

EARLY PROFESSIONAL EXPERIENCE OF MATHEMATICS TEACHERS: VALUES, SELF-EFFICACY AND RETENTION.

A study submitted in fulfilment of the requirements for the award: Masters of Research 2015.

Abstract

This research is a study of the 22 graduates from the 2010-11 University of East Anglia's (UEA) Postgraduate Certificate in Education (mathematics) course and a review of their first year in teaching. Within the study consideration of self-efficacy, values and experience occurred, mindful of the wider issue of attrition rates in the field of mathematics teaching. By focusing solely on the experience of beginner mathematics teachers, I felt that there may be some distinguishing features or nuances that differ from other subject areas. The reality is that this was not the case. The problems and difficulties which afflict all beginner teachers in England are in many ways the same as those encountered by mathematics NQTs.

Gareth Joel (EDU)

g.joel@uea.ac.uk 4256298/3

This copy of the thesis has been supplied on condition that anyone who consults it is understood to recognise that its copyright rests with the author and that use of any information derived there from must be in accordance with UK Copyright Law. In addition, any quotation or extract must include full attribution.

Contents

Introduction	3 - 5
Literature Review	6 - 27
Teacher Self	6
First Appointment considerations	10
Teaching experiences	11
Behaviour Management	12
Administration	13
Work-life Balance	14
Building Teacher and Pupil Relationships	15
Pupil Achievement	16
Peer relationship and support	18
Professional Development and career expectation	20
Independence or Isolation	21
Categorisation of teacher experience and ‘teacher-self’	23
School context and collective efficacy	24
Retention of Teaching Staff	25
Summary of literature review	26
Methodology	28 – 33
Ethical considerations	31
Background Data	34 - 43
University Course Profile & NQT survey	34
Regional Description	35
Summary of Research Cohort Employment Destinations	36
Beginner teacher profile within this study	37
First Appointing School Profiles	38
National figures on Retention of Mathematics teachers	39
PGCE retention data for all subject specialisms	40
Overall comparison considering trainees awarded QTS and being currently employed (all subject specialisms)	41
PGCE retention data for Mathematics (Institution & National rates)	42
Summary of the contextual data	43
Representation of the early experience for beginner maths teachers	44 - 79
Initial focus group discussion	45
Headline comments	48
Substantive groups	52
Pupil behaviour and engagement	52
Teacher-Pupil relationship	55
Peer relationship with colleagues	56
Work-life balance	58
Professional expectation, development and equality	61
Commentary specific to mathematics	62
Exit Interviews	65

Final focus group discussion	72
Considering Research Cohort Characteristics	75
Age (comparing recent graduates with later career changers)	76
Final PGCE grading	77
Degree classification on PGCE entry	78
First Appointing School Profiles	79
Conclusion	80 - 89
Reflection on methodology – limitations of the study	87
Possible future research lines and personal reflections on the study	88
Reference List	90 - 97
Appendices	98 - 121
Ethical considerations	98
Participant Letter	99
Consent Form	100
Information Sheet	101
Beginner Teacher Details	102
Sample Dashboard	103
Teacher Contact made during study	104
HH Exit Interview transcript	105
KC Exit Interview transcript	113

Introduction

This study began in early 2010 as research into retention and attrition rates of mathematics teachers within the England and Wales education system. A 2007 Royal Society 'state-of-the-nation' report reflected the situation around this time. The report found, having considered all subjects, *'the most serious initial drop off occurred among teachers with mathematics'* and moreover, within the field of mathematics teachers, *'50% leave the profession within 4 years post qualification'* (Higgins & Taylor 2007: 57). The British Broadcasting Corporation (BBC) reported on the Royal Society data indicating that the *'patchy nature of the figures hampered the government's ability to tackle the issue effectively'* (www.bbc.co.uk accessed 05/03/10). At this stage the study had a focus on understanding the issue of retention, being mindful of the 2007 Royal Society report and perceived government inability to tackle the situation effectively. My own experience as a maths teacher has made me aware that the lives of teachers can be challenging yet rewarding. However, although the profession can offer a rich and varied experience, it is also true that whereas some teachers flourish, others struggle. This study began as an enquiry to gain greater insight into why some maths teachers fail to flourish, and as such, why they may decide to leave the profession.

The reasons for undertaking this research were in part due to my position as a Lecturer in Education at the University of East Anglia (UEA). In September 2008, I was appointed with responsibility for the secondary Postgraduate Certificate in Education (PGCE) mathematics Masters level course. This was my first post within higher education following a career background based predominantly in secondary school. My teaching experience of 16 years involved working across 11-18 age range, at various management levels, in five different schools. Most recently, I spent seven years as Head of Faculty for a large secondary mathematics department in a successful mixed comprehensive 11-18 school.

In the initial days at UEA it was clear that working in higher education was very different to working in schools. As Murray and Male point out, *'Teacher educators undergo a mid-career transition, leaving their schools to work in HE, to take on academic roles, which differ from the school teaching posts for which they originally trained and in which they have gained experience'* (Murray & Male 2005: 126). The management expectations were different, and the environment was very different, with more personal office space and less direct interaction with colleagues. There was also the expectation that active engagement in research would be involved, and in some way the vibrant dynamic within schools was replaced by a calmer, albeit no less intense, atmosphere.

Despite not having a research background I was keen to become part of the mathematics education research community. I believe that if you are working within higher education and training the teachers of the future that a component of this role is to undertake research to inform such practice. Having been a maths teacher for 16 years I had interest in understanding the experience of mathematics teachers. I also became aware that the recruitment and retention of high calibre maths teachers was a high profile issue in education policy, of importance to future prosperity and well-being of the nation. Stanford University's Eric Hanushek (hanushek.stanford.edu accessed 24/07/15) researches students' performance in mathematics tests against economic growth indicating strong positive correlation. So what keeps good mathematics teachers teaching and what might send them away from the classroom was a question well worth trying to answer.

The underpinning rationale for the study was therefore partly a matter of personal interest, partly an understanding that research in education was now part of my professional duties,

but also, that the provision of an adequate number of effective teachers of maths was an important strand of public policy.

In July 2010 an initial analysis of the Teaching Agency (previously Training and Development Agency TDA) data provided to all Initial Teacher Training (ITT) institutions gave a 'snapshot' of retention within mathematics education. These data are considered during the Background data chapter within the thesis. However it emerged that there were noticeable differences when the data on retention for mathematics teachers for UEA graduates and sector data for other providers were compared. Graduates from the UEA were more likely to remain in teaching; for example 100% of the 04/05 UEA mathematics graduates remained in teaching for four years compared with 72% nationally. Employment immediately after gaining qualified teacher status (QTS) was also higher for UEA graduates than for other sector providers. Higher education ITT departments are given target recruitment figures by TDA. For mathematics trainee teachers at UEA, this figure has remained consistent at 24 for several years. Over these past years, where I have coordinated the training provision, all the teachers completing the course have taken up teaching positions bar two.

Therefore in the summer of 2010, as there were differences in national and UEA employment and retention figures, a decision had to be made regarding the evolution of the study. There were two distinct reasons why the study moved away from a simple focus on retention data and towards a study of the early experience of mathematics teachers. I was interested in how people that I had trained progressed in their first teaching post, both professionally and personally. I wanted to keep in mind the retention question although with a more overt focus on the mathematics teaching experience, and the quality of maths teachers' working lives, including the effect on their lives more generally. As retention and initial recruitment rates for UEA graduates are higher than regional or sector employment any inference made related to national data would have to be accompanied with a note of caution. The second reason why I wanted to look at teacher experience is my belief that purely quantitative data indicating that teachers are leaving the profession may not give full insight into why this is happening or the challenges that teachers face in their professional lives. I want to know teachers' own stories and only subsequently consider how this may impact on retention. As Gray suggests,

'A narrative approach to inquiry is most appropriate when the researcher is interested in portraying intensely personal accounts of human experience. Narratives allow voice - to the researcher, the participants and to cultural groups - and in this sense they can have the ability to develop a decidedly political and powerful edge.'

(Gray 1998:12)

This research became a more general study of the 22 graduates from the 2010-11 University of East Anglia's (UEA) Postgraduate Certificate in Education (mathematics) course and a review of their first year in teaching. Note that the research cohort that was studied was well known to me enabling high return rates for interviews (see methodology section and ethics) and a greater understanding of their early experience.

Being a more general study of early teaching experience hopefully does not detract from the overarching aim of gaining insight into why teachers may not flourish in the classroom and subsequently leave. The evolvment and specificity of the following research questions hoped to interweave the narrative of individual stories into a structured report to aid understanding of retention within mathematics teaching.

In my visits to schools observing these graduates during their training year, I felt that there was linkage between a culture within departments or wider school that if matched to trainees' expectation ensured successful training placements. Would this be the case for first appointment and how would a teacher know that the culture within the appointing school would indeed match? Thus the first research question became:

What factors does a beginner teacher take into account in deciding which school they choose for their first teaching appointment?

The next research question evolved through consideration of how a teacher's values and self-efficacy might be construed through the narrative of their year. Russell and Korthagen (1995), literature to be considered in more detail within the next chapter, viewed that during recent years there has been transition from a 'practice-theory' model to an 'individuality' approach in teacher training. This, in part, recognises that belief-systems can be quite fixed but does raise the question of institutional values conflicting with those of the beginner teachers particularly in light of their first appointment consideration. Therefore how values, self-efficacy or belief might impact on retention is important although trying to understand how these values frame a teacher's view of their year remains of personal interest.

What value or belief systems are apparent for mathematics teachers when they reflect on their early teaching experience?

Once the decision to *give voice* and the 'narrative approach' for the study was adopted, considered in detail within the Methodology chapter, the best approach on how to convey these data collected came next. The option of a case study write-up that may be representative of the wider mathematics teaching community was considered although Grounded Theory Methodology (GTM) seemed to represent the most succinct approach and would allow all study participants' voice. However I was a beginner researcher and was worried that such classification of responses would detract from the 'thick description' (Geertz, 1973) that I was hoping to portray of each teacher's experience. So the research question, in some way aiding my own development as a researcher, focused on how best to represent a teaching year.

Will classification of experience, using Grounded Theory Methodology, aid in a clear portrayal of an NQT year mindful of the complexity of such experience?

The final research question stems from the hope that by answering the first three questions there will be insight into the lived experience of a beginner mathematics teacher. That this experience is conveyed succinctly so that, in some small way, the question of retention can be addressed continues to be the over-arching aim of the study. Bringing together the themes that emerge in the previous three questions is the aim of this last one.

How can data collected through this study help to improve insight into recruitment and retention issues within mathematics education?

Literature Review

'Teaching is a personal activity because the manner in which each teacher behaves is unique.'

(Nias 1989: 2)

The reason to start with reference to the work of Jennifer Nias (1989) is that this study, in a similar way to her work and to be considered in the Methods chapter, emphasises the individuality of every teacher and the uniqueness of their experience.

This study is about the early teaching experience of maths teachers. It proposes that an individual's ideas about teaching are personal, dependent on previous experience but can become firmly set at the very early stage of a teaching career. In terms of the structure and focus of the dissertation; this study has four specific research areas, these being maths student teachers' first appointment considerations, teacher belief systems, classification of early experience, and how these questions might help us understand the challenges of retaining teachers in the profession.

In terms of theoretical frameworks influencing the dissertation, the work will draw on the work and ideas of Goodson (2008) and Sikes (1997) on teacher biography, as one of the keys to understanding educational processes and outcomes (see also, Day et al., 2007). In structuring the literature review, discussion on first appointment considerations and early teaching experience will be preceded by general ideas of 'teacher-self' with specific reference to those of maths and trainee teachers. 'Teacher-self' will be a term used to reflect the belief system of a teacher incorporating teaching expectation, their self-efficacy perception and their developing teacher identity. The review on early teaching experience will include discussion on categorisation of both experience and type of teacher before finally looking at the school context in which this experience has taken place. This structuring of the review is to reflect the belief that 'teacher-self', experience and school context are inextricably linked.

Discussion on the issues in retention of mathematics teachers will be the last part of this review; the literature in this section will include recent media coverage of these issue, and governmental perspectives on both teacher recruitment and retention, as evidenced by the public statements and policy documents and press briefings on the issue of teacher retention

Teacher Self

Belief system is a term used to describe a person's ideological, motivational and attitudinal stance. Belief-systems research actually '*subsumes many of those studies formerly under the heading of ideology*' (Cobb 1973: 122). Numerous psychological studies discuss nature and nurture effects in developing belief system and all reach a similar conclusion that

'our own individual dispositions, the family we grow up in, the peers we associate with, the community and circumstances in which we live, the socio-economic situation and the cultural messages that we are exposed to all contribute.'

(Thornton 2008: 555)

A teacher's belief system is at the core of their 'teacher-self' but this belief system may have started to develop even before a teacher has had their first teaching experience. Although Loughran and Northfield (1996) go so far as to suggest that pedagogical beliefs and identity formation stem entirely from the learning experience teachers have whilst they were at school, this study explores the possibility that these become firmly set during the early years of teaching.

Russell and Korthagen (1995) as Editors of 'Teachers who teach Teachers' explore the nature of belief system and how this may be embedded early in a teaching career with a specific lens on initial teacher education. A simplistic summary of their conclusion reflected professional courses that had progressed from theory-practice models, through to reflective practitioner models to an individuality model where recognition of each teacher's already formed belief system could be developed. Thus,

'the question became how to make teachers aware of their practical knowledge – the conceptions, beliefs, and personal theories embedded in their everyday teaching – and how to develop in teachers both a feeling of responsibility for the goals and effects of their teaching and the skills required to work towards those goals. This meant a shift away from a general theory about good teaching towards a more appreciation for the individuality of each teacher.'

(Russell & Korthagen 1995: 188)

A sense given by the teacher educators who made contribution in the writing of 'Teachers who teach Teachers' (Russell & Korthagen (Eds.) 1995) was that beginner teachers were often using educational theory to explain their professional practice rather than to inform it. In some way this reinforced the idea that teachers' belief system is embedded rather than developing; the skill for a teacher educator is how to ensure beginner teachers reflect on their possibly fixed or difficult to mould belief system whilst still developing their teaching practice.

Belief systems may be difficult to mould but the 'transition shock' (Veenman 1984: 7) of first entering the classroom can undoubtedly challenges fixed mind-sets. The expectations of teachers upon entering the profession are confronted by the reality in schools.

'It is recognised that the transition from teacher education to the first teaching job can be a dramatic and traumatic one for NQTs. This is often referred to as the 'reality shock', and deals with the assimilation of a complex reality which forces itself incessantly upon the beginning teacher.'

(Haggarty, Postlethwaite, Diment & Ellins 2009:3)

The ideologies that a beginner teacher has or the expectations about a teaching career are often quickly reinforced or undermined. The assimilation of new ideas into a teaching belief schema is difficult to assess but clearly happens, albeit at differing rates and to differing extents, for all teachers. This link between belief and expectation do combine with self-efficacy and how good a teacher you believe yourself to be.

It was in the late 1970's that Bandura, at this time highly influential in social learning theory and belief system research, began exploring ideas on self-efficacy and individual perception of this. Self-efficacy theory relates to the competencies and ability that each individual has, 'acknowledging the diversity of human capabilities' (Bandura 1997: 36), and how more

importantly these skills are perceived. Everyone wishes to be successful in their lives and self-efficacy perception is central to a teacher's view on their own teaching performance. This judgement of performance may be through self-reflection linked to belief system and experience or from external feedback. How this feedback or evaluation is received and assimilated into a belief system is at the centre of self-efficacy. Klassen, Tze, Betts & Gordon (2011) have more recently explored the developing research in this area.

'Teacher efficacy—the confidence teachers hold about their individual and collective capability to influence student learning—is considered one of the key motivation beliefs influencing teachers' professional behaviours and student learning.'

(Klassen, Tze, Betts & Gordon 2011: 21)

Understanding belief systems and perception on self-efficacy make an important contribution to a fuller understanding of teacher identity but *'the concept of identity is a complex one, and even a cursory examination of the literature reveals that there is much to understand if one is to appreciate the importance of identity in teacher development'*. (Beauchamp & Thomas 2009: 175).

The next part of this literature review will explore these ideas on 'teacher-self' with particular reference to teachers with mathematics as a specialism. Day and Qing (2010) believe that teacher's professional identities are intricately linked to the subject specialism they teach.

A mathematics teacher belief system, which will have *some* commonalities with that of teachers of other subjects, nonetheless has an element of distinctiveness that needs consideration. In his paper, Furinghetti (1993: 34) concluded that mathematics *'is a discipline that enjoys a peculiar property: it may be loved or hated, understood or misunderstood, but everybody has some mental image of it.'* This mental image is also caricatured by media representation; mathematics being difficult or the mathematics teacher being the most intelligent of creatures. With reference to Ernest's (1995) work we get a

'widespread public image of mathematics being difficult, cold, abstract, theoretical, ultra-rational, but important and largely masculine. It has the image of being remote and inaccessible to all but a few super-intelligent beings with mathematical minds.'

(Ernest 1995: 449)

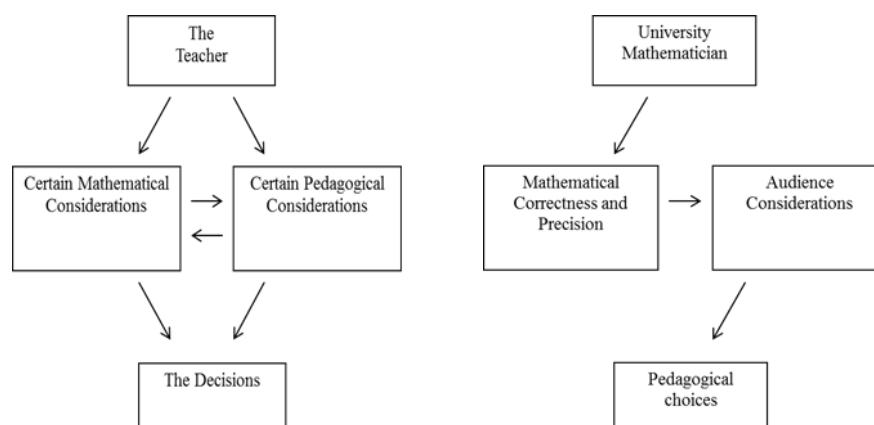
So this representation of the mathematics teacher, supported by Thornton's (2008) work on belief system and how they develop, may make mathematics teachers view themselves in a slightly different light to other subject specialists.

Beginner teacher expectation follows on, to some extent, from the ideas of Loughran and Northfield (1996); a teacher's own learning experience whilst they were at school will inform expectation of what pedagogical approach they might adopt. It should be assumed that subject specialists enjoy their subject and attained relative academic success whilst at school. This leads to two considerations: the first is what type of learning experience did these teachers go through whilst at school? The second is their actual mathematical capability, tied in to how they learn mathematics. If whilst at school they were always in the

higher sets and successful, then this may determine their view on how to best teach. These are factors in teaching expectation when beginner teachers enter their first classroom.

Considering the taught experience of mathematicians brings to the fore differing pedagogical practice evident in mathematics classrooms. The experience that a teacher has gone through will be determined by many factors including the school context they attended, the individual teachers that taught them, their associated beliefs and the era (school context considerations are discussed later). Dependent on era or teacher they had might dictate whether the beginner teachers in this study believe more in a behaviourist or constructivist approach to mathematics education. It is evident a tension in practice between a transmission and collaborative approaches in mathematics was apparent and continues; Swan (2006) has studied this area extensively believing that transmission style mathematics lessons are predominant. Over the past several decades there has also been differing political emphasis regarding best practice, considered by Christodoulou (2014), reinforcing that when a teacher went to school may dictate subsequent belief. These considerations of previous school context, age or schooling experience will have a part to play in future teaching expectation.

In discussing mathematical capability, Paterson, Thomas & Taylor (2011) constructed a tentative framework (below), suggesting that that the mathematics teacher has certain mathematical considerations as well as pedagogical ones whilst a university mathematician will firstly focus on mathematical correctness and precision. How does this transfer to the able graduate mathematician in the school classroom and their expectations?



Does the need for mathematical accuracy and detail outweigh pedagogical decision making? Many would suggest that there is need for both although it does raise the question of whether the able mathematician is more distant, in a pedagogical sense, from the expectations of students. This has much recent relevance as current teacher recruitment practice places an emphasis on academic success being a prerequisite for entering the teaching profession.

'We'll offer high-achieving graduates, especially those in shortage subjects like science and maths, significantly better financial incentives to train as teachers – up to £20,000 for graduates with first class honours degree.'

(Gove 2011 speech to Royal Society)

So mathematicians may have differences in expectation for mathematics teaching although these may not become clear until later in their careers.

Overall it becomes apparent that a view of 'teacher-self' is very personal and difficult to categorise. However by looking at the first appointment considerations of student teachers, there might be some possibility of gaining greater insight into the motivation of maths teachers, and what they are looking and hoping for in a maths education career.

First Appointment considerations

The consideration of what teacher characteristics are required by appointing schools seem clear. Some institutions employ 'hiring staff', particularly in the United States, to recruit although final decisions will be made by Principals. Predilection and emphasis in recruitment criteria may vary between institutions although all schools are seeking the 'best' appointments possible.

'Teacher Candidates who are not only prepared academically but who also have a passion for teaching. They want dedicated self-starters willing to reflect on their teaching methods and adjust their philosophy if necessary. Hiring Officials want team players. They want Teacher Candidates who can develop positive relationships within the teaching community and with their students. Hiring Officials understand the importance of the science of teaching but in the final decision making process, they are looking for the intangibles found in all effective teachers. They are considering the elements that make teaching both an art and a science.'

(Ziebarth-Bovill et al 2012: 136)

What is less clear is what teachers look for in their first appointment. Cockburn and Haydn (2004) conducted a survey on 59 prospective NQTs nearing the end of their training year to explore this question. They found that,

'apart from school location, by some way the most prevalently cited factor was the reputation of the school in terms of the views of other trainees who had been on placement there. The views of their peers appeared to be more influential than Ofsted reports on the school, although 8 of the 59 trainees did mention the school's Ofsted as a factor in applying for a post.'

(Cockburn & Haydn 2004: 68)

The most significant other factor indicated by Cockburn and Haydn (2004) was where trainees had enjoyed a successful placement during the training year, they frequently were, or sought to be, appointed.

Priyadharshini and Robinson-Pant (2003) considered career changers and their thoughts coming into teaching. *'Reasons that are both idealistic (wanting to have a 'moral' career, serving the community) as well as pragmatic (security, stability) in their decisions'* (2003: 110) were conclusions found. On first appointments schools these career changers found

'archaic recruitment practices and cultures in schools suggesting that educational institutions could listen and learn more from the views of people coming from other working environments, such as industry or business.'

(Priyadharshini & Robinson-Pant 2003: 110)

What was clear in this journal paper was that thoughtful consideration, and comparison with previous working environments, were made by career changers in first appointment. However it appears that practicalities, be these logistical (for example, the time it would take to travel from home to work) or teachers looking for clear support and reward, that occupy teachers thoughts in first appointment decisions.

Teaching experiences

Once appointed, looking at categorising experiences that beginner teachers face in their first year of teaching may help us further understand 'Teacher-self' and motivation. This study is suggesting that 'teacher-self' is most strongly determined by the experiences teachers meet in these early stages. The belief system can be better understood by looking at the outcomes and motivations in each experiential context during this early career stage.

'Teachers' professional identities – who they are, their self-image, the meanings they attach to themselves and their work and the meanings that are attributed to them by others – are then associated with both the subject they teach (this is particularly the case with secondary school teachers), their relationships with the pupils they teach, their roles, and the connections between these, their values and their lives outside school'.

(Day & Qing 2010: 34)

Some of the most important moments in one's life can also be some of the earliest ones.

'The earliest phase of life, from pre-birth to about eight years of age, constitutes a period of extraordinary developmental growth and of promise regarding human potential and opportunity. These very early years are of intense interest to those engaged in social and educational policy because of the conviction, supported by research, that 'a good start in life' lays the foundations of wellbeing, health, learning and social care.'

(Tayler 2015: 160)

The same can be said for teaching – the earliest rewards or challenges in the classroom and wider school will have, as this study proposes, the greatest impact on the 'teacher-self' or sense of self-efficacy. Should personal aspirations or expectations be met then the 'teacher-self' will be reinforced; should the opposite happen then doubts or acceptance/assimilation of a new belief structure may occur. It is clear that *'student teachers must undergo a shift in identity as they move through programs of teacher education and assume positions as teachers in today's challenging school contexts'* (Beauchamp 2009: 175) and this is also true for teachers at the very start of their career. The interaction between experience during a first year and 'teacher-self' will dictate how this first year is viewed. The following sections are to reflect the wide-ranging research on teacher experience mindful that the Grounded Theory Method (GTM) approach adopted for this research, discussed during the Methods chapter, meant constant review and development of this review in light of what the research cohort were saying. Some of the following will be subheadings used during data presentation whilst others will be more a reflection on literature which did not arise during research.

Behaviour Management

The first experiential area to review is those of teachers and related student behaviour.

'Classroom behaviour is probably the key area of concern for teacher trainees and qualified teachers alike. Poor behaviour by the students and the stress that that can bring is one of the most common reasons given by teachers for leaving the profession'

(Hramiak & Hudson 2011: 170)

This is supported by Cockburn and Haydn's (2004) research on recruitment and retention where three factors were viewed (trainee questionnaire responses) as 'the main things that make it difficult for teachers to enjoy their job'. *'Paperwork/Bureaucracy emerged as by some way the most commonly cited – mentioned by 171 of the 194 trainees, followed by pupil behaviour (87) and workload (72)'* (Cockburn & Haydn 2004: 73). Furthermore *'the most commonly mentioned 'school' factor was the difficulty and frustration of dealing with disruptive pupils'* (Cockburn & Haydn 2004: 74). Generally the picture of student behaviour in schools is one of consistent low level disruption that confronts all teachers which may infrequently lead to more challenging situations. This is reflected in findings of the Steer Report (2005: 6), *'the main issue for teachers and for pupils is the effect of frequent, low level disruption. This has a wearing effect on staff, interrupts learning and creates a climate in which it is easier for more serious incidents to occur'*. Numerous writing (e.g. Haydn 2007, Rogers 2000, Wragg 1999, Steer Report 2005 et al) make reference to such wearing effect although also with the consistency in dealing with both these low level disruption and more challenging incidents. *'All schools should ensure all staff understand and use consistently, the behaviour management strategies agreed by the governing body and school community'* (Steer Report 2005: 19). Relating all this back to self-efficacy, and regardless of the behavioural strategies adopted, the apparent strength in managing behaviour would appear to have significant impact on 'teacher-self'; the following two quotes reflect this significance.

'It is one of the most requested areas for continued professional development (CPD) and training. It is clearly an area for concern for both experienced and newly qualified teachers, as well as those who are in training, despite the plethora of information, guidance and literature available. This may be because it has such an impact on the way we, as individuals, feel about ourselves and of course our effectiveness as a teacher'

(Armitage, Donovan, Flanagan & Poma 2011: 153)

'Every year, thousands of people go into teaching. Do they all have an equal chance at becoming accomplished at this facet of teaching or are some entrants 'genetically' advantaged because they possess particular inherited characteristics (they are by nature, for example, 'hard as nails', or 'charismatic'), or by virtue of previously acquired experience (a couple of years in the SAS, psychiatric social work)?'

(Haydn 2007: 29)

Administration

The second consideration of a beginner teacher's working life is that of administrative expectations. In Hilsum and Strong's (1978) *'The Secondary Teacher's Day'*, the authors attempt to provide an objective description of the day to day work that a teacher undertakes. The data were collected through the mid 70's and built on the previous National Foundation for Educational Research (1969) *'Feasibility study of the Teaching Day'*. Qing and Day (2010) brought much of these specifics up to date recognising similarities but some differences in the teaching life for the two differing eras. What was clear is that administrative expectations and associated time challenges for a teacher have been ever present.

Both Hilsum & Strong (1978) and Qing & Day (2010) make reference to exam pressures and associated administrative strain. Hilsum & Strong *'got the impression that growth in examination work in recent years has achieved the proportions of an explosion'* (160). The view expressed indicated public examinations were an all-year round industry where administration and discussion with pupils was becoming significant, albeit still small, part of a working day. This type of administrative duty was frequently forced into after-school hours as other pressing duties were conducted through the school day. Gary Cooper, a researcher into stress at work is cited in Qing & Day (2010) reflecting that similar, if not more, strain is occurring today.

'Teachers are under far more stress than they were 20 years ago. They are at the mercy of demands from managers and parents. They have to meet more rigorous criteria, with more exams and higher expectations. They are working longer hours, many marking homework late into the night'

(Cooper cited in Qing & Day 2010: 183)

Hilsum & Strong (1978) continue on the theme of administration to discuss staff and other meetings, examination invigilation, registration and associated form administrative duties and simply a plethora of similar activities that a teacher during the seventies would conduct. Much has changed in the intervening years whilst much would resonate with NQTs today.

Mary Bousted, General Secretary of the Association of Teachers and Lecturers said at their 2015 annual conference that *"unless the government makes changes to address teachers' workloads, we fear thousands of great teachers will leave."* Large numbers of trainee and NQTs have considered leaving the profession, according to a new survey by the Association of Teachers and Lecturers. The association argues that heavy workloads are wreaking havoc among new recruits as 76% of respondents cited this as the main reason they considered quitting. *'Respondents said the changes that would most benefit their teaching would be more time to plan, prepare and assess (83%), less marking and assessment (71%), more freedom in how they teach (47%), and spending less time focused on exams and tests (46%)'* (www.atl.org.uk accessed 10/04/15).

In response to the findings, a spokesperson for the Department for Education (DfE) said: *"The secretary of state has made clear to the teaching unions our commitment to working with them to help reduce unnecessarily high workloads, caused by needless bureaucracy"* (www.theguardian.com accessed 10/04/15). In recent years legislation has moved to support teachers facing bureaucracy and workload challenges; expectations on cover, report writing, sheer number of exam entries and invigilation have all changed. However central

contracts for NQTs have also recently changed with Academies being able to dictate administrative expectations rather than central government or local authority; school context that NQTs begin their careers in is again important.

What is clear from the above 'administrative' literature is that workload and administration challenges have been an ever-present concern in a teacher's working life and more significantly for the beginner teacher.

Work-life Balance

Continuing with Hilsum and Strong (1978) study there are chapters within their book that attempt to further encapsulate the working life style of a teacher in the 1970s. Sections are devoted to the extended work expectations on teachers and is in tone very supportive of teachers being overworked. Chapters devoted to teachers '*work during Weekends and Holidays*' (Hilsum & Strong 78: 64-79) or '*recurring Special Activities: Exams, Meetings, Visits*' (Hilsum & Strong 78: 160-170) are just two that have this overt emphasis on overwork.

More recent studies on teacher workload and work-life balance raise similar concerns to Hilsum and Strong (1978) albeit with greater emphasis on technology and communication. The boundary between work and home has become obscured; technology has meant that teachers cannot switch off from work at any time. Wilson & Wagner (2009) discuss the intrusiveness that constant contact and interaction with management expectations can have. Some schools 'forbid' e-mails being sent during the weekend so as to clearly define the boundaries between a working week and the more personal home life. However, my own experience of working across five schools over 16 years would suggest that there are many schools, and many organisations, where there is a staff 'culture' where many teachers and managers send e-mails when they are working regardless of when the recipient is working. Teachers having the habit of working over a Sunday afternoon or sometimes late into the evening. Is the expectation that these be responded in timely manner adding to the stress of teachers?

The several case studies that Hilsum and Strong (1978) conducted which looked at administrative and working patterns included studies referring to teachers with differing teaching experience, gender or wider responsibilities. The study compared teachers with experience of five years and the beginner teacher finding that beginner teachers '*reprimanded their pupils nearly twice as frequently as the more experienced group*' (1978: 138) and all the subsequent necessary behavioural consequences. All the approaches such as '*mediation, restitution, counselling and when appropriate individual behaviour plans*' (Rogers 2011: 149) be they conducted during a lesson or in detentions take time to conduct and further impact on teacher time. The possible differing approaches to teaching by gender was put forward; there was a '*tendency of women to set more assignments and to engage in less oral instruction (and in less instruction overall) than men. This situation was likely to produce more work from the pupils that required marking*' (Hilsum & Strong 1978: 139). Times change and whether this would still be the case today when assessment for learning strategy and self-assessment have moved classroom practice away from teacher marking is doubtful. Although Black & Wiliam (1998) advocate the success of assessment for learning strategy there will always be a need for teacher marking and associated marking time.

In summary, there remains the constant strain between planning, marking and administration that will impact on teacher's work-life balance and this will be evermore so for beginner teachers. As one teacher 'helpsite' empathised,

'At times, teaching can be overwhelming. You have units and lessons to plan, student work to mark, meetings to attend, reports to write, budgets to submit, emails to respond to, and, if there is any time left—lessons to teach. There is so much to do, and only a limited amount of time'

(timemanagementforteacher.com accessed 01/05/2015)

Other internet references can easily be found as a reminder that the work-life balance for a teacher can be hard to achieve.

Building Teacher and Pupil Relationships

During this literature review I have discussed the impact of perceived behaviour management skill on teacher self-efficacy. The emphasis within this section is on how behaviour management can lead to creating a classroom environment conducive for learning and subsequent positive teacher-pupil relations. This *'positive classroom climate is important for students' learning achievement and motivation and for teachers' well-being'* (De Jong et al 2014: 294). De Jong's journal paper brings together ideas on teacher-pupil relationship with a focus on how this affects teacher well-being and efficacy. Other studies on teacher-pupil Relationship more overtly consider how this can support pupil progress alone (Cornelius-White, 2007 et al) rather than considerations on teachers. The overall findings within the paper suggest that efficacy and teacher competencies do not necessarily reflect the views of pupils or teacher.

'Self-efficacy in classroom management, student engagement, and instructional strategies was not related to teacher–student relationships. An explanation might be that self-efficacy does not refer to actual competence, but to the teacher's perception of it and increasing experience may cause hinges in the pre-service teacher's perception of this competence. With self-efficacy still in flux, effects on the teacher–class relationship or teacher behaviour may be less easy to pinpoint.'

(De Jong et al 2014: 306)

It is interesting that in a previous study by De Jong et al (2013) looking at beginner teachers interpersonal profiles considered the inaccuracy of teacher self-beliefs at the start of the training year and the end,

'Student teachers were likely to underestimate their levels of control and affiliation, whereas at the end of the internships the majority were overestimating themselves. This overestimation could be the effect of a conflict between how student teachers feel they are perceived and how they want to be perceived.'

(De Jong et al 2013: 406)

What is clear is that there is a link between teacher efficacy and well-being. This theme is continued in the writing of Spilt et al (2011) who also further bemoan the overall lack of research that focuses on teacher well-being in terms of pupil relationship,

'Many studies have examined the importance of teacher–student relationships for the development of children. Much less is known, however, about how these relationships impact the professional and personal lives of teachers.'

(Spilt et al 2011:457)

The reason for Spilt (2011) to emphasise further research need is the suggestion that the link between pupil misbehaviour and teacher efficacy beliefs may ultimately contribute to the resolution of the retention question.

'Teachers' relationships with specific students can be primary sources of teachers' everyday emotional experiences and wellbeing because teacher–student relationships contribute to a basic need for relatedness. In addition, the notion that teachers internalize interpersonal experiences with students into representational models of teacher–student relationships could explain the frequently stated view that professional and personal identities of teachers are closely interrelated and shaped by relationships with individual students.'

(Spilt et al 2011:473)

Understanding what supports teachers' need and where such supports are lacking, in order for teachers to develop positive relationships with pupils may contribute to a better understanding of teacher burnout and subsequent attrition rate.

Some studies have attempted to summarise effective teacher practice in building these positive relations with pupils. Goldberg (1990) describes five factors in teacher personality that may impact on positive pupil interaction these being extraversion, agreeableness, conscientiousness, emotional stability and intellect or openness. Wilkins (2014) proposes that from *'the perspectives of students, there are seven distinct constructs that comprise good relationships with teachers'* but overarching within these is the *'students' desire for teachers that provide both academic and emotional support.'* (Wilkins, J 2014: 167).

However research tries to summarise pupil relationship and teacher efficacy, there does appear to be a case for further exploration of this relationship and attrition rates.

Pupil Achievement

Most research on developing the teacher-pupil relationship has had emphasis on how teachers develop this (Wilkins 2014 et al). Similarly pupil academic achievement has been addressed simply on the impact this has on pupils' well-being and less so on teachers' well-being. This study is interested in the positivity and efficacy of teachers in light of pupil outcomes. *'The question of whether teacher acceptance leads to students' achievement or whether students' achievement and other characteristics influence teacher acceptance has been rarely addressed.'* (Košir & Tement 2013: 410).

Firmender et al (2014) explored the relationship in mathematics teachers' instructional practices and pupil achievement. Similarly Swann (2006) considered the variety in mathematical instructional strategy that teachers employ in everyday practice and how these were viewed by pupils. Previously, within this literature review, pedagogical approaches that teachers adopt were considered to be influenced by their own school

experience. Bringing these ideas together, different teachers make different choices in approach adopted; all approaches will have differing levels of success for pupil achievement – partly dependent on context. However it is clear that teachers thrive in an environment where pupils are engaged and achieving, but teachers have differing levels of success in creating such environment.

'Teachers differ in their ability to provide personal support for students, and this differentiation is probably even larger in providing support for at-risk students whose behaviour is less rewarding for teachers' efforts. Teachers feel rewarded when students show affection toward them and when they demonstrate that they enjoy their learning, which is a description of well-adjusted, academically engaged students.'

(Košir & Tement 2013: 423)

Košir and Tement (2013) go so far as indicating that more training for beginner teachers in recognising progress and establishing the teacher-pupil relationship, particularly with low achievers, is essential.

'Therefore, teachers' ability to also establish and maintain warm and supportive relations particularly for students with lower academic adjustment should be emphasized in teacher education and continuing professional development.'

(Košir & Tement 2013: 424)

However beginner teachers should not be expected to place all the progress that pupils make on their own shoulders albeit many beginner, and more experienced, teachers do so. A teacher working in isolation in promoting pupil engagement may not be as successful in supporting pupil achievement as a teacher working collaboratively within a department or school.

'Improving student engagement alone is not a panacea for improving mathematics achievement clearly, teacher collaboration is the most important component when considering the extent that the organisational culture of the school helps translate students' engagement with academic work into greater success, as seen in mathematics achievement.....the key role of professional community is in fostering achievement for many students, particularly those who are less engaged.'

(Muller et al 2014: 1539)

Before considering peer relations and departmental or school culture and effectiveness, one final consideration of a teacher's subject knowledge and the influence this has on pupil achievement. In order to gain Qualified Teacher Status, trainees are expected to meet professional Teachers Standards. The third of these relates to subject knowledge.

T3: Demonstrate good subject and curriculum knowledge

- have a secure knowledge of the relevant subject(s) and curriculum areas, foster and maintain pupils' interest in the subject, and address misunderstandings
- demonstrate a critical understanding of developments in the subject and curriculum areas, and promote the value of scholarship (Dfe, 2012).

(www.gov.uk/Teachers Standards accessed 10/04/15).

There has thus been an overt emphasis on subject knowledge during a training year and subsequent NQT year. Zamorski & Haydn (2002) categorise a teacher with expert subject knowledge as someone who has '*good knowledge of subject, is always ahead of the pupils in knowledge, can inspire pupils on own subject and takes a wider interest in own subject, not just related to school*' (2002: 261). This 'golden nugget' of inspiration is something that a teacher, particularly a beginner one, is looking for. A pupil will engage, and have greater achievement, with a teacher who 'knows their stuff'; this will subsequently lead to a greater feeling of job satisfaction for the teacher.

Peer relationship and support

Building on the relationship with pupils, the experience of NQTs is inextricably linked with the relationship built with peers. This section will look at both formal, through mentor programmes and professional development, and informal, being the quiet words in the staffroom which support new colleagues.

Firstly, to consider informal support that is offered in schools. Apsfors (2013) studied this informal support by interviewing NQTs in Finnish schools.

'In a context such as Finland, with a high academic teacher education but yet no formal system for supporting new teachers, relationships especially with colleagues and principals are of great importance in providing informal support.'

(Apsfors 2013: 1)

Her conclusion was that the informal and collegiate approach in staff rooms created more positivity in beginner teachers with an expectation that more experienced colleagues would be there to offer this.

However it is not only teaching colleagues that can offer such informal advice or encouragement. The whole school community is in a position to do just this.

'Other professional staff include a variety of people both within and beyond the immediate school context, such as education support staff (non-teachers), administrative staff, counsellors and advisors, specialist support staff and teachers in other schools. They all played a role in providing encouragement for the early career teachers and had an impact on how the early career teachers felt about their competency in the classroom.'

(Le Cornu 2013: 8)

Le Cornu's (2013) paper further explores the relationship and support offered by pupils, previously discussed, departmental colleagues and leadership, considered below in formal support. There was consideration of parent involvement as well as the other professional

staff indicated above. In the paper four main strands, or insights, were discussed as important to teacher well-being and resilience. The first strand being *'positive teacher-student relationships are not only important for students' development, but they are also important for early career teachers' development'* (Le Cornu 2013: 10) has already been acknowledged in this review. The second strand *'is the importance of early career teachers feeling connected to their school community'* (Le Cornu 2013: 11) which is to be discussed when considering a feeling of 'isolation' for beginner teachers that is considered later. The third strand looks at *'the nature of the professional support that best assists early career teachers'* (Le Cornu 2013: 11) which is to be discussed within review on the more formal methods of support. The fourth and final strand looked at developing peer equality between colleagues and that beginner teachers would 'find their feet' and be a supportive colleague themselves.

'Whilst the early career teachers were sustained by relationships, they also needed to be able to sustain them. If engagement in two-way relationships was important, as has been argued, then the early career teachers needed to have the energy, skills and abilities to be active participants in these relationships. This was a particular challenge to many of our early career teachers given the physical and emotional exhaustion they faced on an ongoing basis.'

(Le Cornu 2013: 12)

The overall insight given in papers such as Le Cornu's (2013) and others is the crucial role of building relationships, whomever that may be within the school setting, in order to support beginner teachers' resilience and well-being.

To now focus on the more formal support mechanisms that all schools must provide as given by the *'Statutory guidance on induction for newly qualified teachers (England) – Department of Education 2013'*. This includes a suitable monitoring and support programme be put in place for the NQT, personalised to meet their professional development needs (including the development needs of part-time NQTs). This must include:

- *'Support and guidance from a designated induction tutor who holds QTS and has the time and experience to carry out the role effectively*
- *Observation of the NQT's teaching and follow-up discussion*
- *Regular professional reviews of progress*
- *NQT's observation of experienced teachers either in the NQT's own institution or in another institution where effective practice has been identified.'*

(Department of Education 2013: 16)

Although statutory, the benefits of such mentoring and induction programmes have been considered by Hobson et al (2009).

'There are wide range of benefits of mentoring for beginning teachers, including reduced feelings of isolation, increased confidence and self-esteem, professional growth, and improved self-reflection and problem solving capacities. The benefits of mentoring which perhaps most commonly feature amongst research findings relate to the provision of emotional and psychological support, which has been shown to be helpful in boosting the confidence of beginner teachers,

enabling them to put difficult experiences into perspective, and increasing their morale and job satisfaction.'

(Hobson et al 2009: 209).

Lindgren (2005) and others have studied the impact of mentoring on developing beginner teacher's practice, most notably their behaviour and time-management skills. However, it is suggested by Bullough (2004) that one of the most important parts that mentors play is in the socialisation of beginner teachers to their inducting schools. Good mentors appear to consider statutory expectations whilst still offering 'softer', emotional and psychological, informal support.

Professional Development and career expectation

If we assume teachers wishing to be 'successful' as an axiom of teaching, and that '*many factors motivate individuals to pursue a teaching career including the desire for personal growth and continued learning*' (Claudia 2014; 1115) we must consider what constitutes, in teachers' views, this success and desire.

It seems to be the case that some teachers will strive for career progression in their first year of teaching whilst others, and from my own experience I would suggest the majority, focus solely on classroom practice. There seems to be no particular characteristic that would define which teachers focus on wider professional development outside the classroom, i.e. management, over development within classrooms, i.e. pedagogy. '*Future teachers have been found to exhibit different profiles of professional engagement and career development aspirations*' (Watt 2014: 23). However '*there is no relation between personality characteristics and references to career options*' (Pedrosa De Lima 2014: 221) so we cannot define which route teachers decide to follow without asking them.

Professional growth and continued learning appear from the literature cited above to be important elements in teachers' well-being; in reality this is likely to be true of any profession. In order to ensure retention of teachers more school leaders, and governmental guidance ([www.gov.uk/Statutory guidance on induction for newly qualified teachers](http://www.gov.uk/Statutory-guidance-on-induction-for-newly-qualified-teachers) accessed 15/07/15), are recognising the importance of professional development be this for NQTs or more experienced colleagues.

'Employee motivation is a critical element in terms of its influence on individual performance and on the capacity of organizations to attain their objectives. Set in the context of schools, teacher motivation plays an essential role with regard to student learning as well as to a school's capacity to achieve its objectives as an organization. Although professional vocation plays an essential role in the development of a primary teacher's career, it is equally important for school managers to try to keep the best teachers in their schools.'

(Claudia 2014: 1114)

It can be debated whether Professional Development courses always ensure a teacher's 'continued learning'. It can also be debated whether professional development and career progression is for the benefit of individuals or school communities. In considering change within schools there needs to be a sensible balance found that supports both the 'wants' and needs of the beginner teacher in developing their practice or career, and the wider needs and priorities of the school.

'Reform, no matter how well intentioned and theoretically sound, will not have the desired effects if the implementation does not acknowledge those who must implement the reform—the teachers. The reform effort must take into account that teachers have natural emotional reactions to change that have both positive and negative influences on the construction of their professional and personal identity. All too often, unfortunately, change evokes negative emotions due to insufficient information and vague perceptions of unnecessary loss. Risk taking and learning and development, additional vital components of the identity formation process, are also impacted significantly when confronted with change.'

(Reio 2005: 993)

The dynamic and complex situation in schools remains one where beginner teachers are striving to establish identity within the school, wishing also to 'continue learning' whilst schools have professional expectations for these teachers that may be in some ways disconnected from their motivations and needs *at this point in their career*.

Independence or Isolation

My background of working with beginner teachers for the past seven years has made me consider the question of independence or isolation for beginner mathematics teachers. During a training year teachers often work within several different classrooms and consequently have often spoken to me about wanting their own space. During this review we have previously discussed creating a positive classroom environment (considered within the behaviour management section), administrative expectations for beginner teachers and development of both peer and pupil relations. Within the following section, I will review the literature on how having your 'own classroom' might support or hinder these, or having your own space may encourage independence in practice but at the same time isolate beginner teachers.

DuFour (2011) promotes the values found in professions such as medicine or the aviation industry where collaboration is an embedded expectation of good practice. There is suggestion that this type of collaboration is not found quite as distinctively in education.

'Teachers work in isolation from one another. They view their classrooms as their personal domains, have little access to the ideas or strategies of their colleagues, and prefer to be left alone rather than engage with their colleagues or principals. Their professional practice is shrouded in a veil of privacy and personal autonomy and is not a subject for collective discussion or analysis.'

(DuFour 2011: 57)

The article continues by suggesting that enforced collaboration is not necessarily an ingredient for success; school organisations need to ensure a collaborative culture rather than an enforced regime where teachers, be these beginners or not, still have the autonomy and self-efficacy for individual success.

'When schools are organised to support the collaborative culture of a professional learning community, classroom teachers continue to have tremendous latitude. Throughout most of their workday and work week they labour in their individual classrooms as they attempt to meet the needs of each

student. But the school will also embed processes into the routine practice of its professionals to ensure that they co-labour in a coordinated and systematic effort to support the students they serve.'

(DuFour 2011: 59)

Important for all teachers to consider, the ramifications for beginner teachers who are striving to appear competently independent seem even more significant for well-being.

'According to self-determination theory, autonomy and self-perceived competence are fundamental universal psychological needs that are important for motivation and psychological well-being. The theory postulates that satisfaction of these basic needs nourishes intrinsic motivation; people need to feel competent and autonomous to maintain their intrinsic motivation.'

(Skaalvik & Skaalvik 2014: 68)

The extensive Skaalvik and Skaalvik (2014) research, conducted on nearly 2600 teachers, conveys a sense that independence within a collaborative culture should be a goal striven for but that this independence can hide some worrying deficiencies in practice, particularly for teachers that may not be self-confident yet. Beginner teachers

'experimenting with teaching methods and changing practices to meet students' needs serves as a learning process and that will lead to personal learning and development. For teachers with low mastery expectations, autonomy may provide an opportunity to avoid challenges and to hide self-perceived deficits and shortcomings. This is a self-protective strategy that may increase engagement and job satisfaction and decrease emotional exhaustion in the short run.'

(Skaalvik & Skaalvik 2014: 76)

Confident teachers possibly develop competencies in isolation whereas beginner teachers, whose positive self-efficacy may not be as established, need to be careful not to become isolated due to worries over how well they are performing. To some extent this brings in full circle to this review's opening section where self-efficacy is discussed. *'Self-efficacy is positively related to work engagement and job satisfaction, and negatively related to burnout'* (Skaalvik & Skaalvik 2014: 70) further linking to retention rates. However it is the work of Bandura (1997) that recognised engagement and job satisfaction led to positive self-efficacy whereas negative belief ultimately leads to emotional exhaustion. Bandura's (1997) work further considered how environmental opportunities and impediments, a teacher's own classroom considering independence or isolation, are perceived by a teacher further reinforces self-efficacy. A beginner teacher working behind a closed door of their own classroom can either feeling trusted to work independently or isolated and removed from their colleagues. It is how this is perceived by the individual as to whether self-efficacy is enhanced or emotional burn-out occurs.

Categorisation of teacher experience and ‘teacher-self’

Before discussing methodological choices, there is a need to consider how categorising aspects of teacher experience, as has been done within the review so far, can be beneficial in portraying an individual’s narrative but can also be detrimental. This detriment may occur if the narrative is over-simplified, unrepresentative cases used or generalising and ‘stereotyping’ from small samples presented. In the previous section teachers’ lives were discussed by grouping experience, for example behaviour, which is an approach that is simplistic, albeit hopefully not over-simplified, but allows certain clarity in communicating ideas. In Hagger, Mutton & Burn’s (2011) journal paper, *‘Surprising but not shocking: The reality of the first year of teaching’*, the challenges of categorisation and the importance of corroboration were discussed. In the Methods chapter this will be explored further although fundamentally there is no choice but to categorise in order to structure personal and complex narratives.

‘Analytical categories derived independently by members of the research team were compared and collectively defined, then reviewed and refined in the light of further data sets. The categories, originally based on the PGCE year data, were further tested against data from the induction year, prompting the addition of one entirely new category related to the substantive focus of the teachers’ learning. This category – ‘relationships’ – was only added after carefully checking that it did not overlap with any instances mentioned during the PGCE year but assigned to another code.’

(Hagger, Mutton & Burn 2011: 390)

Sometimes teachers’ personality traits or characteristics rather than experiences have been categorised. Writing about individuals, particularly teachers, by summarising their identity into groups can be similarly flawed but again can contribute to a clearer overall impression of work in schools.

In *‘Emerging as a Teacher’* (Bullough, Knowles & Crow 1991) six case studies were studied that reflect differing interpretations of teacher identity. Each case was presented using an initial metaphor to describe the beliefs/identity of each teacher and then reflected on as to whether each teacher completed a ‘successful’ or ‘still challenged’ first year. The metaphors categorised the ‘struggling’ teacher into teacher as expert, teacher as buddy or teacher as rescuer. The ‘successful’ teacher was categorised in terms of teacher as nurturer, teacher as expert/caring adult, always a teacher. Trying to categorise teacher identity, although simplistic, has helped formulate theoretical perspectives on teacher success. However there is clearly an issue in so doing. Look back at the metaphors that describe both ‘successful’ and ‘still-challenged’ first years and replace the metaphors for each group, it is conceivable that the teacher as expert (someone who possesses specialised knowledge which is passed on – a professorial approach) can be successful whilst equally someone who has always identified themselves as a teacher (‘family are all teachers so it’s in their genes’) can be unsuccessful.

A differing structure adopted by Lofstrom (2010) to help define emerging teacher identity was to look at three categories that prospective teachers might consider in their reflections on whether to become a teacher. These three categories were teaching as a career choice, teacher expertise and academic self-efficacy. This study was an attempt to link career expectation with identity. Teaching as a career choice discusses the altruistic motivation

whilst also considering intrinsic or extrinsic benefits that fit with personal aspirations. Altruistic in the view that teaching is a socially worthy profession where one can make a difference in people's lives. The intrinsic motivational factors relate to perceptions and standing of teachers and the opportunity to share one's knowledge. The extrinsic relates to working conditions i.e. salary, working days, job security etc.... Teacher expertise relates to the belief that their subject specialism is important and that they have both an interest and expertise within it. There is a link between this and academic self-efficacy although the focus now is a person's belief that they can communicate ideas or have the capacity to learn this, an idea supported by Hagger, Mutton & Burn et al (2011). Hagger, Mutton & Burn discusses the skills and attributes that a teacher acquires during a training year being an important element of burgeoning teacher identity. In summary, Lofstrom has attempted to define 'teacher-self' through an explanation of predominant expectation and outcome rather than any psychological personal analysis.

The findings of an earlier study by Cockburn and Haydn (2004) tie with the work of Lofstrom in attempting to recognise motivating factors on entry to teaching. Many of the trainee teachers interviewed responded with:

'the pleasure derived from working with children, expressed either in terms of their response to teaching, seeing them make progress in learning, or simply the satisfaction of being in a classroom, working with children.'

(Cockburn & Haydn 2004: 77)

This can be one of the main things that helped provide job satisfaction. There is a sense that *'teacher-self' or one's values as a teacher are presented through 'education as the translation of social, moral or religious ideals into action'* (Nias 1989: 41). Teachers hope that they will make a difference with many teachers fundamentally seeing the welfare concerns and enjoyment of students as being pre-eminent. Two other aspirational factors described by Cockburn and Haydn (2004) are that of the *'collegial and collaborative nature of teaching in school'* and *'the intrinsic pleasure and satisfaction that could be derived from the practical activity of teaching'* (Cockburn & Haydn 2004: 78). The hope that there will be teamwork and inclusiveness in large organisations reflect the 'wants' of a teacher. There is also the hope that the activity of teaching will give a sense of reward to the teacher as well as the pupils. There is consistency in the findings of both studies with expectations and aspirational outcomes defining 'teacher-self'.

This study does follow a similar approach in categorising experience and grouping of teachers, discussed within the methodology section, although a further category which is identified where 'grouping' or factor analysis has arisen is in terms of 'type of schools' in which these beginner teachers started. Understanding the school context is important to help understand the experiences that teachers encounter therein.

School context and collective efficacy

The context and collective-efficacy of the schools that teachers begin their careers in is a further important consideration. On studying 'teacher-self', as mentioned earlier, the interaction with peers, students and institution are important factors in developing identity.

'When teachers experience challenges and failures that may lower their individual motivation, these setbacks may be ameliorated by beliefs in their colleagues'

collective capacity to effect change. Teachers' collective efficacy beliefs, then, are related to teachers' self-efficacy beliefs, but are an emergent group property that influence how teachers in a school cope with a variety of challenges.'

(Klassen, Tze, Betts & Gordon 2011: 23)

Looking at empirical quantitative data regarding a school, of which there is now a plentiful supply, may give the context where teachers work but can only give partial indication on the collective efficacy of these teachers. Quantitative data such as school size, demographic or socio-economic background, student attendance, contextual value added reflecting academic progress made by students, exclusion rates, free school meals et al are just some of data readily available to reflect school context. However within schools less data are regularly collected regarding teachers. Only during collective efficacy studies, of which there are few (with many researchers Bandura, Goddard et al proposing much greater research in this area), does efficacy data collection occur. This poses the problem of attempting to understand collective efficacy by simply looking at context. However in this study context is incorporated when categorising (to be discussed in the methodological choices) the teacher experience with the hope to give a broad sense of the context and collective efficacy that the beginner teachers are working in.

Within a school context there is also the microcosm of mathematics departments that may be considered to have even greater effect on the beginner mathematics 'teacher-self' than the whole school. Large Mathematics departments often have designated teaching or work areas and sometimes work quite independently of other departments. Within departments, but true for whole schools an '*organisational climate reflecting higher levels of reflective dialogues would be associated with both higher levels of collective teacher efficacy and lower levels of teachers' burnout*' (Lim & Eo 2014: 138).

School or departmental context and collective efficacy are factors in understanding a beginner teacher's experience.

Retention of Teaching Staff

Sir Michael Wilshaw, Her Majesty's Chief Inspector for Education, is quoted by the Guardian newspaper as saying that '*it is a "national scandal" that around two-fifths of teachers leave the profession within five years despite massive investment in training.*' (www.theguardian.com accessed 21/07/15). There are Department of Education figures that to some extent corroborate this statement. These figures show that in the 12 months to November 2013 almost 50,000 qualified teachers in England left the state sector. It is important to note that these data do not distinguish between those who retire, leave to work overseas or move to the independent sector (www.gov.uk/ School workforce in england accessed 21/07/15). However, as reported by the National Union of Teachers (NUT) in EDU facts (www.teachers.org.uk/edufacts accessed 21/07/15), this number is stark, as it would equate to one in 12 teachers leaving the state sector for that given year. This 'wastage rate', being the number of full time teachers leaving as a proportion of the total number of teachers in service, of 8.7% was the highest for 10 years, and an increase of more than 25% over four years. However it is notoriously difficult to track teacher employment, regardless of DfE numbers, as frequent changes in circumstances mean data obtained over longer periods of time can be patchy. These quantitative data also don't completely match

data in the upcoming 'Background Data' chapter, particular for teachers in the Eastern region, but do give a wake-up call for decision makers in employment.

Professor John Howson, from the University Of Oxford Education Department, continues this theme.

'The problem is not that teachers are failing the system but that the system is failing them. These results are no reflection on their commitment to education but must surely be a reflection of their experience of teaching under this Government. How can we possibly hope to rebalance our economy away from its over-reliance on the City of London and the banking sector and towards manufacturing, high-tech industry, IT and engineering if we cannot even find the teachers to teach maths and science?'

(Howson 2015: 2)

Within the same article Professor Howson predicts that there is likely to be insufficient teacher supply, particularly maths and science, of new teachers. This will eventually have long term effects of teacher shortages in middle management and leadership as well.

More teacher retention data is considered in the 'Background Data' chapter.

Summary of literature review

To summarise this review, understanding 'teacher-self' is important in the understanding of how teachers view their experience but defining identity is difficult. Accordingly we should assume that there will be uncertainty in predicting exactly how someone will react given certain stimuli.

'Chief among the conceptual difficulties in the Teacher Efficacy Scale and its variants is a focus on teachers' beliefs about their control of student outcomes (originating in locus of control theories) rather than a focus on the teachers' capabilities to effectively teach students.'

(Klassen, Tze, Betts & Gordon 2011: 36)

However not fully understanding 'teacher-self' for any individual does not necessarily undermine research completed on teachers. We can still get a sense of both intrinsic and extrinsic motivation (an indication of 'teacher-self') by what teachers say about their experience, and how it matched expectation, when entering or starting teaching. To do this we need to talk to teachers about what happens to them.

'Justification, if one is needed, is that neither pupils' nor adult observers' accounts can fully capture the lived realities of teaching as an occupation; that can be done by allowing teachers to voice their own thoughts and feelings.'

(Nias 1989: 2).

Before moving on to the methodological choices made to study the mathematics beginner teacher experience, it is worth giving a personal sense of how the literature has conveyed teaching experience overall. There seems to be a wealth of research on the challenges in teaching, be the challenges behavioural or workload related, but there seems to be so little research on the actual rewards.

Sir Michael Wilshaw, during Her Majesty's Chief Inspector for Education speech on the 18th June 2015 stated that we *'all too often don't hear about teaching's triumphs, only its problems.'* This seems to resonate with the literature read. Sir Michael Wilshaw goes on to extol the virtues of teachers and teaching recognising the challenges in recruitment, although not directly retention, particularly in Mathematics and Science.

'Teachers should feel incredibly proud of what they do and the impact they have on children's lives. No other career shapes the lives of young people more. Teaching is the profession that informs all the rest. We need to be as candid about its successes as we are about its setbacks.'

Teaching is a wonderful job. Its problems are well documented; its successes are not. Every few years, usually during a period of economic expansion, the country faces a teacher recruitment crisis.

I have been around long enough to know that this is not a problem caused by any one government or any one policy. Fundamentally, it is the by-product of a society that does not value teaching enough. It is the result of a culture that pays lip-service to teaching but that doesn't really think it is for its brightest or its best.

It is a culture that is intelligent enough to perceive that without great teachers the arts, industry and science cannot blossom, but is so short sighted that it does little to encourage them. It is a society that regards teaching as a career cul-de-sac, to dabble in when times are bad but to desert when more glittering opportunities arrive.

We need to shout about the appeal of teaching as never before. Because unless we do so, all the improvements in England's schools we have seen in recent years could be undone.

The recruitment difficulties laid bare by our preliminary findings will only get worse.

We have to change the way we talk about teaching and we have to start doing it now.'

(Sir Michael Wilshaw: HMCI Speech 18/06/15)

To some extent Sir Michael Wilshaw is considered a controversial figurehead for Ofsted and the language he uses causes friction within educational circles; *'in the few short months since Michael Wilshaw left Mossbourne for Ofsted, he has managed to alienate almost the entire teaching profession by showing himself to be wildly out of touch with teaching today'* (www.theguardian.com accessed 27/07/15). However the sentiment expressed here, which I fully endorse, gives certain justification for trying to understand the early experience of teachers. In some way this may allow us to consider the support needed by teachers, particularly beginners, to recognise successes that come with teaching. This leads on to the methodological choices made.

Methodology

This chapter is structured so that the rationale for methodology is given followed by specific reasons for data collection and analysis methods selected. Part of the rationale for the research approach is Nias' assertion, as considered previously, that *'by allowing teachers to voice their own thoughts and feelings'* (Nias 1989: 2) we gain a clearer impression of their experience. Thus the methodological approach hopes to give voice to beginner mathematics teachers that the seminal work of Jennifer Nias (1989) exemplified. Furthermore this affirmed my belief that quantitative data alone cannot tell the whole story of a teacher's year. More qualitative data collection was needed and the following chapter explains the rationale for this and the methods selected.

Talking to and engaging in discussion with teachers rather than observation or questionnaire data collection was one of the main methodological considerations in study design; I wanted to listen to their stories. To some extent I felt empathy for the teachers starting their career as I had been part of their training, with all the emotions that this entails, and also my own experience as a beginner teacher however distant that may now be. However this study was not of a 'classic' ethnographic approach, in that I was not working alongside or observing the teachers involved in the study. However, there is a strand of auto-ethnography in the study given that it was influenced to some extent by my own experiences as a maths teacher and teacher educator. Chang (2008) conveys the idea of auto-ethnography as *'not about focussing on self alone, but about searching for understanding of others (culture/society) through self'* (Chang 2008: 48). The overarching feeling I had was that by choosing methods that allowed teachers to talk and consider choices made whilst reflecting on my own history and current literature, this would give rise to the richest account of maths teacher experience in their early years. The aim was that this would give the 'thick description' which Geertz sees as helpful for a deep understanding of social situations (Geertz, 1973).

Thus the methods selected to allow 'teacher talk' can be summarised as:

- **Initial and final focus groups.**
- **Telephone interviews conducted at three points during the NQT academic year.**
- **In-depth Profession Exit Interviews.**

Reasons for and design of each follows a description of the questioning and analysis approach used.

The questioning within all data collection stages involved a combination of both semi-structured and unstructured approaches. Galletta (2013) comments that the use of semi-structured interviewing is under-utilised but is fantastic in allowing opportunity to explore complex situations with flexibility. It permits a researcher to *'address specific dimensions of a research question whilst also leaving space for study participants to offer new meaning to the topic of study'* (Galletta 2013: 2). This approach to questioning hoped to support

'the process of bringing to the surface the multi-dimensional nature of lived experience. It responds to an imperative for fine grained qualitative analysis in order to open up new possibilities in understanding'

(Galletta 2013: 2).

The analysis of data collected would follow a grounded theory method (GTM). The GTM analysis was conducted on each of the data collection stages above.

'The method is designed to encourage researchers' persistent interaction with their data, while remaining constantly involved within the emerging analyses. Data collection and analysis proceed simultaneously and each informs and streamlines the other. The Grounded Theory Method (GTM) builds empirical checks into the analytic process and leads researchers to examine all possible theoretical explanations for their empirical findings.'

(Bryant & Charmaz 2007:1)

Glaser and Strauss (1967), two founders of GTM, followed a more positivist, i.e. quantitative, approach with first GTM studies. Reflecting on the work of Charmaz (2006), there has been recent postmodern deconstruction of methodological approaches; as referenced in Creswell (2012), Charmaz advocates a more constructivist design to GTM. This constructivist design would allow her focus to be on *'the meanings ascribed by participants in a study. She is more interested in the views, values, beliefs, feelings, assumptions, and ideologies of individuals than in gathering facts and describing acts'* (Creswell 2012: 429). So using GTM as an analysis tool, rather than methodology per se, is in part down to Charmaz' constructive design.

The research purposes for the first focus group were two-fold. Firstly it was to support the framing of initial ideas for the later interview question design. Focus groups are useful when *'insights are needed in exploratory or preliminary studies'* (Fern 2001: 44).

'The purpose is to uncover factors relating to complex behaviour or motivation. Focus groups can provide insight into complicated topicsor where the area of concern relates to multifaceted behaviour or motivation'

(Krueger 1994: 45)

Secondly I wanted to explore considerations made by mathematics teachers in selecting their first post.

The first focus group was selected through an initial e-mail request to all participants in the study followed by telephone contact made with selected participants. Age, gender and final PGCE grading were considered in the selection of the group. Age and grading are reflective of the whole study cohort. To accommodate this there were to be a four female: two male gender split which ideally would have been equal. Focus groups are generally composed of between 6 and 12 participants although *'when dealing with complex topics or with knowledgeable participants the ideal size of a focus group falls between 6 and 9 participants'* (Krueger 1994: 78). Thus a focus group of 6 was chosen. Video technology was used to capture the focus group discussion. This initial selection process generally achieved *heterogeneity* in grouping to obtain as wide a possible variety in responses. Fern (2001: 27) discusses individual characteristics from *'vertical/horizontal individualist* to

vertical/horizontal collectivists' with participants of individualist tendency being best for early focus group discovery.

The process of selection for the final focus group followed a similar approach as the first. There were again six participants with a three female: three male split. Only one of the study participants in this focus group was involved in the first. The aim of this final discussion, conducted using an unstructured approach, was to possibly corroborate findings from previous interviews.

Telephone interviews presented the core method of data collection. Three sets of telephone interviews were conducted through the academic year, September 2010 through July 2011, with the initial interviews following semi-structured questioning and the final being unstructured. *'The use of telephone interviewing has long been recognised as an important method of data collection and is a common practice in survey research'* (Cohen, Manion & Morrison 2007: 379). The rationale for this approach was simple practicality and high response rate. I had some questions regarding face to face interviewing being superior as a *'person to person relationship constitutes the heart of the interview'* (Newby 2010: 339). However I hoped that my familiarity with each interviewee would ensure open responses; this and the simple practicality of distance between schools meant this telephone interviewing approach.

At the start of this study, I was aware that should any teacher within the research cohort leave the profession they would play an important part in conveying the teaching experience I was interested in; there were two teachers who did resign their posts during the research (duty of care and ethics considered further in the next section: ethical considerations). The richness of their narrative is important to the overall picture of teaching experience although I needed to ensure that there was no greater weighting to their discussion over others; the GTM coding approach hopefully supported this.

These final in-depth exit interviews were unstructured and evolving.

'In-depth interviews are more loosely structured than semi-structured. They can evolve according to the interviewer's take on the interviewee's response. We should immediately appreciate, from this, that the interviewer needs to be skilled but just as importantly, they must be knowledgeable about the issue'

(Newby 2010: 343)

The initial question was simply put as 'just wanting you to talk about your experience over the year. Just tell me your story. Leaving and what led you to that point'. This question allowed a personalised response with later questioning evolving and in some degree being led by the interviewee. These exit interviews were both face-to-face and completed soon after each post resignation; they were conducted at the University of East Anglia as per focus group interviews. Each interview lasted approximately 1.5 hours.

All interviews and focus groups were transcribed by the researcher; two exit interviews will be included as appendices (considered further in the next section: ethical considerations).

Ethical considerations

In considering ethics, the participants were informed through discussion of participant information sheets (Appendix) with consent forms being supplied and collected. Any participant had the opportunity to withdraw at any stage. At all stages, the research was conducted in accordance with BERA guidelines for the conduct of educational research (www.bera.ac.uk 2011).

Two initial key ethical issues were that of my familiarity as researcher with the research cohort and how to ensure transparency in communication of responses made at interview clearly representing teachers' views. To address the first consideration, I ensured data collected did not affect the professional relationship with participants; that open discussion recognised the previous hierarchical imbalance of tutor and student teacher and the research cohort were aware that data collected would not be used to amend or adjust professional references compiled at the end of the participant's training year. To address the second consideration, peer review of data and analysis would be conducted and discussed later in this chapter.

Permission to record focus group interviews and all telephone/exit interviews were requested at the start of each. The participants were made aware that all data collected during the course of the study would remain strictly confidential; initials used to present views have been altered. No information would be attributable or identifiable to any teacher. Transcripts of the telephone interviews would not record names (participants would be identified through a suitable coding system) and the recordings would remain confidential unless permission was specifically granted by the participants for them to be made accessible to a third party. The participants also gave permission to use data collected through their training year.

Ethical approval was granted by the University of East Anglia School of Education Ethics committee in June 2010 which preceded the start of data collection.

Two further significant ethical considerations did become apparent particularly during two 'exit' interviews. These were, firstly how to disseminate quite emotive details that came to light within each interview and secondly a 'duty of care' towards both these teachers and indeed all teachers within the study.

Christina Hughes (2003) editing 'Disseminating Qualitative Research in Educational Settings' gives a critical introduction to the intricacies of communicating sometimes sensitive, mostly qualitative, research data. One anecdote reflected on a situation where local media used part of an ethnographic study to convey a negative impression of a school; there followed difficult conversations between researchers and school to continue this study. However the anecdote concluded that to capture everyday school life this transparency, and the school agreed, was needed. *'The collective context provided by the project helps us to make judgements about dissemination, although it is no guarantee that problems will not emerge'* (Gordon in Hughes 2003: 89) mindful that research within educational settings and teachers is *'entangled in educational politics and policies, research politics and numerous human*

relationships' (Gordon in Hughes 2003: 89). Elliott (1991) similarly recognised that communicating study outcomes was essential but does contain risk.

'Such data sharing promotes a reflective conversation and is at the heart of any transformation of the professional culture. But it carries the risk of bringing latent conflicts and tensions out into the open. Problematic areas of practice become exposed and the practitioners operating in them vulnerable.'

(Elliott 1991: 60)

Mindful of the openness shown by both teachers involved in their exit interviews, I came to the decision that including transcripts of each would do justice and 'give voice' to their experience. Although emotive, each interview gave wider context and personal interpretation of why they left and if they were not to be included would, in my view, devalue their worth.

The second consideration was a 'duty of care' towards both teachers exiting the profession and indeed all teachers involved in the study. Opie (2004) gives a sense of my thoughts during this time.

'Researchers must do all that they can to think through eventualities and possibilities and feel confident that insofar as they are able, they have taken all possible precautions to avoid harming and doing wrong to anyone touched by their research. This is not a simple and straightforward matter and there are no answers that are applicable in all situations either.'

(Opie 2004: 32)

I can say, albeit not in a particularly academic manner, that the 'duty of care' issue was something that I was and remain mindful of; for all teachers in this study, their 'well-being' is something that has been foremost in my thinking.

The final consideration within this methodology chapter is the checking process on collected data. Findings being corroborated or triangulated is a key element for GTM coding and categorisation to be considered valid. So triangulation was conducted through peer reflection during 'Research in Maths Education' group meetings at the University of East Anglia with particular focus on categorisation and my own engagement with literature. Note that the auto-ethnographic approach, where I comment on some of the findings, will still occur in the concluding chapter discussion. To some extent corroboration comes from my own reflections on experience and whether the findings presented ring true with other teachers in the sense of 'face validity'; this would provide indication of the validity of this study.

'Inevitably, however, any attempt to order their words impose a false coherence upon the latter and, it can reasonably be argued, therefore presents a distorted picture of the messy uncertain complexities which is teaching. In response, I can say only that, first no one's efforts to organise another's thoughts can ever be fully

free of distortion but that, second, if teachers themselves recognise their own truths in what I have said, that is validation enough.'

(Nias 1989: 2).

Glaser and Strauss (1967), instrumental in developing GTM analysis, generalised findings into substantive and formal. There is a blurred boundary between these. Substantive findings can be considered as building concepts and hypothesis through the analysis of simply one group. However the generalisations become more formal through similar areas of study incorporating differing research cohorts. I am proposing that the findings within this study should be considered as substantive although if the reader believes that they would 'ring true' for all teachers then the findings might then be considered more formal.

In summary, the approach adopted was to ensure an openness in discussion. Other research methods were considered although I hoped that a richness in narrative unfolded by teachers telling of experience in their own words. The research methods selected are in support of my belief that a more qualitative and narrative approach to data collection would allow a better understanding of these beginner teacher's first year in practice.

Background Data

The initial quantitative data within this chapter provides a background to where the beginner teachers trained and their first appointing school. My hope is that this contextualises the research, allowing comparison to national perspectives. Some of the historical quantitative data presented here was gathered during the beginning stages of research.

The background data are presented in five sections: The training provider profile, Norfolk/Suffolk regional characteristics, teacher profiles, summary of first appointment schools and retention data for these teachers.

University Course Profile & NQT survey

The University of East Anglia is situated on the outskirts of Norwich, the county town of Norfolk. It has been ranked in the top 5 mainstream English universities for student satisfaction over many years (National Student Survey). UEA has also been rated highly for student satisfaction for teaching in mainstream universities – a key measure of academic excellence (The complete University Guide).

The School of Education and Lifelong learning (EDU) is a major school within the Faculty of Social Sciences (SSF). Amongst the approximately 6000 students in SSF there are 1000 in EDU. The breakdown includes undergraduate courses in Educational studies, PE and Sports development and Early Years professional studies; taught postgraduate courses include MA in Counselling, Education and Higher Educational Practice; the Post Graduate Certificate of Education (PGCE) accounts for approximately 350 trainees equally split between Primary and Secondary Level. There are also approximately 180 research students. These numbers have remained relatively consistent through all years that this research was conducted.

The Secondary PGCE course has a partnership ethos working with 70 partner schools within the Norfolk/Suffolk region interweaving university study with school practice. The course is based around professional standards as specified by the Department of Education (DfE) leading to Qualified Teacher Status (QTS).

The OFSTED (2010) inspection, the one prior to data collection, gave an overall rating of Grade 1 with a key comment being:

'Trainees attainment by the end of the programme is outstanding. This is because the different elements of the training combine very well to provide a highly coherent package that caters efficiently and extremely effectively for trainees' individual needs. As a result, they make good and often outstanding progress and this is characterised by a consistent trend of outstanding outcomes over the last three years.'

(OFSTED 2010: 14)

OFSTED Inspections use a four-point grading scale, as follows: **Grade 1:** Outstanding **Grade 2:** Good **Grade 3:** Requires Improvement stated as Satisfactory in previous inspections **Grade 4:** Inadequate. Inspectors judged this provision against inspection criteria and best-fit characteristics as set out in the Guidance for the Inspection of Initial Teacher Education 2008–2011 and the Grade Criteria for the Inspection of Initial Teacher Education.

The most recent inspection by OFSTED (2014) gave a glowing report although downgraded the outstanding previous outcome to good. The feedback given to partnership schools reads:

'In many ways the extremely positive narrative of the report to at least some extent reflects the glowing oral report which we received at the end of the inspection. We are of course very disappointed to have lost our 'outstanding in all cells' grading, particularly as the inspection team intimated that almost all facets of our course were excellent. The limiting factor in the grading was that (for reasons which we all understand), there were fewer 'outstanding' outcome grades for maths and science trainees. The vagaries of the new inspection framework mean that this limits the grades which can be awarded in all the other cells'

(Link communication: Nov 2014)

The comment on outstanding outcomes for mathematics further supports the rationale for this study.

Regional Description

Norfolk is the fifth largest English county, with an area of over 5000km² and a population circa 850,000. Although the seventh most populous non-metropolitan county it is largely rural and as such has low population density. Approximately 40% of the population live in the three major conurbations of Norwich, Kings Lynn and Yarmouth. Norfolk has a comprehensive school system with secondary school age from 11-16 with some schools having sixth forms. Sixth Form colleges are found in larger towns. There are 12 independent schools with Norwich School being Britain's fourth oldest. Norfolk County Council benchmark statistical data against data from the county of Cornwall.

Suffolk is also in the East Anglian region and borders Norfolk to the north. It is the eight largest English county with an area approximately 3,800 km² and a population circa 700,000. The four major conurbations are the towns of Ipswich, Lowestoft, Bury St Edmunds and Felixstowe. In a similar vein to Norfolk, agriculture and tourism are significant economic factors. Suffolk, unusually for the UK, has a 3-tier Primary (5-9), middle (9-13) and Upper school (13 -16) comprehensive school system. Since 2006, Suffolk is moving towards a two-tiered system with certain exceptions for example; Ipswich. All Upper schools have an attached sixth form. There are 14 independent schools.

There may be a historical perception that the Norfolk and Suffolk region have an affluent economy although deprivation indicators within the region show otherwise.

'The social makeup of Norfolk and Suffolk is very varied, some parts of the region, including the coastal strip, have areas of high social deprivation. For example, Norfolk has above average deprivation compared with the English Shire counties, and on most summary measure is the most deprived county in the East of England region. Great Yarmouth and Norwich remain the two local authorities in Norfolk to appear in the most deprived fifty local authorities in England on at least one of the six summary measures of deprivation. Using the Lower Super Output Area of indices of deprivation, Norfolk has 27 Lower Super Output Areas (LSOAs) that fall within the ten per cent most deprived in England, out of a total of 530 (5 per cent). Suffolk now ranked 116th in the country is not as deprived as Norfolk, but worse than the other four Counties in the

East of England. 30 of the Lower Super Output Areas in Suffolk are amongst the most deprived 20% in England.'

(UEA SED 2010: 2)

The Black, Minority ethnic (BME) population of Norfolk and Suffolk is lower than other regions within the UK. In Norfolk just over 12,000 Norfolk people or 1.5% of the population were of a black or minority (BME) ethnic group (2001 census). The ethnic make-up of young people indicates a more diverse population than in the adult population (www.norfolk.gov.uk accessed 18/3/10). In Suffolk 42, 118 people, 6.3% of the population, are from BME groups. Suffolk has seen a visible rise in the BME population since 2001 although the exact number has not been identified. A good indicator of Suffolk's changing ethnic demography is through schools where in five years the number of native languages spoken by children in Suffolk has almost quadrupled from around 35 to 120 (www.suffolk.gov.uk accessed 18/03/10).

Norfolk continues to have a relatively elderly age profile, with around a fifth of the population aged 65 and over. People of pensionable age just exceed the under 16s nationally although in Norfolk there are currently almost three pensioners for every two children under 16. (www.norfolk.gov.uk accessed 18/03/10) In Suffolk the 0-16 age range make up 20% of the population with 23.6% in the 0-19 age range (www.suffolk.gov.uk accessed 18/03/10).

There has been significant net migration gain into the Norfolk/Suffolk region. Many Eastern European countries have joined the European community in recent years. The Norfolk/Suffolk region is particularly attractive to migrants due to specific seasonal labour shortages in the agricultural industry.

In much the same way as all the data in this first chapter are to contextualise this research the Norfolk/Suffolk data should have the caveat that this is a snapshot of the Norfolk/Suffolk profile and is not a complete picture of "today". It should give a background picture of pupil demographic in schools in the Norfolk/Suffolk region. However, it is clear that individual schools will have quite varied demographics. For example, one institution may have significant number of 'English as an additional language' (EAL) pupils whilst the neighbouring school may have few.

Summary of Research Cohort Employment Destinations

A significant proportion of trainees from this institution stay to teach in the Norfolk/Suffolk region. The University of East Anglia is the largest provider of new teachers to this region.

There were 22 mathematics teachers (the 2010 year of completion) involved in this study; the following indicate first appointment destinations for these teachers and compares with later mathematics cohorts. There is comparability between each year.

Maths First Appointment Destinations

Completion Year of PGCE	Norfolk	Suffolk	Elsewhere	Other e.g. gap year	Withdrew /Intercalate	Total
2010	15	4	3	0	2	24
2011	13	3	4	2	2	24
2012	11	6	5	0	2	24

2013	14	3	2	0	4	23
2014	14	6	3	0	1	24

Whole course destination data

Secondary	Year 1 (2011-12)	Year 2 (2012-13)	Year 3 (2013-14)
Overall	159	164	145
Norfolk	68 (43%)	72 (44%)	73 (50%)
Suffolk	30 (19%)	23 (14%)	19 (13%)
Elsewhere	40 (25%)	45 (27%)	38 (26%)
Other e.g. Gap Year	8 (5%)	10 (6%)	3 (2%)
Withdrew/Intercalation	14 (9%)	14 (9%)	13 (9%)

(SED 2014: 4)

There is a greater proportion of mathematics teachers that were appointed in either Norfolk or Suffolk compared with the wider PGCE cohort. This does reflect the appointment opportunity available to shortage subjects within the region.

Beginner teacher profile within this study

The profiles and experience of the research cohort reflect a diverse group (Appendix). Data was collected on:

Gender: there were 13 male and 9 females within the research cohort.

Age: at registration to their PGCE year (subsequently a year later for the start of their NQT year) classified under recent graduates for those aged 21-23, early career changes for those aged 24 – 29 and later career changes for those aged 30 or over. The ages ranged from 21 – 51 with 11 recent graduates, four early career changers and seven later career changers.

Degree classification on PGCE entry: Three trainees had 1st class degrees (including one PhD which is recognised for funding purposes to be equivalent to a 1st). Seven trainees had 2i degrees, five with 2i classification, five with thirds and two with Ordinary degrees having followed an Open University route.

Subject: not all the trainees had solely mathematics backgrounds. Seven trainees had degrees that would not be classified as mathematical per se but acceptance for training was down to 'Advanced' level subject knowledge, school based experience and conditions set to complete Subject knowledge enhancement study. The seven trainees included two with Business Studies and one of each of the following degree studies Computer Science, Natural Science, Chemical Engineering, Material Science and Biomedical Sciences.

Subject Knowledge Enhancement Expectations: national courses validated by Higher education institutions are offered in support of prospective mathematics teachers. These courses can vary in length dependent on institution offerings from a minimum two week course to a full year. One trainee completed a longer 24 week enhancement course whilst a further eight completed a short two week 'booster' often to refresh subject knowledge than enhance it prior to their PGCE year.

School experience already acquired before training: classified under limited pre-course experience between zero and five days, mid-level experience being over five days and up to three weeks, and significant experience being over three weeks or longer work as a teaching assistant/cover supervisor. Overall there were seven teachers who had limited experience, a further seven who had mid-level and the last eight who had significant experience.

Final PGCE grading: Trainees were also given final grading against each of the strands in the TS professional standards and these were recorded as well as Career Entry development plans and NQT targets.

This information may be used should data analysis indicate that there are substantive themes (see grounded theory) arising that are linked to any sub-group within the study.

First Appointing School Profiles

The following data hopes to convey an impression of the types of institution that the research cohort accepted first appointments. No two schools are the same and all have traits that make them distinctive. However to give context to the study and convey the range of schools, OFSTED information for inspection outcomes and Dashboard data are used.

OFSTED inspection frameworks give a final broad view of a particular school using the four-point grading scale **Grade 1:** Outstanding **Grade 2:** Good **Grade 3:** Requires Improvement stated as Satisfactory in previous inspections **Grade 4:** Inadequate. The first appointing schools had the following grading (all OFSTED grading and Dashboard accessed through reports.ofsted.gov.uk accessed 12/04/15 and were accurate at this time).

OFSTED Grading	Frequency
Outstanding	2
Good	9
Requires Improvement	6
Inadequate	1

Note that there were 18 first appointment schools for the 22 teachers in the study. Three teachers all started at one appointing school and a further two paired appointments were made.

Dashboard Data compares all maintained schools in England using quintiles for this comparison. Quintiles are used to split a dataset into five groups each representing 20% of the data. The following two tables compare attainment in all schools and in similar schools; similar schools are ones 'similar' to the appointing school in terms of prior attainment score.

The first table compares outcomes against all the core subjects (English, Maths & Science) with the second table comparing outcomes in the appointing Maths departments.

Comparing all core subjects:

Dashboard Outcomes	Similar Schools	All Schools
Highest	1	2
2 nd Quintile	3	3
3 rd Quintile	7	6
4 th Quintile	5	7
Lowest	2	0

Comparing Mathematics:

Dashboard Outcomes	Similar Schools	All Schools
Highest	3	2
2 nd Quintile	3	6
3 rd Quintile	5	4
4 th Quintile	6	6
Lowest	1	0

There is a breadth to pupil progress outcomes and Ofsted inspection that, I would suggest, allow comparison with national figures for NQT's first appointing schools.

National figures on Retention of Mathematics teachers

Before 2013, The Training and Development Agency (TDA) managed data provision for Initial Teacher Training (ITT) providers. At the start of this study, this website was accessed to consider 'snapshot' of retention of mathematics teachers. The site has information on EBITT (Employment Based Initial Teacher Training), regional and institutional figures, BME (Black, Minority, Ethnic) profiles and details on a wide-ranging set of interest groups. For this study, I considered only national and institutional statistics. The data was only for mainstream (PGCE) graduates and does not look at EBITT figures.

The information that follows is all in the public domain. The data are not intended to be a summative document of the retention rates within teaching rather to be indicative of the general situation; as has previously been indicated NCTL data at times does not match local data due to the challenges of national collation. However, the data are reliable recognising the constraint that employment is dynamic with people changing jobs or relocating.

PGCE retention data for all subject specialisms (comparing National and Institutional data)

The following data were considered at the start of this study, being 2010, but presented here following access in 2015 (dataprovion.education.gov.uk accessed 07/07/15). Included are details on the national trend for teachers from a mainstream PGCE background. This will enable comparison between Mathematics and other subject specialism. The data includes teachers from the main Secondary subjects offered at UEA (namely English, Geography, History, Mathematics, Physical Education, Religious Education and Science Specialism, MFL is not included as data provided is for distinct Language provision). Employment dataset subsequent to 2011 are presented in a different format considered after the initial tables.

PGCE retention data for all subject specialism

O4/05 PGCE graduates teaching 6 years

Provider	Value type	Employment status during 1 st year				Employment status during 6 th year			
		Employed	Not employed	Not matched to GTCE data	Total	Employed	Not employed	Not matched to GTCE data	Total
University of East Anglia	Count	123	30	1	154	135	8	11	154
	R%:	80%	19%	1%	100%	88%	5%	7%	100%
Sector	Count	9,203	4,322	360	13,885	9,673	3,852	360	13,885
	R%:	66%	31%	3%	100%	70%	28%	3%	100%

O5/06 PGCE graduates teaching 5 years

Provider	Value type	Employment status during 1 st year				Employment status during 5 th year			
		Employed	Not employed	Not matched to GTCE data	Total	Employed	Not employed	Not matched to GTCE data	Total
University of East Anglia	Count	140	28	4	172	129	39	4	172
	R%:	81%	16%	2%	100%	75%	23%	2%	100%
Sector	Count	10,462	3,067	431	13,960	9,925	3,604	431	13,960
	R%:	75%	22%	3%	100%	71%	26%	3%	100%

O6/07 PGCE graduates teaching 4 years

Provider	Value type	Employment status during 1 st year				Employment status during 4 th year			
		Employed	Not employed	Not matched to GTCE data	Total	Employed	Not employed	Not matched to GTCE data	Total
University of East Anglia	Count	138	21	0	159	131	28	0	159
	R%:	87%	13%	0%	100%	82%	18%	0%	100%
Sector	Count	10,753	2,591	252	13,596	10,307	3,037	252	13,596
	R%:	79%	19%	2%	100%	76%	22%	2%	100%

O7/08 PGCE graduates teaching 3 years

Provider	Value type	Employment status during 1 st year				Employment status during 3 rd year			
		Employed	Not employed	Not matched to GTCE data	Total	Employed	Not employed	Not matched to GTCE data	Total
University of East Anglia	Count	122	15	0	137	116	21	0	137
	R%:	89%	11%	0%	100%	85%	15%	0%	100%
Sector	Count	10,653	1,954	270	12,877	10,049	2,558	270	12,877
	R%:	83%	15%	2%	100%	78%	20%	3%	100%

08/09 PGCE graduates teaching 2 years

Provider	Value type	Employment status during 1 st year				Employment status during 2 nd year			
		Employed	Not employed	Not matched to GTCE data	Total	Employed	Not employed	Not matched to GTCE data	Total
University of East Anglia	Count	129	15	2	146	125	19	2	146
	R%:	88%	10%	1%	100%	86%	13%	1%	100%
Sector	Count	10,498	2,071	344	12,913	10,307	2,262	344	12,913
	R%:	81%	16%	3%	100%	80%	18%	3%	100%

09/10 PGCE graduates teaching 1 year

Provider	Value type	Employment status during 1 st year			
		Employed	Not employed	Not matched to GTCE data	Total
University of East Anglia	Count	153	15	3	171
	R%:	89%	9%	2%	100%
Sector	Count	11,197	2,758	565	14,520
	R%:	77%	19%	4%	100%

There is significance to the number not matched to General Teaching Council Employment (GTCE) figures. These are potential teachers with QTS who are not seeking a post or possibly teaching overseas. In certain cases there are rounding errors above due to the small numbers involved. Since 2010, the NCTL has decided to provide datasets that do not include 'Not matched to GTCE data' cells. This has allowed for a clearer picture of retention albeit with the aforementioned caveat that not all teachers may be included.

Overall comparison considering trainees awarded QTS and being currently employed (all subject specialisms)

Year	University of East Anglia			Sector		
	Awarded QTS	Currently Employed	Retention Rate	Awarded QTS	Currently Employed	Retention Rate
2004/05	154	125	81%	17,151	11,033	64%
2005/06	172	126	73%	17,097	11,190	65%
2006/07	159	128	80%	17,269	10,976	64%
2007/08	137	109	80%	16,372	10,274	63%
2008/09	146	135	92%	16,311	10,282	63%
2009/10	171	158	92%	17,838	11,336	64%
2010/11	167	150	90%	16,811	10,483	62%
2011/12	143	133	93%	14,366	*9,243	*64%
2012/13	148	144	97%	12,787	*8,694	*68%
Total	1397	1208	86%	Not Considered	Not considered	Not considered

The overall picture of retention of PGCE graduates from UEA compared with national figures is one of a better retention rate; overall UEA graduate retention rates are approaching 90% whereas national figures are around the two-thirds rate. The low percentages for national employment for 2011/12 and 2012/13 may not reflect a complete first appointment profile. Employment in the first year after graduation is also generally higher for UEA graduates than national figures (see previous tables). These data above are not as stark as the Royal Society 'state-of-the-nation' findings that 50% are leaving the profession within 4 years.

PGCE retention data for Mathematics (Institution & National/sector rates)

Year	University of East Anglia			Sector		
	Awarded QTS	Currently Employed	Retention Rate	Awarded QTS	Currently Employed	Retention Rate
2004/05	22	16	72%	1,836	1,224	67%
2005/06	28	19	68%	1,864	1,245	67%
2006/07	16	6	38%	1,908	1,292	68%
2007/08	15	10	67%	1,699	1,147	68%
2008/09	17	17	100%	1,815	1,265	69%
2009/10	22	20	90%	2,390	1,591	67%
2010/11	22	18	81%	2,322	1,525	66%
2011/12	22	21	95%	2,193	1,521	69%
2012/13	19	19	100%	2,068	1,501	73%
Total	183	146	80%	18095	12311	68%

I have been working at UEA since 2008; I am particularly interested in the retention rate for teachers that I have trained. Since 2008 until 2013 there were 102 mathematics teachers awarded QTS with 94 remaining in teaching giving an overall retention rate of 92%. On a very personal note, I feel privileged to see so many teachers remaining in the profession.

The overall retention figure for UEA graduates are much higher than national rates. This is considered in the data presentation chapter.

Summary of the contextual data

The University of East Anglia is a highly regarded ITT provider reflected by the responses to the student survey and feedback from OFSTED. A significant proportion of teachers in the Norfolk/Suffolk region are graduates of the UEA course and the teachers within the research cohort have predominantly remained in the Norfolk/Suffolk region.

The Norfolk and Suffolk region where these data have been collected has a social profile that gives rise to a wide range of school types; it will be important to understand the institutional identity of first appointment school.

The retention rates for UEA graduates across all subjects are better than national statistics. For UEA PGCE mathematics graduates retention rates are significantly better than national figures.

Mindful of the context that these data portray, representation of the early experience for beginner mathematics teachers follows. Initially this will focus on the whole cohort with later analysis looking at responses dependent on cohort characteristics. These beginner teachers have allowed a range of profile data collection from gender, trainee year outcome data to degree classification. As indicated earlier this reflects a diverse group which may allow lines of enquiry in sub-categories of data to occur.

Representation of the early experience for beginner maths teachers

The following write-up of the collected data hopes to succinctly represent the experience of 22 maths teachers in their first year of teaching. As indicated in the methodology section, data was collected at six points during the NQT academic year: Initial and final focus groups, telephone interviews conducted during the Christmas, Easter and Summer terms and finally two in-depth Exit Interviews. Not all teachers were involved or responded at each of these points but the modal response by teachers was three. There were three teachers that were only involved once during the year and two teachers were involved five times (Appendix). I felt that the breadth of responses allowed for GTM categorisation to occur.

The narrative for each teacher follows a GTM analyses.

'The method is designed to encourage researchers' persistent interaction with their data, while remaining constantly involved within the emerging analyses. Data collection and analysis proceed simultaneously and each informs and streamlines the other. The Grounded Theory Method (GTM) builds empirical checks into the analytic process and leads researchers to examine all possible theoretical explanations for their empirical findings.'

(Bryant & Charmaz 2007:1)

The review of these interview data led to numerous GTM substantive categories being identified, and these are presented later.

As someone who wanted to fully immerse themselves in these narratives that the teachers conveyed, and to tell their story, I had initially not wanted to engage more fully in an extensive literature review. In structuring this report, a traditional literature review write-up was produced although this was in tandem with the themes emerging from data.

'Grounded theory requires the researcher to enter the research field with no preconceived problem statement, interview protocols, or extensive review of literature. Instead, the researcher remains open to exploring a substantive area and allowing the concerns of those actively involved therein to guide the emergence of a core issue.'

(Bryant & Charmaz 2007: 269)

NVIVO, the main software tool used within this study, is a qualitative data analysis programme. It is designed for researchers working with predominantly text-based data and analysis and for categorisation to be conducted accurately. The software website indicates that this tool allows us *'to get the big picture or get into the detail. Uncover subtle connections, rigorously justify findings, and effortlessly share your work'* (nvivo.aspx home accessed 21/05/15). The nodes, the term used for the substantive groupings, and associated number reference points considered are as follows:

Nodes			
	Name	Sources	References
+	Applying for a position	4	16
+	Communication	3	5
+	Curriculum developments	2	5
	Enculturation	3	4
	External factors	3	4
+	Headline Comment	0	0
+	Independence	13	22
	Isolation	8	14
	Maths specific	24	34
	Other Career options	2	6
	Personal	2	6
+	Professional Development	15	27
+	Professional Expectations	11	34
+	Professional support	20	33
+	Relationship with colleagues	22	44
+	Relationship with students	40	80
	Respected as a professional (equality)	21	37
	Student behaviour and engagement	41	116
	Student Exams	13	15
+	Time management	13	27
+	Worklife balance	23	62

The substantive groups with greatest number of reference points are the emergent themes predominantly discussed.

Therefore considering the methodological choices, the substantive groupings and the research cohort characteristics, this section for data presentation has the following structure:

- **Initial focus group discussion**
- **Headline comments**
- **Substantive groups**
- **Exit Interviews**
- **Final focus group discussion**
- **Considering Research Cohort Characteristics**

The core issue within this study is whether there is a distinctiveness to the early teaching experience of maths teachers, in particular those involved in this study, and more generally the wider teaching community considered in the literature review. It is always with this lens that data is considered.

Initial focus group discussion

The first focus group, conducted in July 2010, provided data which to some extent framed later interview questions. However the overarching aim of the questioning was to look at what factors were considered when applying for a first teaching post, what then finalised the decision to accept a post once offered and, more generally, what expectations, either positive or negative, were these teachers anticipating during their NQT year.

The answer to the first question of why to apply for a particular job was answered simply. There were two reasons given and neither reflected a particularly analytical approach, looking at OFSTED reports et al, to job hunting.

Location was the most common reason given. When asked, DT immediately indicated *'Location for me'* supported equally quickly by TJ's response of *'it was more location than anything else'* (DT & TJ Initial focus group). NC then summarised for the focus group but asking a follow up question; *'quite interesting that we all said location. You (indicating DT) said location and everybody went yeah. How far away are your schools?'* (NC Initial focus group). The consensus was that living within a 30 minute commute to school was a reasonable expectation.

The commuting distance was conveyed as a key application factor although the situation and environment of the school also played its part. NC conveyed a sense of wanting to work where *'you go out of the school and the area is quite nice'* (NC Initial focus group) rather than a more urban area. This was reiterated by DT who *'went to school that was pretty rough and anywhere round here is a lot better than that'* (DT Initial focus group) and DT:

'If you have had a rubbish day and you walk out of the school you're going to see something nice and green which, I don't know about you guys, but that makes me go aaahhh... it's not so bad. Whereas if you were in...'

(DT Initial focus group)

This may also be a factor why so many teachers who graduate from UEA stay within the region beyond their training year.

'Norfolk is quite a nice area. Being a Norfolk boy I don't have the experience of working in some other places but you hear the stories of what could go on in like an inner city school in London and all the issue that could happen on a daily basis that you don't get in most Norfolk schools.'

(TC Initial focus group)

The reality of London schools may be lost on people who grew up within the Norfolk region but the sentiment of wanting to work in a 'nice' area, quite near where they lived, seemed to emerge during the first focus group discussion.

The other significant factor in applying for post, mentioned 27 times, would be the relationship with colleagues (12 responses) and to clearly be considered an equal (15 responses) in any departmental or school hierarchy. NC *'didn't want to work in a school where the staff were not approachable'* (NC Initial focus group), supported by many other similar responses, although how this was to be judged during an interview day was considered difficult. Many trainee teachers are also offered posts during their training year placement schools; this allowed a judgement of whether the department would be approachable to have already been made. *'I just really got along with the department and I knew them quite well'* (ID Initial focus group) and NC *'was there on placement and like the staff were really, really good'* (NC Initial focus group) both of whom accepted posts from their placement schools. ID *'actually pushed location down'* as she *'liked it (indicating her placement school) enough'* (ID Initial focus group).

So the rationale for applying for a first teaching post was established although the final considerations of whether to accept the post, if offered, differed slightly. The first response would be to simply accept *'because it was offered'* (DS Initial focus group) and *'you spend so much time trying to present yourself and sell yourself that sometimes you don't ask have they sold themselves to you'* (DT Initial focus group). These initial responses caused laughter but then consideration of workload, peer relations again and actually pay was taken seriously; this was at the time when a pay freeze was being introduced for teachers. Although many of these maths NQTs accepted posts on a higher pay spine than other subject areas or were paid over the summer, remuneration still appeared high on the agenda when accepting the post. NC and TJ made comment regarding pay for maths teachers and how it might then impact on retaining them.

'NC: If you did this next year and asked the same question, I would imagine there would be quite a few people annoyed that their pay is frozen. For teachers, particularly math teachers; we are not in it just for money. We could be accountants or whatever and get more money.'

TJ: You could do most things and get more money.'

NC: Yeah exactly but you do quite a high pressured job and we don't get a huge amount of money for what we do and one small thing about money is you do have that security about pay going up a little bit every year.'

(NC & TJ Initial focus group)

This view about remuneration as an important consideration is supported by Christine Blower, General Secretary of the National Union of Teachers, the largest teachers' union, who said in a 2011 press release that,

'The two-year pay freeze follows a long period of real terms cuts for teachers, when their pay awards were well below inflation. The impact of the pay freeze will be worsened by the increase in teacher pension contributions planned by the Government, and by continued high levels of inflation.'

Frozen pay and higher pension contributions are likely to reduce teachers' take-home pay by 11 per cent in total – this translates into losses running into thousands of pounds for individual teachers. With pay settlements in the private sector improving, the value of pay in teaching and other public sector professions will reduce in comparative terms.'

Worsening the real and relative value of teachers' pay will reduce the attraction of teaching as a career, damaging this vital profession and our economic prospects.'

(www.teachers.org.uk accessed 03/06/15)

DT even went as far as commenting, although much in contrast to the importance of location concern, that:

'If the pay situation crops up I'll go abroad. I think I can earn a lot of money teaching maths in a foreign country rather than staying here. I think if it got to that stage, I'm not concerned about moving abroad so I'll probably do it.'

(DT Initial focus group)

Before summarising the considerations and expectations for a first teaching appointment, there was the somewhat unusual situation where one school appointed three of the teachers from this research cohort. Two of the teachers were present in the focus group giving their view on how this situation impacted on acceptance of posts and whether the school had been totally upfront that this would be the situation.

'I do feel differently about the job now knowing that there are three NQTs and that I might not have the attention and resources that I probably would have received before. I mean there is pros to that as well in the sense that I'm going to get a mini network of support but at the same time if I knew that from the beginning it would have changed my mind.'

(DT Initial focus group).

'If I were honest if I knew there were three NQTs and they were all on one year contracts I would have gone to a different school.'

(NC Initial focus group).

The consideration of support was paramount in the thoughts of DT whilst stability of employment was for NC. On initial application there was only one post advertised although during interview a possible second post was discussed but never three. The fact that three teachers were offered posts was a surprise, and not known on the day, to all.

Overall three expectations of good peer relationships, nice and close location, and remuneration was my sense of what these teachers were conveying overall. Independence of role (9 responses), administrative or organisational support (15 responses) and work/life balance (19 responses) were raised but not in relation to accepting a post. This reflects the research of Cockburn and Haydn (2004) that presented two of these post criteria, peer relations and location, but also considered whether the school had a sixth form, the OFSTED report, wanting a challenging school, wanting a mixed comprehensive or challenging pupils, the academic reputation or the technology status of the school. None of these wider considerations were actually spoken of, although possibly inferred, and the three expectations indicated stood out.

Headline comments

In the methodology chapter the aim of this research was presented as giving voice to practitioner maths teachers. Inevitably some form of summary and interpretation of the data is needed rather than simply presenting numerous transcripts. This summary is prone to interpretation albeit with some level of triangulation.

'Triangulation in the traditional sense involves the combination of different interpretations of different types of data towards a more correct representation of what is going on in the area in question.'

(Bryant & Charmaz 2007:443)

My approach has involved the consistent interaction with literature, peer review of substantive groupings and more generally discussion with professional colleagues. However to give voice to teachers, I wanted to ask for a headline comment about their previous experience during each of the telephone interviews, and always intended to present these comments verbatim. I hoped in this manner to provide some illumination of the NQT experience in their own words not being constrained by any analytical tool.

The following are headline comments for each term.

First Term Headline Comment

- *BC - Nothing can prepare you for your first term. I think the first term being a 'proper' teacher has been a bigger learner curve than the four years before put together.*
- *BT - Behaviour management improving. Teaching style not necessarily. Lots of exam preparation and stress. A headline comment; hard work.*
- *DT - Quite tiring and quite unexpected in a way.*
- *ES - Very pleased to have done it and got through it. I have enjoyed it ...it has been very hard work.*
- *KC - Challenging. Just one word will do. Challenging.*
- *KE - I'd stay it's tough but it's fun, it's interesting and it is always different. Each day being different... some days it can be good and some days it can be bad but it's never the same.*
- *KT - A headline comment. Erm. Preparation is key.*
- *NC - A headline comment over the first term.....right let me just think about that..... I'd say enjoyable and manageable! Is that enough for that bit.*
- *ND - It would be interesting probably. Interesting yeah.*
- *OD - Challenging. Tiring.*
- *SL - Wow. Erm..... Probably...I don't know...it has been very hard work but has been very rewarding. A bit clichéd but....*
- *TC - Better than the PGCE year. Not like... I found... I have enjoyed this year more because apart from our group and our class the actual teaching side I much prefer this year than I did last year.*
- *TJ - Lots and lots of work.*
- *HH - Loneliness*
- *MG - Probably I am surprised at the amount of number work we do. The audits and checking that is not related to teaching we do. It feels like you are being constantly checked or watched.*

Second Term Headline Comment

- *BS - Just my own stress and pressure to try and bump up their grades really. I think I'm putting a little bit too much pressure on myself really. And also how the department will perceive my first exam results and want to do well in them.*
- *BT - Slow improvement.*

- *DS - I had a lot of issues on behaviour in the first term. I've been trying to pull that around really. A lot of hard work and I've found it quite stressful at times but hopefully things will be getting better. Since January, it's got easier.*
- *DT - Stressful and busy.*
- *ID - A couple of personal things. Because of the teaching as well. I found it very hard. I don't know that I will be any good at teaching at all. As far as I am concerned this is a write off as a year.*
- *KC – Lost year.*
- *KE - It's been tough. It's been one of those up and down rollercoaster times but have got through it and towards the end of term got better.*
- *MG - I think the headline comment would be it's been different every day. One day you go home feeling one thing and the next day it's totally different.*
- *NC - Some people feel like a sense of relief after the first year but I don't feel like that. I feel like I want to carry on. I feel almost energised but that seems like a little too stimulated. I think just generally positive and optimistic. That's a few key words. You can make a headline out of that.*
- *ND - I still want to get to outstanding but I don't feel the support is there.*
- *NT - About the school or about my experiences? It's been ok. As an NQT I have been having support from my mentor. It is different from the PGCE as we have responsibility to the other teachers but now we have our own classes. There have been good days and bad days.*
- *OD - A headline comment....stressful and tiring.*
- *SL - Probably I felt that I have much more freedom to try different things out and I've enjoyed that.*
- *TC - Well I had some observations in the first term and then during January the observations that I got, the feedback all said that I was making lots of progress and they said I was getting to be a better teacher. More confident and much happier with how my lessons are going. Some of my classes are sorted out and life is getting a little bit easier that's all.*
- *TJ - Long hours*
- *WC – Headline comment. This term has all been about revision so probably a comment about revision and year 11s at the moment.*

Third Term Headline Comment

- *BC - Easier than the PGCE year.*
- *BG - Something along the lines of, I don't know, I guess the thing is I really want to continue after having a blip in the middle. I've pulled through and do feel I'm stronger for it or a better teacher. Something like that.*
- *BS - I don't know. I think at the moment, the way I am feeling at the moment is keep swimming, keep going through it. I can't think of anything else at the moment.*
- *DT - It's been busy, successful and I've enjoyed myself. Such responsibility. It's been a good year. It's gone well. I've been very busy. I've tried to keep myself busy and be actively involved in the department and school as a whole.*
- *ES - Hard work but satisfying. Ok basically. It's been a huge learning curve the whole year really. In respect to being in a completely different working environment, to building relationships with other staff, to getting to know the subject and how to teach it.*
- *KE - Tough but always different.*

- *KT - It's been a fantastic year, short and sweet.*
- *MG - It's been different to what I thought it would be. Every day is different but I probably don't have as high expectations as I did this time a year ago in what I would expect the kids to do.*
- *NC - The highlight for me was just being able to do what I wanted, given a lot more independence. I was allowed to do really what I wanted to do. I set up a music appreciation society and at the end of the year we gave out a publication to all the forms with music reviews, to all staff and pupils. That was really good and also a Frisbee club as well which became the biggest club in the school. I was really proud of that and we are going to carry that on next year. So I know it may be a cliché but you have the time and the trust to do these things in your NQT era. It's been personal, supportive and enjoyable.*
- *ND - It has been both good and bad. There is one thing I feel with the PGCE on the pastoral side that it probably doesn't do the NQT year justice. It takes up a lot of time outside your normal subject hours. I found it quite enjoyable form time but just with administration it does take up more of your teaching time. It is quite enjoyable at the same time. Behaviour issues. I suppose on the PGCE there is always someone there to help you and then you are on your own. As time has gone on I think I have become stronger with that, with the behaviour management. I have had more techniques.*
- *OT - It will definitely be positive as I have thoroughly enjoyed it. Intense but thoroughly enjoyable.*
- *SL - Overall I've been really happy with how it's gone. I knew it was going to be hard work and it has been but I've been able to get through it. So that's been good. Now that I have got to the end of it and things have slowed down a bit, it's been really rewarding. Looking back on it, it's been really positive. Overall very happy.*
- *TC - Teaching: it's all good.*
- *WC - Oooh. A headline comment.....I don't know...ermmm.....can't think of anything....*
- *OD – OK generally. I think it has been a good experience. It has been a turbulent time at the school initially without a head of department and with my NQT mentor leaving half way through at Christmas.*
- *OT – Yeah it was good. A good start. A little bit apprehensive but in a good way.*
- *BS – My year has been a good year. It's been quite tough and quite challenging. I find that I don't really feel that I get appreciated by other members of staff and the pupils I suppose. That was one of the reasons why I did look for another job but obviously I did want to stay in the profession but not necessarily at my school. I don't think the support was there.*
- *BT – Right ok. The first two reviews I had weren't as positive as I thought they should be. I did write quite a few comments in response on the second form I had which resulted in me having an interview with the head discussing what the specific things were they could be doing and whatever. As far as I know I have passed; the school has recommended that I pass.*

It is quite hard to discern a clear pattern within these headline comments and there is need to tread carefully when stating any themes that emerge. However there appears to be some emerging considerations.

The workload during the first term is portrayed as significant; to some extent this is also the impression given for the second term. However fewer comments are made about workload and there seems to be greater positivity in the third set of headline comments. These

comments have been presented to trainee teachers (June 2013 & June 2014 although not recorded for research purposes) who indicated that they felt their NQT years might follow a similar pattern. Whether the interview being in the last few weeks of the academic year has meant a more positive response in the third headline comment is uncertain. Similarly, looking back over a challenging time, for example at the end of a marathon, the memory recalls things more positively than the specific difficulties that may have occurred.

During each round of interviews there appears to be a change in emphasis from many of the beginner teachers over what constitutes a headline comment. The first round of interviews had many short responses simply indicating tiredness. Over the course of the NQT year, it appears that more of the teacher have begun to focus on specific circumstances rather than generalisations. Many of these specific circumstances are discussed in the following substantive group section. However themes on behaviour management, workload, relationships with colleagues and generally collegiate support are already emerging.

Later within this chapter, two exit interviews are considered at length. The headline comments from both of the teachers who resigned post gave warning signs that the year was not going well. HH headline comment is '*Loneliness*' during the first round of interviews and KC has a similarly negative response of '*Lost year*' during the second round. Further study may be pertinent on appropriate methods of identifying teachers who may be struggling in order to give greater support; it is clear in these cases that there were difficulties. This is in contrast to several others who indicate positive reactions to their year throughout and indicate a very successful year throughout. A similar question may be asked of these teachers on how support can be given to further develop practice or professional prospects.

Overall, there are too many variables to make any individual analysis of these headline comments. However I do feel they give a good sense of how the year progressed for this group of teachers.

Substantive groups

The substantive groups with greatest number of reference points, looking at the NVIVO nodes, are the emergent themes discussed here. These themes in hierarchical, (i.e. most references), order are: pupil behaviour and engagement, relationship with pupils, relationship with colleagues, work-life balance, professional expectations linked to professional development, independence and finally maths specific considerations. It is this last theme that may give some insight into the question of whether there is distinctiveness to the early experience of maths teachers in comparison with other curriculum areas.

Pupil behaviour and engagement

Pupil behaviour and engagement has been a prevalent theme throughout this study. It is particularly pertinent to the two later exit interviews and final summary focus group where the behaviour of pupils impacted on staff well-being. Some teachers expressed a hope that the behaviour of pupils, so often spoken about when discussing teachers working life, would not be poor for them. Invariably all teachers explained that they had to work with either challenging individual pupils or whole classes.

'I think I had this fairy tale idea of just going in and teaching the children. They would all love maths and everyone lives happily ever after. It wasn't like that

pretty much from day one. Certain classes I had the same sort of people almost lesson by lesson who were quite disruptive.'

(KC Exit interview)

The first round of interviews led to numerous comments on individual pupil behaviour and how this was taken as very much a personal affront. During the training year it was explained that negative pupil behaviour was never meant as a personal attack although the intensity of the first term meant that many thought it was. BC talks about one particular pupil who *'just didn't like me. I was a new teacher and he got caught by a TA saying he was going to get me'* (BC first interview). Another teacher comments on poor behaviour during the first term but then expresses uncertainty on how to manage this.

'One specific incident was notes being passed around the classroom and then finding them. They have been quite personal towards a teacher. Obviously I found the notes and presumed it was me as it has been passed in my lesson. Quite nasty comments and not knowing how to deal with that.'

(BS first interview)

The uncertainty, when new to a school, of not knowing the systems that pupils are used to or having established yourself within the environment was frequently discussed during the first round of interviews held at Christmas. BS simply stated: *'I think not knowing how to deal with things. That's been quite a big pressure especially not knowing how to deal with behavioural side of things.'* (BS first interview). It was clear that teachers were trying to be the model of consistency in an inconsistent environment; experienced teachers trying to be supportive giving a plethora of strategies but not advising how to be consistent within these.

'Trying to be consistent. One of the things I found with the behaviour things that people have said is that things should be consistent but when you are having issues they give you twenty or thirty things that you can try. Now there is a conflict there which makes things difficult. I'm trying to be consistent in trying the things that people have asked me to try. What I am working on at the moment is a lot of the non-verbal things to try and reduce the number of distractions and disturbances that I get from pupils. That's been one of the things that I've been trying a lot more recently.'

(BT first interview)

The frustration of a teacher who wishes to teach the majority, who inevitably focuses on the minority of pupils who were being disruptive, was also apparent in a number of responses. As can be seen from HH's comment, and HH was one of the two teachers who eventually decided to resign post, this situation was particularly galling.

'I was spending all this time dealing with a few pupils who were behaving badly and not giving anytime to the ones that wanted to learn and then it made me feel that I was letting them down. It was they wanted to learn and they weren't getting the opportunity. I didn't have the opportunity to help them as I was so busy trying to deal with these others.'

(HH first interview)

Managing behaviour did not only appear during first interviews. During second interviews, behaviour continued to be discussed albeit by fewer trainees. Challenging behaviour continuing through the year steadily undermining teacher confidence and belief. *'How they just don't respond to anything at all and it just gets to you a bit'* and *'it's everything from low level to whole class tantrums.'* (ID second interview).

'Behaviour has had a massive impact on everything else. I don't think I have been able to develop my teaching beliefs. It is a catch 22. I've been told that if I get my teaching right then obviously behaviour will come from that but you get swept up in all of it so I try to make a stand sometimes. You know the silent treatment and waiting. But I always seem to be the one who breaks first as I feel I'm not getting anywhere with this so loads of little things...nothing that really that you could name it is this, this or this. The whole combination of behaviour and by teaching right. If I don't get the right combination of that then this is going to be one very difficult job to do.'

(KC second interview)

Individual pupil behaviour becomes more overtly the focus in the last round of interviews; teachers are beginning to recognise and address individual action rather than whole class concerns. The teachers speak about the few causing difficulties rather than generalising.

Having written about the challenges in terms of behaviour that all trainees have spoken about, it is not all 'doom and gloom'. There were many comments about how classes or specific individual behaviour were improving and how this was a fulfilling cycle as to whether teachers were enjoying the lessons. The number of positive comments, less in number to the more negative ones, did portray a better overall picture as the year progressed. The following are just a few of the positive comments made during interviews.

'I've had a particularly difficult class and there is one student in there that has said to the other teachers that they actually really enjoy the lesson. It makes up for the fact that... you know....that you come out of a lesson thinking it has been particularly poor or not gone well. But when a kid actually says it was good then that is quite positive.'

(KE first interview)

'I'm liking how the classes are evolving due to my behaviour. It's nice to see how they react now that they have got to know me. It is nice to see how their behaviour is now that I've been with them longer. There is one example where.....there was one year 9 group whose attitude and behaviour were not very good so their grades at the start of the year were poor. Their attitude and everything has improved and I've got a good relationship going on with them. Their grades have shot up as well.'

(KT second interview)

'I guess I expected a lot of trouble from the students and they lived up to expectations but also what exceeded my expectations was certain classes are amazing, really, really nice.'

(OD third interview)

'I think turning a class around when they had been really cold to start with. Getting some positive feedback from them. They send you Christmas card. There was one who had been in exclusion who sent me a Christmas card saying thank you. It really makes a difference.'

(TJ first interview)

In summary, although NQTs within this study had differing experiences and trajectories in terms of pupil behaviour in their lessons, pupil behaviour and engagement were clearly high in terms of considering quality of working lives for all.

Mindful that there are certain difference between behaviour and engagement, with both having a role to play in teacher job satisfaction, we now consider the link between relationship with pupils and the way a teacher views their practice; this is the second substantive group to be considered.

Teacher-Pupil relationship

What may appear as something quite ordinary in a school context can reassure teachers that their relationship with pupils are positive. The small amounts of praise or recognition by pupils has a long standing effect on NQTs.

'Christmas Cards. Really it's been great to get cards that say like 'you're an awesome teacher' and I kind of felt that by the end of term I had been fairly rubbish at it then to get that sort of feedback from the students is quite nice. Getting comments like 'I did this last year and I never understood it'. Things like that I guess. Yeah feedback from the students. They have understood things and that sort of thing.'

(DT first interview)

Later in the year CS continued this theme indicating that actually having pupils appreciate your efforts however difficult the behaviour may have been is really encouraging. I am not certain whether every teacher has a moment when they fully believe that they can do the job and build good relationships with pupils; personally I do know that I had this moment.

'I think probably the biggest thing that stands out is the last lesson I had with my year 11s because they were a bit of a struggle to start with but we kind of got there in the end. They were genuinely really appreciative and that was the moment I thought I can do this. It's ok. If I can cope with them it's not going too badly kind of thing.'

(DT third interview)

Further evidence that the little things make a significant difference is a simple 'thank you'.

'I had a pretty difficult day with years 10 and 11 but there was one kid at the end of the day that cheerfully said 'goodnight sir. I'll see you tomorrow' which just cheered me. I know it is just a little thing but it really cheered me up.'

(ES first interview)

However the reason why pupils have this good relationship with teachers is often due to the progress they are making rather than any personal bond. *'The biggest positive factor would be the satisfaction that the kids get when they get something. I take great pride in that.'* (MC second interview). A teaching reputation for having a positive relationship with pupils, and making sure good progress is being made, can quickly extend beyond the class that you are actually teaching.

'I have one student - a student from year 11. Her sister in year 9 has asked for help after feedback from her sister. She actually came to ask for help and I said yeah no problem. Staying half an hour after school to get up to scratch and a few other people have also come so I had six there. I was really chuffed.'

(ND second interview)

When asked about positive experiences through the year, ND commented on the relationship with pupils but also the developing relationship with colleagues. *'Just general relationships with children to be honest. Also the staff member and getting to know them better and having a bit of a laugh with them and that sort of thing.'* (ND second interview). This 'settling in' to the school process chimes with my recollection of starting in new institutions, not just as an NQT but subsequently.

Peer relationship with colleagues

This theme of relationship with colleagues is one of the key ideas or themes which emerged during the first focus group; it is also one of the key ideas conveyed by the two teachers who quit during their NQT year. This is the third substantive discussion area being related to professional support rather than simply a personal relationship.

The experienced colleague can offer a lot of guidance whether they recognise that they are actually contributing to how support is viewed by beginner teachers or not.

'They are different ages to me generally but chatting in the staff room; just little conversations about how you got on with this. So just those things have really helped, those couple of minutes of snatched conversations make you feel like yeah I'm on the right track.'

(ES Final Focus Group)

AB succinctly puts that the only reason that they completed their NQT year was due to the collegiate support, particularly experienced or more senior colleagues. *'Definitely my colleagues. It is a really strong department. I don't think I would have coped without them. Especially my head of department.'* (BC third interview). However the year was not all smooth sailing for BC as they did end up arguing with a colleague although it can be construed that this argument stemmed from a willingness to support by telling some 'hard truths' by a colleague in this strong department, rather than any underlying conflict.

'I have had one argument with a colleague since being here. It was my fault in the end. It was me spreading myself too thin. My time constraints and he pulled me up on it. That's about it.'

(BC third interview)

The supportive department is conveyed as fundamental to how well the success of the NQT year is viewed. Consideration of the personal rather than professional nature of this relationship comes later but KT, in their third telephone interview, states that this is the stand out memory they have.

'I think, to be perfectly honest, the main thing that stands out for me is the relationship with my colleagues within my department and my NQT colleagues. The people in my department, we get on really well. We do things together. We can talk about any of the pupils. We give each other help. It's helpful that my head of department is really supportive and kind of quite relaxed sort of person about a lot of issues which I think is really helpful. I think that aspect of it really stands out for me.'

(KT third interview)

However for every positive comment about the supportive nature of colleagues, there were as many negative comments. Some of these comments are discussed in the later exit interviews by two teachers that did not go on to complete their year. Some teachers conveyed a negative sense of collegiate support and that they did not want to become like some of the 'moaning' staff room teachers.

'I would stop teaching if I just didn't enjoy it anymore and I became a cynic. Like one of those people who sit in the staffroom who moan about kids; they hate kids and teaching. I would never want to do a job that I hate surrounded by people I don't like. As long as I enjoy it and remember why I went into teaching in the first place.'

(DT Final Focus Group)

The appreciation, support and relationship with colleagues is prevalent in many comments but the three statements by BT, each one from three telephone interviews, summarise both the views of the many and the positive or negative impact comments made by colleagues can have. For BT there seems to be a transition where teaching seems to go well until the Christmas' first interview to later Easter and Summer term interviews when more negativity comes through. This is somewhat in contrast to the Headline comments made where more negativity comes through at Christmas and comments are much more positive later, particularly in the summer term interviews.

'Positive reinforcement from pupils and staff has been good. Telling me they are enjoying what is going on. The positive.'

(BT first interview)

'The biggest negative factor would be on the flip side is the negatives and the criticisms from other staff and having negative comments from other staff members.'

(BT second interview)

'I find that I don't really feel that I get appreciated by other members of staff and the pupils I suppose as well. That was one of the reasons why I did look for another job but obviously I did want to stay in the profession but not necessarily at my school. I think the support wasn't there when I needed it really.'

(BT third interview)

At times the support offered does not always come from experienced colleagues within a department but from other NQTs, reflected in the subsequent quote where three NQTs are within one particular maths department. There also seems to be a correlation between positive involvement with colleagues across the whole school or simply work friendships evolving and the way support is viewed.

Firstly to comment on DT's experience, who was in the unusual position of being with two other maths NQTs trained at UEA, and the support they received being highly valued in helping with workload, planning and more generally by seeing the other NQTs daily.

'There are three of us in the department and particularly people I know quite well, it's been really quite nice because we have had similar classes. We have all taken on year 11 and sixth form classes and form. Our sixth form lessons have been at exactly the same time so I've been able to go have you done chapter three yet and he'd go no not yet. It has been really supportive and because we have seen each other daily that's quite nice. You always get that checking up on each other.'

(DT Final Focus Group)

It also seems to be the case that support from other NQTs comes from proximity. People in the same circumstances helping each other whereas NQTs that work in other departments or elsewhere within a school may not necessarily bring the same level of support.

'I've only got an NQT in art so it's quite different. There are two NQTs in art and it's quite different. Apart from NQT meetings which are good I've not had much dealing with them. I probably deal more with the NQT plus one in the maths department.'

(TJ Final Focus Group)

Proximity seems important in developing relationships with colleagues. On a day to day basis the support comes from people working nearby. TJ is working on a large campus, albeit fewer pupils than the school can actually cater for, and it is the colleagues nearby that are most important.

'The people I work with. The staff and definitely the department are very helpful and very friendly. Not just in the maths department but in the whole area that we work.'

(TJ Third Interview)

Work-life balance

The fourth substantive group is consideration of work-life balance or put simply 'workload'. There were 89 comments from 36 sources considering work-life balance and time management considerations. All comments made by the beginner teachers reflect a heavy workload but there seems to be a difference in view as to whether this workload is acceptable, manageable or sustainable.

Starting by considering the three career changers who were part of the final focus group and who have indicated that they were used to working long hours in previous careers; the workload expectations for a teacher still surprised them.

'I've obviously done twenty years of something else. It is a long time since I started that previous career but I found the expectations in this incredible. Incredible what people are asked to do. It might be certain aspects of my school versus other ones but I have found the work life balance quite challenging. It wasn't unexpected following some of the conversations we had last year. Some of it is personality, some of it is the school but I have three kids and my wife works so balancing what I need to do to get comfortable to teach versus getting in and making the tea and getting everybody ready.'

(ES Final Focus Group)

'I must admit that I resented it at times. One of the reasons for going into teaching was to spend more time with the kids to be honest. I found that I was even spending less time. I've always worked long hours. That didn't worry me but starting work at 8 o'clock at night once the kids had gone to bed. The kids were like 'you never watch telly with us anymore' and at weekends. One of the days I would be working all day or marking or doing reports or doing the paperwork that came with it not necessarily planning.'

(TJ Final Focus Group)

'It's been really challenging and in our school there is an awful lot on reporting, parents evenings, induction evenings, after school department meetings, NQT meetings, induction meetings. Certainly the first couple of terms there seemed to be two or three nights a week and then you were going home trying to get ready for the next day. I found that I was using a lot of my free time for ringing parents or taking a breather or trying to work out what I was to do with some tutor group stuff. In our school we didn't have houses so the implication as a tutor is that at sports day it is tutor group against tutor group. There is an expectation on you that your tutor group would come along and be signed up. They might have a banner so tutor groups are definitely like having another class so I think I got better as I went along the year. I'm more to the point with my time. I started to go in early and think I have an hour now roughly and I've had a think about it at the weekend. That resonates with me but certainly the first two terms were really hard.'

(OD Final Focus Group)

OD comments confirm the headline comments that things seem more positive during the summer term; a more manageable workload or simply becoming used to the expectations may be the reason for this positivity. OD highlighted lots of administrative expectations although does not initially raise the 'elephant in the classroom' for workload.

'I think it has been the marking that I have found horrendous.' (TJ Final Focus Group). When the question of marking is raised there were murmurs from everyone in the final focus group. OD concurred rather dramatically *'marking has been 'Oh my God! That always becomes the last thing I do and there are so many other things.'* (OD Final Focus Group)

The sentiment on high workload, if workload is commented on, is confirmed by all of the respondents, be they career changers or not, but it is how each person has sought to manage this that differs. Two simple answers for those who became more comfortable with

their workload appears to be a strict time management regime and becoming more familiar the school systems and pupils. DT considers their time management regime.

'I'm really strict with time. I don't work late. I go into work early, work in the morning and that is when I get everything done as it gives me a kind of fixed deadline. I can't go into a lesson if it is not planned but if I give myself this time to plan it then I've got myself a fixed deadline and then I don't panic.'

(DT Final Focus Group)

BG confirms the above and other previous points. A strict regime of completing all work in school and ensuring all 'frees' are used efficiently appears to be working for them. They also suggest that workload seems lighter in the summer term as considered previously.

'Well when I started actually one of the first things you realise is how many classes you have to teach. My first half term I was working pretty long hours leaving school at half six or seven getting all my work done. I found that quite stressful and I thought if it is going to be like this for the rest of the year I'm not going to be able to do it. But the second term there were loads of parents evenings so the workload didn't calm down at all but I found planning came a lot easier, planning groups of lessons. I started using my 'frees' a lot better and I started to enjoy it a lot more.'

(BG third interview)

'I've become familiar with the school and the children and everything has become a lot clearer with schemes of work. I've got everything where I want it in terms of resources. Everything has become a lot easier in terms of those things really.'

(DT second interview)

So familiarity with school systems and pupil expectations help with workload. A lighter workload in the summer term also appears to relieve pressure. However the big question that needs answering is why teachers actually commit to this accepted high workload? The answers, to some extent, come from the same people, career changers with family, whose quotes started this section.

'I've worked long hours for a lot of years but for to some extent having a different motivation for working the long hours helps. I feel like I'm doing it for good reasons. When it is one of the classes that is playing up that doesn't sit well. Generally having that underlying motivation helps, it still feels like it is for a good reason.'

(ES Final Focus Group)

'I made such a conscious decision to do this. There is no way that I'm going to give up. No way. To me it was such a lifestyle thing with children. I know there is no other job that will give me that. Even if my work-life balance is so out of kilter during term time but if you look at it over a year it's perfect even if it is not right.'

(TJ Final Focus Group)

Most of the quotes used within this section have been taken from discussion with career changers. They have been the people most vociferous on workload and this may be due to reflection on workload expectations in previous careers. However workload concerns were cited by all participants and is evidence that everyone was mindful of the challenges this presented.

Professional expectation, development and equality

There were three principal nodes in the NVIVO categorisation, these being professional expectations (34 references), professional development (27 references) and respected as a professional equal (37 references) that will be considered in tandem. The viewed importance of all three of these areas further define how an NQT perceives the success of their year.

A major worry that was expressed during the first focus group was a question of respect. *'You wanted to be taken as an equal.'* (DT First Focus Group). The importance that was given to how other teachers view your practice has significance for teacher identity.

'I want them to know that I'm doing my best, I'm doing a good job in the department. I went in to be a maths teacher and if they don't think I'm a very good maths teacher then I would be a bit phased.'

(NC First Focus Group)

NC continued by using quite an emotive term of 'fear' when describing the need to be respected for their work.

'In my first year, like I was saying, I would want to be taken seriously. I guess the fear is that I wouldn't be taken seriously and then I do sort of want the respect of my peers and pupils and things and that is probably... that is my only fear.'

(NC First Focus Group)

During the third round of interviews, BG gives great importance to how one is perceived and the endeavour to make sure that colleagues' views on one's practice are positive. AF tells the story of forgetting about a formal observation, having been informed in November although happening the following February, and how this affected all the months subsequent.

'I'd totally forgotten that she was coming to observe me and I'd only written a couple of lines in my book and I thought 'Oh my God'. I think she could tell I hadn't planned well and I was very nervous. I thought at that point that this might be make or break and how I reacted to that and maybe more importantly how she reacted. We had a chat after lunch and I said I'd totally forgotten and apologised and she said that's fine and we had a chat about it. I don't know but ever since then I have been almost trying to do things to make it up to her and show that I can be a good teacher. That's kind of been quite a big thing for this year.'

(BG third interview)

It was not just how peers viewed practice that was important to BG; it was also how parents viewed a teacher's support of their children which was given significance. This fragility of

confidence in early teaching experience has been inferred by others but was particularly acute for BG.

'When I started the year I was concerned about being judged by people. I was really worried about parents evening with lots of remarks about being baby faced and what parents were going to say but in the first five minutes of parents evening I realised that I was in control and they wanted to hear from you.'

(BG third interview)

Supporting teachers to settle into their roles with growing confidence is possibly a vital component in answering the question of retention.

Professional development and expectations, both extrinsic and intrinsic, were considerations presented in 26 sources and commented on 61 times. However time to manage expectations can be difficult to find. *'Sometimes you are expected to do more and more and it feels like less and less time.'* (WC first interview). However once time is found, recognition of this hard work is rewarding. *'Recently I have taken over the role of deputy head of house until the end of term. So my hard work has been recognised and hopefully there will be ways to build on that in the future.'* (DT third interview).

The balancing of extrinsic and intrinsic expectations is something that is considered by NQTs. It is also portrayed by DT as a clarity of decision making ensuring that you only involve yourself in activity that is of interest and you can have an impact on.

'I think that I'm doing enough things now. These are the kind of things that I want to do and I'm enjoying those things so I'll just try to increase my involvement in those things rather than getting involved in other new things. I feel that I have got enough things to keep me interested and keep me busy that I can make an impact on. I don't think I really want to get involved in any more new or different things.'

(DT third interview)

Commentary specific to mathematics

The final substantive group considered is the mathematically specific references made throughout the study. Much of the previous writing would be indicative of any curriculum area and, I would propose, for any given school or age group taught. The nuances of experience coming through, discussed in the concluding chapter, for differing age groups of teachers or those working in these differing institutions do not really make reference to mathematics and can be considered generic for all teachers. However this study is focused on the early experience of the mathematics teacher and it is with this in mind that mathematical issues are considered.

The themes that have emerged related to maths match considerations explored during the literature review. The accepted conferred importance, a general negativity towards mathematics and at times a perceived level of difficulty within the subject that may not be prevalent elsewhere or differing mathematical pedagogies are three themes explored. Much of the following discussion refers to the second round of telephone interviews, conducted around Easter of the NQT year, as this was explored at this stage.

Pupils appear to appreciate the importance of mathematics and generally make appropriate effort accordingly. *'They do know or some of them do know that they do need it. Some of them realise how important it is so they really want to learn.'* (ID second interview). Being considered a core subject, alongside English and Science, has also afforded a certain kudos to mathematics. *'I think it has been good teaching maths as it is a core subject. I can stand my ground a little bit more.'* (BS second interview). This kudos extends to outside the classroom.

'I think a maths teacher can be quite well respected by society. I think that RS or PHSE have a lot of people disagreeing with it whereas you say to someone I'm a maths teacher and they say 'cor blimey that's pretty good'. That's quite a positive influence on the pupils and society.'

(NC second interview)

However this conferred importance might be construed as placing extra demands on mathematics teaching and subsequent examination results. Pupil progress is important to all teachers although OD infers that there is more pressure within core subjects than elsewhere.

'A whole school focus is on Maths, English and Science so you are going to get a lot more attention than others subjects as the core subjects are the first thing that parents look at when the students go to the school is the results in Maths, English or Science. They're the most important so I do see it as more pressurised area to teach than others I would say.'

(OD third interview).

This was supported by many other comments including MG (second interview) stating that *'being a maths teacher the focus is on you a lot more. At the school they want the high maths results. You are always focussed on getting the exam results.'*

So these NQTs have confirmed the perception of Mathematics teaching as being an important core subject that has high status with parents and pupils. Being a core subject and having associated teaching positives, kudos and importance, or teaching negatives, expected pressure on exam outcomes, should be considered when looking at maths NQT experience. However mathematics is a core subject and pupils have no choice but to study it; again something that could be construed either in a positive way, guaranteed pupil numbers, or negatively through pupil resentment in being forced to study a subject they don't want to do.

'The pupils have to do it and I think that in itself can cause some resentment. A lot of them have an instant dislike to maths which means you have to try and convince them this is a good thing to do.'

(BT second interview)

This leads on to considering perceived pupil negativity towards mathematics, regardless of status. *'My impression is that they find it hard and they find it pointless. 'Why do we need maths it's pointless'. There doesn't seem to be the understanding of why we need maths.'* (NT second interview). In a somewhat exasperated tone, NT continues that *'every time I start a new topic they ask why we are doing it.'* (NT second interview). DS and KE continue with this theme attempting to convince their pupils of the relevance of mathematics whichever career path is being chosen or simply to get pupils engaged appear challenging.

'I've got a load of girls that are A students in Beauty who say they don't need maths to do Beauty. I say 'if you want to run your own business in Beauty then you will need to have an understanding of the numbers'. It's trying to relate it to what they think. 'I'm an A* student in Beauty but rubbish in Maths' or 'Why should I do this when I'm really good at something else?'. It's trying to get them to understand that they are not separate, they are actually linked in terms of what they want to do is still quite difficult.'*

(DS second interview)

'I would say it is different as a lot of kids say that they don't need maths. I've spoken to a lot of kids who say 'when am I ever going to use this' and it is difficult to come up with every single bit of maths that you would use in day to day maths. At the same time you have to try to give them stuff that they are interested in, you need to know a little bit about who you are teaching or what their plans for the future are and say 'look this is where it could be used'. There is that level of enjoyment in it as well. Trying to get that level of fun in maths is not always possible like in all subjects but I think with other subjects a lot of it can be research based. Whereas in maths it's very much like you are taught something and if you don't get it, it is very difficult to progress.'

(KE second interview)

KE's comment, in particular, infer how a teacher's differing pedagogical choice either constrain or encourage how much pupil progress is being made. BT implies the need to focus on key basic skills and denigrates the use of mathematical games within the classroom. However KE, counters this argument, having utilised such games to enthuse pupils who otherwise would have been uninterested.

'We've found it quite hard as often they are not as good as their Key stage grade has been. I found it quite difficult as some of the pupils have come in having done maths in a very game orientated way so perhaps not ready to put in the effort I think they need to get the grounding right. A lot of basic skills don't seem to be there.'

(BT second interview)

KE and BT agree on the specific nature of mathematics following a 'spiral curriculum' and both convey negatives related to this. The term 'spiral curriculum', a term introduced by Bruner (1960), conveys the idea of repeated pupil engagement with the same topic at different stages of development. A pupil will complete the same mathematical topics each year building on the prior knowledge from the previous year or term. This repetition of topic material does not sit comfortably with BT. *'In maths we tend to go round and round and round I think that that can be a bit galling as in other subjects you start here and move forward all the time.'* (BT second interview). For KE the challenge related to a spiral curriculum is recognising how to move pupils forward by establishing the right building blocks, or addressing misconceptions, in understanding. In maths *'you are taught something and if you don't get it, it is very difficult to progress.'* (BT second interview).

The negative view of mathematics dominates much of the decision making when planning. The challenge of making material accessible and enjoyable balanced with the need to ensure progress. The view that mathematics is difficult, inaccessible and lacking in topic material that fully engages pupils does not compare favourably with other subjects.

'The students have a real negative view of maths. The stuff that gets taught in our school, the curriculum has a lot of emphasis on empathy and wider key skills PE, drama and performing arts. Historically the students have lent towards those areas as they feel that they are not academically strong enough. I didn't realise this originally but when I started I thought I was delivering quite creative lessons but compared to a lot of other stuff they get taught in their curriculum it's still in a classroom. It's still maths and they really struggled with that.'

(DS second interview)

Overall, in the view of these NQTs, an impression that the negative view of mathematics makes pedagogical decision making challenging. The teachers also felt that it could make pupil engagement more difficult to sustain regardless of a perceived academic kudos. Conducting interviews with other subject teachers may have led to similar responses although these teachers conveyed an acute awareness of their perceived challenges in the teaching of mathematics.

Exit Interviews

The two NQTs that resigned posts during their first year of teaching seemed to be able to talk candidly about their experiences and thoughts on the challenges that this first year presented.

The first teacher was employed in a large suburban comprehensive. During the exit interview, a discussion point related to why they chose to take up this initial post.

'I took the job there. I was offered the job really early on; offered it from first placement. I was a bit dubious then only because it was so early but I thought about it and even though I wasn't 100% sure of the school, I was very happy with the support the staff seemed to show. The staff seemed to gel as they had just been OFSTEDed and that was why I went. One of the teachers was becoming an AST and that was why I went there. Specifically I was looking for the support.'

(HH Exit interview)

The rationale of all those that partook in the initial focus group suggested that an underlying reason to take up their first post was simply practicalities and location. Placements are always a consideration when allocating schools to trainee teachers; HH lived nearby the appointing school so this would corroborate the first focus group's view. The support offered by the school was also a consideration particularly the possible extra support by an Advanced Skills Teacher (AST); this does not seem to have actually have come to fruition in spite of the obvious good intentions.

The following quote conveys a sense of despondency with the lack of support that eventually occurred.

'I noticed really early on that there wasn't any support that I was expecting. I didn't expect the same level of support I was getting in my PGCE but there was zero really. My mentor (the AST) I didn't really see. The problem was that she had just started the AST role and was out of school every week. She had just got

married and she is off on maternity now. There were other things as well and although enjoyed the teaching side of it which I always did it was I was..... I was having problems with certain classes and I felt the school weren't helping me either... a lot of the teachers were saying 'try and do this' and you try that and then the head of maths was saying 'I wouldn't do it that way you should do it this way'. You can't really change half way through. The Head of Maths was part time so she was never there. The worst day of the week was a Wednesday. It was the worst day of the week purely because you get the year 10s twice that day because of the way that their week worked out. The head of Maths wasn't there and my mentor is not there. It was always when there were problems. Anyway I kept trying different strategies and I would talk to people. I got good help from a former NQT but I just felt that it was so empty. Morale was so low.'

(HH Exit interview)

The first comparison made is between the NQT year and PGCE. Statutory guidance on induction for newly qualified teachers (England) considers the monitoring and support during induction although this comes across unfavourably, as suggested by HH, with the support available during a PGCE programme. The guidance (point 2.34) states the following is needed:

'A suitable monitoring and support programme must be put in place for the NQT, personalised to meet their professional development needs (including the development needs of part-time NQTs). This must include:

Support and guidance from a designated induction tutor who holds QTS and has the time and experience to carry out the role effectively; Observation of the NQT's teaching and follow-up discussion; Regular professional reviews of progress; NQT's observation of experienced teachers either in the NQT's own institution.'

([www.gov.uk/Statutory guidance on induction for newly qualified teachers](http://www.gov.uk/Statutory-guidance-on-induction-for-newly-qualified-teachers) accessed 15/07/15)

With both AST frequently away from school and the Head of Maths being part-time meant that their availability to carry out the supporting role simply wasn't there. The school had identified a very suitable candidate, being the AST, who may have more time allocated and skill for the role as stated by guidance (point 2.35):

'The head teacher/principal must identify a person to act as the NQT's induction tutor, to provide day-to-day monitoring and support, and coordination of assessment. The induction tutor must hold QTS and have the necessary skills and knowledge to work successfully in this role and should be able to provide effective coaching and mentoring. This is a very important element of the induction process and the induction tutor must be given sufficient time to carry out the role effectively and to meet the needs of the NQT. The induction tutor will need to be able to make rigorous and

fair judgements about the NQT's progress in relation to the relevant standards. They will need to be able to recognise when early action is needed in the case of an NQT who is experiencing difficulties. It may, in some circumstances, be appropriate for the head teacher to be the induction tutor.'

([www.gov.uk/Statutory guidance on induction for newly qualified teachers](http://www.gov.uk/Statutory-guidance-on-induction-for-newly-qualified-teachers) accessed 15/07/15)

However the reality of the AST working in schools elsewhere and her later maternity leave, without clear induction replacement, have caused an anxiousness for the NQT regarding support. Could this, in part, be considered a reason for their eventual resignation?

The pastoral support offered by this trainee's PGCE course has been recognised by OFSTED as being highly effective. *'The high level of pastoral support for trainees, which leads to rapid and effective action by the university when trainees encounter difficulties'* (OFSTED 2014: 12). Could the trainee expectation of support offered be unrealistic during the NQT year where pupil contact is higher and external support, similar to PGCE tutors, not readily accessible? All support during NQT years are generally internal school support rather than through a third party; when discussing support with the head teacher an external helpline number was offered to HH although he comments that *'this was not a lot of use'*.

Another comment from HH was that he was *'was having problems with certain classes'* (HH exit interview) and if we are to take this as related to behaviour management, it corresponds to the most significant GTM substantive group of 'pupil behaviour and engagement'. Pupil behaviour considerations was commented on 116 times in 41 sources. During this study all the NQTS have commented on pupil behaviour impacting on their well-being.

School morale comes through as another contributing factor for HH's final resignation. This was not discussed explicitly by any of the other NQTs but the relationships with peers, commented on 44 times, was. Similarly isolation, commented on 14 times by other NQTs, related to morale is a theme that does come through. Both these come through in HH's comments. HH conveys a very negative impression of life at the school although we should recognise that this exit interview was conducted very soon after resignation and the associated rawness in emotion.

On isolation, HH comments:

'I did feel that there was a very poor morale and it wasn't like that the year before when you would have thought it would have been because of OFSTED problems. That was one of the things.... if you went to the staffroom ... I didn't go at break because it was too far away...but if you went at lunch the only people there were the TAs. There was obviously the odd teacher coming through but there was no one really to talk to. I said that to the head. I said this was the loneliest job I'd ever had. I don't get to speak to any teachers. I knew more about the cleaner. There is something wrong when I have a better relationship with the cleaner than I do some of my colleagues.'

(HH Exit interview)

HH is aware that his own perception on school morale may not be the view expressed by other colleagues. However he does comment:

'I feel that a lot of teachers will have different experience but morale was really poor. That was something I really noticed. I know from experience that you can be in the worse situation in the world but if you have good morale. I've been in the forces and I've been in the desert where we've been eaten by everything and had a great time and I've been in 5 star hotels and had the most miserable time. That's down to morale.'

(HH Exit interview)

Isolation, low morale, support and pupil behaviour are the four areas that were most frequently discussed during HH's exit interview with the interpretation that these were the factors that underpinned his decision to resign. However personal circumstances, being that GG was a career changer who could take an early pension, would also be a factor. Life outside of school will impact on life in school and HH had other options.

'My dad is in a home. He has Alzheimer's but my mum had a stroke during the PGCE. My father-in-law had terminal cancer and died at the same time. I do think to teach effectively right in that intense period I'm sure it did but it makes you think about life as well. I was getting quite angry inside especially in some of the lessons and I didn't want to say something or do something which I would regret or the school would regret At the end of the day I thought that I am not going to give myself a heart attack...not for something I wanted to do and I wanted to enjoy. I'm not doing this as a career I'm doing this as a vocation.'

(HH Exit interview)

Much that was discussed is reminiscent of the substantive groups presented by the other research cohort NQTs. The challenges that the first term present is portrayed by the overall negativity in headline comments presented earlier. However the problems appear particularly acute for HH; we can never know whether HH had finished his first full year he would have remained in teaching. We do know that the experience was not all negative as HH subsequently took up a TA position and appears to be thriving (subsequent phone call that was not part of the research methodology).

The second exit interview was with KC who had entered the teaching position with similarities to HH being that he was also career changer who hadn't come from an atypical subject knowledge background. KC's first appointment school had a recent poor record in OFSTED inspection, difficulties in recruiting teachers as it was a rural school and served a poorer socio-economic community.

The rationale for KC taking up his first position appears accidental rather than considered. *'Hadn't really put myself out for a job because I wasn't sure, story of my life, of where I wanted to be in terms of location. I wasn't 100% so really I fell into the school position.'* (KC

Exit interview). This is in contrast to HH who overtly looked for support. KC was fortunate as the support appears to be present in his school however accidentally he had 'fallen' into this first teaching post. The mentor was *'a great bloke, absolutely fantastic', 'really helpful and a good one to turn to'* although KC indicates that he may have needed someone who was a bit more direct with him. *'I could have done with someone who was a bit more dynamic' or 'I think in some ways I needed someone to kick my backside. I'm like that as a person and I said that but their attitude was don't worry'*. (KC Exit interview). This appears to convey the impression of someone who knows they may not be doing particularly well at the start of the year, who is getting plenty of pastoral support, but possibly not professional expectations.

The two clear themes that KC does convey relate to behaviour management and workload/time management. We have already noted the number of comments regarding pupil behaviour from all NQTs. There were also 89 comments related to time management and work-life balance; so the concerns that KC indicates are common to all. It is the severity of these and how acutely the issues affect KC which seem of greater significance.

On behaviour management, KC comments that he'd:

'Got himself into bad habits because I'd got into a bad position. I'd let things go, not deliberately, but I'd got into dealing with things and if something slipped by it was just my nature. I know now what I should have done but I got into a routine where I probably let things slip in behaviour. That led on to the fact that because of bog standard lessons there were behaviour issues.'

(KC Exit interview)

Behaviour expectations was a theme that ran through KC's comments on the first few months before Christmas. There also appears to be mixed messages communicated to KC, in their view, related to behaviour and classes. KC comments about being observed once by the Head-teacher, who in KC's words, indicated that *'apart from a few critical things, it was a satisfactory lesson'* (KC Exit interview), observed once by his mentor who *'gave me satisfactory. He was pleased with how the lesson went to be honest'* contrasting with several observations by an external agency, which KC did not expand on, that was focussed on behaviour more widely within the school but gave very negative specific feedback to KC.

Time management was an issue for KC:

'Often I would be working very late at night and when I say late, I mean 11 o'clock at night because I'd fuffed around watching a bit of telly or I'd actually got up sometimes at half past 4 – 5 o'clock in the morning because I had gone through the whole night not doing anything..... Time management I found difficult right early on.'

(KC Exit interview)

The behaviour management concerns and time management were not the final reasons for leaving teaching. The final reason to leave teaching were threefold: a longstanding heart condition that needed operating on, the demise of a relationship and then to be offered a redundancy package that the circumstances dictated was too good to refuse.

The operation was always at the back of KC's mind and there is indication that affected his attitude to work:

'I was originally told that I was going in around December time so I thought only a few more weeks to go but when that got put back to January, it was like I was having little shifts all the time. If I had known straight away it was going to be the end of February I could have knuckled down. Totally unprofessional of me but I think I had reasons for that.'

(KC Exit interview)

There was also a deferral of responsibility because of the operation; all the issues on behaviour could be addressed at a later stage.

'When I knew I was going into hospital I knew I would be in for at least two months and I think in the back of my mind, even though I wouldn't accept it at the time, I had almost accepted this year was going to be a write off. Start afresh in September and do that.'

(KC Exit interview)

The offer of redundancy, in many ways, was a suitable outcome for both school and KC. KC did discuss this with his union, giving options rather than defensively, but the outcome does seem to have suited both parties in difficult circumstance.

'I then got in touch with my union, the NUT, representative and basically it was a case of what were my options. I hadn't passed the year and what was the school intending doing? Are they going to let me go and after they spoke with HR and county, they came back with the school willing, if I was, to make me redundant. They gave me a redundancy package and for me, how I was feeling, it was a no brainer..... the reason also being, as time went on, I actually couldn't face the thought of going back in. I could not face going back to school.'

(KC Exit interview)

The two teachers appear to convey a similar message in terms of behaviour within classes giving greatest concern. The external circumstances of both seem to ensure the final decision as well. Both teachers subsequently became Teaching Assistants, although for KC this was only on a short term contract that wasn't renewed, so the negative experience cannot have been enough to detract from working in schools.

The differing experience related to school support and how this was perceived. For HH, arguably the stronger of the two teachers (PGCE summative reports from schools), felt very

unsupported and isolated whereas KC did feel emotionally supported. Similarly the intrinsic motivation shown by both on wanting to keep trying also seem to differ although eventually with the same outcome. HH did keep trying but eventually felt disillusioned whereas KC seems to have become resigned earlier. HH persevered but eventually became deflated: *'I kept trying different strategies and I would talk to people. I got good help from a former NQT but I just felt that it was so empty.'* Whereas KC, due to the seriousness of his condition, *'because of that going on, couldn't be bothered with stuff'* from an earlier stage.

These two stories show similarities that can occur for all in the early years of teaching. It is how these impact on sense of identity or well-being ultimately decide whether a teacher remains in the profession. For these two career changers, both of whom have shown a passion to remain in education, the personal circumstances they were experiencing compounded the challenges faced within school. However it is important to be cautious when attempting to derive meaning and significance from a sample of two. Further research in this field would need to have a much bigger sample of exit interviews with mathematics teachers leaving the profession to more fully explore possible reasons for high attrition rates in this field.

Final focus group discussion

The final focus group was conducted during the last week of term and involved six participants, one of whom was also in the initial focus group. The unstructured approach to questioning hoped these teachers would summarise their year without any particular direction given; whether this discussion resonated with previous data collected was kept in mind.

There were three themes that seemed to arise and these did indeed corroborate previous data. Two themes, behaviour management and relationship with pupils, were summarised by the very first comment:

'There are two (themes) that I can think of that stand out off the top of my head. One positive and one negative. Let's start with the negative, why not! There was an incident where I was sworn at quite harshly by two students – a f..... prick, sorry and what was the other one a f..... c word. This happened within 30 seconds and I thought 'oh that's nice' and it made me feel really good about myself and motivated to be a teacher. More recently when the year 11s had left one of the girls came back; I'd spent quite a lot of time doing revision with her and a couple of others in my class. She came back in and sort of said thank you basically for helping her. That was in complete contrast to how that previous incident made me feel.'

(OD Final Focus Group)

The third theme related to perceived pressures be these workload related, marking or simply anticipating Ofsted formed over half the discussion time.

Behaviour management, the first theme has already been discussed extensively. It is clearly an issue for all beginner teachers; in this final focus group alone there were over 40 comments related to behaviour management. However there was a difference in tone to how this was discussed to much previous data (apart from exit interviews where there is

similarity). In this discussion it was not the behaviour of pupils that was a concern; it was the support mechanisms, both pastorally and administratively, that was often criticised. Concern was particular raised over repeat offenders and how these pupils are managed.

Senior leadership was seen as inconsistent.

'The thing I would say about the behaviour I had to deal with is that the senior leadership team in the place I am at the moment is nowhere near as consistent as I have seen in different schools in the past and although the behaviour I have seen hasn't been serious the students have seen it as acceptable. There is just a complete lack of consistency from the top.'

(KT Final Focus Group)

'In terms of the senior management they are so inconsistent. If I have four students who are all in different houses getting detentions for the same thing, I have to approach that in four different ways. I have to speak to different people in four different ways to get the same outcome. It's really inconsistent.'

(DT Final Focus Group)

Although Senior Leadership was often criticised, departmental support was often praised. In ES's particular case, he praises both departmental and senior support although, as many others did, raising issues about consistency in routines and structure. *'The department have been excellent and overall my experience is that the senior support is very visible with informal support. There is no structure but it is available if you need it.'* (ES Final Focus Group).

How teachers who have pupils that consistently cause difficulty within class, and in all likelihood across the wider school, are supported caused quite heated discussion.

'We get the same students from the same lessons. It doesn't seem like anything has been done. There are things being done behind the scene but they just take such a long time or they are not particularly obvious they are being done.'

(OD Final Focus Group)

OD continues with criticism of house systems and inconsistencies in approach to behaviour management generally; this mirrors DT'S previous comment about different heads of houses dealing differently with individual pupils.

'There are different ways that people deal with it; a quick fix or doing it properly. We've got a vertical house system as well and one of the houses is doing their own detention system as well. Two students in the same class do the same thing and they get punished in different ways and I think that is ludicrous.'

(OD Final Focus Group)

The year group approach to school organisational structure rather than a house system is presented as a better approach in supporting behaviour management by ES.

'We have heads of year, tutors and there is one 'sort of enforcer' who is on the senior team who really spends most of his time dealing with the repeat offenders. It's actually very streamlined, there is no confusion. With the house system you don't have that.'

(ES Final Focus Group)

It should be noted that ES's appointing school was considered 'Outstanding' by Ofsted whereas the school that OD was working in had a sequence of 'Required Improvement' grading and has subsequently been placed in special measures. Whichever structural approach is adopted in schools, be it house or year, the endeavour to be consistent in how behaviour is managed seems to be a key supporting factor for beginner teachers.

The second theme, relationship with pupils, was raised a number of times. Often this relationship was considered in terms of behaviour or the respect and appreciation shown the teacher for their work. It is interesting that teachers at the beginning of their teacher career very much appreciate when pupils offer their thanks.

'They caused me so much grief to start. They are the class that hated me and I hated them to start with but slowly they became my favourite class. When they left for their exams; at that point they were coming twice a week after school and these were the sort of students who were predicted Es and Fs. They were coming to after school sessions twice a week and they were so grateful. Going from giving them after school detentions weekly to that point in two terms was my achievement of the year.'

(DT Final Focus Group)

An apparently small thing such as a 'thank-you' from a pupil had a significant impact on the beginner teacher identity and confidence resonating from OD's very first comment.

'For me it was all the little things. Some kid would say thanks at the end of the lesson. The little comments. Some of the kids would start to say 'what are you up to'; there is a relationship that is starting to build and you feel that you are settling in and that is quite nice.'

(OS Final Focus Group)

The final theme that emerged in discussion related to 'pressure' be this workload and marking, impending OFSTED inspections and more generally department or school expectations.

'I think my biggest thing for nearly all the year until May was OFSTED hanging over us. We were below the floor for our exams. Since September it has been hammered in to us that our marking has always got to be up to date and everything. Patrols to make sure we are marking and a lot of observations to make sure we are ready for OFSTED coming.'

(TJ Final Focus Group)

This was vociferously supported by OD.

'I had the same issue with OFSTED definitely coming at some point. It was just piled on with department meetings and making sure you had targets in their books. This and this and this and I'm just sitting there thinking I am going to walk away. I can't deal with this; there is just too much of it.'

(OD Final Focus Group)

Both OD and TJ were working in schools serving challenging catchments and which OFSTED had graded poorly whereas TC was working in an OFSTED graded 'Outstanding school' where marking seemed less on the agenda albeit focussed feedback remained fundamental.

There are some people who mark a lot more than others but I don't think our head of department is one of the people who does the most. So if they said you had to have it done by here, here and they weren't doing it they would lose a lot of standing. What they are concentrating on is the quality of the work rather than the quantity so we have lots of bits about breakdown of marking you are looking for a target to improve on, something they have done well, a sign that they have made progression since the last time you have marked it.

(TC Final Focus Group)

Discussion on marking involved all participants in the final focus group. It was perceived as a pressure by all although very much depended on the school and more specifically the head of Department's own emphasis placed on marking.

'What I tend to do and what my head of department has led me on to doing is instead of actually spending time marking books excessively to actually spend that time thinking! It is about thinking about things to motivate them and rather than spend ten minutes marking a book spend five minutes thinking about what you are trying to say or spend five minutes having a chat with them in a lesson. Like to kick start them rather than just writing something in their book.'

(KT Final Focus Group)

'There is so much difference in schools in the same county. The heads seem to have a huge amount of power and say so on what happens in their little world. There are obviously quite a lot of differences to how each school does things which I find quite surprising.'

(ES Final Focus Group)

Overall the expectations placed on teachers were found to be challenging particularly for the two career changes within this group. DR, who had been overtly positive throughout the previous discussion, was summarising his experience, following a change in career, in negative terms. This was supported by SI who was even more damning regarding workload expectations.

I've obviously done twenty years of something else. It is a long time since I started that previous career but I found the expectations in this incredible. Incredible what people are asked to do. It might be certain aspects of my school versus other ones but I have found the work life balance quite challenging. It wasn't unexpected following some of the conversations we had last year. Some of it is personality, some of it is the school but I have three kids and my wife works so balancing what I need to do to get comfortable to teach versus getting in and making the tea and getting everybody ready.

(ES Final Focus Group)

I must admit that I resented it at times. One of the reasons for going into teaching was to spend more time with the kids to be honest. I found that I was even spending less time. I've always worked long hours; that didn't worry me but starting work at 8 o'clock at night once the kids had gone to bed did. The kids were like 'you never watch telly with us anymore' and at weekends. One of the days I would be working all day or marking or doing reports or doing the paperwork that came with it not necessarily planning.'

(TJ Final Focus Group)

For all the challenges that teachers felt they were under, and many were conveyed in this discussion, there was also a sense of worth to this workload. ES summarised the views of many well at the same time mirroring headline comments made previously.

'It's been really challenging and in our school there is an awful lot on reporting, parents evenings, induction evenings, after school department meetings, NQT meetings, induction meetings. Certainly the first couple of terms there seemed to be two or three nights a week and then you were going home trying to get ready for the next day. I found that I was using a lot of my free time for ringing parents or taking a breather or trying to work out what I was to do with some tutor group stuff Certainly the first two terms were really hard.'

(ES Final Focus Group)

However the rationale for why do this was also conveyed by ES; *'I've worked long hours for a lot of years but to some extent having a different motivation for working the long hours helps. I feel like I'm doing it for good reasons.'* (ES Final Focus Group).

'Doing it for good reasons' seems to be a suitable end-point for this quantitative and narrative data. I have attempted to summarise the breadth of responses given and some of the themes that appear to come through. Before finally exploring my interpretation of these comments, one last consideration of particular research characteristics.

Considering Research Cohort Characteristics

Considering the differing cohort characteristics, it is important to stress that the sample size for these do not lend themselves to quantitative analysis which might provide statistically significant results. However, they may suggest possible areas for further investigation and through a tentative reflection, some interesting research ideas may arise.

As considered in the 'Beginner teacher profile within this study' within the Background Data chapter, there are numerous cohort characteristics that could be considered. Initially, I intend to focus on four of these characteristics:

- Age; the 11 recent graduates will be compared with seven later career changers.
- Final PGCE grading; the experience of the 11 beginner teachers graded 1 overall will be compared with the experience of three teachers graded three.
- Degree classification on PGCE entry; the three teachers that had 1st class degrees will be compared with the five who had thirds and two with Pass degrees.
- First Appointing School Profiles; comparison of beginner teacher experience between the two Ofsted 'Outstanding' recruiting schools and the seven schools that were either graded as Requires Improvement or Inadequate.

The background data or characteristics that are not considered at this stage are gender, degree subject (as not all trainees had solely mathematical backgrounds), school experience already acquired before training and data gained from analysis of Career Entry development plans (CEDP). There is no specific rationale for this except being mindful of the thesis word count, and the feeling that having looked through the data obtained in relation to these categories, there is insufficient data on which to base meaningful comment.

Age (comparing recent graduates with later career changers)

The 11 recent graduates who started the course achieved PGCE outcomes of seven grade 1s, two grade 2s and two grade 3s. The seven career changers achieved a similar spread with three grade 1 outcomes, three grade 2 and one grade 3. From this limited sample, there seems little validity in considering outcome differences for differing age groups of teachers. The only comment which might be made with confidence is that within this small sample, there was little to suggest that career changers were either more or less likely to develop into effective maths teachers.

However this is in stark contrast to how these teachers actually felt about their NQT year. Career changers in this sample seemed to find it much more difficult to accommodate the challenges of transition to the classroom than more recent graduates. Ten of the 11 recent graduates spoke positively about their NQT year whereas only two out of the seven career changers did so. This is worthy of further exploration although would reflect my own experience of training career changers; there are some who recognise the difficulties in making such a career move although most, the case within this study, find the mismatch between expectation and classroom reality difficult to accommodate becoming critical of their practice.

Anderson (2014) has researched this issue of supporting transition for career changers using a case study approach with three such teachers. The opening line from the abstract of Anderson's (2014) journal paper indicated that these '*individuals who change careers to assume teaching roles in secondary schools are more likely to struggle in the classroom than those without such backgrounds*' which would corroborate the findings here. There were three implications that arose from the study; the first of these being,

'teachers who enter a school with a history of significant professional accomplishments and a variety of life experiences outside of the educational system may perceive themselves as more experienced and "school savvy" than is the case for their new younger colleagues. In fact, these more mature

beginning teachers indeed may have been hired in part because of their more extensive career backgrounds’.

(Anderson 2014: 153)

This study would support this finding as the career changers within the study make frequent reference to previous work situations, be this work expectation or responsibilities. There is also suggestion that career changers are viewed differently by colleagues and view themselves differently. A further implication that would be endorsed through this study is the sense of expectancy and disappointment in classroom reality; I would suggest that this is why five of the seven career changers expressed negativity in interview responses.

‘Many of these career changers enter teaching seeking a sense of personal and/or professional fulfilment that was missing in their previous work experiences. While their initial optimism is valuable, career changers may also possess idealized and unrealistic view of the rewards of teaching. The inevitable onset of reality in the contemporary classroom may be especially distressing.’

(Anderson 2014: 153)

The third implication which hasn’t been corroborated or considered within this study but would be something that I would endorse through my own previous training experience is that career changers do come with much prior experience that can be both supportive in an NQT year or negative.

‘Career changers are more likely to have held previous positions of authority than is the case for their younger novice colleagues. For a career changer coming from situations where he or she experienced significant personal and professional autonomy, the position in the school hierarchy may feel like a career demotion. In such cases, previous life experiences may actually serve to inhibit professional induction.’

(Anderson 2014: 153 citing work by Morton (2006) and Chambers (2002))

In summary, the three implications raised within Anderson’s (2014) study resonate with interview feedback considered within this study. Five of the seven career changers have remained in teaching but significantly, two others did not.

Final PGCE grading

The final PGCE grading may be indicative of how an NQT year will go although, as with any statistic or broad analysis, does not always guarantee correlation.

All the 11 beginner teachers previously graded 1, with only one exception, gave positive feedback with the caveat that previously discussed substantive categories, behaviour or workload etc., are considered albeit in a more positive light. Pertinently, and this comes from my own knowledge of how these teachers have progressed since the start of the study, eight of them now have more senior managerial roles. Some have changed schools to achieve this promotion but all are doing well; there are six heads of departments, one Special Educational needs co-ordinator (SENCO) and one Advanced Skills Teacher (AST). The

significant exception to this positive reflection is the experience of HH considered within the previous exit interview section.

Two of the three teachers who were previously graded 3 remain teaching five years after the start of this study. One has taken promotion and remained in the same school whilst the other has moved schools twice although taken no managerial responsibility. The third teacher graded 3 was 'KC' who had the most difficult NQT year and is considered within the previous exit interview section.

Overall, as indicated by the original sentence within this section, the final PGCE grading is an indicator of how the NQT year will go but is not always a guarantee. There is also likely correlation between these outcome grades and future promotion opportunities although this would need a longer longitudinal study to explore fully.

Degree classification on PGCE entry

This section compares beginner teachers with first degree classifications of thirds or passes with those who achieved first class honours. This is particularly topical as recent teacher training bursary payments are significantly higher for teachers with higher degree classifications. However, as mentioned during the literature review, this has caused controversy. The previous Education Secretary, Michael Gove, *'has said the government should only pay to train graduates as teachers if they have at least a 2:2'*, but these *'proposals to raise the bar for trainee teachers in England could worsen the shortage of science and maths teachers'* (www.bbc.co.uk accessed 28/07/15).

To consider the seven teachers within the study who had third or pass degrees, four of these achieved PGCE outcomes of grade 1, two received outcomes of 2 and one with an outcome of 3. Five out of the seven portrayed their NQT year in a positive light while two viewed the year negatively. Of the teachers who viewed their year negatively, one has remained in teaching whilst the other, HH, resigned. HH held a pass degree, as he was a career changer having studied within the armed forces, but still achieved a PGCE grading 1. HH might be considered a counter-example to correlation between degree classification and PGCE outcome although this would need fuller exploration for any statistical validity. The teacher who was graded as 3 during the PGCE year remains in teaching five years later.

The three teachers that had first class degrees gave mixed responses, one overtly positive, one generally positive with the last quite negative, about their NQT year. Two out of the three achieved grade 1 PGCE outcomes whilst the third achieved a grade 2. One of these teachers, as mentioned earlier, has become an AST. The second after five years remains in the classroom although was granted a sabbatical year abroad through his first appointment school. The third is the one teacher from this research cohort that I have unfortunately lost contact with.

The data presented here does not support the idea of direct correlation between degree outcomes and either the quality of teacher they become or successful NQT years. However the sample is small and further study is required.

First Appointing School Profiles

During literature review and the first section within this data chapter, first appointment schools were considered due to geographical practicalities and general reputation. In the concluding chapter there is some consideration of how these schools support induction.

The feedback from the two teachers employed in Ofsted Outstanding schools is mostly positive and never critical. It is overtly positive by one early career changer whilst the later career changer still found the transition to teaching more difficult but sang the praise of all teaching colleagues and professional support.

The feedback from nine teachers working in the seven Ofsted Requires Improvement or Inadequate schools give a much more negative impression. Six of the nine teachers were consistently critical of support, behaviour and general workload implications. Three did convey a rosier picture in their schools although these three, all graded 1 during training year, all were confident teachers who enjoyed working autonomously.

Data presented here does support the somewhat obvious conclusion that working in (possibly) more challenging schools is in itself more challenging, and makes it harder to enjoy teaching. According to this small sample, working in better functioning schools seems to affect well-being and job satisfaction positively.

This concludes presentation of collected data. I hope that data presents, openly and honestly, the comments made by all the beginner teachers in this study. Inevitably by wanting to portray the lived experience of teachers, this data borders on the somewhat descriptive. However this thick description hopes to give an interpretation of events, being a process of '*sorting out the structures of signification and explication of meaning*' (Geertz 1973:9). This is to be explored during the concluding chapter.

Conclusion

'Surprising but not shocking: The reality of the first year of teaching' is the title of a journal paper by Hagger, Mutton and Burn (2011) reflecting a three year longitudinal study focusing on the expectations and experience of 36 beginner teachers from two ITE institutions. Their conclusions, leading to the aforementioned title, are mirrored by the findings within this study, hopefully in corroboration.

'Further research is clearly needed with teachers from a range of PGCE programmes, but it would appear that genuine school/university partnerships with fully integrated ITE programmes have helped both to smooth the continuum between training and induction and to equip beginning teachers to learn more successfully from the processes of teaching as they are engaged in them.'

(Hagger, Mutton & Burn 2011: 403)

By focussing solely on the experience of beginner mathematics teachers, I felt that there may be some distinguishing features or nuances that differ from other subject areas. The reality is that this was not the case. There were some specific issues and comments which seemed to have particular pertinence or resonance for maths beginner teachers, (to be discussed later), but *for the most part*, the general sense of experience conveyed by these teachers match closely to literature about NQTs from other subjects. The problems and difficulties which afflict all beginner teachers in England are in many ways the same as those encountered by maths NQTs. However, discovering there is little difference between literature and responses does not mean that the breadth of data cannot support insight into the overall retention question; the four research questions that this study began with start the process of answering this.

What consideration does a beginner teacher make in deciding their first teaching appointment?

School location and reputation of schools in terms of other trainees who had placements there being the two most significant factors when considering new posts (Cockburn & Haydn 2004) are corroborated by the findings in this study. This study supports the school reputation finding although positive peer relationship is considered vital in ensuring this reputation. There is indication that the consideration for mathematics teachers is the same as for all subject specialists. The first focus group gave much support to the argument that school location and reputation of schools are the predominant factors in school appointment. This does lead to a further question related to recruitment rather than retention. If ITE provision is predominantly based around HEIs, and considering the first appointment findings, then recruitment will necessarily be based geographically around these HEIs with schools that are in partnership.

The UEA partnership works alongside 70 schools across Norfolk and Suffolk although the university is based in Norwich. There is a tendency for trainee teachers to be based around the Norwich area and subsequently schools in this vicinity to have greater choice in recruitment. A further consideration, this time for the university lecturers who make placement choices, is what constitutes the best training experience to ensure high PGCE pass and future retention. Ronfeldt (2012) studied this in detail. There is

'an ongoing debate about the kinds of schools that make for the best field placements during pre-service preparation. On the one hand, easier-to-staff schools may support teacher learning because they are typically better-functioning institutions that offer desirable teaching conditions. On the other hand, such field placements may leave new teachers unprepared to work in difficult-to-staff schools and with underserved student populations that need high quality teachers the most. Using administrative and survey data on almost 3,000 New York City teachers, their students, and their schools, this study finds that learning to teach in easier-to-staff field placement schools has positive effects on teacher retention and student achievement gains, even for teachers who end up working in the hardest-to-staff schools.'

(Ronfeldt 2012: Abstract)

If placements are always in schools geographically close to UEA and with schools whose reputation is of being 'better-functioning', then the cycle of easier recruitment to these schools is sustained. If, as Ronfeldt (2012) suggests, easier-to-staff placement schools have positive effects on teacher retention regardless of whether they end up working in the hardest-to-staff schools, how can university based ITE ensure the supply of good teachers be delivered to these hardest-to-staff schools?

Conversations with school-based mentors, heads and link teacher over the past seven years of work as a PGCE tutor suggest that challenges in recruitment are indeed the case for schools in the North and East Norfolk coastal strips but also rural communities in the region; however this is evident for many other parts of the country. Mary Bousted, head of the teachers' union the Association of Teachers and Lecturers, considers that one of the main factors for school under-achievement is

'isolation of these schools, particularly in coastal areas, where there are low wages, high worklessness, children not prepared for learning and children being moved in and out of schools, with generally difficult recruitment challenges.'

(www.bbc.co.uk accessed 22/07/15)

The head teachers' association ASCL, said *'parachuting teachers in to short-term placements would be a "sticking plaster" and what was needed was a co-ordinated national strategy and the long-term support and assistance inner city schools had had'* (www.bbc.co.uk accessed 22/07/15).

Possibly, as Grant and Secada (1990) suggest, ITE provision should include placement experience in school settings with diverse student population or which are more rural, as a fundamental part of preparing beginner teachers to meet the changing demands in education. This exposure need not necessarily be considered an extensive full placement, as the best training experience needs to be prioritised, but may allow these schools to build reputation with prospective appointees that may otherwise be absent.

The answer to the first research question may be simple, geography and reputation, but the recruitment reality for head teachers continues to be challenging. A by-product of new training routes into teaching may to some extent support recruitment in areas away from centrally based HEIs as school-led options become available through clusters of schools.

'This school-led option offers practical, hands-on training and education based in good schools across the country. School Direct courses are designed by groups of schools – with a university or a SCITT – based on the skills they are looking for in a newly qualified teacher (NQT). The schools recruit you as a trainee onto their School Direct course with a job in mind just for you. This is a popular choice for those who hope to secure a role in the network of schools where they train.'

(www.education.gov.uk accessed 22/07/15)

However this new school-led training has caused controversy as there has been under recruitment to date, the expertise of HEIs is being lost and financial incentive to continue offering PGCE training routes becomes fragile as training diversifies. This School Direct model, based around Teaching School clusters, may also run the risk of causing inequities of distribution within clusters as well. More generally the possible enculturation into particular schools may not support a diverse experience and as such would not be beneficial for beginner teachers (www.theguardian.com/education accessed 22/07/15).

Data for this study was gained through focus groups and interviews with UEA PGCE graduates; these data undoubtedly suggest that location and reputation are key factors in first appointment choice. However no comparison was made with graduates from other training routes who possibly may convey differing views. Nonetheless, I feel that the findings with regards to the first research question are robust and would be representative for mathematics PGCE graduates from any institution.

What value or belief systems are apparent for mathematics teachers when they reflect on their early teaching experience?

By the end of this study, it became clear that there was a research naivety in attempting to infer teachers' values or belief system by simply what they say. The methodological design did allow a breadth of response although, as there was no direct questioning on values or self-efficacy, there could be limited correlation between these and classroom experience; this is explored further in the limitations of methodology section subsequent to research question review.

The methodological limitations in answering this research question did not stop some belief themes to emerge. These are subjective, inferred by my interpretation of narratives given, so need to be read with caution. I found 'teacher-self' to be very personal as one would expect; unfortunately the data made it difficult to gain any specific sense of an individual's motivation with a strong or convincing level of validity. There were three exceptions to this; the first relates to the two teachers who resigned posts. The exit interviews explored expectation, belief and reality to a far greater extent than previous telephone interviews. The insight gained during these extended interviews allowed much greater inference of values and beliefs to be established. The second exception was the 'later career changer' group of teachers who were often very open and explicit about their expectation and experience. The final exception was how teachers viewed the perception of mathematics in the classroom; a teacher's belief about how mathematics should be taught compared to the reality of how it is taught also came through.

Expectations versus the differing reality in an NQT year were clearly conveyed during the two exit interviews. These two beginner teachers presented a similar message to literature in terms of pupil behaviour causing greatest concern but, in my view, gave an impression of not

knowing either how to recover this situation nor the self-efficacy to try. This completely corroborates the work of Armitage (2011) that behaviour *'has such an impact on the way we, as individuals, feel about ourselves and of course our effectiveness as a teacher'* (2011: 153) and in these two cases eventually caused their resignations. However the second theme, particularly acute for one of these teachers, were flaws in the developing peer relationship and support from colleagues. This is explored within the literature review alongside feelings of isolation; my sense of our conversation was that they were seeking affirmation they were doing a good job rather than support alone; they wanted to be 'trusted' and recognised in doing well. Yin et al (2013) explores this question of 'trust' indicating *'that teachers' sense of empowerment has a significant effect on student achievement and their other self-perceptions, such as job satisfaction, professional commitment and perceived reform outcomes'* (2013: 13). Later, within the paper, Yin considers that *'relationship between teachers' empowerment and their efficacy beliefs is an interesting but an underexplored issue'* (2013: 16). I would suggest that, in this case, the absence of a developing and 'trustful' relationships led to resignation; the belief of what would happen and the actualities of what did happen were at odds. How departments can support beginner teachers by acknowledging strengths, recognising doubts and creating a trusting environment is indeed underexplored so an area worthy of further research.

The dynamic between later career changers and support within schools has already been discussed. However it is worth emphasising that, of all the interviews, these teachers were often the most damning and judgemental of situations in school. The later career changers often criticised how behaviour was supported, they were critical of recruitment practices and more generally frequently made comparison with previous workplaces. Anderson (2014), as considered in data presentation, considered that this group of teachers may *'possess idealized and unrealistic views'* (2014; 153) but it is clear that their belief of what would happen and the actualities of what did happen were conflicted. In the recommendations section, a hope that further study of this group of teachers, mindful that there is a current drive to recruit more career changers, occurs.

The final consideration is that of mathematical pedagogical beliefs. During literature review consideration of how beginner teachers were taught whilst at school (Loughran & Northfield 1996) and their mathematical capabilities (Paterson et al 2011) influenced certain pedagogical beliefs for mathematics teachers. During data presentation, the impression was also given that the negative view of mathematics made pedagogical decision making challenging, (considered by Stipek et al, 2001), leading to pupil engagement being difficult to sustain. However I did not get the sense that these were of detriment to a teacher's well-being nor considered at length. My sense was that whatever the teacher's beliefs or values were, be these mathematical pedagogy, made little difference to well-being. Teacher self-efficacy outweighed pedagogical consideration; a teacher believing they can teach well correlates with remaining in the classroom. Teachers with a *'high sense of efficacy and control of their professional life have shown higher levels of persistence, effort and resilience'* (Noormohammadi 2014: 1381). A very valid note of caution, considered by Chestnut and Burley (2015), is that self-efficacy does not always mirror actuality in the classroom; just because a teacher believes that they are 'doing well', whatever we wish to define as 'doing well', does not mean that this is the reality.

To conclude this section, value or belief systems were not transparent for these beginner teachers except in the cases of later career changers, during two exit interviews and in relation

to mathematical pedagogical practice. As such, it may have been pertinent to emphasise the focus on expectation versus experience rather than actual belief system in framing this research question. What was successful was the actual representation of these teacher's experience; the hope that the questions raised herein may possibly start future research avenues.

Will classification of experience, using Grounded Theory Methodology (GTM), aid in a clear portrayal of an NQT year, mindful of the complexity of such experience?

The choice of data presentation within this study followed, to some extent, Grounded Theory methodology. Many of the initial ideas on how to approach the categorisation this entails were taken from Bryant & Charmaz (2007). In my view what was essential was *'dialoguing with data to finding one's own way of telling the story'* (Ruppel & Mey 2015: 178) eventually constructing *'a narrative out of the original units of conceptualization (codes, categories, subcategories, core category), and to designate the core category as story lines'* (Ruppel & Mey 2015: 178). I will have done this well, and again in the words of Nias (1989), *'if teachers themselves recognise their own truths in what I have said, that is validation enough'* (1989: 2).

It should be kept in mind that GTM develops corroborating validation through sustained interaction with literature (after data has been obtained), combined with establishing GTM substantive categories for data presentation. Hopefully it is clear that the literature presented previously supports the data and vice-versa. What may not be as well constructed is the narrative for individuals. Cronin (2014) used a case study methodology to look at five beginner nurse practitioners in their first appointment institutions; by focusing solely on five participants the study gave a clearer individual narrative for each nurse and the institutions that they worked in but could not give more formal generalisations of the experience of all nurses. The 22 beginner mathematics teachers partaking in this study give us a slightly larger sample, as would be the number of institutions they were employed in, to support generalisation to the wider teaching community. What was gained through generalisation did at times lose depth of individual narrative; this is unavoidable without following a case study methodology or approach.

Previously I proposed that data findings should be considered as GMT substantive groups, being behaviour, pupil and peer relationships et al; the wealth of literature for each of these substantive groups gives validation enough to now consider them formal. These formal groups have been well documented and, as already stated, would be representative for all curriculum areas. However in this categorisation certain 'one-off' comments and groups with smaller number of reference points were overlooked. Some of these are worthy of further scrutiny. One category in particular, that being departmental enculturation, would definitely be of interest to explore further. Through my own experience of visiting numerous mathematics departments across the Eastern region, there is a distinctiveness to each and in most an unwritten expectation that colleagues appear to fit this mould. Pedagogical decisions in the teaching of mathematics cause much debate, meaning that beginner teachers often seek reassurance that their teaching approaches resonate with colleagues; this being the enculturation process (Bishop 1991). Although only four references within data collected made me mindful of enculturation, it would be an area of further study that would interest me. An example of the type of enculturation that occurs is when BS comments they were either going to fit with their department or fight with them.

'There is a class that I have taken on which I am struggling with. My teaching style is very different to what they are used to; that is being fed

back to teachers and then teachers are also criticising. The thing that has got to me more is the fact that they don't come and speak to me. It is kind of going through other people and eventually getting back to me. It is a little bit of a bitchy atmosphere. If you are going to criticise come and give it constructively. I'm quite open....come and observe my lesson rather than just saying this isn't going well. Come and see...observe me and then give feedback and tell me how to improve it. That has been one of my main hurdles over the first term.'

(BS first interview)

There are many differing approaches for data presentation although I hope that the GTM coding methodology adopted conveyed a clear summary of teacher experience. There may be comments that are not given due recognition although my sense is that data presented does allow an 'honest' overview of the beginner mathematics teacher's life.

How can data collected through this study help improve insight into retention issues within mathematics education?

This section could simply be a summary of all experiential categories. However these categories have already been well documented, both here and related literature, so is not the approach I intend. Instead, in the following paragraphs, I hope to convey recommendations, some of which may have implications for educational policy decisions in this area, or key supportive measures that schools might implement, or simply recognise, in order to avoid attrition.

The first consideration is that the substantive categories are relevant to all teachers and that we should not suppose that beginner teachers alone face challenges along these lines. However beginner teachers, particularly ones who might perceive themselves to be struggling, appear to doubt this and need appropriate support in building their self-efficacy. One hopes that they may eventually become the supporting colleagues or mentors themselves. Induction support of new colleagues should be ongoing until fully established into the culture and climate in school. As Norman and Feiman-Nemser argue, *'until we face the fact that all beginning teachers are learning to teach, we will continue to define induction as short-term support rather than new teacher development'* (Norman & Feiman-Nemser 2005: 695).

The second consideration is one of resilience and how best to support this determination. By developing resilience, challenges involving poor behaviour or teacher workload can be addressed.

'Resiliency is the ability to withstand and overcome adverse experiences/situations rebounding to become more adept and self-confident when faced with future challenges. After years of correlational research dedicated to identifying individual and environmental protective factors promoting resilient behaviours, current research has shifted towards key elements associated with internal and external protective factors. With this shift, the focus has centred on what might be done to promote positive characteristics and create an environment where both children and teachers can thrive.'

(Susan et al 2013: 548)

My overriding perception from the majority of interviews was the determination and resilience of teachers in having a successful first year. In the two exit interviews, teacher resilience had been broken down and eventually led to these teachers leaving the profession. Similarly there was often a resigned tone within interviews conducted with later career changers; this is a group of teachers that can offer so much to a school although expectations on these teachers need to be sensible as for any NQT. Resilience is such an important element in teacher retention that this would be a priority in future research possibilities.

The third consideration is self-efficacy. Bandura's (2001) research showed that students with higher academic self-efficacy work harder and are more persistent. Considering earlier studies by Bandura (1993), there was an important link established between perceived student confidence, or self-efficacy, with sustaining motivation and achievement. I would suggest that Bandura's studies on undergraduate students are replicated in beginner teacher experience. This to some extent is corroborated by Löfström (2010) that looked at over five hundred trainees during a five-year Swedish trainee teaching programme. *'Drop-out rates are the highest in the first year of studies indicating that it is vital to support students' positive academic self-efficacy'* (Löfström 2010: 170). Similarly, as previously discussed, it is not the value or expectation that teachers place on pupil behaviour rather the self-efficacy that they can manage this that supports retention.

The final consideration regards development of 'trusting peer relationships'. Within this study there were many references about the developing peer relationship between direct mentoring colleagues and wider departmental colleagues. Some participants talked about the 'loneliness' of being a mathematics NQT feeling isolated from other colleagues. Many other comments gave a sense that teachers wanted, or needed, to prove themselves within their NQT year, to show that they were effective practitioners so as to be accepted as an equal colleague. Some of the teachers were more successful than others in believing that they had achieved this.

'Teacher empowerment may depend on the characteristics of teachers as well as the particular school situation, among which teachers' sense of efficacy and the creation of a trust relationship in school are suggested as important prerequisites of teacher empowerment'

(Yin 2013: 13)

As well as exploring beginner teacher feelings of isolation or need of acceptance, there is similar research possibilities on how mentors support a trusting but honest induction process.

The four considerations expressed here may go some way in supporting higher retention rates particularly within the field of mathematics.

Reflection on methodology – limitations of the study

Following a slow start in the writing of this thesis, I hope the study clearly portrays the actualities of mathematics teaching today for beginner teachers. The reason for such a slow write-up comes from my own self-efficacy doubts in writing; I have reviewed numerous Masters level submissions during my years as course tutor to beginner mathematics teachers but sometimes being a critic doesn't help the writing process. Despite this slow start, I hope the study helps understand the transition process of beginner teachers in settling into the school environment. The limitations of this study follow.

The scope of the study was too great. In attempting to answer the question of retention, the study hoped to explore teacher values and belief, self-efficacy as well as teacher experience over a full year. In retrospect it may have been prudent to simply focus on one theme during the NQT year and look at expectation and reality for this one theme. For example, by looking at teacher values and belief, self-efficacy and experience but only for behaviour may have allowed more depth to the study. As has previously been mentioned, the work of Geertz (1973, 2000) and 'thick description' has recently become a consideration of mine for future possible research approaches, but this approach, which combines anthropological and philosophical considerations, reflects to some extent this limitation.

'As befits two disciplines, neither of which is clearly defined and both of which address themselves to the whole of human life and thought, anthropology and philosophy are more than a little suspicious of one another. The anxiety that comes with a combination of a diffuse and miscellaneous academic identity and an ambition to connect just about everything with everything else and get, thereby, to get to the bottom of things leaves both of them unsure as to which of them should be doing what.'

(Geertz 2000:2).

The second limitation, again similar in some way to work conducted by Geertz (1973, 2000), relates to the data presentation herein being too descriptive. I was acutely aware of trying to balance a portrayal of a teacher's year in their own words with analysis although at times this has strayed towards the descriptive. Geertz' 'thick description' has drawn criticism for '*drawing profound implications from an ethnographic detail*' and being '*prone to too-casual generalisation*' (White 2007: 1187). However, I hope that findings presented here 'ring true' to readers and generalisations made do truly reflect what has been said. One other consideration is the 'face-validity' of data presented; I did not get participants to check my interpretation of these interviews which is an oversight that I would rectify in future research.

The third limitation, and the final consideration, relates to my own doubts and expertise as a researcher. The GTM coding adopted has allowed presentation of data but there has been such a breadth of communication by study participants that I hope any particular emphasis conveyed has not been overlooked. I hope to have done justice to these teachers as they all were so open in their discussions with me.

Possible future research lines and personal reflections on the study

The possible future research lines have been referred to previously, and in some ways still relate to the overall retention question, although to summarise these here:

- Development of resilience. *'Resiliency is the ability to withstand and overcome adverse experiences/situations rebounding to become more adept and self-confident when faced with future challenges'* (Susan et al 2013: 548). How do teachers develop this attribute during early years of teaching?
- Trust development between colleagues. How does mentor or departmental practice develop an honest but trusting culture within schools? When do beginner teachers become 'accepted' as collegiate peers and when do they stop seeking this acceptance?
- Departmental enculturation. This is of personal interest through numerous school visits and seeing differing departmental cultures. How does enculturation occur within departments, what selection criteria is considered in first appointment and what pedagogical expectations are placed on beginner teachers may be some of the questions considered.
- Changing practice through stages of career – a longitudinal study of mathematics teachers. The write-up to this study took longer than it should have although allowed insight on how the study participants progressed later in their teaching. It would be of interest to more formally explore what pedagogical considerations were made during an NQT year and later, what professional development avenues were followed and again to follow a teacher 'well-being' consideration at differing stages of career. There are studies on the wider teaching community, for example, Goodson (2008), although this would have an overt mathematical focus.
- Exit interviews for all teachers who leave the profession. I felt that the two exit interviews contained in this study, although emotive, were very informative. How much greater would the insight be if numerous exit interviews could be conducted?

There are also three personal insights that I have gained from this study. The first is that my writing didn't develop quickly or come easily; however these past few months in finalising this thesis have been much more rewarding and I can now envisage continued research. The second insight is the negativity in approach to research in education. *'In the 21st century, questions about the efficiency and effectiveness of our educational systems are often harshly critical – especially given the challenges of rapid change'* (Fifield 2014: 47). One of the approaches that I would hope to adopt in any further research is the possible use of Appreciative Inquiry. I still believe that there is a place in research to look out for positive phenomena, and sing the praises of education and educationalists rather than focusing exclusively on deficit models.

'By asking positive questions and envisioning a positive future, Appreciative Inquiry, and similar positive approaches to organizational change, hold the potential to unleash positive emotions in organizational members, including organizational leaders.'

(Whitney 2015:19)

The third personal insight is that I keep asking big questions. I do not ever want to lose this personality trait but need to recognise that research is an ongoing jigsaw puzzle that slowly

develops into the bigger picture. *'In what we are pleased to call the real world, "meaning," "identity," "power," and "experience" are hopelessly entangled, mutually implicative'* (Geertz 2000: 184 cited Springs 2012: 539). Trying to answer the question of teacher retention needs to be conducted slowly bringing together parts of a jigsaw puzzle rather than jumping in too quickly.

To finish, I would like to offer thanks to all the participants within this study for their honesty and trust.

Reference List

- Abbs, P. (1974) *Autobiography in Education*, London, Heinemann.
- Adler, A. & Adler, G. cited in Holstein J. & Gubrium, J. (2003) *Inside interviewing: new lenses, new concerns*, California, Sage.
- Ado, K. (2013) Action research: professional development to help support and retain early career teachers, *Educational Action Research*, 21 (2), 131-146.
- Aguire, J. & Speer, M. (1999) Examining the Relationship between Beliefs and Goals in Teacher Practice, *Journal of Mathematical Behaviour*, 18 (3), 243-261.
- Anderson, H., Fry, S. & Hourcade, J. (2014) Career Changers as First-Year High School Teachers, *Clearing House*, 87 (4), 149-154.
- Armitage, A., Donovan, G., Flanagan, K. & Poma, A. (2011) *Developing Professional Practice 14 – 19*, Harlow, Pearson.
- Aspfors, J. (2013) Caring about caring: newly qualified teachers' experiences of their relationships within the school community, *Teachers and teaching*, 19 (3), 243 – 269.
- Bandura, A. (1993) Perceived self-efficacy in cognitive development and functioning, *Educational Psychologist*, 28, 117–48.
- Bandura, A. (1997) *Self-efficacy: the exercise of control*, New York, Freeman.
- Bandura, A., Barbaranelli, C., Caprara, G. & Pastorellim, C. (2001) Self-efficacy beliefs as shapers of children's aspirations and career trajectories, *Child Development*, 72, 187–207.
- Bayar, A. (2014) The Components of Effective Professional Development Activities in terms of Teachers' Perspective, *International Journal of Educational Sciences*, 6 (2), 319 – 339.
- Beauchamp, C. & Thomas, L. (2009) Understanding Teacher Identity; an overview of issues in the literature and implications for teacher education, *Cambridge Journal of Education*, 39 (2), 175 – 189
- Bishop, A. (1991) *Mathematical enculturation: a cultural perspective on mathematics education*, London, Kluwer Academic.
- Biza, I., Nardi, E., & Joel, G. (2014) What are prospective teachers' considerations regarding their intended practice when management interferes with mathematical learning? In X, Y. (Ed). Proceedings of the British Society for *Research into Learning Mathematics* x(y), June 2014.
- Black, P. & Wiliam, D. (1998) Assessment and Classroom Learning, *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.

- Bruner, J. (1960) *The Process of Education*, Cambridge, Harvard University Press.
- Bryant, A. & Charmaz, K. (2007) *The SAGE Handbook of Grounded Theory*, London, SAGE.
- Bullough, R. & Draper, R. (2004) Mentoring and the emotions, *Journal of Education for Teaching: International Research and Pedagogy*, 30(3), 271–288.
- Bullough, R., Young, J., Hall, K., Draper, R. & Smith, L. (2008) Cognitive complexity, the first year of teaching, and mentoring, *Teaching and Teacher Education*, 24(7), 1846-1858.
- Cobb, P. & Yackel, E. (1996) Constructivist, emergent, and sociocultural perspectives in the context of developmental research, *Educational Psychologist*, 31(3/4), 175-190.
- Chambers, D. (2002) The real world and the classroom: Second-career teachers, *Clearing House*, 75 (4), 212–229.
- Chang, H. (2008) *Auto-ethnography as Method*, California, Left Coast Press Inc.
- Charmaz, K. (2006) *Constructing Grounded Theory*, London, SAGE.
- Chesnut, S. & Burley, H. (2015) Self-efficacy as a predictor of commitment to the teaching profession: A meta-analysis, *Educational Research Review*, 15, 1–16.
- Christodoulou, D. (2014) *Seven Myths about Education*, London, Routledge.
- Clarke, M. (2009) The Ethico-Politics of Teacher Identity, *Educational Philosophy and Theory*, 41 (2), 185 – 200.
- Claudia, V. (2014) The role of motivation in the development of school teachers' career, *Proceedings - Social and Behavioural Sciences* 180, 1109 – 1115, The 6th International Conference Edu World 2014 "Education Facing Contemporary World Issues", 7th - 9th November 2014.
- Cockburn, A. & Haydn, T. (2004) *Recruiting and Retaining teachers: Understanding why teachers teach*, London, Routledge Falmer.
- Cohen, L., Manion, L. & Morrison, K. (2007) *Research Methods in Education*, Abingdon, Routledge.
- Cornelius-White, J. (2007) Learner-centered teacher-student relationships are effective: A meta-analysis, *Review of Educational Research*, 77, 113–143.
- Creswell, J. (2012) *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research (Fourth Edition)*, Boston, Pearson.
- Cronin, C. (2014) Using case study research as a rigorous form of inquiry, *Nurse Researcher*, 21 (5), 19-27.
- Day, C., Sammons, P. & Stobart, G. (2007) *Teachers Matter: Connecting Work, Lives And Effectiveness*, Buckingham, Open University Press.

- Day, C. & Qing, G. (2010) *The New Lives of Teachers*, Oxon, Routledge.
- De Jong, R., Mainhard, T., Van Tartwijk, J., Veldman, L., Verloop, N. & Wubbels, T. (2014) How pre-service teachers' personality traits, self-efficacy, and discipline strategies contribute to the teacher–student relationship, *British Journal of Educational Psychology*, 84, 294–310.
- De Jong, R., Van Tartwijk, J., Wubbels, B., Veldman, I. & Verloop, N. (2013) Beginning and end of the internship: student teachers' interpersonal profiles and the accuracy of their self-beliefs, *European Journal of Teacher Education*, 36 (4), 393–412.
- DuFour, R. (2011) Work Together - But Only if You Want To. We cannot waste another quarter century inviting or encouraging educators to collaborate, *Kappan Magazine* 92 (5), 57-61.
- Elliott, J. (1991) *Action Research for Educational Change*, Milton Keynes, Open University Press.
- Ernest, P. (1995) Values, gender and images of mathematics: a philosophical perspective, *International Journal of Mathematical Education in Science and Technology*, 26 (3), 449-462.
- Fern, E. (2001) *Advanced focus group research*, London, Sage.
- Fifield, J. (2014) An Appreciative Inquiry into the Value of Appreciative School Leadership - Generative Research for Addressing 21st-century Educational Challenges, *AI Practitioner*, 16(3), 47-52.
- Firmender, J., Gavin, K., & McCoach, D. (2014) Examining the Relationship between Teachers' Instructional Practices and Students' Mathematics Achievement, *Journal of Advanced Academics*, 25(3), 214–236.
- Furinghetti, F. (1993) Images of mathematics outside the community of mathematicians: evidence and explanations, *Learning of Mathematics*, 13 (2), 33–38.
- Galletta, A. (2013) *Mastering the Semi- Structured Interview – From Research Design to Analysis and Publication*, New York, New York University Press.
- Geertz, C. (2000) *Available Light*, Princeton, Princeton University Press.
- Geertz, C. (1973) *The Interpretation of Cultures*, New York, Basic Books.
- Glaser, B. & Strauss, A. (1967) *The Discovery of Grounded Theory*, Chicago, Aldin.
- Goldberg, L. (1990) An alternative 'description of personality': The Big-Five factor structure, *Journal of Personality and Social Psychology*, 59, 1216–1229.
- Goodson, I. (2008) *Investigating the Teacher's Life and Work*, Rotterdam, Sense.
- Goodnough, K. (2010) The Role of Action research in transforming teacher identity: modes of belonging and ecological perspectives, *Education Action Research*, 18 (2), 167 – 182.

- Gordon, T. (2003) Chapter 6: Intricacies of dissemination in ethnographic research in Hughes, C. (Ed) *Disseminating Qualitative Research in Educational Setting*, Milton Keynes, Open University Press.
- Grant, C. & Secada, W. (1990) Preparing teachers for diversity chapter in Houston, W. (Ed.), *Handbook of research on teacher education*, 403–422, New York, Macmillan.
- Hagger, H., Mutton, T. & Burn, K. (2011) Surprising but not shocking: The reality of the first year of teaching, *Cambridge Journal of Education*, 41 (4), 387-405.
- Hall, K., Draper, R., Smith, L. & Bullough, R. (2008) More than a place to teach: exploring the perceptions of the roles and responsibilities of mentor teachers, *Mentoring & Tutoring: Partnership in Learning*, 16 (3), 328-345.
- Haydn, T. (2007) *Managing Pupil Behaviour: Key Issues in Teaching and Learning*, Abingdon, Oxon Routledge.
- Higgins, K. & Taylor, P. (2007) A 'state of the nation' report – *The UK's science and mathematics teacher attrition*.
- Hilsum, S. & Strong, C. (1978) *The Secondary Teacher's Day*, Slough, NFER Publishing Company.
- Hilsum, S., Bell, M. & Cane, B. (1969) *Feasibility Study of the Teaching Day*, Slough, NFER Publishing Company.
- Hramiak, A. & Hudson, T. (2011) *Understanding Learning & Teaching in Secondary Schools*, Harlow, Pearson.
- Huggett, F. (1986) *Teachers*, London, Weidenfeld & Nicholson.
- Howson, J. (2015) Post-election special edition, *The Monitor*, 1 (2), 1-4.
- <https://dataprovion.tda.gov.uk/provider> accessed 28/07/15.
- <http://hanushek.stanford.edu/> accessed 24/07/15
- <https://getintoteaching.education.gov.uk/explore-my-options/secondary-training-options/school-direct> accessed 22/07/15
- Klassen, R., Tze, V., Betts, S. & Gordon, K. (2011) Teacher Efficacy Research 1998–2009: Signs of Progress or Unfulfilled Promise? *Educational Psychology Review*, 23, 21–43.
- Košir, K. & Tement, S. (2013) Teacher–student relationship and academic achievement: a cross-lagged longitudinal study on three different age groups, *European Journal of Psychology of Education*, 29, 409 - 428.
- Krueger, R. (1994) *Focus groups: A Practical Guide for Applied Research*, London, Sage.
- Le Cornu, R. (2013) Building Early Career Teacher Resilience: The Role of Relationships, *Australian Journal of Teacher Education*, 38 (4) 1-16.

- Lim, S. & Eo, S. (2014) The mediating roles of collective teacher efficacy in the relations of teachers' perceptions of school organizational climate to their burnout, *Teaching and Teacher Education*, 44, 138-147.
- Lindgren, U. (2005) Experiences of beginning teachers in a school-based mentoring programme Sweden, *Educational Studies*, 31(3), 251–263.
- Löfström, E., Poom-Valickis, K., Hannula, M. & Mathews, S. (2010) Supporting emerging teacher identities: can we identify teacher potential among students? *European Journal of Teacher Education*, 33 (2), 167–184.
- Loughran, J. & Northfield, J. (1996) *Opening the Classroom Door: Teacher, Researcher, Learner*, London, Falmer Press.
- Menter, I., Hutchings, M. & Ross, A. (2002) *The Crises in Teacher Supply*, Stoke on Trent, Trentham Books.
- Moller, S., Stearns, E., Mickelson, R., Bottia, M. & Banerjee, N. (2014) Academic Engagement the Panacea for Achievement in Mathematics across Racial/Ethnic Groups? Assessing the Role of Teacher Culture, *Social Forces*, 92(4), 1513-1544.
- Morton, M., Williams, N. & Brindley, R. (2006) Colliding cultures: Career switchers transition to elementary school classrooms, *Action in Teacher Education*, 28, 40–50.
- Newby, P. (2010) *Research methods for education*, Harlow, Pearson.
- Niehaus, K., Moritz Rudasill, K., & Rakes, C. R. (2012) A longitudinal study of school connectedness and academic outcomes across sixth grade, *Journal of School Psychology*, 50, 443–460.
- Nias, J. (1989) *Primary Teachers Talking*, London, Routledge.
- Nisbet, J. & Watt, J. (1984) cited in Bell, J., Bush, T., Fox, A., Goodey, J. & Goulding, S. (Eds) *Conducting Small-scale Investigations in Educational management*, London, Harper & Row.
- Noormohammadi, S. (2014) Teacher Reflection and its Relation to Teacher Efficacy and Autonomy, *Procedia - Social and Behavioural Sciences*, 98, 1380 – 1389.
- Norman, P. & Feiman-Nemser, S. (2005) Mind activity in teaching and mentoring, *Teaching and Teacher Education*, 21 (5), 679–697.
- Opie, C. (2004) *Doing Educational Research*, London, Sage.
- Paterson, J., Thomas, M. & Taylor, S. (2011) Decisions, decisions, decisions: What determines the path taken in lectures? *International Journal of Mathematical Education in Science and Technology*, 42 (7), 985-996.
- Pedroso de Lima, M., Vaz Rebelo, P. & Barreira, C. (2014) Teacher Development: Contributions of Educational Biography and Personality, *Journal of Adult Development*, 21 (4), 216-224.

- Priyadharshini, E. & Robinson-Pant, A. (2003) The Attractions of Teaching: An investigation into why people change careers to teach, *Journal of Education for Teaching, International research and pedagogy*, 29 (2), 95-112.
- Richardson, R. (1990) *Daring to be a Teacher*, Stoke-on-Trent, Trentham Books.
- Robinson, J. & Norris, N. (2001) Generalisations: the linchpin of evidence-based practice, *Educational Action Research*, 9 (2), 303-309.
- Rogers, B. (2000) *Classroom Behaviour: A Practical Guide to Effective Teaching, Behaviour Management and Colleague Support*, London, SAGE.
- Ronfeldt, M. (2012) Where Should Student Teachers Learn to Teach? Effects of Field Placement School Characteristics on Teacher Retention and Effectiveness, *Educational Evaluation and Policy Analysis*, 34 (1), 3–26.
- Ruppel, P. & Mey, G. (2015) Grounded Theory Methodology—Narrativity Revisited, *Integrated Psychology of Behaviour*, 49, 174–186.
- Russell, T. & Korthgaen, F. (eds) (1995) *Teachers who teach Teachers*, London, Falmer Press.
- Schoenfeld, A. (2011) *How We think: A theory of goal-oriented decision making and its educational applications*, New York, Routledge.
- Sikes, P. (1997) *Parents who Teach: Stories from Home and from School*, London, Cassell.
- Skaalvik, E. & Skaalvik, S. (2014) Teacher Self-efficacy and perceived autonomy; relations with teacher engagement, job satisfaction and emotional exhaustion, *Psychological Reports: Employment Psychology & Marketing*, 114 (1), 68-77.
- Spilt, J., Helma, M., Koomen, Y. & Jochem, T. (2011) Teacher Wellbeing: The Importance of Teacher–Student Relationships, *Education Psychology Review*, 23, 457–477.
- Springs, J. (2012) Meaning vs. Power: Are Thick Description and Power Analysis Intrinsically at Odds? Response to Interpretation, Explanation, and Clifford Geertz, *Religion Compass*, 6 (12), 534–542.
- Stake, R. in Denzin, N. & Lincoln, Y. (Eds) (2000) *Handbook of Qualitative Research*, London, SAGE.
- Steer report (2005) *Learning Behaviour: The Report of the Practitioners' Group on School Behaviour and Discipline*, Nottingham, DofE.
- Stipek, D., Givvin, K., Salmon, J. & MacGyvers, V. (2001) Teachers' beliefs and practices related to mathematics instruction, *Teaching and Teacher Education*, 17, 213-226.
- Susan, M., Dodd, A. & Fiala, K. (2013) Comparing Protective factors and resilience among classroom-based teachers and community-based educators, *Education*, 134 (4), 548-558.
- Swan, M. (2006) *Collaborative Learning in Mathematics*, London, NRDC.

Swan, M., (2014) Improving the alignment between values, principles and classroom realities in Li, Y. & Lappan, G., (eds), *Mathematics Curriculum in School Education*, London, Springer.

Taylor, C. (2015) Learning in Early Childhood: experiences, relationships and 'Learning to Be', *European Journal of Education*, 50 (2), 160-174.

Veenman, S. (1984) Perceived problems of beginning teachers, *Review of Educational Research*, 54, (2), 7-11.

Watt, H., Richardson, P. & Wilkins, K. (2014) Profiles of professional engagement and career development aspirations among USA preservice teachers, *International Journal of Educational Research*, 65, 23–40.

White, B. (2007) Clifford Geertz: Singular Genius of Interpretive Anthropology, *Development and Change*, 38 (6), 1187–1208.

Whitney, D. & Frederickson, B. (2015) Appreciative Inquiry Meets Positive Psychology, *AI Practitioner*, 17(3), 18-26.

Wilkins, J. (2014) The Development of a Scale to Explore the Multidimensional Components of Good Student-Teacher Relationships, *Education Research and Perspectives* 41, 154-172.

Wilson, K.S. & Wagner, T. D. (2009) The Spillover of Daily Job Satisfaction onto Employees' Family Lives: The Facilitating Role of Work-Family Integration, *Academy of Management Journal*, 52(1) 87–102.

www.atl.org.uk March 2015 page 5 accessed 10/04/15.

www.bbc.co.uk/news/education-11330193 accessed 28/07/15.

www.gov.uk/government/news/new-plans-to-attract-and-train-maths-and-physics-teachers accessed 10/04/15.

www.gov.uk/government/uploads/system/uploads/attachment_data/file/301107/Teachers__Standards.pdf accessed 10/04/15.

www.gov.uk/government/uploads/system/uploads/attachment_data/statutory_guidance_on_induction_for_newly_qualified_teachers.pdf accessed 15/07/15.

www.gov.uk/government/statistics/school-workforce-in-england-november-2013 accessed 21/07/15.

www.norfolk.gov.uk accessed 18/03/10.

www.suffolk.gov.uk accessed 18/03/10.

www.teachers.org.uk/node/13047 accessed 03/06/15.

www.theguardian.com/teacher-network/teacher-blog/2012/may/11/michael-wilshaw-ofsted-stress accessed 27/07/15.

www.theguardian.com/teacher-network/2015/jan/27/workload-new-teachers-work-life-balance accessed 10/04/15.

www.theguardian.com/education/2014/jan/15/ofsted-chief-teachers-quitting-scandal accessed 21/07/15.

www.theguardian.com/education/2013/jul/08/teacher-training-in-schools accessed 22/07/15.

Yin, H., Chi-Kin Lee, J. & Zhang, Y. (2013) The effect of trust on teacher empowerment: the mediation of teacher efficacy, *Educational Studies*, 39(1), 13-28.

Zamorski, B. & Haydn, T. (2002) Classroom management and disaffection, *Pedagogy, Culture & Society*, 10:2, 257-278. Routledge, London.

Ziebarth-Bovill, J., Kritzer, J. & Bovill, R. (2012) The Essential criteria for hiring first year teacher candidates, *Education*, 133 (1), 125-138.

Appendix - Ethical considerations

Ethical considerations

The retention of mathematics teachers new to the profession. What keeps them teaching, what sends them away?

Issue within the research	Ethical considerations
A review of national quantitative statistical data on retention of mathematics teachers in the UK.	No ethical considerations as the data are publicly accessible. No individuals can be attributable to this data.
Exploring the experiences, opportunities and support given to newly qualified teachers and teachers in their early years.	The participants in this research have been informed appropriately through discussion of the participant information sheets (Appendix) and requested to participate (Appendix); consent forms (Appendix) have been supplied and collected. Any participant has the opportunity to withdraw at any stage of the study.
Initial focus group discussion (exploration of individual views in a group context).	Permission to record the focus group discussion will be requested at the start. All participants in the focus group discussion will be made aware that any discussion would remain confidential.
The use of a data collection sheet (Appendix E) and telephone interviews.	The participants are aware that all data collected during the course of the study will remain strictly confidential. No information will be attributable or identifiable to any teacher. Transcripts of the telephone interviews will not record names (participants will be identified through a coding system) and the recordings will remain confidential unless permission is specifically granted by the participants for them to be made accessible to a third party. Permission to record the interviews will be requested at the start of each interview.
The use of data collected through the PGCE training year.	The participants have given permission to use data collected through their training year. This information will not be attributable or identifiable to any teacher.
Employment in schools.	The schools where the participants are employed will remain anonymised.
Impartiality.	The researcher will endeavour to ensure that data collected will not affect the professional relationship the researcher has with participants The data collected will not be used to amend or adjust professional references compiled at the end of the participant's training year.
Safeguarding.	It is important that all practitioners working to safeguard children and young people understand fully their responsibilities and duties as set out in legislation related to the Children's Act 2004. Should at any stage during this research questions over safeguarding arise this will be communicated directly to the teacher and confidentiality cannot be assured.
Permission has been obtained from the SY PGCE course director.	The University of East Anglia SY PGCE course director permission has been requested and granted.
Complaints.	Any complaints against the conduct of the researcher can be made within 30 days to either the Chair of Research Ethics Committee or the Head of School at the School of Education and Lifelong Learning. Contact details are available through the University of East Anglia website www.uea.ac.uk .

Appendix – Participant Letter**Gareth Joel**

Lecturer in Education

School of Education and Lifelong Learning

Faculty of Social Sciences

University of East Anglia

Norwich NR4 7TJ

Email: g.joel@uea.ac.uk

Tel : 01603 593677

Fax : 01603 593446

<Student Address>

<date>

Dear <student name>,

I would like to invite you to participate in my doctoral research:

'The retention of mathematics teachers new to the profession. What keeps them teaching, what sends them away?'

I would like to find out about the mathematics teacher experience in the early years of your professional life.

The research will involve an initial focus group discussion, the completion of the attached data capture sheet and three telephone interviews per year. These interviews, lasting approximately 30 minutes, will take place as near as possible to the end of each academic term.

I enclose a consent form and information sheet giving more details about the process and how ethical details of anonymity and confidentiality will be dealt with. The information sheet is for your reference and there is a withdrawal form should you at any stage wish to withdraw from this study.

If you feel happy to participate in this research, could you please sign and return the consent form.

Yours sincerely,

Gareth Joel

Appendix - Consent Form**Consent Form**

Research study title	The retention of mathematics teachers new to the profession. What keeps them teaching, what sends them away?
-----------------------------	---

I can confirm that I have read the attached information sheet and agree to participate in the research study. I understand that I can withdraw from this research at any stage.

Signature	
Date	
Name (Capitals)	
Contact telephone numbers	
Address	

Please sign and return this form to Gareth Joel.

Appendix - Information Sheet

Information Sheet

Research study title	The retention of mathematics teachers new to the profession. What keeps them teaching, what sends them away?
Aims and Purposes of the study	The purpose of this research is to gain an understanding of secondary (SY) mathematics teacher experience in the early years of their professional life and how this may impact on retention rates within this sector. The data collected will be a core aspect in this research. The findings, as well as being of interest to the wider educational research field, will inform curriculum development on the SY PGCE mathematics course.
Methodology	This longitudinal study will involve an initial focus group discussion, completion of the attached data capture sheet and three telephone interviews through each academic year. Should any teacher leave the profession during this time there is the possibility that a longer exit interview would be undertaken.
Confidentiality	The initial focus group discussion (exploration of individual views in a group context) and interviews will be recorded, however all names and schools will be anonymised (through a coding/lettering system). The data capture sheet will likewise be anonymised. All data collected will be kept in a secured/locked work office. With your agreement, the researcher would like access to entry data at the start of this research (career entry development plan, data collected through the PGCE training year) and will use this in the strictest of confidence. In the final PhD submission no information will be attributable or identifiable to any teacher.
Voluntary Participation	Participation in the study is entirely voluntary. You can withdraw at any stage during the research. Participation or non-participation will not affect the professional relationship with the researcher.
Safeguarding	It is important that all practitioners working to safeguard children and young people understand fully their responsibilities and duties as set out in legislation related to the Children's Act 2004. Should at any stage during this research questions over safeguarding arise this will be communicated directly to the teacher and confidentiality cannot be assured.
Code of Conduct	All data collected during the course of the study will remain strictly confidential.
Complaints	Any complaints against the conduct of the researcher can be made within 30 days to either the Chair of Research Ethics Committee or the Head of School at the School of Education and Lifelong Learning. Contact details are available through the University of East Anglia website.

Appendix – Beginner Teacher Details

Age on registration	Degree	Class	How much school observation experience	A level (or equivalent) and grade	SKE	Overall final Grading
21	Mathematics with Statistics	3	5 Days	Grade A Further Maths E	No	1a 1a 1a
41	Business Studies	2ii	5 Days	Grade D	12+ unit	3a 2b 2b
21	Mathematics	2i	15+ SAS	Grade A Further Maths B	No	1a 1b 2a
21	Physics and Mathematics	3	3	Grade B Further Maths E	No	3a 3a 3a
21	Mathematics with Management	2i	15+ SAS	Grade A AS Further Maths B	No	2a 1b 2a
26	Business	Pass	11	Higher Grade C	No - Late applicant	2a 2a 2a
26	Computer Science	2i	Overseas teaching experience	Grade A	Late applicant	1b 1a 2a
21	Mathematics	2i	5	Grade A AS Further Maths A	No	2b 2b 3a
22	Mathematics with computing	2ii	0	Grade A	1 unit	3a 3a 3a
22	Mathematics	1	5+	Grade A	No	1a 1b 1a
42	Natural Science	2i	15+ SAS	Grade E	1 unit	2a 2a 3a
45	Open Degree	Pass	Teaching assistant	Using Maths/Exploring Maths Pass	1 unit	1b 1b 1b
42	Chemical Engineering	3	0	Higher Grade B	1 unit	2b 2b 2b
20	Mathematics	3	3+	Grade A Further Maths A	No	1b 1b 1b
42	Material Science	2i	3+	Grade B	1 unit	1a 1a 2a
21	Mathematics	2ii	5+	Grade B Further Maths C	1 unit	1b 1b 1b
37	Specialist Mathematics	3	6	Grade C		1a 1a 1a
51	Mathematics	2i	5+	Grade A (Pure and Applied)	1 unit	2a 2b 2b
21	Biomedical Sciences	2ii	0	Grade B	1 unit	1b 1b 1b
21	Mathematics	2ii	15+ SAS	Grade B Further Maths C		1a 1a 1a
24	Mathematics with Statistics	1	15+ SAS	Grade A		2b 2b 2b
29	PhD Mechanical Engineering	2i	2	Grade A		1b 1a 2a

Appendix – Sample Dashboard

How are pupils doing in exams? (Attainment)

Overall

In 2012, 66% of pupils attained five GCSEs grade A*-C including English and mathematics. This has not changed since 2011.

Percentage of pupils who attained five GCSEs grade A*-C including English and mathematics

Year	Percentage
2010	66
2011	66
2012	66

..... National level

In 2012, the school's result was in the middle 20% of similar schools' results, and in the top 40% of all schools.

Comparison with other schools

Similar schools	All schools
Highest	Highest
2nd quintile	2nd quintile
3rd quintile	3rd quintile
4th quintile	4th quintile
Lowest	Lowest

English

In 2012, 71% of pupils attained grade A*-C in English (EBacc). This is a decrease of four percentage points since 2011.

Percentage of pupils who attained grade A*-C in English (EBacc)

Year	Percentage
2010	0
2011	71
2012	67

..... National level

In 2012, the school's result was in the middle 20% of similar schools' results, and in the top 40% of all schools.

Comparison with other schools

Similar schools	All schools
Highest	Highest
2nd quintile	2nd quintile
3rd quintile	3rd quintile
4th quintile	4th quintile
Lowest	Lowest

Mathematics

In 2012, 75% of pupils attained grade A*-C in mathematics (EBacc). This has not changed since 2011.

Percentage of pupils who attained grade A*-C in mathematics (EBacc)

Year	Percentage
2010	0
2011	75
2012	75

..... National level

In 2012, the school's result was in the middle 20% of similar schools' results, and in the top 40% of all schools.

Comparison with other schools

Similar schools	All schools
Highest	Highest
2nd quintile	2nd quintile
3rd quintile	3rd quintile
4th quintile	4th quintile
Lowest	Lowest

Science

In 2012, 72% of pupils attained grade A*-C in science (EBacc). This has not changed since 2011.

Percentage of pupils who attained grade A*-C in science (EBacc)

Year	Percentage
2010	0
2011	72
2012	72

..... National level

In 2012, the school's result was in the bottom 40% of similar schools' results, and in the bottom 40% of all schools.

Comparison with other schools

Similar schools	All schools
Highest	Highest
2nd quintile	2nd quintile
3rd quintile	3rd quintile
4th quintile	4th quintile
Lowest	Lowest

Appendix – Teacher Contact Made during study

NQTS (Number of Responses)	Initial Focus Group	Interview 1	Interview 2	Interview 3	Exit Interview	Final Focus Group
1 (2)		x		x		
2 (3)		x	x		x	
3 (4)	x	x	x	x		
4 (5)	x	x	x	x		x
5 (2)		x	x			
6 (3)		x	x	x		
7 (3)		x	x	x		x
8 (2)	x		x			
9 (3)		x	x	x		
10 (1)				x		
11 (3)		x	x	x		
12 (2)		x			x	
13 (4)	x	x	x			x
14 (3)		x	x	x		
15 (3)		x		x		x
16 (3)		x	x	x		
17 (2)	x		x			
18 (3)		x	x	x		
19 (4)		x	x	x		x
20 (5)	x	x	x	x		x
21 (1)			x			
22 (1)				x		
Total Responses	6	17	17	15	2	6

Appendix – HH Exit Interview transcript

HH exit interview responses

GJ: Can you just run through what happened and what your experiences were over the six months.

HH: I took the job there. I was offered the job really early on; offered it from first placement. I was a bit dubious then only because it was so early but I thought about it and even though I wasn't 100% sure of the school, I was very happy with the support the staff seemed to show. The staff seemed to gel as they had just been OFSTED ed and that was why I went. One of the teachers was becoming an AST and that was why I went there. Specifically I was looking for the support.

So I started there in the July, July 1st I think it was, and in the first few weeks I was just feeling my way around. I didn't have any classes as such. I did a couple of covers and that was about it really. That was fine. I started in September. I had a form and a classroom. That was no problem. I noticed really early on that there wasn't any support that I was expecting. I didn't expect the same level of support I was getting in my PGCE but there was zero really. My mentor (the AST) I didn't really see. The problem was that she had just started the AST role and was out of school every week. She had just got married and she is off on maternity now. There were other things as well and although enjoyed the teaching side of it which I always did it was I was..... I was having problems with certain classes and I felt the school weren't helping me either... a lot of the teachers were saying 'try and do this' and you try that and then the head of maths was saying 'I wouldn't do it that way you should do it this way'. You can't really change half way through. The Head of Maths was part time so she was never there. The worst day of the week was a Wednesday. It was the worst day of the week purely because you get the year 10s twice that day because of the way that their week worked out. The head of Maths wasn't there and my mentor is not there. It was always when there were problems. Anyway I kept trying different strategies and I would talk to people. I got good help from a former NQT but I just felt that it was so empty. Morale was so low.

GJ: Can we take a step back. There are two questions that come to mind. One is other support available. Obviously the mentor has direct support but you weren't getting much of her time. Also the Head of Department but you didn't get much of her time. What other support was available in the school that you could of accessed?

HH: Well I spoke to SL who was the link tutor/NQT induction tutor and I talked to him although I never.....although he was very supportive....I never felt supported if that makes sense.

GJ: Does that mean he would say the right things but not actually follow this with support?

HH: I was disillusioned with the Maths department and that as well. I would have to go from Maths to Art (Departmental areas) and this was getting me a little disillusioned as well. It was getting on for about five weeks and I saw the head and to be honest nothing really happened. He gave me a phone number of a support line which was not a lot of use.

GJ: What do you think you were looking for? What did you want the head to do?

HH: I don't know. I think I wanted someone ...my mentor... my head of maths to get together and discuss it. It just seemed that they were all too busy. I know they were busy but as I mentioned earlier that the Head of maths her children were more important, fair enough, and she was never there after school or lunchtimes. And say with my mentor she would go off at lunchtimes and she would shoot straight off after work. So there was no time to discuss things. When my mentor put a couple of pupils on maths report but she never followed it up so in terms of the kids it took two weeks to realise that nothing was going to happen from this. It became even worse.

GJ: Would you say that this was endemic of the whole school culture or specifically related to NQT support?

GG: I did feel that there was a very poor morale and it wasn't like that the year before when you would have thought it would have been because of OFSTED problems. That was one of the things.... if you went to the staffroom ... I didn't go at break because it was too far away...but if you went at lunch the only people there were the TAs. There was obviously the odd teacher coming through but there was no one really to talk to. I said that to the head. I said this was the loneliest job I'd ever had. I don't get to speak to any teachers. I knew more about the cleaner. There is something wrong when I have a better relationship with the cleaner than I do some of my colleagues.

GJ: What was the heads response to that?

HH: You should try and go to the staffroom but there is in there. If you go in there all there is is TAs. I used to be one.

GJ: Do you think that the Head has a take on what the school is like? Has he gone behind closed doors? He is quite a robust character who is out and about.

HH: Well he seemed to be visibly upset by some of the things I was saying. When I first had a meeting with him. When I first saw him, it was a Wednesday; he could see that I was upset and that I didn't think I could carry on with this. The first thing he said was that he wished I'd said that when I first took the job and the next thing he said was that I would have to work my notice. I wasn't talking about things like that, I was just trying to talk and that really put me off. I was unhappy with that and told him that. Later on he did apologise about that. SL already knew that I was really on the brink and I'd talked to him the day before and he had spoken to the head so he should have known I was having real problems and it shouldn't have been a shock. That really annoyed me. He'd had heads up and he shouldn't have been so shocked. That sort of upset me a bit that's no way to treat your staff. I said to him ... I thought about it over the weekend.... to see him next week and told him that I would really really try but it just didn't get better. There was lots of do this or that or you shouldn't have done that, lots of negatives.

GJ: Can we take a step back and talk about the actual classes. You have indicated that there were a couple of classes that you found particularly difficult. Some of the classes you enjoyed teaching and were nice. Just talk about your experiences in the classroom away

from all the support and everything else, just talk about the positives and negatives in the classroom.

HH: I had two year 7 classes, one a top set and one sort of middle. Yeah they were fine although I was shocked the top set year 7 weren't that good. They were big classes; there were thirty in the class as standard. Its hard work when it is a big class. I think we made some good progress although I wouldn't say to me teaching top sets are the most fun thing anyway.

GJ: Prefer foundation classes.

HH: I always will. The ones that struggle. With year 8s I had two classes; one SEN. There should have been 12 in the class but two never showed up. I had a honeymoon period for two weeks but then had some problems but as it turned out they were really good. I really regretted leaving them as we were really doing well. We were doing algebra and they said when are we starting algebra and I said that you have been doing it for three weeks. I really really enjoyed it and the TAs were saying how good they had been. I was really pleased with that as although they were small classes there were some real problems. The other good class; I had another year 8 class that were bottom set. I had a TA in there and some of the students were very hard work behaviour wise but it wasn't too bad and we did progress quite well. It helped having a TA there especially the one I had in there was quite a strong character. So that was pretty good and they weren't a bad class to be honest.

GJ: So your KS3 classes even with the challenges you quite enjoyed teaching and this is what you want but then the year 10 classes?

HH: The year 10 class was the ones with all the problems. They were bottom set and at HS sometimes it appeared these were just for problem pupils. This class consisted of 24 pupils of which 5 had been on the PP the year before and there were some real hard children to work with. There were some that were there because they struggled, there were some there who couldn't be bothered and there were some there because of behaviour. I had a girl who was awful, very rude and very insolent, if you she went outside you were lucky and you had to send a student but sometimes you would wait half an hour for someone to come. She was bad but the reasons were always given why...she was swearing at you.

GJ: What was the consequence of her swearing at you?

HH: In the end she got moved into the head of year 10s class as he was just opposite me and for a couple of weeks she was in with him but eventually she got moved to another class Alison's. I said to her she might be really good for you as that was all I got from my Head of Maths she was no problem for her. That really helps me that does! But she had history but she wasn't the only one. I had about four or five like this and I moved them to the back and almost ignored them. The others were getting no time from me as I was spending my whole time dealing with the others and that's not why I went into teaching. I went into teaching and it got to the stage where I could lead a horse to water and I was trying to help them but they weren't interested. All they were interested in was misbehaviour and so I moved them to the back.

GJ: What was the strategy the school would support? Not support for you but support for those students to redirect.

HH: I had work report but that collapsed because it was never followed up by mentor who was meant to be following it up. I spoke to the Head of Maths about it and she said she (indicating mentor) was dealing with it. Of course that made me look stupid as I put them on work report but nothing happened.

GJ: Was this endemic of the school as poor practice or just poor practice in this example?

HH: I have a feeling that ... when I spoke with Alison she said that this had not happened the year before. She (indicating mentor) had a lot more on her plate and she didn't have the time for it to be honest. When I spoke with the Head of Maths or the Deputy Head of Maths (they split it 0.8:0.2) and when I spoke with him I said I was banging my head against a brick wall talking to the Head of Maths. He went yes so obviously ... but I can't put it on him to deal with it as he had another student in who he was mentoring. It got to the stage where I felt like this wasn't just in my class as you walk around the school and you see things that are going on and I started dealing with that but in the end I gave up. No one else was doing it and it would take up all your breaks. I didn't end up going for lunch as I would deal with one student and others would say yeah he's like that. When you see at lunchtime management doing duty in the playground and they would be ignoring things so you think what is the point.

GJ: The school you say has been through some challenging times getting a notice to improve.

HH: It then get the OFSTED through as good. The OFSTED were there when I was on my first placement. It happened just near the end of it. Looking at the Maths department ...I can't comment about any other department... and looking at behaviour I found that quite hard to believe. I feel that a lot of teachers will have different experience but morale was really poor. That was something I really noticed. I know from experience that you can be in the worse situation in the world but if you have good morale. I've been in the forces and I've been in the desert where we've been eaten by everything and had a great time and I've been in 5 star hotels and had the most miserable time. That's down to morale.

GJ: This is why you applied to the school because you thought morale was strong and the support would be there.

HH: Actually when I made the decision that I've got to go I saw two others. One of the teachers in that school was an ex USAC engineer and one of the teachers had come from South Africa and I was talking to the two of them and they said they would do the same.

GJ: You were in the fortunate position of having your pension.

HH: I'd gone into teaching as I wanted to teach. The reason I left was that I wasn't teaching when I wanted to. I was teaching the year 8s and the year 7s I wasn't teaching anything they didn't know already. But the year 10s there were kids there who wanted to learn and I wasn't teaching them but I felt I was letting them down as I wasn't able to teach them. That was the situation.

GJ: Can I take a step even further back. On the PGCE year you did exceptionally well. You finished the course with a very good report, a very strong report from both placements. You indicated to me the reason you went for the HS job was because that was the type of school you wanted to work in. Do you think that there was anything that could have been done on the PGCE year that could have prepared you for the situation you arrived in?

HH: I think there should be more on strategies in dealing with pupil behaviour and the other one with your colleagues and dealing with pupil behaviour.

GJ: That tripod of relationship.

HH: Above all... this always comes out... but at the end of the day if haven't got and you can't get them to behave.

GJ: Do you think that you were slightly 'mollycoddled' through your PGCE year?

HH: I think you do to a certain extent. When I was at HS I did have a year 8 group. I did have a year 9 group (remembering timetable) and one of the girls I had real problems with that I had the year before. She got moved up not for ability but because of behaviour. So I did but they weren't too bad classes to be honest and they were coming round to an extent but it was just killing me all the time. And also when I went to BHS I had a year 8 group there who were hard work and I had a very low special needs class but the support had been there. At BHS the head of maths there at the time was almost a rod of steel but she has gone now. A lot of kids figured...but she was such a nice person and she was smiling when telling them off. They did respond to it. I took one of her classes and I thought it was just me that couldn't teach them but she said nobody could and they were very hard work. I did have slightly more cherry picked classes but it is going to be as at the end of the day you have got to learn how to teach. You can't just learn how to get them to behave. Learning how you manage behaviour should have much more emphasis.

GJ: The new standards focus much more on behaviour and there will be a lot more emphasis on behaviour. Can I take a different stance on workload and lifestyle? Just general workload and life outside of school and how that would impact on school. What was your general working day etc...?

HH: I was getting to school just before 7.30 prepared. I never did anything... I might do a bit of photocopying...but I never planned to do anything really in the morning. One morning I would be on duty anyway and I had a form. I'd just get all my stuff sorted out and by then my form....they were year 7s ...I said to them that if they wanted to come in early they could apart from Monday when it was assembly anyway. Some wanted to come in and that was good. That was ok. I wouldn't have a dinner break, I would sit in there (indicating classroom). I'd leave school at 4.20, quarter past 4 purely because of the traffic otherwise you wouldn't get out. Then I would get the dinner ready and I would then do two hours at least in the evening. On a Sunday I would do three hours. If Linda was here I would say I did two hours. I didn't mind putting a bit extra in thinking that this would pay off in the long term so it was quite intense I must admit but I had been expected that. I was doing a lot in my PGCE year. The other thing that did upset me was the school, when they coerced me not coerced but

offered me the job; I was worried that I wouldn't get a permanent class as the person I was taking over from. I like IT and I like using Smart boards especially with the low ability kids I find it helps. You can bring in things. When I started I did have a classroom but it didn't have a smart board. It had an OHP. I could use stuff but I couldn't use it interactively. I did get offered from the NQT budget half funding with the department funding half but they wouldn't. I was a bit narked when you get half funding up front. I was a little bit narked but I thought I'd make do with what I had got which I did especially with the SEN class. I found that I spent a lot of time prepping lessons for them so that it was interactive throughout the time. They were really positive. I had them twice after break.

GJ: So lifestyle wise the workload doesn't sound horrendous. It doesn't sound like you were working till midnight.

HH: I would say I was working until 10/11 but I did have a break. I'd get home and would walk the dogs but I was thinking about it all the time. But that wasn't a problem as such. That wasn't the problem. The rewards for that work was the problem. I did feel that sometimes I was wasting my time. You try to ring parents about problem children and I'd think what the point a lot of the time is.

GJ: That was the method of contact. It wasn't the head of house or head year.

HH: They would get involved for other reasons but for little things they wanted you to deal with it. Their view on little things and my view on little things might be different.

GJ: Did you actually have a social life. Basically how did you get rid of the stress that was caused by the job?

HH: I didn't really. I don't think I really did. There was no one at the school I felt that I could talk to about it. My mates are nothing to do with education so they don't want to know. They're electricians and builders or workers and they just..... So that side I don't think I really did. I'm not the best person and I will admit it; I'm not the best person to ask for help. I don't do it lightly; it's not me to say.... so a bit of a failing I suppose but that is just the way I've been brought up.

GJ: The decision was made but was there any critical moment that led you to that decision? Or was it just a building up?

HH: It built up then levelled off. I had half term and I went back.

GJ: You mentioned your father had a heart attack.

HH: My dad is in a home. He has Alzheimer's but my mum had a stroke during the PGCE. My father-in-law had terminal cancer and died at the same time. I do think to teach effectively right in that intense period I'm sure it did but it makes you think about life as well. I was getting quite angry inside especially in some of the lessons and I didn't want to say something or do something which I would regret or the school would regret. I wasn't likely to hit a kid but you don't know. I'd more likely say something and then get it blown up out of

all proportion even if it was.... some lessons I could feel myself almost shaking and how do you deal with that. It was actually making me feel sick. It must have been affecting me as I had stomach problems after about the second week for the whole time I was there. I think that was the stress that was coming out like that but my blood pressure was going up. I went to see the doctor about things as well. At the end of the day I thought that I am not going to give myself a heart attack...not for something I wanted to do and I wanted to enjoy. I'm not doing this as a career I'm doing this as a vocation. That was almost...

GJ: So what now?

HH: Don't know really. I don't think I would like to go in full time which I never wanted to. I wanted to do full time for a couple of years and then go part time. Get the NQT year out of the way and then go part time but I just don't know. I applied for a job at BHS but I knew they wanted fulltime but just in case but I didn't hear anything. I thought they might get back to me saying.... I had (worked with) the head of maths and the head teacher who was in a special needs group and I did them. I did think I would hear but I didn't hear from them. I did apply for a job with the national trust. They were doing teaching.... to do with energy. Well I thought well actually I had experience on solar energy. I then applied recently to Sprowston looking for tutors but I got an e-mail back saying they're not looking anymore but it was on their website. That did annoy me as they could pull it off their website. They did say that they would keep me on their books in case they need. I'm not bothered but why put me on your books if you haven't got a job. Say you're not interested. Is it you don't want me or is it because you haven't?

GJ: You are still interested in education as such?

HH: Yes but not.... I'm not sure whether especially in Norfolk where schools are very close and linked. A lot of people know.... I don't know whether me leaving HS after being.... I know it won't have done me any favours but I don't know any lasting damage because they'll want you last employee as a teaching referee is always there. I don't know whether...

GJ: When did you actually leave?

HH: it was last November half way through the second half term. I did say I would try to keep on until Easter. I can't believe I was only there... it seemed a lot longer.

GJ: Is it better for a school to have you working there stressed who may have days off or to have supply.

HH: have you noticed that there doesn't seem to be many jobs around at the moment. You are always looking, you look in the paper. It seems a lot less than last year.

GJ: Looking back over the year some final comments on the positives.

HH: I enjoyed the course and feel I got a lot out of the course. It was a very good course. Even if I never went teaching again it was a good course. I enjoyed the placements. I didn't realise as much at the time but I enjoyed my second placement more than my first and I think the reason was the maths department were a team and they ... a couple of times I

went round one of their houses. They were more relaxed and felt more of a team. I must admit that the only negative side was that a lot of teachers had been there forever and. If you are there for a long time then you are going to get like that. I enjoyed working with most of the children to be honest. That's the positive side. The negative side is that it has reinforced my views that there are real problems in our society and in the way we deal with not just children but everyone. We let people get away with things which we deem as minor. We keep doing it until it becomes so major it is really major and then they get shocked. We let them walk over boundaries and I think. I don't blame the pupils...I don't blame the children for acting like that because that is their job. When you are a child you are learning boundaries. You are given a boundary and you step over it you are reprimanded but you will step over it. That's the only way you learn. If you step over boundaries and nothing happens then you will keep pushing until something does. I think there are still real problems but until that is dealt with.... I was reading something in the EDP today about a motorbike incident. A 19 year old from Burnham Market chased after this other car with a 50/60 couple in there smashing windows. The solicitor said...they got eight months and banned for two years... said this kid was nineteen and was taking medication. He's nineteen and got away with it all through his schooling. He's got ADHD and it is not his fault. Now he has gone to prison for 8 months. If that had been dealt with earlier and things like that. That's a positive side (laughs) no that's a negative but it has made me realise that at the end of the day schools have so little powers although I know that they are trying to address that but it does seem... it is down to parenting and most parents have been brought up in the same situation as their kids. First thing they do is to defend their kids, its automatic. The school must be wrong. Little Johnny would never do that.

Appendix – KC Exit Interview transcript

KC exit interview responses.

GJ: Just want you to talk about your experiences over the year. Just tell me your story. Leaving and what led you to that point.

KC: After the PGCE I was very positive. Hadn't really put myself out for a job because I wasn't sure, story of my life, of where I wanted to be in terms of location. I wasn't 100% so really I fell into the SHS position. Again that is the story of my life. I think it is a case of never really going for something. I always have seemed to be in the right place at the right time. Not to become a millionaire or anything but...just being in the right place at the right time. It's the same with the SHS job where I wasn't intending going for it was a last minute thing and I applied for it, got offered the job and took it. Got a really good feeling there but once I started, I'll be totally honest, I felt, whether I am being over critical as I am quite often, out of my depth most of the time. I wasn't really sure what sort of.... I think I had this fairy tale idea of just going in and teaching the children. They would all love maths and everyone lives happily ever after. It wasn't like that pretty much from day one. Certain classes I had the same sort of people almost lesson by lesson who were quite disruptive. Nothing wrong with the school in terms of their procedure, procedure was good, the backup was good. It was just that I did get a bit disillusioned in dealing with that on a regular basis. So in terms of that I'm not particularly, I'm not a mathematician; I've never been strong at what I have done. I have had to work at things. Sometimes I can be a bit lazy and I was finding the workload (challenging) as well. It was a combination of things right from the very start. It wasn't getting me down or anything. It was just something I was trying to address and trying to get over. As I say right from the start I knew the job was going to be harder than I thought it was going to be.

GJ: Can I ask three questions related to that. One your preparation from last year, did you not expect it to be this hard? Two you commented that you are not a mathematician but you have done all the background so in many ways you are a good mathematician. Did that not make the planning easier? You also mention being a bit lazy, although you say that tongue in cheek, talk about the workload expectations you had. Did you not expect it?

KC: Probably but I think it is like anything I have gone through life managing to get by. I thought the same was going to be of this. Not in the case of taking short cuts which was never my intention. I'm not going to give up. I gave up 18 months of my life to do the maths enhancement course and PGCE. Totally serious with it but then when I went into it the fact of being observed by somebody was almost a comfort blanket for me because I had that regular observation. I went straight into a class but the problem with that were any bad habits that I had from the start stayed there. So my expectations were, I was well prepared the PGCE did prepare me my observations did, but in a different environment and going in on my own I became a manager rather than a co-worker if that makes sense. I have never had confidence in myself to be that sort of manager. I think I found that harder than I thought it was going to be. In terms of managing my workload that is what I found difficult. I managed to sort that out later on but early on after a long day at school I would get home, I'd quite

often leave straight away, I would make a cup of tea...right better get on with it... make another cup of tea. Often I would be working on it very late at night and when I say late I mean 11oclock at night because I'd fuffed around watching a bit of telly or I'd actually got up sometimes at half past 4 – 5 o'clock in the morning because I had gone through the whole night not doing anything. Woke up early in the morning as I had gone to bed early as the day had tired me out. Time management I found difficult right early on.

GJ: You talked about the support and the support being good. Did they notice that you were struggling with time management?

KC: I don't think they did. I can use names as this will be confidential. Edson a great bloke absolutely fantastic. Phil absolutely great head of department. I think in some ways I needed someone to kick my backside. I'm like that as a person and I said that but their attitude was don't worry, everything is fine taking into light what the school is like. This almost made me have excuses. It is considered a challenging school not like inner London. For the area it is a challenging school and because of that I had an easier ride but should have had my backside kicked a bit more. As you are aware from the PGCE I always look for that comfort blanket, always looking for someone to tell me. I can't just go off on my own and say I'm confident. I think that is what I lacked... I needed a bit more guidance in lesson planning. This was also a criticism, I think you pointed out to me, mine were too old school as in textbook, get on with it and do it, and I needed a bit more variance. Get them more involved but I drifted into that quite quickly. Relying on the textbook, trying to stick other things in but when they failed rather than me looking at it from a different angle I went back to my comfort blanket. I went back to the books as this is what we had to learn. Edson was of a similar style. Yes he had more but basically he had the attitude this is what we have to learn and he'd do it from the textbook. I didn't have that dynamic person to look up to. Not criticising Edson, I'm emphasising that, as he was a brilliant bloke. Really helpful and a good one to turn to but I could have done with someone who was a bit more dynamic. I almost fed off them and I think I got myself into a routine basically of the way I was teaching and lesson planning had become quite easy in one respect because my lesson plan was the double page from the book.

GJ: That's where you got to after a couple of months so lead on from there.

RB: That was in terms of the teaching. In terms of behaviour I got myself into bad habits because I'd got into a bad position. I'd let things go, not deliberately, but I'd got into dealing with things and if something slipped by it was just my nature. I know now what I should have done but I got into a routine where I probably let things slip in behaviour. That led on to the fact that because of bog standard lessons there were behaviour issues. Nothing major but it always took only one or two people to disrupt and I had a few instances with certain people. Yet the attitude from the school was don't worry about it as they are known to be like that. That didn't make it any easier because I took it actually very personally even though I know it is not. It was told to us on the course although however much you are told it is very hard to accept with my personality. That combined with that was what made it hard. Round about October time, late October, I had the accident which eventually led me having the heart operation. I slipped on a chair that had wheels. Leaning over a desk slipped on the

desk and whacked my chest. That was on the Thursday or Friday and I went to A&E and that was when they did an x-ray and found a shadow on my heart. Then the initial thought of a tumour disappeared when they confirmed it was the heart. That was a relief in some respects but I don't think that helped me at school form then onwards. When I eventually had my operation in February it was a question of when was I having my operation? That became my number one thought so I took it wouldn't say easy at school but school was almost secondary.

GJ: What was your workload expectation when you went back? How long did you have off?

KC: I had three weeks off in October.

GJ: What was your experience when you went back?

KC: Start afresh again. Learn from my mistakes. Rejig things. Do things in a different way. I did start to do that. I was staying in school until whatever it might be, half five sometimes six o'clock. Doing y planning at school then when I left unless there were any extra bits I needed to do I could just leave it and go.

GJ: How did that help? That's slightly dichotomous to what you've just said.

KC: In my preparation but when it came to the following day and delivering the actual lesson in a lot of cases it didn't overly bother me if I had an average lesson. That's what I mean. I was originally told that I was going in around December time but then I thought only a few more weeks to go that would lead on til December. But when that got put back to January it was like I was having little shifts all the time. If I had known straight away it was going to be the end of February I could have knuckled down. Totally unprofessional of me but I think I had reasons for that. If I'd had in sight February I could have knuckled down and got Christmas out the way. Do my work and forget about it (indicating operation).

GJ: What does the word professional mean to you?

KC: I think in terms not doing what is expected of me. Everyone has their own expectations but my expectations vary all the time. Sarah (indicating girlfriend) said I was quite a complicated person whereas I thought I was quite simple not a complex person.

GJ: The first couple of maths you were trying hard in lessons but really preparation was weaker. Later you were trying hard in the preparation but because you were concerned with the heart thing you were letting things slip in the lessons.

KC: That's basically how it feels now but at the time I didn't realise... now I look back that's how it was. With the discipline and stuff like that I was thinking I don't want the hassle to deal with something. I did take things personally rather than let it slip and think they would be doing this with anybody else. I wanted to deliver a lesson and go through but because of disruption or whatever reason or I hadn't done an interesting lesson, I took it very personally rather than just go on to the next lesson. I would go back a lot rather than going forward.

GJ: So you have got to Christmas now. What happens then?

KC: As far as I was concerned I was going into hospital soon into January. So again it was a case of one or two weeks back at school until I got a phone call to say it had been put back again. I was still going into school as normal. It was just the three weeks back in October/November time. I was enjoying going to school. There was no problem with that. It wasn't a case of getting up and not wanting to go to school. Got on fantastically with loads of the pupils but because I worry about stuff it was just the minority that was spoiling a lot of my day.

GJ: Round about that time we spoke and you said that county had been in to observe you and there were some question marks. Was that right?

KC: Well I didn't pass my first term. So basically I have nothing to transfer if I go back into school.

GJ: What did they say about that first term? What was the feedback?

KC: It was mainly to do with discipline and behaviour. Lots of my observations, and this was a gripe for me but I never took it further as I didn't think it was worth it, but there was a bloke who was brought in by Swaffham School to do behaviour observations and some training and he observed me most as opposed to.... the head master observed me once and Edson observed me once and gave me satisfactory. He was pleased with how the lesson went to be honest. The headmaster observed me once and apart from a few critical things said it was a satisfactory lesson but most of my reports came from this guy which I thought was a bit unfair. I would have preferred to be observed by the school a bit more to get a bit more of a balanced view. Yes I'm not denying what he said. I'm not saying he's incorrect but I wasn't observed by the school and they went solely on this guy.

GJ: That puts you at Christmas.

KC: Yes then I had a run from January through to half term but because I was working under the fact that I was going to be in in two or three weeks. I don't think not passing the first term affected me at all. I think it was mainly with the heart although again discussions I've had with Sarah since when we have spoken about it she doesn't know if I was using that as an excuse because it wasn't going well. I don't believe it was, haven't passed the first term but still have plenty of time and I'll deal with it later. When I knew I was going into hospital I knew I would be in for at least two months and I think in the back of my mind, even though I wouldn't accept it at the time, I had almost accepted this year was going to be a write off. Start afresh in September and do that.

GJ: Did you have any discussion with the head about that thought?

KC: Not really. My discussions were with the Assistant and we had sort of agreed that it was going to be difficult. We'll try and get passed but that's if I get back in within the year. I was originally saying that it would be six weeks back then get back in September and then all I would need to do is pass September to December, and then I would be back on track thank you very much, jobs a good un. That's when things changed back in February because of the operation. Well I had half term then had the operation straight after half term and I didn't go back into school. I had the operation. I was in there for a week and was with my parents

for a while. My thoughts of school were completely gone. I had other things to think about. Recovering pretty well really. Physically I couldn't do a great deal but emotionally I felt ok. That was the problem as after about four weeks I was able to get around a bit more; I was still back at my parents then came back to Dirham and stayed with Sarah for about week. Then I realised that the six weeks I had originally planned was just pie in the sky, that wasn't going to happen. I'd been signed off until the end May which was three months. My intention now was not six weeks but eight or nine weeks and get the doctor to sign me back to work but as time went on I got further and further away from school and I had no contact with school which was my choice.

GJ: Had they tried to contact you?

KC: Not really. I had spoken with Edson and Phil and they said that they had deliberately stayed away. They knew that if I had wanted anything that I would get in touch. That wasn't an issue. I didn't feel let down by the school. I kept in touch before and I kept in touch during by texts and such but once I'd had the operation that was it. I had no contact with the school. I found it harder and harder to want to pick up a maths book even. So I was going to go to the doctors and go back but the doctor said it wasn't a good idea to go back. Physically I was getting fine but emotionally I was a bit buggered because this was at the same time as my relationship with Sarah was breaking down. So I'd had the operation, the relationship with Sarah and I hadn't been in school for eight or nine weeks. So this was May and I thought see how I am at the end of May. If emotionally I was fine then I'd get another couple of weeks and get myself back in. I was fully intending to go back but in the meantime I had a letter that they were reducing the number of staff, the intake was going down and they were looking at redundancies. There was a substantial difference from last year and previous years. I then got in touch with my union, the NUT, representative and basically it was a case of what were my options. I hadn't passed this year and what was the school intending doing with me? Are they going to let me go and after they spoke with HR and county, they came back with the school being willing, if I was, to make me redundant. They gave me a redundancy package and for me, how I was feeling, it was a no brainer. It was a shame in one respect as it made life easier for me with things falling into place. That redundancy was from the 31st May. I wasn't an employee from the end of May and that was the easy option. The reason being, as time went on, I actually couldn't face the thought of going back in. I could not face going back to school.

GJ: A few questions. Firstly if the redundancy package wasn't in place would you have gone back into school?

KC: there was a very good chance although I can't say for definite. I was looking for an excuse though.

GJ: What is it specifically that you couldn't face?

KC: I think it was a combination of things. The thought of going back in to a full time position which wasn't necessarily going to happen as they said that I'd have a phased return and the fact that because I had found it stressful...I will use the word stressful....I was finding it difficult to use the 24 hours in the day properly. Time at school, having time for myself and

for preparing. The thought of going back as I say and the thought of delivering to certain groups who by the end of it, because I knew I was going in for the operation, I was showing less interest and attention to them than I should have been. That goes back to that professionalism.

GJ: That has spoken about the whole year. It has been a challenging year all round. Do you think that they are interdependent: the heart condition and the workload?

KC: definitely not with the heart condition. I'll tell you why as I have a genetic thing called Marfan's condition. The heart condition is a by-product of that. I don't think it helped matters and I reassessed myself. I was thinking I don't want to go back and put myself in stressful situations. Just because I have had the operation doesn't mean the heart conditions can't come back.

GJ: If you are willing, and only if you are willing, to talk about the relationship side.

KC: I would say that that was the worst affect. I went into hospital with no fears at all. People would ask what I had done and I wasn't really sure. I knew I had this and that repaired. I came out completely easy. It sounds really stupid but if I had died I wouldn't have known anything about it because I would have been under. I was prepared going in and didn't show any emotion. When I came out I was fine, physically a problem but didn't show any emotional issues. The breakdown of my relationship with Sarah; that changed things completely. Then thing that had built up that I thought I was dealing with, which hadn't been an issue with the operation, then all came out. It's been a nightmare to be honest. Because of that going on I couldn't be bothered with stuff. I don't mind saying this, I have mild depression at a low level as I have seen the doctor and stuff. It's hardly surprising considering what's occurred sort of thing but I got to the stage, not at the point so I can't dress myself, but to the point where I don't want all the hassle. I don't want the stress. I have enough stress going on. That was another reason why do I want to put myself back in that situation with the school. I would say to be honest that is as much to do with the breakdown with Sarah as it was the operation. I think I've almost used that as an excuse. I've had an operation don't talk to me like that.

GJ: The breakdown with Sarah, do you think that was to do with the operation.

KC: Possibility. There are other things going on not directly related to that which she found it hard to cope with. The problem with school, although this should have suited her, was that Monday to Friday I very rarely saw her because we didn't live together. She was in Norwich and I was in Dereham. Monday to Friday never really saw her, we spoke and stuff, but it was mainly at the weekend. She liked her own space and I liked my own space so in theory that should have been fine for us both but she had gone from a situation where it was just her and her two children and seeing now me for full weekends. That didn't help matters. So I think it was a combination. The fact of having the heart operation she was finding it difficult to deal with. After that we just started drifting.

GJ: If we go back to the school now. Were there any other NQTs in the school? Did you have much to do with them and did their experiences, none of their experiences could match yours, but could you talk about the similarities or differences in their experience.

KC: We had regular meetings and we could talk about stuff. I think the general experience were similar but then again they were in a different situation. The guy who was an NQT in English, although technically he wasn't an NQT, because he'd already passed. I think he had been teaching in New Zealand and this was his first role back in the UK but he wasn't an NQT. So we didn't have shared experiences in that respect. We'd found it all hard. We'd found the behaviour issue hard. He'd had enough experience to deal with it better than I did. In terms of the others. I think there were shared experiences but the problem I had which is relevant to the whole discussion; when it was breaks and stuff for the first few months I was basically camped out in my room. I had my own room so I didn't have to move around. Breaks and lunchtime I would basically stay there; it was only when you talked to others and they'd say get yourself down the staff room. If you have any anger or stress you could get it out there. A lot of people were in a similar position. I don't think that helped as well. Because I kept myself pretty well isolated, obviously the teaching time was by myself, and if I had a spare lesson that was generally my own time in my room and I spent breaks and lunchtimes there. It wasn't until after Christmas in that period from January to February that I started going down to the staff room on a regular basis.

GJ: Isolation has been mentioned a lot.

KC: That doesn't surprise me. I thought I was doing myself a favour by being able to get on but in some ways it made it worse. Sometimes you need to step away at times and actually that is great to hear. I did take a lot of it personally, the fact that I was doing something drastically wrong, when it wasn't all me. Yes I wasn't the best teacher in the world but there is a lot of things I could of done better and should of learnt from but on the other hand it wasn't entirely me. But the knock on effects is that you get into your bad habits and trying to overcome that. Another thing that doesn't help is the fact that I'm 43 and if I was in my 20s you're very adaptable. Certain personality traits that you can adapt but I am as I am. I tried my hardest like with my break up with Sarah and the ways I was in certain things she didn't like but I tried to adapt. Similarly in teaching I tried to adapt certain things but I found it very hard to adapt.

GJ: It's hard to adapt when you are mature entering the profession?

KC: That's how I felt it was. Yeah it's like with the discipline or behaviour side. I felt that I was generally firm when I was in my placements, generally pretty consistent but the n I had the crutch of being observed most of the time and that was my thing to focus on. You have to be consistent for that but that slipped a lot. Because of the way I was I could be firm and deal with certain things but actually using the school systems consistently was what I found hard.

GJ: Can I ask you about any critical incidences. Anything that you look over your year and think that made a big impact.

KC: Not from the teaching point of view. It was a load of small things. I didn't dislike it. The benefits. It sort of goes back to one of the lads who came to visit on our PGCE and he said to be totally honest the holidays. He enjoyed the teaching and stuff but the main reason is that it fits into his life. Well actually this is a great job to stick with because of the benefits of the job. So there were no particular incidents that did that. I think the observing (by external) got me down. Being observed. Well he has been hired on a regular basis by SHS and he is a behaviour expert and I think his observations got me down a lot because he was supposed to be..... initially I tried to be positive and try to turn this around and turn that around but eventually it was almost like not wanting him in the class as opposed to the pupils. Not wanting to be observed by him and I think it was a build-up of stuff. I'm not one to fight things. I thought I could do and I thought I could be very positive and things. It's a challenge, let's go for that challenge like quite a few on the PGCE were like that particularly the younger ones but I didn't do it. Probably went back into myself.

GJ: What next then?

KC: Don't know. My current situation is I have just got someone to rent my house out. I'm moving from Dereham, I don't want to be there. I'm still in there at the minute but it is going in about four weeks. I'm not working as I left at the end of May and because of the redundancy that will tide us over, on the assumption that I would have been paid, that will tide us over until the end of August. I had this though that I don't need to do anything until then so I haven't done but now I'm looking at everything and thinking shit. I haven't got a plan. This is the first time in my life that I have felt completely out of control. As I said earlier even though I haven't made decisions things have just fallen in place at the right time. I've applied for a job, not necessarily a job I wanted to do pre teaching, but it has come in and I have eventually done it. I can stick at that for a while, earn some money and keep going whereas now I'm out of control. I haven't got a job and just relying on my savings and the bare pittance that jobseekers is. Relationship with Sarah I still see her occasionally, still meet up but it's not going anywhere. In terms of being friends something always crops up and big arguments will start which then goes into the important one of where I go. I'm in the position where I'm literally renting out my house in three or four weeks, someone's going to be moving in and I don't know here I am moving to. Am I moving back towards Stamford where family and friends are or to Norwich? I had a job interview back in Deeping seven or eight miles from Stamford. I went for that which would have been a part time one which would have been ideal and just 'balls' the whole thing up. The fact that I hadn't been in school for four months effectively made me unprepared for the interview. It is a pity that I hadn't had a previous interview to make those mistakes. That was my ideal with things falling into place. I wasn't confident I was going to get it but I was relying on that. It would have sorted out where I was going to be moving to, it would have given me a job in September even though it was part time but this would be ideal for what I wanted to do. That hasn't happened and I'm now like a rabbit in the headlights.

GJ: Anything that could have been done differently. You could have done differently or the school?

KC: I should have pushed a bit more with the school in terms of asking for help. I was on a regular basis talking to Edson and Phil. They seemed quite happy but what their thoughts were seemed to be at complete odds to the management side of things. I did have discussions with Edson and Edson didn't agree with things; it just seemed a contradiction that I was being told by Edson everything's ok but then at the same time I'm being told by the behaviour expert that I'm not doing enough then obviously from a management point of view. What obviously sums that up is the fact the school didn't exactly put themselves out to ask me to stay on which is the ultimate things. Rather than have a word we me they were quite happy to offer me the redundancy package from County.