exceptional' school leadership (Day *et al.*, 2007; Gu & Day, 2007; Day & Gu, 2010). Pat's promotion to the senior leadership team was perceived as an important boost to her commitment and professional trajectories. The significant contribution of the new head to Pat's positive trajectories can also be found in the open, collegial and collaborative school culture that she created and nourished where Pat felt that she learned how to be efficacious, how to belong, how to teach well and how to be as professionals. In the case of Katherine, strong leadership support also

provided her with strength, confidence and a sense of belonging which enabled her to recover from short-term setbacks and continue to make a difference to the learning and achievement of the pupils. In addition, she found that the organisational structure in her school which clearly defined patterns of roles and responsibilities and which encouraged flows of information and communication played a critical part in helping her survive and successfully manage the complexities and tensions in her everyday professional life. Like Pat and Katherine, between 58% and 93% of highly committed teachers across the six professional life phases in the VITAE research also perceived leadership recognition and support in the organisational setting as having made a significant impact on their capacity to teach to their best (Day & Gu, 2010).

Examples of such strong leadership impact on teachers may also be found in an international longitudinal study on successful school principals and their staff (Day & Leithwood, 2007). The qualities of school principals and the contextually sensitive strategies which they enacted over time were found to be key to building and retaining the commitment, engagement and collective loyalty of teachers. In North America, Corrie Giles (2006) reported research on the resilience of two urban secondary schools in New York State and Ontario, Canada, which had experienced, 'successive waves of increasingly standardised reform', yet which were characterised, like Katherine's school, by an enduring internal architecture of personal, group and organisational conditions that 'provide long term nurturing and support' (Giles, April 2007, unpublished, p. 29). In these North American schools, the internal conditions and the ability of the principals to buffer the effects of external changes had created conditions for self-renewal. Committed and trustworthy leaders at all levels are at the heart of building an individual and collective sense of resilience in organisations.

The findings of a mixed-methods national study of the impact of effective school leadership on pupil outcomes in England, provides further evidence that principals' professional values and leadership practices have had a profound influence upon the development of individual, relational and organisational capacity and trust in a group of effective and improved primary and secondary schools, which led to the growth of confidence and commitment in the staff and achievement of the students (Day *et al.*, 2011b). Interactions, structures and strategies which secured consistency with values and vision in the school were identified as fundamental to establishing and sustaining relationships within the school community—a key contributing factor in creating an optimal organisational condition for teacher resilience.

Taken together, these findings suggest that school leadership matters in sustaining a sense of resilience, commitment and effectiveness among the staff. Building resilience in an organisational setting places a great deal of importance on the effectiveness of the organisational context, structure and system, and on how the system functions as a whole to create a supportive environment for individuals' professional learning and development, to build a trusting relationship amongst its staff, to foster a collective sense of efficacy and resilience and, through this, to sustain its continuous improvement. However, to date this concept has been

developed largely outside education. Hamel and Välikangas (2003), writing in the context of business, describe a truly resilient organisation as a workplace that is filled with excitement and argue that strategic renewal, i.e., 'creative reconstruction', 'must be the natural consequence of an organisation's innate resilience' (2003, pp. 2–3).

Supportive organisational communities do not happen by chance. They require good leadership. Knoop (2007) argues that 'Considering the present pace of socio-cultural change, it is difficult to imagine a time in history when good leadership was more important than it is today, and when the lack of it was more dangerous' (2007, p. 223). Thus:

Leaders are the stewards of organisational energy [Resilience]... they inspire or demoralise others, first by how effectively they manage their own energy and next by how well they manage, focus, invest and renew the collective energy [Resilience] of those they lead'. (Loehr & Schwartz, 2003, p. 5)

In the case of Katherine, she would probably have had a nervous breakdown and a prolonged dip in her perceived effectiveness if the senior leadership team and the principal in particular, had not offered her the very kind of professional and personal support that she needed to boost her confidence and sense of efficacy. Stories like Katherine's were also found in Henry and Milstein's (2006) study which led them to conclude that, 'Teachers, students, parents, support personnel are the fabric of the school. Leaders are weavers of the fabric of resiliency initiatives' (Henry & Milstein, 2006, p. 8).

Conclusions: sustaining teacher resilience, commitment and effectiveness in times of change

We have argued, on the evidence of the research reported in this paper, that the widely used definition of resilience as the capacity to 'bounce back' in adverse circumstances is inadequate to describe the nature of resilience in teachers. This is because, at least in part, it fails to reveal and reflect the uncertain and unpredictable circumstances and scenarios which form the main feature of teachers' everyday professional lives. Such circumstances are an inherent part of the nature of teaching and present a constant intellectual and emotional challenge to those who strive to teach to their best. Thus, for many teachers who have managed to sustain their commitment and motivation in the profession, the ability to weather the often unpredictable 'storm' of school and classroom life (Patterson & Kelleher, 2005) is not an option, but a necessity. We, therefore, propose a broader definition of teacher resilience than those who have examined it from a solely psychological perspective. Our data show that resilience in teachers is the capacity to manage the unavoidable uncertainties inherent in the realities of teaching. It is driven by teachers' educational purposes and moral values. Although it 'arises in interaction between individual and the practices they inhabit' (Edwards, 2011), it is also influenced by their biographies and the conditions of their work and lives.

For teachers, resilience is much more than the capacity to survive and thrive in adversity. It encompasses the capacity to function well generally over time in so called normal teaching and learning environments as well as in response to 'initial, brief spikes' which disturb normal functioning temporarily or severe disruption (Luthar & Brown, 2007, p. 941). The nature and sustainability of resilience in teachers over the course of their professional lives is not a static or innate state, but influenced, individually and in combination, by the strength of their vocational selves, the commitment of those whom they meet as part of their daily work and the quality of leadership support within the school as well as their capacities to manage anticipated as well as unanticipated personal events.

A central task for all concerned with enhancing quality and standards in schools is not only to have a better understanding of what influences teachers' resilience over the course of a career, but also the means by which the resilience necessary for these to be sustained may be nurtured and developed in the contexts in which they work and live. Horne and Orr (1998) proposed seven 'Cs' to describe key features of resilient organisations: community, competence, connections, commitment, communication, coordination and consideration. These characteristics are also used in the educational research literature to portray schools which are learning communities in which both pupils and teachers are likely to experience enriched relationships with others, enhanced efficacy and commitment and increased job fulfilment (Stoll & Louis, 2007). At a time when the contemporary landscape of teaching is littered with successive and persisting government policy reforms that have increased teachers' external accountabilities, work complexity and emotional workload, such learning communities are a necessary condition for schools and their teachers to sustain their capacity to be resilient in order to continue to work for improvement.

Understanding teacher resilience as a multi-faceted and dynamic construct and its importance in sustaining teachers' commitment and effectiveness has important implications for pre-service programmes. Efforts need to be made to help pre-service students be more aware of the likely experiences that they will face on entry into teaching. Rather than treating teacher resilience as being narrowly associated with inherited personal traits, teacher educators need to become engaged in future thinking with pre-service students on internal and external factors which influence resilience in teachers, so that they can be better prepared for the realities of teaching. It is also perhaps time that policy organisations recognised the limitation of treating teacher resilience as a fixed psychological construct and testing and assessing it through prescribed diagnostic questionnaires. As the teachers in the research reported, it needs to be nurtured in context, through appropriate, timely in school support by wise leaders and continuing professional programmes which will ensure that staff retain their capacity to be resilient so that schools will retain teachers who are willing and able to teach to their best—what we call quality retention.

Acknowledgements

We wish to acknowledge the researchers and teachers who participated in the original VITAE project, especially Professors Gordon Stobart and Pam Sammons and Dr Alison Kington.

References

- Aaronson, D. (2008) The impact of baby boomer retirements on teacher labor markets. Chicago Fed Letter, 254, September. Available online at: http://www.chicagofed.org/publications/fed-letter/cflseptember2008_254.pdf (accessed 20 September 2011).
- Association of Teachers and Lecturers (2010) Press release – Annual Conference March 2010: Over a quarter of education staff have dealt with physical violence by pupils, London, ATL.
- Ball, S.J. (2000) Performativities and fabrications in the education economy: Towards the performative society, *Australian Educational Researcher*, 17(3), 1–24.
- Ball, S. (2003) The teachers' soul and the terrors of performativity, *Journal of Education Policy*, 18(2), 215–228.
- Benard, B. (1995) *Fostering resilience in children*. ERIC/EECE Digest, EDO-PS-99.
- Bryk, A.S. & Schneider, B.L. (2002) *Trust in schools: A core resource for improvement* (New York: Russell Sage Foundation Publications).
- Brunetti, G. (2006) Resilience under fire: Perspectives on the work of experienced, inner city high school teachers in the United States, *Teaching and Teacher Education*, 22, 812–825.
- Burghes, D., Howson, J., Marenbon, J., O'Leary, J., & Woodhead, C. (2009) *Teachers matter: Recruitment, employment and retention at home and abroad* (London, Politeia).
- Castro, A.J., Kelly, J. & Shih, M. (2010) Resilience strategies for new teachers in high-needs areas, *Teaching and Teacher Education*, 26(3), 622–629.
- Chevalier, A. & Dolton, P. (2004) Teacher shortage: Another impending crisis?, *CentrePiece*, Winter, 15–21.
- Child Poverty Action Group (2009) *Child wellbeing and child poverty* (London, Child Poverty Action Group).
- Cicchetti, D. (1993) Developmental psychopathology: Reactions, reflections, projections, *Developmental Review*, 13 471–502.
- Cicchetti, D. & Garmezy, N. (Eds) (1993). Milestones in the development of resilience, *Development and Psychopathology*, 5(4), 497–774.
- Creswell, J. (2003) *Research design: Qualitative, quantitative, and mixed methods approaches* (Thousand Oaks, CA, Sage).
- Darling-Hammond, L. (1997) *Doing what matters most: Investing in quality teaching* (New York, National Commission on Teaching & America's Future).
- Day, C. (2004) *A passion for teaching* (London, Routledge Falmer).
- Day, C. & Gu, Q. (2010) *The new lives of teachers* (Abingdon, Routledge).
- Day, C., Edwards, C., Griffiths, A. & Gu, Q. (2011a) Beyond survival: Teachers and resilience. Available online at: <http://www.nottingham.ac.uk/education> (accessed 1 September 2011).
- Day, C. & Leithwood, K. (Eds) (2007) *Successful principal leadership in times of change: An international perspective* (Dordrecht, Springer).
- Day, C., Sammons, P., Hopkins, D., Harris, A., Leithwood, K. Gu, Q. Brown, E., Ahtaridou, E. & Kington, A. (2009) *The impact of school leadership on pupil outcomes* (London, Department for Children, Schools and Families).
- Day, C., Sammons, P., Leithwood, K., Hopkins, D., Gu, Q., Brown, E. & with Ahtaridou, E. (2011b) *School leadership and student outcomes: Building and sustaining success* (Maidenhead, Open University Press).
- Day, C., Sammons, P., Stobart, G., Kington, A. & Gu, Q. (2007) *Teachers matter: Connecting lives, work and effectiveness* (Maidenhead, Open University Press).
- Day, C., Stobart, G., Sammons, P., Kington, A., Gu, Q. & Smees, R. (2006) *Variation in teachers' work, lives and effectiveness* (London, DfES).

- Department for Children, Schools and Families (2007) DCSF: School workforce in England (Revised). Available online at: <http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000743/index.shtml> (accessed 1 September 2011).
- Department for Children, Schools and Families (2008) DCSF: School workforce in England January 2008 (Revised). Available online at: http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000813/Addition_C.xls (accessed 1 September 2011).
- Department for Children, Schools, Families (2009) *Deprivation and education* (London, Department for Children, Schools and Families).
- Edwards, A. (2007) Relational agency in professional practice. A CHAT analysis, *Actio: An International Journal of Human Activity Theory*, 1, 1–17.
- Edwards, A. (2011) Agency, motives and practices. Paper presented at the ESRC seminar series on *A Multi-Disciplinary Inquiry into the Nature and Forms of Workplace Resilience: Teacher Retention and Effectiveness in Times of Change*, University of Nottingham, 19 January.
- Edwards, E.A. (2003) *Retention and motivation of veteran teachers: Implications for schools*. Unpublished dissertation, Faculty of the Department of Educational Leadership and Policy Analysis, East Tennessee State University.
- Giles, C. (2006) Sustaining secondary school visions over time: Resistance, resilience and educational reform, *Journal of Educational Change*, 7, 179–208.
- Goddard, R., Hoy, W. & Hoy, A. (2004) Collective efficacy beliefs: Theoretical developments, empirical evidence, and future direction, *Educational Researcher*, 33(3), 3–13.
- Goleman, D. (2007) *Social intelligence* (New York, Arrow Books).
- Goodwin, R. (2005) Why I study relationships and culture, *The Psychologist*, 18(10), 614–615.
- Gordon, K.A., Longo, M. & Trickett, M. (2000) Fostering resilience in children, *The Ohio State University Bulletin*, 875–899. Available online at: <http://ohioline.osu.edu/b875> (accessed 20 September 2011).
- Gorman, C. (2005, January 17) The importance of resilience, *Time*, 165(3), A52–A55.
- Greenberg, M. (2006) Promoting resilience in children and youth: Preventive interventions and their interface with neuroscience, *Annals of the New York Academy of Sciences*, 1094, 139–150.
- Greenfield, S. (2008) *ID: The quest for identity in the twenty-first century: The quest for meaning in the twenty-first century* (London, Sceptre).
- Grissmer, D. & Kirby, S.N. (1997) Teacher turnover and teacher quality, *Teachers College Record*, 99(1), 57–61.
- Gu, Q. & Day, C. (2007) Teachers' resilience: A necessary condition for effectiveness, *Teaching and Teacher Education*, 23, 1302–1316.
- Guttman, C. (2001) A hard sell for teaching, *The Courier UNESCO*, October.
- Hamel, G. & Välikangas, L. (2003) The quest for resilience, *Harvard Business Review*, September, 1–13.
- Hansen, D.T. (1995) *The call to teach* (New York, Teachers College Press).
- Hargreaves, A. (1994) *Changing teachers, changing times* (London, Cassell).
- Hargreaves, A. & Fullan, M. (1998) *What's worth fighting for out there?* (New York, Teachers College Press).
- Health and Safety Executive (2000) The scale of occupational stress: A further analysis of the impact of demographic factors and type of job. Available online at: http://www.hse.gov.uk/research/crr_pdf/2000/crr00311.pdf (accessed 20 September 2011).
- Health and Safety Executive (2011) Stress-related and psychological disorders: Occupation and industry (2007/8–2009/10). Available online at: <http://www.hse.gov.uk/statistics/causdis/stress/occupation.htm> (accessed 9 July 2011).
- Henry, D.A. & Milstein, M. (2006) Building leadership capacity through resiliency. Paper presented at the *Commonwealth Council for Educational Administration and Management*, Lefcosia, Cyprus.
- Higgins, G.O. (1994) *Resilient adults: Overcoming a cruel past* (San Francisco, Jossey-Bass).
- Horne, J. & Orr, J.E. (1998) Assessing behaviors that create resilient organizations, *Employment Relations Today*, 24(4), 29–39.
- Howard, S., Dryden, J. & Johnson, B. (1999) Childhood resilience: Review and critique of literature, *Oxford Review of Education*, 25(3), 307–323.
- Huberman, M. (1993) *The lives of teachers* (London, Cassell).
- Ingersoll, R.M. (2003) *Who controls teachers' work?* (Cambridge, MA, Harvard University Press).

- Johnson, S.M. (2004) *Finders and keepers* (San Francisco, CA, Jossey-Bass).
- Kardos, S.M. & Johnson, S.M. (2007) On their own and presumed expert: New teachers' experience with their colleagues, *Teachers College Record*, 109(9), 2083–2106.
- Knoop, H.H. (2007) Control and responsibility, in: H. Gardener (Ed.) *Responsibility at work* (San Francisco, CA, Jossey-Bass).
- Kyriacou, C. (2000) *Stress busting for teachers* (Cheltenham, Stanley Thornes).
- Layard, R. & Dunn, J. (2009) *A good childhood: Searching for values in a competitive age* (London, Penguin Books).
- Lazear, E.P. (2000) The future of personnel economics, *The Economic Journal*, 110(467), 611–639.
- Leithwood, K., Day, C., Sammons, P., Harris, A. & Hopkins, D. (2006) *Seven strong claims about successful school leadership* (Nottingham, National College for School Leadership).
- Lindsey, S. (2007) Retention and intention in teaching careers: Will the new generation stay? *Teacher and Teaching: Theory and Practice*, 13(5), 465–480.
- Loehr, J. & Schwartz, T. (2003) *The power of full engagement* (New York, Free Press).
- Luthans, F., Avolio, B.J., Avey, J.B., & Norman, S.M. (2007) Positive psychological capital: Measurement and relationship with performance and satisfaction, *Personnel Psychology*, 60, 541–572.
- Luthar, S.S. (2006) Resilience in development: A synthesis of research across five decades, in: D. Cicchetti & D.J. Cohen (Eds) *Developmental psychopathology: Risk, disorder, and adaptation* (New York, Wiley), 739–795.
- Luthar, S. & Brown, P. (2007) Maximizing resilience through diverse levels of inquiry: Prevailing paradigms, possibilities, and priorities for the future, *Development and Psychopathology*, 19, 931–955.
- Luthar, S.S., Cicchetti, D. & Becker, B. (2000) The construct of resilience. A critical evaluation and guidelines for future work, *Child Development*, 71, 543–562.
- Macdonald, R. & Marsh, J. (2005) *Disconnected youth? Growing up in Britain's poor neighbourhoods* (Basingstoke, Palgrave Macmillan).
- Margolis, J. (2008) What will keep today's teachers teaching? Looking for a hook as a new career cycle emerges. *Teachers College Record*, 110(1), 160–194.
- Masten, A.S. (2001) Ordinary magic: resilience process in development, *American Psychologist*, 56, 227–239.
- Masten, A.S., Hubbard, J.J., Gest, S.D., Tellegen, A., Garmezy, N. & Ramirez, M. (1999) Adaptation in the context of adversity: Pathways to resilience and maladaptation from childhood to late adolescence, *Development and Psychopathology*, 11, 143–169.
- Masten, A. & Garmezy, N. (1985) Risk, vulnerability, and protective factors in developmental psychopathology, in: B. Lahey & A. Kazdin (Eds) *Advances in clinical child psychology* (New York, Plenum Press), 1–52.
- Matheson, I. (2007) Current demographics in the school teacher population in Scotland, paper presented at the *Scottish Educational Research Association Conference*.
- Meister, D.G. & Ahrens, P. (2011) Resisting plateauing: Four veteran teachers' stories, *Teaching and Teacher Education*, 27, 770–778.
- Merriam, S.B. & Associates (2002) *Qualitative research in practice: Examples for discussion and analysis* (San Francisco, Jossey-Bass).
- McLaughlin, C. & Clarke, B. (2009) Relational matters: A review of the impact of school experience on mental health in early adolescence. Unpublished research paper.
- Nash, P. (2005) Speech to Worklife Support Conference, presented at the *London Well Being Conference*, London, 21 April.
- New Economics Foundation (2009) *National accounts of well-being: Bringing real wealth onto the balance sheet* (London, New Economics Foundation).
- Nias, J. (1999) Teachers' moral purposes: Stress, vulnerability, and strength, in: R. Vandenberghe and A.M. Huberman (Eds) *Understanding and preventing teacher burnout: A sourcebook of international research and practice* (Cambridge: Cambridge University Press), 223–237.
- Nieto, S. (2003) *What keeps teachers going?* (New York, Teachers College Press).
- OECD (2005a) *Education at a glance* (Paris, OECD).
- OECD (2005b) *Teachers matter: Attracting, developing and retaining effective teachers* (Paris, OECD).

- OECD (2009) *Creating effective teaching and learning environments* (Paris, OECD).
- OECD (2011) *Building a high-quality teaching profession: Lessons from around the world* (Paris, OECD).
- Palmer, P.J. (1998) *The courage to teach: Exploring the inner landscape of a teachers' life* (San Francisco, Jossey-Bass).
- Parsons, C. (1999) *Education, exclusions and citizenship* (London, Routledge).
- Patterson, J. & Kelleher, P. (2005) *Resilient school leaders: Strategies for turning adversity into achievement* (Alexandria, VA, Association for Supervision and Curriculum Development).
- Peterson, C., Park, N. & Sweeney, P. (2008) Group well-being: Morale from a positive psychology perspective, *Applied Psychology: An International Review*, 57, 19–36.
- PricewaterhouseCoopers (2001) *Teacher workload study* (London, DfES).
- Rutter, M. (1990) Psychosocial resilience and protective mechanisms, in: J. Rolf, A.S. Masten, D. Cicchetti, K.H. Nuechterlein & S. Weintraub (Eds) *Risk and protective factors in the development of psychopathology* (New York, Cambridge), 181–214.
- Rutter, M. (2006) *Genes and behavior: Nature–nurture interplay explained* (Malden, MA, Blackwell).
- Social Exclusion Unit (1998) *Truancy and school exclusion* (London, HMSO).
- Social Exclusion Unit (2001) *Preventing social exclusion* (London, HMSO).
- Schaufeli, W.B. & Bakker, A.D.B. (2004) Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study, *Journal of Organisational Behaviour*, 25, 293–315.
- Smithers, A. & Robinson, P. (2003) *Factors affecting teachers' decisions to leave the profession* (London, Department for Education and Skills).
- Smithers, A. & Robinson, P. (2005) *Teacher turnover, wastage and movements between schools* (London, Department for Education and Skills).
- Stoll, L. & Louis, K.S. (Eds) (2007) *Professional learning communities: Divergence, depths and dilemmas* (Maidenhead, Open University Press).
- The Sutton Trust (2009) *Attainment gaps between the most deprived and advantaged schools* (London, The Sutton Trust).
- Tolofari, S. (2005) New public management and education, *Policy Futures in Education*, 3(1), 75–89.
- Troman, G. & Woods, P. (2000) Careers under stress: Teacher adaptations at a time of intensive reform, *Journal of Educational Change*, 1(3), 253–275.
- Troman, G. & Woods, P. (2001) *Primary teachers' stress* (London, Routledge).
- Wassell, B. & LaVan, S. (2009) Tough transitions? Mediating beginning urban teachers' practices through coteaching *Cultural Studies of Science Education*, 4, 409–432.
- Webb, R., Vulliamy, G., Hämäläinen, S., Sarja, A., Kimonen, E. & Nevalainen, R. (2004) Pressures, rewards and teacher retention: A comparative study of primary teaching in England and Finland, *Scandinavian Journal of Educational Research*, 48(2), 169–188.
- Wilson, R., Homenidou, K. & Dickerson, A. (2004) *Working futures: New projections of occupational employment by sector and region 2002–2012* (Nottingham, SSDA/DfES).
- Zucker, R.A. (2006) Alcohol use and the alcohol use disorders: A developmental–biopsychosocial systems formulation covering the life course, in: D. Cicchetti & D. Cohen (Eds) *Developmental psychopathology: Vol. 3. Risk, disorder, and adaptation* (New York, Wiley), 620–656.