An examination of how the mentoring of Initial Teacher Education students is perceived and practised in Wales.

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Submitted in partial fulfilment for the award of the degree of Doctor of Philosophy

University of Wales Trinity Saint David 2024

Declaration

This work has not previously been accepted in substance for any degree and is not

being concurrently submitted in candidature for any degree.

Signed: Margaret Simpkins

Date: 26th May 2024

STATEMENT 1

This thesis is the result of my own investigations, except where otherwise stated.

Where correction services have been used the extent and nature of the correction is clearly marked in a footnote(s). Other sources are acknowledged by footnotes giving

explicit references. A bibliography is appended.

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STATEMENT 2

I hereby give consent for my thesis, if accepted, to be available for deposit in the

University's digital repository.

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Acknowledgements

I should like to take this opportunity to express my gratitude to the following who have helped me in many different ways to develop my appreciation of how mentoring in Wales was perceived and practised at the beginning of a period of transition and reappraisal in Initial Teacher Education.

The late Dr Howard Tanner helped to define and refine my research questions and provided guidance and support in the initial stages of my work. Dr Alex Southern's knowledge and understanding of the philosophical stance of Teach First Cymru helped me to reflect upon the values and perceptions which influenced trainees' experiences in one of my case study schools. Professor Mererid Hopwood generously shared her wide-ranging knowledge of the process of mentoring in Wales. I am grateful to all of the above for their support.

I am indebted to Dr Susan Jones for many reasons. Her scholarship, erudition, and kindness provided me with both support and challenge, and she has given unstintingly of her time and expertise. I am profoundly grateful that she has supervised the later stages of my work. Diolch.

Dr Jane Waters-Davies has been my supervisor throughout the lengthy period it has taken me to complete this work. I can only say that she has been an inspiration in so many ways. Her support and guidance have been invaluable, and her critical acumen has challenged me to develop my understanding of my research topic and of research

practice further. Her patience, kindness, and encouragement have never wavered. It has been a privilege to discuss my work with her.

My thanks are also due to all of the subject and senior mentors who completed my questionnaire or took part in semi-structures interviews or informal conversations about mentoring. Many mentors welcomed me to observe lessons given by their ITE students and allowed me to attend post lesson feedback sessions. ITE students at the case study schools frequently contributed their perceptions of the mentoring process and explained how working with their mentors had helped their professional development.

There are too many library staff to mention by name but I appreciate their willingness to answer my frequent queries with courtesy and good humour.

Abstract

This mixed method study examines the perceptions and values of subject mentors who work with ITE students in placement schools in Wales. A second area of interest is how they work with their students to facilitate their professional development within the distinct socio-cultural context of their placement schools. Finally, the study considers student voice and the subjective diverse expectations and assumptions of individual students about the mentoring role.

The quantitative survey sent to mentors in all secondary schools in Wales provided data about the theoretical stance of subject mentors to the mentoring process and reflected diverse views which were explored through the analysis of descriptive statistics. The qualitative element of the study took the form of case studies of the mentoring process in three secondary schools in south Wales which were chosen for their varied socio-cultural contexts. Data were gained through semi-structured interviews with senior and subject mentors, departmental staff and ITE students, lesson observations and attendance at feedback sessions. Analysis of the data aimed to reflect the richness of the mentoring experiences provided in each case study, to explore how individual mentors worked with their students to support and challenge them in their professional development, and to allow student voice to emerge.

The study makes the following contributions to knowledge of the mentoring process in Wales. Firstly, it contributes to our knowledge of the attitudes and values which influence subject mentors in their work and secondly it explores through observation of classroom practice how mentors focus upon serving the needs of their individual

ITE students. A third possible contribution is that of student voice which reveals how the subject mentor is considered by many to be the linchpin of the school experience providing support and reassurance through availability beyond the confines of the school day.

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List of Abbreviations

WG Welsh Government

QTS Qualified Teacher Status

LPP Legitimate Peripheral Participation

ITE Initial Teacher Education

ZPD Zone of Proximal Development

BERA British Educational Research Association

MAT More Able and Talented

MKO More Knowledgeable Other

PGCE Postgraduate Certificate in Education

PLP Personal Learning Project

SLT Senior Leadership Team

Chapter One

Introduction

My research study focuses upon how the mentoring of Initial Education students in Wales is perceived and practised by stakeholders in the process at a time of change and transition in the wider context of Welsh education. The publication of the Tabberer, Donaldson and Furlong reports between 2013-15 had highlighted the need for reappraisal of the Welsh education system to meet the needs of the twenty-first century.

My research was undertaken during the academic year 2015-16 when the newly published Furlong report (2015) had "raised the importance of mentoring" (Jones et al 2021:181) which was "identified as a key element in the professional development of teachers" (ibid) within Initial Teacher Education (ITE). My research study attempts to define and understand the process of mentoring as it is understood by stakeholders in the Welsh system of ITE today with specific reference to the values and perceptions, which inform their practice.

The Welsh Government recognised the creative and innovative role which mentoring should play in developing the professional knowledge and enhancing the metacognitive skills of ITE students within a supportive relationship. In Teaching Tomorrow's Teachers (Welsh Government 2017a) the Government set out more explicitly their vision of the direction which the mentoring of ITE students should take. The government supported the continuing partnership between universities and their

associated schools and set out their expectations of the mentoring process in some detail. Mentors were enjoined to model, sponsor, and provide psychological support whilst helping their students to understand the norms and values of their placement schools. In addition, the duality of the role encompassing support and challenge (Ambrosetti 2017:43) was emphasised.

My interest in mentoring stems from my work as a subject and senior mentor in a large comprehensive school in south Wales and my research questions have emerged from my personal and professional experience. ITE students in Wales are placed in two schools during their teaching practicum and work with assigned subject mentors to develop their professional expertise and to become members of the community of practice. Though there is no universally accepted definition of mentoring I adopt the view that it is essentially a relational, developmental, and contextual process which encompasses personal and professional dimensions (Bullough 2008:329; Ambrosetti et al 2017:44; Mackie 2018:15) and as a subject mentor I provided emotional support for my students, whilst facilitating their professional development and helping them to understand the cultural norms of the school. I found the role challenging yet also immensely rewarding and thought-provoking, as by discussing the practical and theoretical problems that individual students faced, I was encouraged to reflect on my own teaching and learning.

As senior mentor my role became much wider. The school customarily welcomed ITE students from three universities each academic year and I ensured that I fulfilled the requirements which each institution expected the school to provide. I organised an induction programme which provided an opportunity for the ITE students

to mee the Headteacher and members of the Senior Leadership Team and devised a Professional Studies programme which involved a range of specialist staff including the Additional Learning Needs Co-ordinator, a Head of Year and a panel of Newly Qualified Teachers who were able to answer queries from the ITE students about their own experience during their school placements.

Hudson and Hudson (2016:54) suggest that the mentoring role is wide-ranging and includes the provision of knowledge, support, advice, and challenge. It identifies individual potential and reinforces the student's capacity to take responsibility for learning and continued professional development. It is designed to help ITE students understand the various processes that culminate in sophisticated craft knowledge and empower them to teach effectively (Maynard and Furlong 1995). In her study of mentoring, Schoper (2017:2) suggests that the process should be identified as a means of achieving student success. She stresses that learning is an active rather than a passive process and that the ultimate challenge for the mentor is to facilitate the students' commitment to their own learning and to accept responsibility for further professional development.

The relational and developmental aspects of the mentoring process have been well documented in the literature. However, there is a third aspect which has a considerable impact on the mentoring process and must not be overlooked. Mentoring cannot occur in social or cultural isolation. It is grounded within a community of practice (Lave and Wenger 1991; Aubrey and Riley 2016:173) and integration into this community of practice is an important part of the process.

My research questions have emerged from my experience of mentoring as a subject and senior mentor in a large comprehensive school in south Wales.

RQ1: What are the perceptions, values, expectations, and assumptions which mentors in Wales bring to their role?

My first research question examines the values and perceptions which influence the conceptual and theoretical understanding which subject mentors in Wales bring to their work.

RQ2: How do mentors in Wales work with ITE students to help them to achieve success?

My second research question analyses <u>how</u> mentors work with their students in three case study schools in Wales. This is an area which has been neglected in the literature (Harrison et al 2005:7; Chan 2008:329) and so I have drawn upon my personal experience and interrogated all data sources to try to develop an "insightful" and "intuitive" (Thomas 2016:232) response. All data sources will contribute to my understanding of how language and gesture inform and encourage the mentoring process. I hope to contribute to further understanding of this through a consideration of mentor and student comments in the discussion of my data findings in Chapter 4.

Theoretical Frameworks of Mentoring

It has been claimed that mentoring can be better understood by reference to theoretical frameworks (Hawkey 1997; Dominguez and Hager 2013) but researchers including Furlong and Maynard (1995); Jacobi (1991); Allen and Eby (2010) and Ambrosetti et al. (2014) caution that no single framework for mentoring, which is universally accepted, exists.

Mullen (2007:5) adds that mentoring theory is neither simple nor uniform. Clutterbuck (1992) agrees that the problems and experiences facing individual mentors will vary according to the situations they face within specific social, cultural, and political contexts, but suggests it is imperative to try to achieve consensus about some of the principles which underlie the mentoring process, irrespective of contextual vagaries, so that it is possible to define the mentoring role.

Mentoring theory is constantly evolving and has been reconceptualised by successive researchers in the last thirty years (Allen et al 2003; Dominguez and Hager 2013) and the frameworks discussed below have added to our understanding of the richness and variety of values, perceptions, and beliefs which are reflected in the process.

I have chosen to position my study on the mentoring of secondary ITE students in Wales within an over-arching sociocultural framework which acknowledges the shaping force of social, cultural, and contextual imperatives upon student learning and development.

Sociocultural theory: the theoretical frame for this study

Sociocultural theory accepts that learning, and development, is socially and culturally based. The process of mentoring within Initial Teacher Education seeks to guide, support, and challenge students as they embark upon their teaching careers and acquire a professional identity within a distinct social and cultural context. Subject mentors seek to aid students in their acquisition of the requisite skills and knowledge to enable them to become independent, effective practitioners who are able to engage pupils and support their learning and understanding.

Bonk and Cunningham (1998:26) argue that traditional teacher-centred models of transmission are outdated and unable to fulfil the needs of learners in the 21st century. Instead, they suggest that alternative models of teaching such as a learner centred constructivist approach based on "sociocultural dialogic activity" guides, supports and challenges learners more appropriately than behaviourist or cognitive approaches to learning.

Sociocultural theory is rooted in the work of the Russian psychologist Vygotsky who argued throughout his writings that learning and development are essentially social, cultural, and historical activities. The tenets of social interaction, mediation, and intersubjectivity are important elements in his sociocultural theoretical framework and are examined briefly below. Shabani (2016) and Arshavskaya (2015) relate several of Vygotsky's theories to the mentoring process of trainee teachers and I have adopted their analysis of Vygotskian theory as my underpinning theoretical frame. "At the heart of Vygotsky's theory of social interaction lies an understanding of human cognition as

social and cultural" (Kozulin et al 2003:1). Kozulin suggests that, for Vygotsky, cognitive development or the acquisition of higher mental functions is only possible through social interaction which leads ultimately to internalisation. Vygotsky's claim that social interaction "is the basis of learning and development" (Shabani, 2016:2) has clear relevance to the mentoring process. Lantolf and Poehner (2014) agree claiming that social interaction between instructors and learners promotes learning and development.

Cole and Gajdamaschko (2007:193) emphasise the importance which Vygotsky accorded to the role of culture in human learning and development. Wertsch (Toronto University Research Papers: undated) states that for Vygotsky "all psychological functions begin, and to a large extent remain, culturally, historically and institutionally situated and context specific".

Vygotsky suggested throughout his writings that learning as a mediated process is social in origin and is based upon social mediation together with dialogic negotiation between the learner and teacher. Lantolf (2001:80) agrees commenting that "the central and distinguishing concept of sociocultural theory is that the higher forms of human activity are mediated" by different modes of symbolic tools or signs.

The most important of these semiotic tools is language.

Shabani (2016:3) emphasises the complexity of this process and points out that Vygotsky insisted that learners need to engage in concrete tasks as they develop their skills and knowledge. He believes that Vygotsky's precepts are applicable to the mentoring of ITE students. Thus, in mentoring sessions students are supported in their

activities or critical reflection upon feedback. In this manner the interactive social speech between mentor and trainee is transformed into the intra-active private thought of the student and aids reflection, self- evaluation, and the development of professional identity. Such discussions make learning meaningful so that students' capacity to learn and develop their professional expertise increases over time (Shabani 2016).

The zone of proximal development

Vygotsky's concept of the Zone of Proximal Development (ZPD) emphasises the importance of social interaction, language, and discussion in the process of learning and development. Daniels (2001:59) believes that in many ways the concept "lies at the heart of Vygotsky's social account of learning" which differentiates between "what a person can achieve when acting alone and what the same person can accomplish with support from someone else and/or cultural artefacts" (Lantolf 2000:17). Thus, within the ZPD, a more experienced and knowledgeable 'expert' practitioner (MKO) engages with a less knowledgeable individual to encourage learning and development by offering support and guidance.

Though Vygotsky was writing about the learning and development of children there are clear parallels here to the mentoring process of ITE students. Shabani (2016:6) suggests that the mentor or more knowledgeable colleague acts as a catalyst for the progress of the less experienced student learner enabling her to reach a level of development, she is unable to reach without "attuned assistance". The mentor's role in determining the actual level of the trainee and then enhancing her theoretical and

practical understanding through the ZPD are vital. Through social, collaborative, and dialogic activities the student's learning potential emerges and develops.

Scaffolding

The concept of scaffolding is generally associated with the work of Jerome Bruner and will be discussed more fully in the section below. However, scaffolding was identified as an important means of support within Vygotsky's theory of learning and development. For Vygotsky scaffolding involved simplifying the role the learner plays in an activity rather than simplifying the task (Daniels 2007:317). There are clear applications to the process of mentoring. Challenge and support are both inherent within this concept (Daloz 1999:31).

The concept of scaffolding may be applied to the mentoring process (Shabani 2016:6). Scaffolding allows the mentor to provide the degree of assistance which is directly related to the needs of the individual student. The level of support is gradually reduced as the learner's confidence and competence develops. Thus, the element of challenge which allows for further learning and professional development is maintained.

Intersubjectivity

Intersubjectivity may be defined as a temporary shared social world within which the participants collaborate to jointly understand and deal with a task. Through

this process Vygotsky believed they might come to restructure pre-existing thought and behaviour (Wertsch 1985).

Rogoff's (1991) theory of guided participation has much in common with Vygotsky's concepts of the ZPD and intersubjectivity. She stresses the collaborative elements of learning and explains how an expert practitioner, such as a mentor, can guide and support the learner's current level of understanding to reach a new developmental plane. Rogoff's contribution to our understanding of social and cultural influences upon learning and development will be discussed in more detail in the following section which deals with the influence of several important educational theorists' views upon the mentoring process.

Bruner in "The Culture of Education" (1996) explored his developing interest in how cultural factors affected the learning process. Though his work was related to the learning of children I suggest that the principles he enumerated are equally applicable to the learning and development of ITE students. Bruner suggested that the sociocultural context of education is "important to our understanding of how learning works" (Moore 2012:122). Though Bruner was primarily interested in the role that internal and external contextual and cultural factors played in children's learning and development, his ideas on the impact of culture on the learning process have implications for the mentoring of ITE students, whose prior cultural and contextual experiences influence their views on the learning process.

Sociocultural theory acknowledges the centrality of the educational context in the process of learning and development. Lave and Wenger's (1991) concept of

socially situated learning emphasised that learning is contextually and socially situated, and learners are actively involved in the processes of social activity within a community of practice. Their theories of situated learning, legitimate peripheral practice, and the concept of the community of practice will be discussed in more depth below. I suggest that the above are relevant to the process of mentoring and reflect the centrality of social and cultural activity and experience in the development of students' learning.

In conclusion, sociocultural theory provides a meaningful lens of enquiry with which to examine the process of mentoring and the learning and development of ITE students. Sociocultural theory considers not only the social, cultural and contextual influences which permeate the mentoring process but also seeks to explain how these factors provide a catalyst for the learning and development of both mentors and ITE students.

Chapter Two: Review of the Literature

Mentoring has been variously conceptualised within the literature. Indeed, no universal definition of the construct has been agreed (Jacobi 1991) and accepted by researchers though there appears to be an element of consensus that mentoring includes relational, developmental, and professional elements within traditional, transitional, or transformative cultural contexts (Ambrosetti et al 2017:44). In addition, the subjective values and perceptions of all stakeholders involved in the process of mentoring influence how mentoring is perceived and practised.

In this chapter, I firstly set out, with reference to a range of literature, the subjective values and perceptions which researchers claim influence subject mentors in their approach to the process of mentoring ITE students. I then set out the models of mentoring which have been identified and defined in the literature and thereafter explore and review the process of mentoring in Wales at the time of my research.

RQ1: What are the perceptions, values, expectations and assumptions which mentors in Wales bring to their role?

The purpose of RQ1 is to "gain insight into mentors' perceptions of their role" (Bullough et al 2008:328).

In my study I consider the process of mentoring Initial Teacher Education (ITE) students in Wales and examine the perceptions and values that influence subject mentors in the performance of their role. Values are "the expression of core beliefs

which an individual may hold. In this sense they are subjective, intensely personal" (Pajares 1982:329) and directly influence perceptions which may be described as "the practical application of values" (ibid).

The subjective values of individual subject mentors have a fundamental effect on their perceptions of their role. Values may be characterised broadly as conservative or liberal (Gibb 2003:239). Mentors who hold innately conservative values may be inclined to encourage their ITE students to accept and strive to replicate the norms of the community and the accepted patterns of behaviour and performance. They perceive their role to be a means of ensuring the continuity, consistency and stability of the status quo.

In contrast mentors who incline to a more liberal approach to their work perceive mentoring as being "a potent force for change" (Gibb 2003:239) which may contribute to social and cultural change within the school through pedagogical debate and discussion which may lead to the amendment of accepted practice, modernising and progress.

The ITE students

Bryan and Carpenter (2008:55) point out that ITE students also bring to their school placement their own values, perceptions and expectations of the mentoring process. Hagger and McIntyre (2009:9) agree pointing out that "individual student teachers tend to have distinctive preconceptions" which Hobson et al (2006:13) suggest can "impact upon their teaching experience and professional development"

during the PGCE. Hobson et al (ibid) suggest that "an understanding of students' early perceptions" may enable subject mentors to "offer appropriate support and challenge" and help student teachers to become aware of alternative perspectives which they may choose to incorporate into their developing sense of professional identity.

Raffo and Hall (2006:60) agree commenting that subject mentors need to appreciate the "complex and real interdependence of personal biography, identity, and predispositions of individual ITE students which can create particular paradigms of understanding" whilst Clark and Patterson (1986:287) suggest that "mentor perspectives are a reflective, socially defined interpretation of experience that serves as a basis for subsequent actions" (ibid). Pajares (1992:314) concurs arguing that mentors' perceptions of the mentoring process affect how they carry out their role. Mentors' perceptions of their role vary upon a continuum according to their traditional, transitional or transformative subjective values which will be discussed in the next section which sets out the characteristics of the traditional, transitional and transformative models of mentoring.

The Traditional Model of Mentoring

The traditional role of the mentor within Initial Teacher Education has been characterised as a master/apprentice (Lave and Wenger 1991) monological approach wherein the mentor assumes the role of the expert whom the student seeks to emulate in order to become accepted as an effective teacher who can engage pupils fully in the learning process (Jones et al 2020:183).

This approach defined by Lave and Wenger (1991) explains how the student teacher may become a full member of the community of practice and in due course attain the status of expert herself through situated learning, observation, and legitimate peripheral participation. They assert that the aim of the mentor is to develop the knowledge and understanding of the student so that she will become aware of the values and perceptions of the community and work collaboratively with other professionals to share concerns, solve problems, deepen knowledge, and incorporate these into her professional practice.

Lave and Wenger first coined the term community of practice in their seminal treatise Situated Learning Legitimate Peripheral Participation which arose out of their work on a number of social theorists including Vygotsky. They challenged the traditional transmission theory of learning which suggested that learning involved the transfer of information from teacher to student, focusing instead on their concept of situated learning: "we suggest that learning occurs through centripetal participation in the learning community" (Lave and Wenger 1991:100).

Their ideas were informed by their studies in a variety of contexts of, amongst others Yucatan midwives, US quartermasters, meatcutters and tailors. Their findings suggested that the direct transfer of knowledge was not as important as involvement in the community which they suggested stimulated and supported learning.

Barab et al (2004:133) defined the community of practice as "a persistent sustaining social network of individuals who share and develop an overlapping knowledge base and set of beliefs, values, history and experience". Newcomers to the

community engaged in legitimate peripheral participation "the process whereby newcomers become part of a community of practice (Lave and Wenger 1991:29). They claim that legitimate peripheral participation provides a way to speak about the relationship between "newcomers" and "old timers" within a community and describes the process whereby over time newcomers move from the periphery of the community toward the centre. In this way Lave and Wenger (1991) claim that the traditional elements of the community of practice will be maintained and observed.

Whilst this mentoring approach provides for stability there has been some criticism of the practice (Jones et al 2021:183) which has been accused of promoting a hierarchical, asymmetrical mentoring stance in which the attitudes, values, and subjective preferences of ITE students are set aside in favour of the continuity of existing norms, values, and practice in the community. Within this mentoring model the mentor is perceived as the expert, or "critical friend" who directs the mentoring experience of the ITE student emphasising the importance of the acquisition of skills accepted and practised in the community. (Jones et al 2021:184) argue that this approach may inhibit spontaneous discussion and may lead to "passive acceptance" of the status quo by student teachers which inhibits creativity and innovation.

The Transitional Model of Mentoring

Though the traditional model of mentoring described above retains some support more recent research including that of Kochan and Jones (2019) has challenged the model and has suggested that as well as facilitating the acquisition of skills and knowledge an important aspect of the mentor's work is to acknowledge the

perceptions and values of the individual student and to understand how these may be incorporated into the process of learning to teach.

Within a transitional model of mentoring the relationship formed between mentor and ITE student is viewed as an important means of facilitating the student's professional development and integration into the professional learning community of the placement school. The emphasis is upon collaboration, collegiality, reciprocity and equity, and joint construction of knowledge replaces the directive element within the traditional model Kochan (2012).

The transitional mentoring model values dialogic pedagogical discussion between mentor and student as a means of assessment and evaluation of student progress. The concept of dialogic discussion has been identified as a means of advancing the professional development of student teachers (Jones et al 2021:181) through a more equitable learning conversation between mentor and student teacher. They suggest (ibid) that this strategy emphasises the supportive and collaborative aspects of the mentoring role (Jones et al 2021:182). Hobson and Malderez (2001:57) defined mentoring as a "two-way approach that develops a reflective approach to learning through the key processes of collaboration and dialogue" which may be used to enhance the processes of observation and reflection (Griffiths et al 2020:211). This emphasis upon collaboration and dialogue is characteristic of the transitional model of mentoring.

The Transformative Model of Mentoring

Transformative models of mentoring envisage a move to the future (Kochan 2013). They recognise that something new is needed to complete our understanding of the nature and potential of mentoring in the 21st century (Fullan 2000; Hagger and McIntyre 2006). Within a transformative school culture, the mentoring model may be characterised by "role fluidity" and mutual learning. This sophisticated mentoring construct is characterised by uncertainty, experiment, and exploration, and the outcome may be unclear, but Kochan argues that transformative approaches to mentoring have the power to challenge the cultural norms of a community in new and exciting ways.

Within this mentoring experience the emphasis is upon helping ITE Students to acquire a sense of professional identity through dialogic discussion where pedagogical issues are subjected to scrutiny and critical reflection which helps the ITE student to move toward a degree of autonomy. Mentor and student respect each other's values and understand that there are multiple conceptions of how to teach. They recognise the complexity of the mentoring process and understand that individual values and perceptions affect and permeate practice. Mentor and student are positioned as equals within this mentoring model which is concerned not with the current status quo but with "what might be" in the future. In Chapter 4 I explore the support for traditional, transitional or transformative approaches to the mentoring of ITE students within my case study schools.

Educative Mentoring

Lave and Wenger's apprenticeship model of mentoring was hugely influential but over time researchers such as Feiman-Nemser (1998), Bullough (2012), and Langdon (2013) suggested alternatives approaches to the process of mentoring. Feiman-Nemser in 1998 coined the term educative mentoring to describe a critical shift from earlier models of mentoring which had focused rather than upon dialogic professional learning conversations. Bullough (2012) and Langdon and Ward (2015) are amongst those who believe that there are limitations within this traditional essentially monologic approach to mentoring and suggest that educative mentoring is a more effective and equitable approach to employ to foster and facilitate the professional learning and understanding of both subject mentors and ITE students. Mentors who are committed to educative principles provide opportunities for their ITE students to contribute to this process through leading discussions in school Inset sessions or departmental meetings on recent pedagogical research findings, or innovative approaches to teaching and learning.

This model of mentoring is grounded in Dewey's (1938) model of educative experience and influenced by theories of socially constructed cognition, such as those of Vygotsky (1978). The argument suggests that the learning of mentors and students occurs through purposeful social communication which emphasises interaction and the co-construction of knowledge and targets to be attained. Trevethan (2017:221) believes that educative mentoring reflects Vygotsky's learning theory that knowledge construction requires scaffolded support appropriate to individual needs and suggests that through reciprocal enquiry, professional conversations, guidance, challenge and

support mentors and trainees are encouraged to "interrogate, explain and justify their practice" (ibid). This means that educative mentoring provides both opportunities and challenges for both mentor and student to learn about pedagogic practice through processes of shared reflection and enquiry. Langdon et al (2019:152) defined educative mentoring as "a set of practices, values and beliefs...which adopts an inquiry- based approach to developing practice." Educative mentoring seeks to make the process of teaching visible and transparent through discussion, explanation, questioning, and critical reflection. Mentor and ITE student are positioned as equals and co-learners within this approach to mentoring and through activities such as coplanning, co-teaching, observing and giving feedback there is an opportunity for each member of the mentoring dyad to share their expertise and learn from each other in professional learning conversations. Langdon (2011) suggests that educative mentoring supports mentors in providing student teachers with professional learning opportunities that promote their pedagogical expertise. She emphasises that through educative mentoring ITE students are given the opportunity to learn about and acquire the skills, attributes and attitudes which support pupil learning.

Educative mentoring celebrates the principles of reciprocity, empathy and equity which encourage collaborative dialogue, questioning, and reflection between mentor and ITE student as the norm. Educative mentoring is based upon coconstructivist principles, (Richter et al 2010:28) building through dialogue "compelling theoretical knowledge" (Langdon and Ward (2015:31) about teaching and learning and encouraging the consideration of "alternative beliefs and viewpoints" (ibid) about pupil learning and the role of the teacher (Langdon et al 2019:251). Educative mentoring emphasises the importance of context and leadership. School leaders may possess a

deeply held commitment to school involvement in the process of Initial Teacher Education. Timperley (2011) suggests that school leaders are able to influence the character of the context within which mentoring occurs and "enable or constrain pedagogically focused educative mentoring" (Langdon and Ward 2015:32) which may transform the culture of the placement school. Langdon and Ward (ibid) set out the challenges which they believe face school leaders in their task of developing educative mentoring in their schools.

Ulrik and Sunde (2007) suggested that school leaders can "shape" the experience of mentoring in their schools through their criteria for mentor selection and their vision of the mentoring process. Cunningham (2007) argued that the selection and training of mentors is a fundamental responsibility for school leaders and the successful implementation of the mentoring of ITE students within a school is dependent upon their support. School leaders who are intent upon establishing educative mentoring in their schools need to appoint subject mentors whose approach to mentoring supports dialogue, reflection upon pedagogy, and pupil learning with their ITE students. In these circumstances school leaders may be concerned during the mentor selection process on ensuring that those members of staff chosen to become subject mentors possess the requisite personal qualities, professional skills and empathy for the principles of educative mentoring to enable them to fulfil these demands.

Educative mentoring may be viewed by some school leaders as a potential catalyst for change within the socio-cultural climate of the school. In such circumstances those appointed to undertake the mentoring role are selected by school

leaders to ensure that they support this potentially transformative agenda and are able to encourage dialogue and reflection upon the process of teaching and learning within the wider professional community of the school. I suggest based upon my own experience as a senior and subject mentor that educative mentoring offers an alternative and potentially transformative approach to the mentoring of ITE students which impacts upon both the mentor and the student teacher. The student teacher is encouraged to contribute to dialogic discussions which support her learning, understanding and subsequent professional development whilst educative mentoring challenges the mentor to engage in critical reflection and a reconsideration of the subjective values which inform her perceptions of the mentoring process.

The Process of Mentoring

RQ2: How do subject mentors work with their ITE students to help them to achieve success?

The process of mentoring is "complex" and "encompasses personal and professional dimensions" (Aderibigbe et al 2016:13). The role of the subject mentor is multi-faceted and demanding and includes relational, developmental, and cultural elements (Ambrosetti et al 2017:50) which individual mentors interpret according to their subjective values and professional knowledge and experience.

In this section I outline, based on the extant literature and my long experience of working in the field, some of the most significant and challenging practical aspects

of the role which mentors undertake to scaffold students' experiences, provide technical instruction, and balance a demand for intellectual rigour with emotional support.

The relational aspect of mentoring

The relational aspect of mentoring lies at the heart of the mentoring construct for many researchers. Gormley (2008:45) suggested that mentoring relationships "occur along a spectrum from highly functional to highly dysfunctional with most occurring in between". Hudson (2016:21) comments that this interpretation "recognises the complexities" inherent in many mentoring relationships and recognises the role of mentors' subjective values, preferences, and perspectives in the creation of professional learning relationships.

Mullen (2005:5) opined that mentoring is "first and foremost a relationship" the quality of which has a considerable impact upon the progress of student teachers. Hudson (2016:30) agrees emphasising that mentoring is a "personal" relationship based upon trust and respect, whilst Ambrosetti (2010:2012) emphasised the importance of subject mentors being supportive of and responsive to the perceived needs of their ITE students.

Daloz (1991) recognised the importance of "nurturing" (Anderson and Shannon 1986) within the professional mentoring relationship though he linked this to the concept of challenge which will be discussed further in the section on professional development. He argued that the mentor as a trusted advisor within an established

and secure mentoring relationship is able to introduce new ideas or suggest new directions for the professional development of the ITE student.

Not all researchers accept that mentoring relationships depend on the creation of such strong emotional bonds and suggest that this conception of the mentoring relationship describes an ideal which is seldom achieved, emphasising that the central aspect of the mentor's role is to model good practice and provide practical support to ensure student professional development (Young et al 2005).

In conclusion I suggest that the personal attributes, qualities, values and perceptions of subject mentors will influence how they work with their ITE students to create positive relationships based on trust and mutual respect and demonstrate emotional sensitivity and support to facilitate their ITE students' professional learning and development.

Professional development

In this section of the chapter, I outline some of the most significant and challenging practical aspects of the role which subject mentors undertake to scaffold students' experiences, provide technical instruction, and balance a demand for intellectual rigour with emotional support.

Subject mentors face a challenging task in supporting ITE students as they learn to acquire the practical skills and competences required for the award of QTS (qualified teacher status). In addition, mentors are increasingly being challenged to

help their students understand pedagogy and to link the theoretical and practical elements of teaching and learning through dialogue and discussion as required within the context of the reforms in initial teacher education in Wales. They are expected to share tacit knowledge (Polanyi 1967) which will be discussed further below, share their professional expertise, and guide their students to reflect critically and honestly upon their practice. In addition, they are expected to support the student's development of an individual teaching identity and respect her movement towards self-evaluation and autonomy. Finally, they are enjoined to explain and explore teaching strategies which engage pupils and facilitate their students' critical reflection and learning (Clutterbuck 2001; Jones et al 2018).

The challenges inherent in the mentoring process (some of which are listed above) have been identified frequently in the literature but the question as to how mentors fulfil their goals is considered less often (Hall et al 2008:329). There are myriad reasons for this. They include Gardiner's (2008) claim that observation of the discussions between members of a mentoring dyad might disturb the "delicate equilibrium" of the mentoring relationship, and a consequent lack of opportunities to observe student lessons to note the nature and extent of collaboration between mentor and student. In addition, mentors and/or students may be unwilling to summarise their reflections of a lesson if an outsider is present, and lack of time to give more than cursory immediate post lesson feedback is often a reality.

In the following section I consider how some mentors strive to overcome these and other difficulties and explore the tools and strategies which mentors have

at their disposal to support the professional learning and development of their students.

Lesson Observation

Hobson (2002:8) suggests that lesson observation by their subject mentors is one of the most important developmental aspects of the mentoring process and valued as such by the ITE students who are the beneficiaries of the activity. Hagger, Burn and McIntyre (1995) indicate that lesson observation needs to be perceived by mentor and student alike as a constructive and consensual activity. They argue that mentors need to reassure students that participation in this process of observation will provide opportunities for progression in their teaching and learning through the reflective dialogue which follows the observation in the debriefing/feedback session thus allowing mentor and student to deconstruct the process of teaching and learning (Hobson and Malderez 2001; Jones 2021) reflect upon the decisions taken, and link theory and practice.

Feedback

Lesson observation of ITE students by subject mentors and experienced teachers is widely accepted as an effective way of gauging the current stage of development of ITE students. A key aspect of the mentor's role following the lesson observation is to provide feedback to the ITE student which assesses her progress toward qualified teacher status (Department of Education 2013).

Feedback by subject mentors and other colleagues involved in the mentoring process within the placement school has been identified in the research literature as a valuable aspect of the mentoring process. There is consensus amongst all parties that if feedback is to be useful to students in aiding the development of practical skills, craft knowledge, or pedagogical understanding, it should be focused, specific, and detailed (Hudson 2013; Hattie 2011). It should also be given as soon as practicable after the lesson observation before memories are distorted by the passage of time.

Feedback sessions offer the opportunity for dialogic discussion which "flows from what has happened in the lesson" (Jones et al 128:129). Jones et al (ibid) argue that dialogic discussion promotes "inquiry and reflection". Mentors have an opportunity to teach and share their professional craft knowledge and contextual understanding. Langdon (2013) and Achinstein and Athanases (2006) suggest that learning conversations, which occur in such debriefing sessions provide opportunities for an exchange of ideas which have the potential to transform the learning and understanding of students and mentors alike.

The inclusion of other members of staff in the process is valuable because it creates the opportunity for different perspectives to be presented to the student providing a wider dimension to her practical experience and developing craft knowledge, and guards against unbalanced or partisan judgements and opinions dominating the procedure.

Observation of Subject Mentors by ITE Students

Cajkler et al (2013:1) in their systematic investigation of classroom pedagogy claim that ITE students should observe their subject mentors and/or experienced colleagues as frequently as possible. They argue that by watching experienced practitioners at work ITE students gain an awareness of a range of teaching strategies which contribute to the process of effective class management which they are then able to emulate.

The observation of subject mentors by ITE students may contribute to extending the collegial and relational aspects of the mentoring process but the mentor must be willing to allow the student teacher to observe and comment on her lesson and accept any criticisms made which can then be discussed more fully. This mentoring strategy encapsulates an element of risk taking which some subject mentors may find unacceptable, but I believe that the potential benefits for both parties are high. The ITE student seeks to understand why the mentor acted in a particular way and the mentor is able to explain her reasons for the decisions made. Cajkler et al (2013:2) suggest that allowing ITE students to comment and offer feedback to their mentors is a genuine developmental opportunity for them and provides a meaningful context for pedagogical discussion encouraging dialogue, analysis, reflection and an opportunity for mentors to "unpack" their often-tacit professional knowledge and practice in post lesson discussions.

Tacit knowledge

Tacit knowledge is built up from the subjective values and personal and professional experiences of an individual. It is difficult to access and articulate as it is largely internalised (Shim and Roth 2007) and represents a challenge for subject mentors who wish to deconstruct and explain the concept to their ITE students. The importance of ITE students learning to understand and acquire tacit knowledge is discussed frequently in the literature though Sternberg and Grigorenko (2001:1) suggest that the concept is hard to articulate. However, through their research sharing tacit knowledge among expert teacher performers and mentees (2007) Shim and Roth identified two ways in which mentors could articulate such knowledge and make it accessible to their students' observation and BIS (bringing it to the surface).

Observation of their mentor's classroom practice afford opportunities for the ITE students to appreciate the valuable internalised tacit knowledge which she deployed to solve problems and facilitate pupil learning.

In the dialogic discussions which followed the lesson the mentor was then able as the MKO to respond to direct questions and challenges from her student and share her personal reasons for choices made, thus encouraging student reflection. Such learning conversations help the student begin to build up her own library of internalised tacit knowledge of effective learning strategies which can be called upon in future similar circumstances to support pupil learning.

Learning conversations

Learning is "complex" (Daly et al 2020:329) and "ITE students need to be challenged and supported to understand and master the complexity of learning to become increasingly confident and competent professionals" (ibid). Learning conversations between the subject mentor and the ITE student provide valuable opportunities to explore this complexity. The most obvious interaction occurs after a formal lesson observation where the mentor provides feedback to the student on the quality of their teaching and mentor and student review progress and identify areas for improvement.

Alongside feedback from lesson observations, more informal and unscheduled dialogue also takes place, where the mentor and ITE student discuss and explore aspects of pedagogy together (Jones et al 2018) and understanding is co- constructed through open and meaningful conversations. These learning conversations were thought by both ITE students and mentors in this study to be where genuine learning took place through informal dialogue where "the competency of the ITE student's teaching is evaluated, towards less daunting interactions that are more personalised, purposeful and timely" (Jones et al 2018). They add that whilst the mentors "examined the emergence and development of a dialogic approach" they "did not consider the nature and impact of the dialogue itself" (ibid).

In consequence, though they drew attention to the nature of the conversations that ITE students and mentors have about learning they acknowledged the "paucity of

research" findings in this area. I hope to contribute to a more detailed understanding of the nature of this dialogue in my discussion of the findings in the case study schools.

Modelling

Cornish and Jenkins (2010) believe that a useful tactic for mentors to employ at the beginning of the practicum is modelling. They claim that many mentors perceive modelling as a means of enriching the mentoring process as it provides opportunities for discussion, explanation, reflection, self-knowledge, continuing professional development and linking theory and practice for both members of the mentoring dyad. Lave and Wenger (1991) suggested that close observation of successful teaching strategies by ITE students helps the students to develop self-confidence and a semblance of expertise as they note that experienced practitioners lay constant stress on developing the learning of their pupils. However, Cornish and Jenkins (ibid) also warn that modelling may ultimately have fewer positive learning outcomes in that the ITE student may perceive the task of learning to teach as a simple process of replication rather than a creative and reflective experience (Cain 2009) which offers opportunities for progression in their professional learning and understanding.

Assessment

Subject mentors are required to assess and evaluate the professional progress of their ITE students against the standards required for the award of QTS (qualified teacher status).

It is apparent in the literature that there is some division in the views of researchers concerning the purpose and process of assessment. Fish (1996:146) considered assessment to be "complex and problematic" and noted that the practice included an element of evaluation and judgement which could adversely affect the relational aspect of the mentoring process. Hudson (2009) agreed with this view claiming that mentoring was much more likely to be successful where the mentor did not bear the responsibility of assessing the student teacher whilst Smith and Lesham (2011) were sceptical as to whether mentors could assess their students' performance, relative to external standards, without jeopardising the relational aspect of mentoring which they considered lies at the heart of the process.

However, Ambrosetti et al (2017:51) and Anderson and Shannon (1999) suggest that if assessment is based around nurturing and supporting ITE students it can support the development of student learning and self-esteem if provided in an honest and balanced way. Assessment may be formative or summative, formal or informal, oral or written and how individual subject mentors choose to deliver their lesson assessments can impact upon their effectiveness.

In the following section I consider in more depth these facets of the assessment process.

Formative Assessment

Many mentors who consider that mentoring is a collaborative and reciprocal process perceive the formative discussion which follows the lesson observation to be

most valuable (Dobie et al 2010; Fish, 1995). Ambrosetti et al (2012; 2014) suggest that an informal, formative, assessment process has a positive developmental impact upon the professional learning of both mentor and student as it provides opportunities for modelling, guiding, and sharing professional expertise. The benefits of such formative assessment in supporting students' learning are confirmed in much research (Hattie 2009; Shute 2008) and researchers emphasise that it should be detailed, specific and goal directed (Black and William 1998; Gibbs and Simpson 2004). If such assessment of progress is regarded as one aspect of a professional learning conversation this affords the mentor and student an opportunity to discuss critical incidents which have occurred during the lesson and creates opportunities for the mentor to help the student understand what is needed to move forward and achieve her personal and professional goals. In these circumstances the subject mentor's evaluation and assessment of the student's performance may act as a catalyst to encourage her to engage in reflective thinking and aid the subsequent development of "professional artistry" (Geen et al 1995:6) the kind of competence which experienced practitioners are able to display in "unique, uncertain and conflicted situations in practice" (Schon 1987:229). This may, in turn, lead to "positive changes" in their teaching practice and to "pedagogical and professional growth" (Sempowicz et al 2012:52). As such these writers suggest that formative assessment should be viewed as a positive process and the mentor's role is one of empowering the student, recognising progress and identifying the next steps for continued progression (Jones et al 2018:127).

Summative Assessment

Subject mentors are required to complete formal lesson assessment forms linking theory and practice and assessing and evaluating student progress according to the standards for qualified teacher status in Wales. The formal nature of the written lesson observation identifies perceived strengths and areas for development evident in the lesson (Jones et al 2018:128) and may be used as evidence of progress against the Teachers' standards.

Smith and Leshem (2011) are sceptical as to whether mentors can assess students' performance relative to external standards without jeopardising the relational aspect of mentoring and question how the processes of appraisal and assessment impact upon the learning and professional development of ITE students.

They concede that the idea of accountability and the imposition of judgement introduces an element of tension into the process which some mentors and ITE students find difficult. They suggest that the judgemental nature of such assessment does not seem to have the potential to encourage ipsative learning on the part of the student teacher nor to encourage further professional dialogue between the subject mentor and student. The 'Janus'-like contradiction between the "critical friend" on the one hand and the strict evaluator or assessor on the other (Tillema et al 2011) may harm the relationship of the mentor and student which may have serious implications for future professional partnership, growth, and development (Benson 1990).

However, Ambrosetti et al (2014) and Jones et al (2018) contend that written summative assessment allows subject mentors to provide balanced and honest feedback which sets targets for further professional growth, and I believe as a result of my own experience that as such it is a valuable tool for mentors to employ. The key would seem to be to stress that such assessments should recognise strengths in student performance whilst also offering opportunities for critical reflection and continuing professional development.

Wright et al (2012) suggest that school-based mentors and university curriculum tutors should take turns in delivering feedback and assessing the progress of their ITE students. The interactive and interpersonal dialogue which ensues widens the scope of the discussion and enhances students "understanding of the nature and purpose of feedback" (Ben-Peretz 2011). Philpott (2016) suggests that this is an important element in helping students to access mentors' "craft knowledge" (Spear, Lock and McCulloch 1997:270) that is their understanding of how to deploy their knowledge and understanding in the classroom to enhance pupils' learning. Shulman (2015) believes that the term should include "subject content knowledge", which together with excellent lesson planning and classroom management, and effective delivery of creative resources and activities, involve and engage pupils and enhance and facilitate their learning. Classroom practitioners who possess excellent craft knowledge are flexible and adaptable in their approach to their work and create opportunities for pupils to play an important part in classroom discussion through asking open questions and using pupils' responses to extend their learning. They are interested in pedagogy and are able to make use of recent research to improve the experiences they provide for pupils. In short, they possess considerable professional expertise which they are able to share with student teachers through dialogic learning conversations. High quality teacher assessment and feedback then provides an opportunity for mentors to support students in their professional learning.

Clutterbuck (1999) suggested that sharing the responsibility for assessment more equally between subject mentors, departmental staff, and student teachers through initiatives such as lesson study (which is discussed below) creates an opportunity for different perspectives to be presented to the ITE student and emphasises mutuality, reciprocity, inclusion, and collaboration.

Traditionally the mentor as gatekeeper provides access to the teaching profession, and through assessment and evaluation of progress influences final recommendations and references Fish (1995). She believed that this is an important aspect of the subject mentor's work but Davis and Fantozzi (2016) explored students' reactions to this aspect of the mentor's role and concluded that it discourages ITE students from expressing any criticism of the mentor's views. They argued that it encourages a culture of conformity rather than promoting autonomy and independence. The essentially unequal and asymmetrical nature of the mentoring relationship is thus highlighted here. Whilst some mentors continue to 'guard' access to the teaching profession as described above, increasingly mentors encourage their students to observe them and to comment on their performance so that their ITE students begin to appreciate how assessment must be delivered in a balanced and constructive format to encourage reflection, learning, self-evaluation, and a willingness to embrace change.

Reflection

Reflection is the ability to frame and reframe practice through a critical consideration of past experience, (Schon 1983;1987) and as such is an important skill for student teachers to acquire.

The literature emphasises that reflection is a core skill of effective teachers (Frick et al 2010:421). Radovic et al (2014:271) comment that helping ITE students to reflect critically upon their learning and practice is "one of the main skills that students need to develop during their ITE course" whilst Cain (2008) suggests that understanding and engaging with the concept of reflection encourages ITE students to develop "independence of thought and mind" rather than accepting unquestioningly the norms and values of an institution. These researchers accept that subject mentors have an important role to play in helping their students to understand the concept of reflection and to acquire the skill to utilise the process to evaluate critically and honestly the development of their professional learning and understanding.

Schon (1987:17) argued that reflection, which he acknowledged was "not a comfortable process", could be divided into two: reflection on action which considered the action undertaken by an ITE student during a lesson and reflection in action which refers to the flexible response an experienced teacher may make during the lesson if it develops in directions not originally envisaged.

Schon contended that though the student "can't see it just by being told" senior experienced practitioners such as mentors can help him to "see what he needs to see"

(ibid). Bray et al (2000:6) defined reflection on action as a collaborative process through which a "group of peers strive to answer a question of importance to them... the notion of co-enquiry is based upon researching with people" in order to "understand the experience of others" (Bray et al 2000:8).

Reflection on action has long been established as an important element in learning from experience, indeed Kolb's (1984) model follows the work of Dewey (1931) in defining learning as a cycle involving reflection on experience, devising conceptual meaning from this, and engaging in experimentation which may lead to new forms of experience. Mezirow (1991) summarises the importance of reflection as the process "which enables us to correct distortions in our beliefs" (1991:6). In mentor meetings subject mentors can encourage their students to think critically about the decisions they made during their lessons and to consider alternative approaches they could have chosen.

Furlong et al (2000) found in their study that for many ITE students reflection seemed to imply thinking about their teaching experiences and talking about these in descriptive terms with their subject mentors. Schon argues that in such circumstances the challenge for the mentor is to reveal what he calls "knowing in action" to make explicit "a kind of intelligence that begins by being tacit and spontaneous to meet the needs of the situation" (Schon 1987:125). The challenge for subject mentors then is to manage the movement from an essentially uncritical approach to one which focuses upon analysis and evaluation of the effectiveness of choices made during the lesson including discussion of principles derived from practice, research, and theory. The role of the mentor is to demonstrate that this ability to reflect in the middle of a situation

may help the student to solve problems in the classroom and through reciprocally reflective dialogue help the student to begin to develop this ability.

Strong and Baron (2004) in their study of 16 experienced subject mentors in the USA found that mentors seldom gave "direct advice" to their student teachers, preferring instead "indirect suggestion" (Strong and Baron 2004: 47) which was often tentative in nature, and thus required a response from the ITE student. They stated that this helped the students to consider and reflect critically upon specific instances in their practice and attempt to evaluate and understand why these had or had not supported pupils' learning through mentor/student discussion and interaction.

Hagger and McIntyre (2006) conclude that there is little real evidence to suggest that the majority of ITE students do learn to reflect critically upon their practice during the PGCE course. Hagger and McIntyre (2006:4) point out that student teachers bring to their school placements their own preconceptions of what constitutes good teaching and that they are sometimes unwilling or unable to let go of these. The challenge for the subject mentor is clear and in my Findings section I shall set out how subject mentors in my case study schools challenge their ITE students to reflect upon a range of teaching strategies and to consider their effectiveness in promoting pupil learning.

The theory practice gap

Traditionally the provision of "theory" in an Initial Teacher Education in Wales was seen as the responsibility for the university to deliver to ITE students. Theory was conceptualised as the academic work which underpinned the student developing

understanding of the process of teaching and learning. "Practice" defined as the practical work of teaching was delegated to the placement school and usually carried out by experienced staff or subject mentors.

However, the Donaldson, Tabberer and Furlong reviews proposed a reconfiguration of the roles of university lecturers and school- based mentors which emphasised collaboration based upon strong partnerships between colleagues to bridge this theory/ practice divide. Gove (2013) as secretary of state for Education had set out his "vision" for a "teacher led" educational system arguing that practising teachers should be afforded a significantly wider role in closing this theory practice divide, working in close partnership with their university colleagues to support the translation of theoretical knowledge into practice (Stephens 2024). Furlong (2015) had emphasised that developing such "strong links" between theory and practice would help student teachers to "understand and explore the interconnectedness of educational theories and classroom practice". Such an approach demands that subject mentors in schools reconceptualise their role as teacher educators who discuss with their ITE students the theory which underlies their professional practice whilst university curriculum tutors come into schools not only to review student progress but also to engage in learning conversations and listen actively to student concerns. Donaldson believed that such a collaboration between school mentors and university tutors would provide a stronger professional learning experience for student teachers in Wales which would encourage them to consider not only the "what" of teaching but also the "why" and crucially the "how".

Lesson Study

Lesson study based upon collaboration, dialogue, evaluation and agreed revision between participants provides an opportunity for mentors, curriculum tutors and ITE students to work together to advance reflection and professional practice.

Programmes of Initial Teacher Education are often criticised because "what is taught in education classes is disconnected from teachers' work in the classroom" (Kotelawala 2012:67). In consequence there have been calls for approaches which bridge the perceived divide between university methods courses and school-based experience (Darling-Hammond 2000; McBeath 2011:38) and support students' understanding of the links between theory and practice.

Lesson study originated in Japan (Myers 2012) and was designed to promote reflection and collegiality. It is a "systematic investigation of classroom pedagogy conducted collectively by a group of teachers rather than by individuals, with the aim of improving the quality of teaching and learning" (Tsui and Law 2007:1294).

In its original form, it has been described as a collaborative learning-focused process in which teachers work together on five main activities in a lesson study cycle (Cajkler and Wood 2015:1). It begins with "the identification of a learning challenge" (ibid) where participants jointly plan a study or research lesson to respond to this. One teacher then delivers the lesson whilst the others observe and offer feedback on its impact on the learning of selected pupils. The lesson is jointly evaluated, revised, and retaught, until each member of the group has had the opportunity to participate.

Advocates of lesson study, including Cajkler and Wood (2013:2) suggest that this strategy has the potential to encourage dialogue, reflection, and innovative practice. Lesson study has been adopted in school Y in this study, as an effective means of offering students support in collaborative lesson planning, delivery, and evaluation. I will comment further on mentor and student assessment of the strategy in my Chapter 4 (Findings school Y) below.

Pedagogy

Hudson (2013) avers that "teachers' complex practices in the classroom contribute to the student learning process" (Hudson 2013:363). It is essential in his view that mentors guide and develop the knowledge and understanding of pedagogical practices of their student teachers (ibid). Shulman (cited in Hudson 2013:363) considers that the term "pedagogical knowledge" should include subject and content knowledge. The challenge for the mentor is to provide a "carefully constructed high quality mentoring programme" (Marable and Raimondi 2007:35) to address this issue.

An important aspect of the mentoring role is to "deconstruct and articulate" (Hudson 2013:367) problems which may arise in regard to lesson planning. These include planning for differentiated learning, devising creative and appropriate teaching strategies, problem solving, and considering classroom management strategies, effective questioning, and linking theory and practice. Hudson suggests that collegial recourse to a "community of mentors" (Hudson 2013:367) not only allows ITE students access to a variety of perspectives and possible approaches to teaching and learning but also encourages the development of a whole school mentoring culture.

Professional Identity

The literature suggests that mentors have a responsibility to fulfil in supporting their ITE students in their quest to develop a sense of professional identity. Flores and Day (2006:220) define professional identity as an "ongoing and dynamic process which entails the making sense and reiteration of one's own values and experiences". The development of such a sense of professional identity is seen by Flores and Day: (ibid) and Daly et al (2020:230) as an important aspect of the work of the subject mentor and in the following section I explore with reference to the literature how some mentors fulfil this task.

The concept of "professional identity" refers to the core beliefs a teacher has about the nature of teaching. Professional identity in Korthagen's view (2011) stems from prior knowledge developed and reshaped through practice and experience. Over time ITE students develop, with the help of their mentors, in dialogic learning conversations into autonomous practitioners who are able to direct their own learning. Subject mentors can support their students' development of a professional identity in several important ways. Explanation, sharing their professional experience, revealing their tacit knowledge, responding to direct questioning, discussing pedagogy and linking the practical and theoretical elements of the process of teaching and learning all contribute to the ITE student's professional development and sense of professional identity. In addition, Daly et al (2020:234) suggest that encouraging reflection to build the "curiosity of the student" is an important element in the process.

The Selection of Mentors

The selection of subject mentors has attracted considerable discussion in the literature. Ambrosetti et al (2014:230) and Aderibigbe et al (2016:16-17) agree that mentors should be selected because of a range of personal characteristics which they possess including qualities of nurturing, professional integrity, honesty and sincerity. Mentors should be good listeners, open-minded and models of effective professional practice. Most importantly they should be committed to the work of mentoring and be willing to allow to encourage risk-taking and allow their students to explore alternative strategies which they themselves might have reservations about.

Johnson and Howe (2003) stress that it may be equally useful to ensure that prospective mentors who demonstrate negative personality traits should be deselected. Mentors should guard against being judgemental (Hobson and Malderez 2009) or being unavailable to resolve any problems their ITE students may be experiencing. Prospective mentors who exhibit these negative characteristics are highly unlikely to be able to foster either a productive professional relationship with their ITE student (Gardiner 2008) or to be able to help them to develop their professional learning.

Schools do vary about how mentors are chosen. They may be experienced teachers or relative newcomers to the profession. They may be personally committed to the mentoring process or selected by the senior mentor or the senior leadership team at the school. They may be encouraged to apply through incentives offered or view involvement in the mentoring process as a means of career progression.

However, even when great care is taken in matching mentors and ITE students there may still be pitfalls in the relationship. These include a failure to establish a rapport, or the lack of professional commitment by either party. If a mentoring dyad fails to develop the necessary mutual trust, then it may be appropriate to consider whether a different pairing may be more beneficial or productive though this decision should not be taken until all parties involved are convinced that this is the best course of action. (Shanahan et al 2015).

Supporting the continuing professional development of subject mentors has traditionally been considered to be the responsibility of the partner institution. However, researchers such as Jones (2018) and Ulrik and Sunde (2013) commented that the quality of such provision was variable and addressed the informational and administrative aspects of the process to the detriment of enquiry-based issues mentors wished to explore, including links between research, mentoring theory and practice. Langdon (2014) suggests that even expert and experienced teachers find the transition to mentoring challenging, and she argues that the opportunity to engage in problem solving activities with their peers and discussion of the theoretical frame works of mentoring may impact positively on the quality of practical support they are able to provide for their students and their own understanding of the mentoring process.

Availability/ Accessibility

The importance of regular meetings between the ITE student and the mentor is recognised in the literature (Aderibigbe et al 2016; Daly et al 2020). Sood et al

(2022:616) remark that "mentoring is a time-consuming activity" but they recognise that the availability of the subject is perceived as crucially important by ITE students (ibid).

These meetings provide opportunities for subject mentors to scaffold students' learning through collaborative dialogue. Daly et al (2020:236) conceptualise the learning process for the student as the "result of interaction through dialogue" which can be the product of informal or more detailed discussion. They argue that such experiences are valuable in developing student learning and sense of professional identity. ITE students in the case study schools in this study emphasised that ready access to their subject mentor provided reassurance and emotional support. The willingness of subject mentors to be available for informal discussions during the school day or in the evenings via email increased the students; self-confidence and self-efficacy and will be discussed more fully in Chapter 4.

School context

The process of mentoring is inevitably contextualised within the individual and unique community of practice. Mentoring occurs within "the context of variable and powerful school cultures" (Langdon et al 2013) and the cultural norms, values and rituals of the placement school inevitably influence the process.

Mentors may perceive the cultural component of their role to help their ITE students to "fit into" the cultural community of the school and become accepted over time as members of that community or accept the challenge of helping their students

to develop into independent practitioners who are able to teach effectively in any cultural context.

The role of school leaders in establishing a culture which supports the process of mentoring has attracted some attention in the literature. Cunningham (2007) identified the challenge facing school leaders in providing an effective and supportive institutional framework or architecture for mentoring. Darwin (2000) indicates that mentoring can transform the culture of educational institutions if supported by school leaders. He stresses the importance of the role institutional leaders play in introducing models of mentoring which espouse, change. or challenge the status quo. This will be discussed further in Chapter 4 findings below.

Formal mentoring

Formal mentoring describes the process whereby mentors and ITE students are matched by a third party, for example, a university department of education, and the expectations regarding the structure of the mentoring programme within the school are set out, as are the issues to be addressed throughout the practice. Though formal mentoring practice may vary from one institution to another it is the degree of intentionality which characterises the practice most clearly. The activities are planned, structured, and organised and development is sequential and logical. In terms of organisational clarity there would seem to be a great deal to commend in this formal mentoring process. However, there may be caveats some of which are identified in the literature. Some mentors and ITE students may find this approach too prescriptive and lacking in the elements of spontaneity and flexibility which more informal mentoring

programmes may include (Bozeman and Feeney 2007) to the detriment of the needs of the mentor and/or the ITE student.

Informal Mentoring

Informal mentoring may be construed as both the complement and the antithesis of the formal mentoring process. Informal mentoring is not dependent upon the assignment of a mentor to a student by a third party. Indeed, informal mentoring may develop quite spontaneously as one or more members of a school subject department offer support and advice to an ITE student with whom they have professional contact. The agenda for discussion is frequently determined by the ITE student; Morton-Cooper and Palmer (2000) claim that this process may have immediacy in terms of responsiveness to the needs of the individual which formal mentoring lacks.

Informal mentoring may demonstrate a more collaborative relational approach than formal mentoring, but the aim of the process is essentially the same i.e., to develop the student's professional craft knowledge and to nurture the development of learning and professional expertise.

Varney (2009) believes that informal mentoring can also aid the socialisation and integration of the trainee into the school community. However, he also identifies a possible caveat to informal mentoring by questioning whether the closeness of the personal relationship sometimes obstructs professional learning. In addition, time is not made available on a regular basis and meetings are therefore dependent on the

goodwill of the colleagues. Thus, the process necessarily lacks the organisation and structure of the formal mentoring programmes.

Clearly, both of the above approaches to the mentoring process have advantages and disadvantages, but together they would seem to support the perceived and articulated needs of ITE students. Perhaps the "best practice" regarding the mentoring of ITE trainees is a combination of formal and informal mentoring approaches (Morton-Cooper and Palmer 2000) which Fassinger and Hensler McGinnis (2005) term "intentional mentoring" to allow ITE students to access a mentoring programme which is formal and structured yet also truly developmental and based upon supportive professional relationships. In Chapter 4, I comment further on how the process of mentoring is perceived and practised in each of my case study schools.

The Senior Mentor

In this section I use the term "senior mentor" to describe the senior member of staff who is responsible for supporting a team of subject mentors within the school and for working with ITE students during their school placement to provide a positive professional experience. In this sense it encompasses the terms "professional mentor" and "general mentor" which some universities and training agencies choose to employ. As this research was conducted before changes in the role which culminated in the descriptor of "lead mentor" I shall in this section of my study consider only the role of "senior mentor".

The senior mentor is frequently perceived by ITE students and subject mentors as the "active leader" (Carney and Hagger 1997) of the mentoring process within the placement school. The role encompasses many responsibilities, and the personal experiences, values, and perceptions of the role incumbent also influence practice. The senior mentor has the overall responsibility of co-ordinating the practical and professional experience of ITE students within the school by developing, supporting, and monitoring the work of their subject mentors (McIntyre, Hagger and Burn 1994) and fostering the development of a mentoring culture within the wider school community. These challenges within the role will be explored further in Chapter 4 where research findings relating to my three case study schools are discussed.

School Administrators

On a practical level school leaders and administrators can do much to facilitate the development of an effective system of mentoring within the school. Kilburg and Hancock (2006) based on a two-year study of 149 mentoring teams in four school districts documented the need to resolve recurring problems which had an adverse impact on productive mentoring within the school. Obstacles identified included a lack of time provided for mentoring, and a failure to provide a space for mentoring (Andrews and Quinn 2005; Gilbert 2005). Kilburg and Hancock (ibid) found that, providing ITE students with policy documents and information routinely given to new staff recognised the influence of mentoring as a pervasive force within the school community. and reinforced the status of the student as a member of the community.

Summary

The increasing complexity of teaching in the new millennium has emphasised the need for a reappraisal of the needs of student teachers. Fullan (2000) suggested that on-going research into pedagogy, the development of information technology, the changing learning styles of ITE students and pupils have challenged traditional mentoring theory and practice as "insufficient" to meet contemporary needs and that new approaches such as acceptance of concepts such role fluidity and dialogic learning conversations must be considered to enable the process to evolve. Such new approaches include the need to recognise the mutuality, reciprocity and equity that are consistent with the principles of educative mentoring in which both mentor and student are recognised as learning from the process.

In this chapter I have set out with reference to a range of literature the subjective values and perceptions which researchers claim influence subject mentors in their approach to the mentoring of ITE students. I then considered the models of mentoring identified and defined in the literature and reviewed the process of mentoring as practised in my case study schools at the time of my research.

In the next chapter I set out my research design and methodology.

Chapter Three: Research Methodology

The task of a research methodology is to explain and justify the research decisions made (Clough and Nutbrown 2002:23). These are complex issues, and I began by considering which research paradigm best supported my chosen research approach and thus allowed me to explore critically my research questions. I appreciated that my choice would need to reflect "fitness for purpose" (ibid).

I was influenced by Furlong's view expressed at a BERA conference in 2004 that "different research traditions have a great deal to contribute to the core purposes of research" (Furlong, 2004:352). This view which celebrates diversity within research methodological approaches was echoed by Feilzer who argued for an "alternative worldview" (Feilzer, 2010:7) and a pragmatic philosophical research approach.

This pragmatic approach is a research strategy which Johnson et al (2007:112) believe should be formally recognised as "a research movement with a distinct identity". Denscombe (2008), Johnson and Onwuegbuzie (2004) and Cresswell (1995) emphasise that the mixed methods approach incorporates ideas and practices that separate the approach from the other main research paradigms and offers the opportunity for researchers to combine qualitative and quantitative approaches within a single research enquiry. Denscombe (2008) argues that this research paradigm possesses the flexibility necessary to pervade a multi- layered approach which is characterised by methodological pluralism.

Pragmatism is generally regarded as the philosophy which underpins mixed method research enquiries. Several researchers including Johnson and Onwuegbuzie (2004:17) assert that pragmatism offers "an immediate and useful middle position philosophically and methodologically". It allows researchers to examine and utilise perceptions and processes gained through quantitative and qualitative approaches, and the key criterion for judging knowledge is how useful it is perceived to be in providing credible answers to the research questions. Thus, the research is problem driven (in the sense that the emphasis is focused on the research enquiry and the questions and answers revealed). This seemed to me to be a constructive and helpful methodological approach to employ as it allowed me the flexibility to conduct empirical qualitative enquiries using a range of research tools and use elements from these to provide a fuller response to my research questions. In addition, it offered an opportunity to move beyond sole reliance on one qualitative research tool and offset the limitations which this would necessarily possess (Tashakkori and Teddlie 1998).

Denscombe (2008:273) argues that such a methodological approach can increase confidence in the accuracy of the research findings. It provides for triangulation, convergence, and corroboration (Greene et al 1989) and allows for "an all-embracing vision of the subject" (Denscombe 2010:141). Researchers who employ a pragmatic approach realise that there is no "indisputable knowledge" (Denscombe 2001:148). Instead, they accept that all knowledge is provisional, and that truth is not universal. Knowledge is indisputably linked to its temporal, historical, social and cultural context.

In conclusion, disputes about competing research methodologies are unhelpful and unproductive and justified my decision to site this research study within the "broad church" of pragmatism.

A multiple methods research methodology emphasises how the elements can be combined to explain and elucidate the research questions more fully. Pragmatism may indeed be "a research paradigm whose time has come" (Johnson and Onwuegbuzie 2004) and "a methodological approach suitable for the 21st century" (Denscombe 2008:271). It was the most suitable research approach for me to adopt as it ends the "fruitless speculation" which characterised the paradigm wars (Feilzer 2010:7) and instead focused on the most important and central methodological issue of whether this approach has the potential to answer my research questions (Hansford 2008).

Research Design

My research design was a multiple method qualitative design (Creswell 2014) and utilised a range of qualitative research strategies. Qualitative research is an investigative approach that aims to understand and interpret experiences through the subjective perceptions of those involved in the process which are subsequently interpreted in textual form. Data were collected through large scale qualitative survey then three small scale case studies involving semi-structured interviews, observations of student lessons and mentor feedback meetings. Adopting a qualitative research approach offered me the opportunity to consider the subjective views of mentors and ITE students and recognise that their values and experiences. In addition, I recognised

that my own subjective values influenced the way I conduct research and consequently the interpretations I constructed (Walliman 2021).

Questions of reliability and validity are important issues to consider in research design. In qualitative research these notions tend to be framed as credibility, rigour trustworthiness and robustness (Lincoln and Guber 1985). Credibility demands that the research achieves 'intimate familiarity' (Flick 2014:490) with the topic, provides enough data to merit the claims made as well as a strong and logical link between the data gathered, the robustness of analysis and the contributions derived. Throughout this thesis I aim, through the provision of thick descriptions of the cases, to ensure that the research is credible according to these criteria. Similarly, I aim to meet the requirements of trustworthiness which include 'prolonged engagement' and 'persistent observation' (ibid) in the field using triangulation of multiple methods with diverse participants using varied forms of data. I reflect on how I negotiated the research process in Chapter 5.

The research questions in this thesis demand insight into the day-to-day practices of subject mentors to ITE students in schools. The research design created the opportunity to collect such data in a rigorous manner that I have subjected to robust data analysis in order that the findings are both credible and trustworthy.

Research tools

Surveys

The large-scale survey took the form of a postal survey to seek the views of subject mentors in Wales concerning their conceptual understanding of their roles, their attitudes to their work, and their opinions concerning the process of mentoring. This allowed me to obtain an overview of current approaches to mentoring in Wales today through gathering "descriptive, behavioural, and attitudinal data" (Rea and Parker 1997) and to target a wide population and collect data and provide descriptions of participants' perceptions, preferences, and values. This was used to frame the indepth case studies, as set out in Chapter 4. My original intention was to gather attitudinal data through Likert-scale questioning however this element of the survey, despite piloting, was less informative than I had hoped. However, several the respondents chose to write on the survey response and elaborate on or explain the reasons for their approaches to mentoring (see appendix 10). I have chosen to use these responses as part of the qualitative dataset as these are reported in Chapter 4.

The survey data responded to RQ1: the perceptions and values mentors in Welsh secondary schools bring to their role. Some respondents chose to comment upon and/or explained their perceptions and values which informed their mentoring stance.

Questions 1, 2, 3, 4, and 12 consider respondents' perceptions of the Master/Apprentice model of mentoring, whilst questions 5, 7, 8, 9, 10, 11, and 13

indicate levels of support for a rather more collegial approach to mentoring. I discuss my broad findings section in Chapter 4, and how these shaped my approach to the case studies. I wished to consider if mentors' perceptions of their role are "idiosyncratic" or if the data reveals that support for one approach is predominant.

Surveys provide a snapshot of how things are at a specific point in time (Cohen and Manion 2007) and typically are "well suited to the collection of mass data" (ibid) providing me with a broad contextual overview which provided some insights into mentoring in Wales. Some limitations have been identified in this research strategy. Bateson (1984) contended that surveys depend in the first instance on respondents' willingness to be involved and cautioned that care must be taken when conducting a survey to ensure that questions are clear and unambiguous. However, respondents' reported views and opinions that may not accord with their actions, and I noted that the issue of dissonance remained a possibility (Hartas 2010:258).

I constructed a survey which focused on exploring the values and perceptions which influenced subject mentors in their approach to their work. I was aware of several ethical issues which needed to be addressed before constructing and activating the survey. Firstly, I understood that survey respondents should not be viewed as passive data providers for researchers and should not be treated as such. I recognised that informed consent must be sought and gained from all participants and that they had the right to withdraw that consent at any time. In addition, I noted their right not to complete items in the survey. Finally, I provided guarantees on confidentiality, anonymity, and non-traceability in the research (Cohen et al 2010:377)

ensuring that participants' identities were disguised and that all references which might identify the case study schools were removed from the research report.

I accepted the views of Cohen and Manion (2007:333-337) that questions needed to be simple and should have "high value interest" to encourage participation.

I employed rating scales as Cohen and Manion suggest that these are particularly useful for "tapping attitudes, perceptions and opinions" (Cohen and Manion 2007:328) of the research population, in my case, those of subject mentors in Wales regarding their role.

Cohen and Manion (2007:334) suggest that rating scales possess a number of strengths and advantages:

- They are east to administer and can target large research populations,
- They can access personal traits, values and perceptions.
- They offer participants a variety of possible responses.
- They can gather specific, detailed, and nuanced feedback.

However, Cohen and Manion have also suggested that there may be limitations which researchers should be aware of:

- Rating scales lack depth.
- Respondents' cannot explain the reasons for their responses.
- There is no way of checking that the questions have been understood as the researcher intended.

My survey invited participants to respond to a series of Likert scales as Cohen and Manion (2007) and Thomas (2016) concur that such rating scales can indicate a set of attitudes relating to a specific area: and my survey questions provided participants with a range of possible answers to choose from and subsequently coded responses into numerical values from 1 to 5 e.g.

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

The questionnaire was constructed in three sections (see appendix 1). Section one explored mentors' perceptions of their roles whilst section two invited comment on the impact of mentoring on the cultural community of the school. The third section addressed the issue of partnership between schools and HEIs and canvassed mentors' views on this.

The questions I created were informed firstly, by my experience as a subject mentor, though I acknowledge that they were also influenced by the literature I had read at this time.

Piloting the Survey

I conducted a pilot process in the creation of the survey. I appreciated the importance of ensuring that questions were clear and unambiguous. In addition, I

wanted to identify any questions which seemed to be commonly misunderstood (Cohen and Manion 2007:341) or even redundant. The survey was sent to 20 English secondary schools unconnected with this study and after analysis of the responses to some questions amendments were made to enable respondents to focus more clearly on the issues, I wished them to explore.

I also arranged for the survey to be translated into Welsh and piloted the translation with two of my former students who are first-language Welsh speakers to ensure clarity and symmetry between the Welsh and English versions of the questionnaires.

Piloting the survey allowed me to gather "descriptive, inferential, and explanatory information" (Cohen et al 2011:256) relating to my research questions. I considered the format of questions in the light of the responses to my piloted survey in terms of utility, bias, specificity, and clarity of purpose, and made a number of amendments before operationalising the survey to my chosen population. For example, question 1 in the pilot survey read as follows:

Mentors should provide trainees with details of suitable teaching strategies to follow.

In the post pilot questionnaire this was changed to:

Mentors should provide their students with details of a variety of teaching strategies to consider.

The change from trainee to "student suggests an emphasis on initial teacher education rather than training and in the post pilot version responsibility for the

consideration of a variety of teaching strategies has been shared between mentor and student in contrast to the master/apprentice implication in the first example.

The final survey was organised in three sections (see appendix 1). Section 1 (questions 1-14) sought to elucidate respondents' perceptions of the mentoring process and invited comment on the values which informed their work, Section 2 (questions 15-18) explored the cultural dimension of mentoring and asked respondents to rate the significance of this within the mentoring process. The final section of the questionnaire asked for respondents' opinions of the current partnership arrangements between schools and universities and about how mentors were selected in the partner schools and the training they were given in preparation for the role.

Hard copies of the survey were sent to senior mentors in secondary schools throughout Wales for distribution to subject mentors, along with an explanatory letter (appendix 2). The subject mentors were invited to tick a box to indicate their response on the rating scale.

Operationalizing the Survey

Robson (1991) suggested that postal surveys can suffer from relatively poor response rates. To encourage responses from participants I telephoned each secondary school in Wales to enquire if they were involved in Initial Teacher Education with any agency including universities, Teach First Cymru or other programmes. I asked for the name of the senior mentor and if possible, made an appointment to speak to her to explain the purpose of my research and to ask for her permission to send

copies of my survey to her for distribution to her mentoring team. The surveys were sent first class to demonstrate my belief that mentors' views were important. Each mentor received a sealed envelope containing an individual copy of the questionnaire, a covering letter explaining the focus of my research study, and a stamped addressed envelope for ease of return to me, I suggested a return date of three weeks to allow respondents a reasonable timescale for completion though I stated that I would welcome further returns after this time if this was more convenient for respondents.

Qualitative Research Strategies

My research design enabled me to develop and explain my quantitative data through a qualitative enquiry (Yin 2014:64). Qualitative research is not primarily concerned with generalisation, as the aim and value of such research is to record descriptions of instances and to discuss themes which may emerge which relate to them (Creswell 2014:203; Thomas 2016). Particularity rather than generalisation is the aim of qualitative research, and this has been my focus in this study. I believe that a study of a process such as mentoring in a unique context may not only be valuable as a source of rich data but may also form a basis for corroboration of the findings on a wider scale.

Thick descriptions

The qualitative research methods which I adopted in my study provided "thick descriptions" (Ryle 1949, Geertz 1973) rich, detailed, and nuanced accounts of how the process of mentoring was perceived and practised in my three case study schools.

Ryle (1949) introduced the concept of thick description by contrasting it to "thin" description. Thin description remains at the surface level in that it is content to document what is observed without attempting to explore or comment upon any deeper significance or meaning. There is no attempt to interpret the data and in consequence thin description may result in an incomplete or possibly a misleading picture of the research participants' views. Thick description uses vivid descriptions, illustrative examples and direct quotations from the data sources such as interview transcripts, memos and field notes to "go beyond the surface" (Geertz 1973; Denzin 1989; McLeod 2024) and to explore the underlying meanings of the comments of research participants through detailed analysis of complex and intricate details.

Denzin (1989:83) suggested that "a thick description...does more than record what a person is doing. It presents detail, context, emotion and the webs of social relationships that join persons to one another". Schwandt (2001:255) emphasised that "thick description is not simply a matter of amassing relevant detail. Rather to thickly describe social action is actually to begin to interpret it by recording the circumstances, meanings, intentions, strategies, motivations and so on that characterise a particular episode. It is this interpretive characteristic of description rather than detail per se that makes it thick". Thick description builds up a clear picture of the individuals and groups "in the context of their culture and the setting in which they live" Holloway (1997:154).

In the next section of this chapter, I set out how I conducted case studies in three mixed comprehensive schools in south and mid-Wales.

Case Studies

My case studies were undertaken in three mixed 11-18 comprehensive schools in south and mid Wales. They were selected as they fulfilled the following criteria:

- they represented different socio-economic and cultural communities and so provided distinct contexts for my research.
- they were associated through partnership in mentoring ITE trainees from different HEI's in Wales, including Teach First Cymru.
- they expressed an interest in exploring and explaining the principles which guided the mentoring process within their individual communities of practice.

Lincoln and Guba (1985:360) point out that there is little agreement amongst researchers as to what a case study actually is. In response to this comment, I feel that it is important to explain why I chose to conduct a case study enquiry.

Simons suggests that "case study is" an in-depth exploration from multiple perspectives of the complexity and uniqueness of a particular project, policy, institution, programme or system in a real-life context" (Simons 2009:21) using "multiple sources of evidence" (Robson 2002:178).

Case study has been described as "probably the most flexible of all research designs" (Hakim 1987:60) in that it offers the researcher the opportunity to combine exploratory and explanatory work from multiple sources to answer her research

questions. It has been compared to using a spotlight or microscope to provide a "richly detailed portrait" (Hakim 1987:60; Thomas 2016) of the research topic.

Thomas (2016:4) claims that case studies can provide answers to questions of "how" and "why" and explain research questions which address these issues (Yin 2014:16; Thomas 2016:4). This seemed to me to be applicable to my research questions which seek to understand the values and perspectives held by individual subject mentors, and to explore how they enact the process of mentoring in their specific socio-cultural contexts (Thomas 2016:4).

Case studies depend on careful, well documented empirical research practices and I ensured that I collected "sufficient" data from multiple sources including semi - structured interviews, informal conversations, professional studies meetings, lesson observations and feedback sessions to allow for the exploration of the case and the. construction of "plausible" arguments and interpretations (Bassey 1999:75; Thomas 2016:14). I followed these practices to ensure that my research findings were valid and reliable.

I set bounds for my study as advocated by Stake (1995), Yin (2014) and Thomas (2016) and adopted a multiple case design to minimise charges of subjectivity and increase the potential for replication (Yin 2014:64). In the next section of this chapter set out in some detail the research practices I followed to ensure that these requirements were met.

Data Collection

Data were collected for the case studies from a variety of sources, including semi-structured interviews with subject and senior mentors, observation of students' lessons, and feedback sessions with the mentors that followed. I also conducted interviews with ITE students to listen to their comments about how their mentors had worked with them to develop their professional understanding of teaching and learning and facilitate their membership of the community of practice. Transcripts of my schedule of interview questions with mentors and ITE students are included in the appendix. The data provided me with multiple means of analysing how the process of mentoring was perceived and practised by stakeholders within each case study context.

The next section of this chapter describes more fully how data were collected from mentors in the case study schools.

Interviews

I wrote to senior mentors in my prospective case study schools and requested permission to undertake a series of interviews with their subject mentors. I planned to hold a series of face-to-face interviews whenever possible rather than telephone or online interviews to allow me to consider non-verbal cues and gestures as well as oral comments in order to gain an in depth understanding of mentors' practice from several perspectives.

I piloted my interview questions with subject and senior mentors in schools which were not selected as case study schools and included prompts and probes to ensure that interviewees felt they could influence the interview agenda and discussion. The interviews were recorded with the informed consent of the participants and varied in length from 15 minutes to an hour. Data were transcribed and offered to participants for clarification or amendment. If participants stated that they would prefer that the interviews were not recorded, perhaps for reasons of self-consciousness, I made detailed field notes which I later transcribed and reflected upon.

Kvale states that "the varieties of research interviews available approach the spectrum of human conversations" (Kvale 1996:13) and that such interviews were potential construction sites for knowledge" (Kvale 1996:14) as they allow for an exchange of views between interviewer and interviewee.

Cohen and Manion (2007:411) define a research interview as "a two-person conversation". They warn that is sometimes suggested that interviews may be prone to "researcher bias" and I noted the need to guard against this. However, on a more positive note they suggest that interviews can provide "extensive" opportunities for researchers to gather data which are directly relevant to the research enquiry.

Interviews vary upon a continuum from unstructured to tightly structured, but I chose to use a semi-structured interview format for the following reasons. I felt that semi-structured interviews would enable me to learn about the values, attitudes and perceptions of individual mentors and to understand how these shaped their practice more fully than formal structured interviews. Semi-structured interviews allowed me to

prepare in advance a schedule of topics which I was interested in exploring with the mentors in each of my case study schools but began by asking each mentor a general question such as "what do you think is the most important aspect of your role as a mentor?" I was content for the interview to continue and for the subject mentor to raise topics she considered to be significant. There was then the possibility of a dialogic discussion during which I could ask the occasional direct question to ensure that I was able to access and understand the subjective values and perceptions of the mentor. If I felt that, I needed to develop the discussion further I was able to probe to ensure that I had understood her views accurately.

The data collected provided insights into the values and perceptions of mentors in my three case study schools through accessing the subjective views and opinions of participants in particular contexts which helped me to answer my research questions.

Group Interviews

One of my case study schools volunteered to convene a focus group meeting of four of the school's subject mentors to discuss their views of the process of mentoring.

I was careful not to attempt to lead the discussion in order to allow them to comment freely on their approach to supporting their ITE students' practice, though I asked some additional open questions to ensure that the mentors considered the research areas I was interested in.

This experience provided me with the opportunity to explore simultaneously the attitudes of several mentors, with similar levels of experience and expertise, toward the mentoring process. It provided the mentors with an opportunity to discuss their perceptions of their roles and gave me the opportunity to listen to alternative points of view put forward by individual subject mentors within a specific professional learning community. However, some reservations have been expressed by researchers in the field, and these now need to be considered. For example, there are possible limitations in a group interview in that in such a situation some staff might be reluctant to speak up or others might dominate the conversation. In addition, the trustworthiness of interview data has been questioned with respect to the truthfulness of the answers given by interviewees. However, triangulation with other methods of data collection such as survey or questionnaire responses provided me with an effective way of checking for accuracy and authentication (Denscombe 2010).

Lesson Observation

To complement my programme of semi-structured interviews with subject mentors and ITE trainees in my case study schools I carried out a programme of lesson observation. This provided me with "a systematic technique" for collecting "live" data in "naturally occurring social situations" (Cohen et al 2012:457). Robson makes the point that "what people do may differ from what they say they do" (Robson 2002:310) and direct observation where the researcher merely records what they see is more likely to produce accurate data (Foster 1996:13).

The focus of my observation was upon the nature of the relationship and character of interaction demonstrated between the subject mentor and the ITE student during the lesson. This provided relevant and useful data which contributed to my understanding of subject mentors' attitudes toward student autonomy, and traditional or collegial models of mentoring. This related directly to my first research question which aimed to understand how individual mentors understood and perceived the mentoring process within their school.

I adopted initially a semi-structured approach to lesson observation. I began by employing a quantitative structured approach which recorded data by using a standardised observation schedule (see appendix) during the lesson and used a checklist to record the frequency and duration of mentoring interventions. This provided a useful overview of proceedings.

However, I realised that for my research study such an approach was insufficient as it recorded only the number and timing of mentoring interventions without describing the nature of this activity. Therefore, I supplemented these data capture sheets with field notes which recorded my impressions of significant incidents during the lesson (see appendix). In short, I added a qualitative dimension to my lesson observation. Qualitative observation methods emphasise "social meaning and the cultural context of behaviour" (Forster 1996:4). The observational data obtained in this manner contributed to my understanding of the impact of the culture of the case study schools on the behaviour and perceptions of subject mentors and ITE students and provided data for my second research question which focused upon the nature of the relationship which subject mentors established with their ITE student(s), and how they

facilitated the professional development of their students and introduced them to the wider socio-cultural community of the school.

I was not able to request that I observed particular lessons with regard to key stage or subject area in any of my case study schools. In each case my visits were curated by the senior mentor, and I was invited to visit the school on specific dates and provided with a list of ITE lesson to observe, usually in the company of the subject mentor. If it was convenient I then attended mentor feedback sessions. Two of the case study schools allowed me to arrange to speak to their ITE students informally and I arranged convenient dates to interview subject mentors in the future.

Forster (1996:5-6) argues that researchers should bring to the process of observation a relatively open mind, minimise their preconceptions, and respond to the evidence which emerges. As I gained experience in lesson observation I began to follow this advice, utilising whichever approaches seemed to me to be most likely to provide data which would answer my research questions.

In conclusion I chose to use observation as one of my research methods because I realised it could provide me with detailed information about verbal and non-verbal interaction between mentors and their students which could not be obtained from interviews or from documentary evidence. I exercised caution in accepting participants' own accounts of their behaviour as I was aware that these could be misleading for several reasons. The information might not have been systematically recorded or might have been susceptible to deliberate distortion by an individual.

However, I recognised that this a very valuable source of rich data which could yield thick descriptions 1976 (Geertz) and illumine values and perceptions. Lesson observation helped me to appreciate that processes and features of the school environment are often taken for granted by members of the school community so that they may be unable to describe or evaluate them clearly. Observation provided an opportunity for me to appreciate the complexity of the school culture and "see the familiar as strange" (Delamont 2002:171).

I realised that though observation is an important research strategy it also has some limitations as a method of collecting data. Sometimes school personnel are reluctant to allow researchers to observe their practice and key gatekeepers may deny access. More significantly, I realised that observation by itself can provide only a partial view of the situation and researchers may regard it important to obtain further information about the intentions, motives, perspectives and meaning of what is observed. In consequence Forster emphasises that "observations are inevitably filtered through the interpretative lens of the observer" (Forster 1996:14).

Another problem may be that phenomena such as values and perceptions may be difficult to identify through direct observation. This suggests that observation needs to be balanced with other research approaches such as feedback sessions or individual interviews to gain further understanding of the perceptions of mentors and ITE students about the mentoring process.

In the next section of this chapter, I set out the additional research approaches

I undertook to develop my understanding of the subjective values and perceptions

which influenced individual mentors in their approach to their role in each of the case study schools.

Feedback Sessions

The observation of several lessons taught by the ITE students allowed me to look critically at the process of mentoring in my case study schools and provided valuable data to help in answering my research questions. However, I also observed, whenever possible, the feedback sessions which followed the lesson as I felt these illustrated the importance which individual mentors attached to explicit aspects of their work and set out how they conducted their mentoring practice.

I recognised that through my presence, albeit as a non-participant observer, there was a risk that one or both members of the mentoring dyad would act in an atypical fashion. However, with this caveat in mind I attended as many post lesson feedback sessions as possible to gather data about the nature and scope of the process of mentoring as defined by each mentoring dyad in their individual context.

These feedback sessions took place at various periods of time after the lesson, ranging from an immediate debriefing to conversations at lunchtime, at the end of the school day, or during a designated mentor period. In formal mentor meetings I asked permission of both participants to audio record the session and sat out of their sight. In addition, I noted, through brief handwritten field notes, the points which I felt would provide data for my subsequent deliberation and reflection, with reference to my research questions about the process of mentoring within the school.

If the subject mentor or the student teacher was reluctant to proceed whilst I was present, I respected their wishes and did not attend the feedback session. In those instances, I was frequently able to gain access to their perceptions of the mentoring process in their school by other methods e.g., individual interviews or less formal conversations which might take place at break or lunchtime. I was invited, for example, to informal collaborative planning sessions in several subject areas in my case study schools where I was able to observe how individual subject mentors used their professional expertise and craft knowledge to guide, support or challenge their ITE students as appropriate and to encourage them to focus upon how the activities they had planned would enhance pupil learning. As student L in case study school C remarked "I'd show her my plan and she'd tweak it a bit".

In conclusion, my lesson and feedback session observations provided me with the opportunity to gain empirical knowledge of the process of mentoring in my case study schools. They provided me with the opportunity to reflect upon the meanings of what I saw and heard, and to listen to the "voice" of the participants (Clough and Nutbrown 2002).

Ethical Considerations

Ethical considerations are an important element in research practice (Denscombe 1998; Hartas 2010). In consequence before undertaking any action in the field I submitted my research proposal to the Ethics Committee of the University of Wales Trinity Saint David for approval. I appreciated that ethical approval from the Committee was essential before I began to collect primary data from research

participants involved in either my survey of mentors' attitudes or my subsequent indepth case studies of selected schools.

Ethical codes devised by organisations such as the British Educational Research Association (BERA) provide guidelines and advice for researchers seeking ethical approval for their work and in my research proposal to the Ethics Committee of the University I emphasised that I was cognisant of these. After obtaining approval from the University Ethics Committee to undertake my research study I wrote to all schools in Wales involved in my initial survey or subsequently in my case studies. I explained the nature of my study and promised to respect the anonymity and confidentiality of all respondents. In seeking informed consent from participants, I made sure that participants were aware that involvement was completely voluntary and that consent to participate in the research could be withdrawn at any time.

Hartas (2010) in her discussion of ethical considerations in Educational Research identifies several principles which he argues should underpin such studies. These include the principles of non-maleficence, fidelity, beneficence, and autonomy.

Non-Maleficence

The principle of non-maleficence suggests that a primary concern of the researcher should be to "avoid harm" (Hartas 2010:113) to the participants involved in the research process. Denscombe (2010) links this to the issue of safeguarding the interests of all respondents involved in the research study. He identifies several

categories which could impact adversely upon participants involved in the research process, including physical and psychological harm.

I recognised that I had a responsibility to investigate these issues. I concluded that the risk of physical harm to participants was a remote possibility. The issue of psychological harm seemed to be more relevant. To minimise the risk that participants did not suffer any trauma through their involvement with the research study I promised to respect any sensitive information, such as, for example a lack of support or recognition for the mentoring process within a school, which emerged and ensured that comments were not attributable to individuals (Denscombe 1998:331).

Beneficence

The principle of beneficence is as Hartas (2010:114) concedes "a challenge" for educational researchers. He argues that it may be the case that there will be no direct benefit to participants. I contend that in this study the opportunity for individual subject mentors to reflect on practice, motives and attitudes had positive and personally valuable implications for themselves and promoted professional dialogue within individual communities of practice. Additionally, the cumulative views of participants informed the discussions about the process of mentoring in Wales today.

I appreciated the need to strive for accuracy and trustworthiness in my research study. I took care to record and transcribe data as faithfully as possible and ensured that my actions were carried out with honesty and integrity. I promised participants that the data I collected would be analysed robustly and that I would provide a "balanced

and dispassionate" interpretation of the findings (Denscombe 1998:336). In addition, I took care to avoid a charge of plagiarism by acknowledging the work of those writers and researchers who directly influenced my understanding of ethical and academic issues.

Autonomy

The principle of autonomy ensures respect for the views of the individual research participant (Hartas 2010). This is an extremely important ethical issue. I have taken care to ensure that my own views do not dominate in the study and that through dialogic questioning and listening to responses the attitudes and opinions of research participants emerged.

My final ethical concern was to ensure that data was stored safely and that participants were confident of the security of the provision I made so that there was no possibility of a breach of confidentiality. In conclusion I acknowledge once again that ethical issues are a significant factor to consider during the research process. I was aware that it was important to respect and protect all those who participated in my research study. I recognised that the ethical dimension of my research was a very important element and took care to consult and follow the BERA guidelines, I anonymised the identity of all participants and the schools within which they worked and promised to ensure confidentiality of individual views expressed in discussions.

Reflexivity

Berger suggests that reflexivity is the process of "a continual internal dialogue and critical self-evaluation" (Berger 2013:2) of the researcher's positionality and recognises that this may affect the research process and outcomes. It involves in her view "turning the researcher lens back onto oneself" (ibid) and undertaking a process of self-appraisal.

Malterud suggests that reflexivity starts by "identifying preconceptions brought into the project by the researcher including personal and professional experiences and pre-study beliefs about how things are and what is to be investigated" (Malterud 2001:484). It requires self-consciousness, self-assessment, and self-awareness on the part of the researcher so that she may understand and articulate how these may have directly or indirectly influenced the research design, data collection and interpretation of the research findings (Holmes 2020:3; Greenbank 2003). A reflexive approach suggests that researchers should "acknowledge and disclose themselves in their work aiming to understand their influence on and in the research process" (Holmes 2020:3). This view recognises that researchers are part of the social world they are researching. Bourke (2014) argues that it is important that the researcher recognises that her personal integrity and the social context can influence the research process whilst Moser (1994) argues that researchers should acknowledge and disclose their selves in their research and seek to understand their part in it or influence on it (Moser 1994; Cohen et al 2011; Holmes 2020).

Reflexivity is then a conscious and deliberate process on the part of the researcher to identify for the reader an "audit" of her reasoning, judgement, and

meaning making, which allows her to engage in "self-critical, sympathetic introspection" and the "self-conscious analytical scrutiny of the self as researcher" (England 1994:82). I have accepted the above definitions of reflexivity and have attempted to set out clearly how I have followed their recommendations to ensure readers appreciate my subjective values and perceptions.

Positionality and its Relationship with Reflexivity

Positionality "reflects the position that the researcher has chosen to adopt within a given research study" (Savin-Baden and Major 2013:71) and influences how research is conducted, its outcomes and results (Rowe 2014). I have chosen to locate this study within a socio-cultural research paradigm and have focused upon constructing through my quantitative survey results and dialogic conversations with subject mentors and ITE students, an account of their values and perceptions, to inform my understanding of how the process of mentoring is perceived in my case study schools.

Enoch (2013) defines the concept of positionality as the process of articulating the author's identity in the text whilst Holmes suggests that positionality describes "an individual's world view" (Holmes 2020:1) concerning their ontological and epistemological assumptions. These are coloured by a researcher's values and beliefs which include political affiliations, gender, age, ethnicity, social, cultural, and historical factors (Berger 2013). Foote and Bartell state that "the positionality that researchers bring to their work and the personal experiences through which positionality is shaped

may influence what researchers may bring to research encounters, their choice of processes and their interpretation of outcomes" (Foote and Bartell 2011:46).

I realised as my research progressed that my position as an older female researcher did colour my approach to my research in that it influenced my choice of interview questions, the data I collected during lesson observations, and my response to individual research participants due to my experiential and subjective values. Equally, I believe that it affected the subjective personal responses of individual senior and subject mentors together with the individual staff involved in the mentoring process in each of the case study schools. For example, a newly appointed and relatively inexperienced subject mentor in one of my case study schools adopted a very formal approach in his post lesson feedback session with his ITE student. I was sure that this was not typical behaviour and spent time with him over coffee so that he could relax in future meetings and understand that my presence was non-threatening and that I was grateful for his help in demonstrating the values and perceptions which informed his work as a mentor.

On another occasion I was challenged by the mentor to deliver the feedback to the student whose lesson I had observed. I was happy to begin the conversation but ensured through open questions that I gradually encouraged both the mentor and the ITE student to contribute to the discussion whilst I withdrew and listened to their views.

My Professional Experience

Lincoln and Guba (1985:362) suggest that as part of the methodological review the researcher provides details of her "credentials" for undertaking research on a given topic.

My professional experience as a subject mentor contributed to the development of my positionality in that it provided me with an opportunity to work with a range of ITE students in a large comprehensive school in south Wales and to develop an appreciation of the wide-ranging nature of the mentoring role. My subsequent role as senior mentor allowed me to work with a team of mentors and to offer leadership, guidance, and support as necessary.

My work as a university curriculum tutor added another dimension to my understanding of the mentoring process as I was involved not only in supporting ITE students during the school practicum but also in contributing to the training of new subject mentors. My understanding of the importance of partnership between school and university colleagues to enhance the mentoring experience of their students developed considerably at this time as did my awareness of the range of values, perceptions, and interpretations of the mentoring process which mentors espoused. I noted that subject mentors were eager to discuss how they carried out their work and created opportunities to explore a range of alternatives.

The Insider/Outsider Debate

Mercer (1972) identifies insiders and outsiders as follows: "insiders are the members of specified groups and collectives or occupants of specified social statuses. Outsiders are non-members". Mercer suggests that "the insider/outsider dichotomy is in reality a continuum with multiple dimensions and all researchers constantly move back and forth along several axes, depending upon time, location, participants and topic" (Mercer 2007:1).

Holmes (2020) suggests that researchers should be aware that they are likely to adopt multiple positions during the research process and may be viewed by participants as "insider" or "outsider" at different times, and my experience supports this view. He points out that though etic and emic perspectives are "often seen as being at odds" they may have no clear boundaries and suggests that it is possible for researchers to "straddle both positions", that is, to be on occasion simultaneously both insider and outsider. He argues against a dichotomous view of the terms preferring to regard them as poles of the continuum and suggests that it is important for novice researchers to consider how they perceive these concepts. In addition, he warns that the researcher's psychological stance toward the research participants may change over time as a relationship develops and counsels that it may be necessary to practice "on-going" reflexivity as the research progresses.

I believe that my position in each of my case study schools was initially that of an "outsider" researcher, who was concerned to construct an explanation of how mentoring was understood by all participants involved in the process. I was not a member of any of the mentoring communities I was researching and though my experience as a senior and subject mentor had provided me with some understanding of how mentoring could be enacted I wanted those currently involved in the process within different socio-cultural environments to explain the values and perceptions which guided them in their work within their distinct social and cultural contexts.

As my research progressed, I found that my position as a researcher varied from "outsider" to "insider" in each of my case study schools and with individual research participants. My experience as a senior mentor meant that even though I was unfamiliar with the social and cultural norms and values of the school I was able to empathise with challenges inherent in the mentoring process. This enabled me to move away from the position of "outsider" researcher to that of a more analogous colleague with direct experience of the responsibilities of the role. I recognise that this insight helped me to move toward the position of an insider to some extent though my position as a researcher meant that I remained an observer and reflective reflexive participant in the research process. The responses of the mentors in each of my case study schools varied according to their individual circumstances and subjective positionality which I shall discuss in more detail in my case study reports.

I recognise that the three distinct research contexts within which this study was situated influenced its course. The norms, the social and cultural values of the professional community, and the attitudes and beliefs of those involved in the mentoring process at the time the study was conducted all contributed to the way in which the process of mentoring was enacted and affected my positionality.

In conclusion, I acknowledge that it is important to be a reflexive, reflective and rigorous researcher. Herod (1999) and Holmes (2020) concede that this is "complex" and "difficult" but suggest that it is essential to pay attention to positionality and reflexivity and record the views expressed in the words of the participants. I have tried to set out through "open and honest disclosure" (Holmes 2020) how reflexivity helped me to understand where and how I believe my positionality may have affected my research process. I believe that this should enable the reader to make an informed judgement about the extent of my data and findings to be "truthful". I accept that my interpretation of my research data is subjective and influenced by my values and perceptions. It follows that another researcher analysing the same data set might reach different conclusions.

The Analytical Framework

My analytical framework is based upon my a priori knowledge derived from the literature and my empirical knowledge based upon my experience as a subject and senior mentor. The framework examines my research questions from multiple perspectives and moves from the "merely descriptive" (Thomas 2016:15) toward a heuristic interpretive approach which provides for analysis, explanation, meaning making and conclusions. The research literature suggests that the analytical framework should focus on the research objectives and questions and the theoretical approach which informs my stance, and I have accepted this advice.

My framework is the product of critical reflection which has allowed me to "rethink" my data (Timmerman and Tavory 2022:168). This has encouraged me to

summarise, structure and organise my data and to clarify systematically "how I research and what I see" (Mason 2002:5). My analytical framework emphasises the need for reflexivity, rigour, and critical reflection, which as Srivastava and Hopwood (2009) suggest is designed to "spark insight" and "help to develop meaning" (Srivastava and Hopwood 2009:76) through exploring the concepts and themes which I have constructed from the data.

I recognise that the development of my analytic framework is an "interactive and iterative process" (Timmerman and Tavory 2012:168) which aids me in obtaining an "holistic" overview of the data set (Gale et al 2013). In addition, I am aware that the framework for my study should be "flexible" and "adaptive" to generate "rich and nuanced findings" (Gale et al 2013:) that focus on, and seek to explain, the complexity of the mentoring process as practised in Initial Teacher Education in Wales at the time, by generating codes and categories that are relevant to the purpose of the research enquiry.

Bingham (2022) suggests that a deductive approach to data analysis facilitates the framing, managing and organising of data generated by a research enquiry and helps to focus on the purpose of the research. This "structured and systematic" top-down approach (Stuckey, 2010:10) meant that I defined and applied pre-determined codes drawn from academic literature to identify "commonalities and differences" (Gale et al 2013) within the data to draw relevant descriptive or explanatory insights which supported the development of my analytical template and my subsequent interpretation. This deductive approach provided valuable and relevant data to inform the discussion of RQ1.

My study is designed as a multiple methods enquiry and the analytical framework reflects this approach. I surveyed the attitudes, values, and perceptions of mentors in Welsh secondary schools via survey which asked them to respond to questions on their preferred mentoring practice, their methods of promoting student enculturation, and their views on current partnership arrangements with HEIs. This survey data was reviewed and used broadly to frame how I went about the case studies (see Chapter 4).

Ambrosetti et al (2014) suggested that the process of mentoring included relational, developmental, and contextual dimensions and I have adopted her assessment to structure and organise my data because these constructs have repeatedly been identified in the literature by other researchers in the field including Hudson (2016) Aderibigbe et al (2016) as significant elements within the mentoring process.

I adopted a two stage approach to analysis, initially employing a deductive approach and following this with an inductive process which is explained further below. The initial stage – the deductive process - was an aide to familiarisation with the dataset. The inductive analytical process was far more valuable in responding to the research questions as it provided nuance and depth of insight. This then provided me with the thick descriptions that are reported in Chapter 5 and are the foundation upon which the responses to the RQs are based.

Deductive coding

The tables which follow headed relational, developmental, and contextual dimensions of mentoring identify, summarise, and set out in each case key findings derived from my exploration of the literature. For example: Gardiner (2009) created the construct of "professional friendship" to describe a collegial relational stance within which the subject mentor offered support coupled with challenge to her mentee. I reflected carefully upon the meaning of each concept in each of the following tables and these provided me with a framework to code my data on the relational, developmental, and contextual dimensions of the mentoring process.

Relational dimensions of mentoring

The following table, derived from the literature I reviewed, sets out some of the most significant relational dimensions of the mentoring process as identified by Ambrosetti et al (2017) and provided me with a template for my data analysis. Each a priori code is referenced and described fully.

Code (a priori)	Description	Reference to literature	
Professional friendship	Positive, constructive, supportive	Gardiner (2009)	Professional friendship is a construct used by Gardiner (2009) to explain the nature of the relationship which exists between the subject mentor and her ITE student. She characterises this as a positive, constructive, and supportive relationship but lays stress on the underlying responsibilities which the mentor must fulfil.

Emotional support coupled with challenge	Nurturing, encouraging,	Anderson and Shannon (1986) Daloz (1986)	Anderson and Shannon (1986) were amongst the first to identify the supportive/nurturing aspect of the mentoring process, whilst Daloz (1986) emphasised the need for challenge to exist at the heart of the mentoring relationship.
Non- judgmental	Open- minded	Hudson (2016)	Hudson (2013) suggested that the mentoring relationship should be nonjudgmental so that ITE students can be confident of unqualified support from their mentors.
Master/ Apprentice	Learning to understand the norms of the community	Lave and Wenger (1991)	Lave and Wenger (1981) posit a relationship within which the mentor is regarded as the master and the student as an apprentice.
Legitimate peripheral practice	Limited participation	Lave and Wenger (1991)	Students observe practice from the periphery and gradually over time through legitimate peripheral participation become accepted members of the community of practice.
Available/ accessible	Investing time in the mentoring process	Cain (2008)	Cain (2008) stressed that the mentor's availability and accessibility are vital to developing a relationship which helps the student teacher to feel valued and supported and echoes the need for the importance of emotional support to be recognised as an important factor within the relational process.

Problem solving	Responding to the needs of individual students	Lopez (2014)	Lopez (2014) explored the link between the relational and developmental dimensions of the mentoring process arguing that a positive, supportive relationship within the mentoring dyad facilitates problem solving and professional development for mentor and student alike.
Collegial/ collaborative approach	Built on trust and commitment	Hudson (2013)	Hudson (2016) emphasised the importance of establishing trust as a basis for developing a collegial/collaborative relationship.
Guidance	Provision of advice and help	Roberts (2000)	Roberts (2000) considered that the provision of guidance to be a fundamental element within the mentoring relationship.
Trust and respect	Honesty and openness	Orland- Barak (2005)	Orland-Barak (2005) identified trust and the establishment of mutual respect as vital elements in forming a constructive mentoring relationship.

Table 1. Relational dimensions of the mentoring process

Developmental Dimensions

The following table which is derived from a range of literature which I reviewed earlier sets out some of the most significant dimensions of the mentoring process and provided me with a template for data analysis. Each a priori code is referenced and described fully.

A priori codes	Description	Reference t	o literature
To develop students' practical skills	Lesson planning, structuring, class management	Ambrosetti et al (2014)	Developing students' practical skills such as classroom management and lesson planning was identified by Ambrosetti et al (2014) as a key element within the professional development of ITE students and a major aspect of the work of subject mentors.
Establishing professional learning goals	Sharing professional expertise	Bullough (2005)	Bullough (2005) suggested that by establishing individual professional learning goals for their students, mentors highlighted areas for improvement and further professional development.
Explaining professional practice	Making the tacit explicit	Hudson (2016)	Lesson observation and dialogic feedback were considered by Hudson (2016) as important opportunities to facilitate students' learning and understanding by allowing the mentor to share tacit knowledge and professional expertise.

Lesson observation –	Formative and summative	Pollard et al (2000)	Formative and summative assessment Pollard et al (2000) helps students to reflect honestly upon their work and to deepen their appreciation of what reflection means.
Feedback		Hudson (2016)	Constructive and balanced post lesson discussion supports students' professional learning.
Reflection	On learning experiences	Furlong and Maynard (1995)	This is a challenging aspect of the developmental dimension of the mentor's work though viewed by many researchers including Furlong and Maynard as a fundamental responsibility.
Assessment	Evaluation of progress	Pollard et al (2000)	Supports target setting and continuing professional development.
Professional identity	Helping students to develop a teaching persona	Bullough et al (1995)	Mentors help their students to acquire a sense of professional identity.
Pupil learning	Focusing on pupils' changing developmental needs	Nevins, Stanulis and Ames (2009)	Mentors help students in the transition from focusing exclusively upon their development to consider how best to serve the needs of their pupils and facilitate their learning.

Reciprocal learning	Suggesting alternative approaches/ strategies		Mentors share their professional expertise to encourage students to experiment with unfamiliar approaches to involve pupils and facilitate learning.
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Table 2. Developmental dimensions of the mentoring process

Contextual Dimensions

The following table which is derived from a range of literature which I reviewed earlier sets out some of the most significant dimensions of the mentoring process and provided me with a template for data analysis. Each a priori code is referenced and described fully. Enculturation or explaining the norms and values of the placement school is identified in the literature as an important aspect of the mentoring process by many researchers including Bradbury and Koballa (2008) whilst Aderibigbe (2016) is amongst those who believe that mentoring should involve the whole school community. Kochan (2013) identifies traditional, transitional, and transformative school cultures and defines the mentoring role in these different professional learning communities.

Code - a priori	Description	Reference to literature
Enculturation	Socialisation into the norms and practice of the school	Bradbury and Koballa (2008); Aderibigbe, (2016)
A whole school issue	All staff involved in the mentoring of the ITE students	Aderibigbe (2016)

Traditional	To maintain the cultural status quo	Kochan (2013)
Transitional	To be open to the possibility of cultural change and to recognise that ITE students may contribute to this	Kochan (2013)

Table 3. Contextual dimensions of the mentoring process

Using the framework tables above to code my data deductively provided me with a valuable means of exploring my data. I referred frequently to my research questions to maintain my focus during this activity and to ensure that the coding decisions I took reflected "the goals of the study" (Auerbach and Silverstein 2003:44). However, on occasion I, like Blair, "felt constrained by its pre-definedness" (Blair 2015:250). Both Gale (2013) and Bingham (2015) acknowledge this potential difficulty and recommend some open or "in vivo" coding to ensure that the "voices" of the mentors and students in this study (Flick 2011:149) are heard. Following my deductive analysis, I then conducted an inductive analysis to explore what else the data was telling me, using an open coding approach.

After careful reflection upon my subjective preferences and the arguments presented in the literature cited, I decided to pursue a deductive - inductive approach to coding my data, that is I coded my data deductively first and then used an open coding approach to inductively explore what further insights the data provided.

Inductive Coding

Inductive analysis is an emergent strategy of data analysis which allows codes to emerge as a "bottom up "strategy from the participants' own words. This "in vivo" coding (Flick 2013) allowed thick descriptions to emerge from my data in a depth which may not be possible in a priori coding and thereafter supported the development of themes and findings. This analytical strategy drew out additional meanings within the data transcripts. The codes that are applied to the data in open coding are emergent from the text and not a priori and I noted Blair's advice that I should not "impose" (Blair 2015:17) my own codes upon the data. I found like Blair some difficulty in coding the data in a "detached" (Blair 2015:17) manner as I knew the research participants and through my personal experience as a subject and senior mentor, I felt I understood the views which they expressed. I acknowledge once more my individual perspective and "internal assumptive bias" (Blair 2015:18). My data analysis process included constant comparison, theme mapping, and perhaps most importantly "thick descriptions" (Geertz 1975) which involved documenting the behaviour of participants, reflecting upon this, and ascribing meanings to this.

The codes developed through open coding complemented the templates derived from my deductive analysis and provided the rich and nuanced thick participant descriptions (Geertz 1976) which I felt would allow me to understand individual mentor perspectives within the cultural contexts of my case study schools. I believe that as such they are "clear, relevant and useful" (Blair 2015:26) and reflect and complement the key concepts which I identified in my data transcripts and provided a fuller understanding of semantic and latent meanings within the data (Xu

and Zammit 2020:7). I felt that this "integration of inductive and deductive coding reflected a balanced, comprehensive view of the data" (Xu and Zammit 2020:3) which. facilitated the development of themes (Saldana 2016; Charmez 2001).

As set out above, data were collected through lesson observations, formal and informal discussions with subject and senior mentors and interviews with ITE students. In addition, I attended mentor meetings and professional studies sessions in my case study schools. Whenever possible I recorded these meetings to supplement my field notes which included comment on the body language and signage employed by participants as well as the lesson or meeting focus. Table 4 provides an overview of the data collected.

School X	School Y	School Z	
Formal meeting with the Senior Mentor.	Preliminary meeting with the senior mentor before beginning my observation at	Interview the professional mentor before beginning my	
First Professional Studies meeting held by the Professional Mentor at the	the school. A focus group meeting	programme of observation at the school.	
beginning of the school placement.	attended by 3 subject mentors (mentors B, C, and L).	Meeting with headteacher (field	
Lesson observations of students T, B, S, I, L, D, U.	Attendance at the first Professional Studies session held by the senior mentor.	notes) Lesson observations	
Feedback sessions held		with the Teach First	
by mentors C (1), L (3), SM (3).	Individual student interviews arranged by the senior mentor.	trainees and feedback meetings which followed the lessons:	
Individual interviews with subject mentors C, L, N, SM, D.	Individual interviews with mentors B, C, L, and M which were written up using	Trainee 1observation of 2classes.Trainee 2	
Individual interviews with students S, I, L.	my field notes.	observation of 2 classes.	

Field notes students T and U.	Lesson observations and feedback meetings of students S, E, A, Ana, R, J.	- Trainee 3 observation of 1 class.
	Informal conversations with several ITE students.	Informal comments made to me during lesson observations

Table 4: Overview of data collected in each of the case study schools

Process of analysis

Data were transcribed as soon as practicable in every case and the transcriptions offered to participants to ensure accuracy. I then familiarised myself thoroughly with the transcripts before beginning to code the data.

My approach to coding my qualitative data developed in conjunction with my exploration of the data and my sustained reflection upon my research questions. My goal was to learn from my data and keep revisiting it until "patterns and explanations" (Richards 2005:94) began to emerge. Firstly, using the framework (tables 1, 2 and 3) I began the iterative and emic process of deductive coding focusing upon descriptive, topic and ultimately analytical coding (Richards 2005:9; Denzin and Lincoln 2000:10) see appendix 3.

I began the process of interpreting my data through "open coding" of my data transcripts i.e., "coding anything which might be relevant" (Gale et al 2013:5) including behaviours and values and "looking out for the unexpected" (ibid) to prevent coding

becoming merely mechanistic or literal. I worked upon a hard copy of the data and annotated the text line by line whenever I noted any comment which seemed to me to be relevant, useful, or significant in relation to the purpose and goals of my enquiry, see appendix 3. This descriptive coding enabled me to understand what the mentors did when enacting certain aspects of practice, and how this related to the aspects defined in the literature. This insight has enabled me to provide the thick descriptions of each case study (see chapter 4) and the associated insight into day-to-day mentoring practice.

I followed Richards' (2009) advice to "drill down" and "explore" my data and worked upon a hard copy of the data transcript and annotated the text line by line wherever I noted a comment which seemed relevant, useful, or significant in relation to the purpose and goals of my enquiry (see appendix 3). In this way I adopted a systematic approach to the coding process as advocated by Kroll (2017:86). I also recorded in memos additional or alternative lines of enquiry for further reflection to supplement this process.

My approach to coding was heuristic as I wanted the subjective values and perceptions of mentors and students regarding the process of mentoring to emerge from the transcripts and drive the process of coding and categorisation. I employed manifest or "in vivo" coding (Frick 2011:149) to ensure that the voices of the research participants were heard. As stated above, I also referred frequently to my research questions to maintain my focus during this activity and to ensure that the coding decisions I took reflected "the goals of the study" (Auerbach and Silverstein 2003:44).

At each reading the text was annotated further as I attempted to appreciate the significance of each individual datum. Appendix 3 demonstrates how different pens were used at different turns of reading. In this way I tried to ensure that over time I achieved as complete an understanding of the experiences and opinions of participants as possible. However, I acknowledge that my subjective stance, which owes much to my prior experience and subjective values influenced my impressions and comments however carefully I have tried to record information in a balanced way.

Whilst coding is the preliminary activity which assigns "a summative, salient, essence-capturing and/or evocative attribute" (Saldana 2013:3) to data, categorisation is the logical product of that process. I constructed my categories after "thoughtful textual analysis" (Kroll 2017:83). This aggregated my initial codes into categories which were generated from the characteristics, links and patterns noted during the process of coding. When I was satisfied that I had identified as many relevant categories from the data transcript as I could I was able to move toward further refinement and analysis of the data to aid my understanding of participants' experiences of mentoring and to interpret their meanings and explanations in light of the three overarching frameworks that I adopted for this study.

I organised the categories into abstract concepts which I considered in relation to my research questions. This was not merely a descriptive or logical ordered process but the result of sustained thought and reflection. I took care to ensure that my concepts were firmly rooted in the data records and that the chain of evidence was robust. My data transcripts provided me with the comments of subject mentors and students. The categories and concepts I developed from this data helped me to

discover and explore their perceptions and to formulate abstract theoretical interpretations of their views. It is at this juncture that I believe the process of coding moves from a logical, ordered approach to become an inductive and inferential activity. Thus, I organised the process of coding logically and hierarchically to enable abstract analysis of the data records to occur.

Analysis and interrogation of the data using the constant comparative method helped me to refine my data, identify themes and "explore their relationships to one another" (Taylor and Bogdan 1984:126). My final activity in this coding process was to incorporate the categories and concepts into themes that sat within the three overarching frames for this study. My analysis enabled me to retain the complexity and richness of my data which is so "fundamental" within a qualitative enquiry (Richards 2009:94) and to establish the detailed day to day mentoring practices in the three case study schools.

King and Horrocks (2010) define themes as "recurrent and distinct features" (King and Horrocks 2010:150) which are evident from the data and which the researcher sees as "relevant to the research questions" (ibid) she seeks to answer. Thus, was able to place each theme within the framework of the Relational, Developmental, and Contextual dimensions of the mentoring process and, as a result, identify what specific practices are used by mentors within each dimension.

Lincoln and Guba (1986) claim that "over-subjectivity" cannot be avoided in the coding process within qualitative research as each researcher brings her own beliefs, experiences, and perceptions of the social world to the activity. However, Saldana

(2013:39) views subjectivity as a strength as different people will code in different ways as they "ponder, think, interrogate, speculate and categorise" (Saldana 2013:39) their data. My approach to coding was heuristic as I sought to discover meanings and explanations in the data which reflected the views and opinions of the participants in my research study.

The next chapter sets out the broad findings from the survey, and how these framed my approach to the case study data collection process. It also sets out the detailed findings from the case studies, providing a thick description of each.

Chapter Four: Findings

Firstly, I present a description of the broad findings from the survey. This informed how I shaped the data collection in each case study, as it provided an insight into the state of play concerning mentoring practices, perceptions and values of mentors at the time of the study. The chapter then sets out each of the thick descriptions created for each case study school.

Survey results

In this section of my study, I analyse and evaluate the data obtained from the survey which I constructed and distributed to subject mentors in secondary schools throughout Wales. I explained in chapter 3 how I constructed and piloted the survey before considering the responses and, making minor amendments to ensure that the questions were clear and unambiguous. When I was satisfied that I had achieved these aims I operationalised the questionnaire.

I sent out a total of 917 questionnaires to secondary schools in Wales and there were 328 valid and completed surveys returned. This data provided an insight from just over a third of the schools in Wales at the time if the study, with half the number of male respondents to female (125 and 203 respectively). The questionnaire was divided into two sections.

Section 1

The first section (questions 1-14, appendix 1) asked subject mentors to indicate their response to questions which explored their perceptions of the mentoring of ITE students. The data derived from section 1 reveals a picture of the values and perceptions which inform the work of mentors in Wales.

Broadly speaking, the responses from section 1 of the survey indicated diverse perceptions about the role of the mentor with respondents advocating both a master/apprentice model and a more transformative approach resonant with the principles of educative mentoring. Responses indicated high levels of support for a monolithic conception of mentoring with the mentor positioned as the "expert" and role model and the student as the learner. However, as many responses indicated considerable support for the concepts of flexibility, reciprocity and collegiality within the mentor-student relationship. The data indicated that mentors could hold both conceptions at the same time. Whilst there was clear support for mentors making evaluative judgements not all respondents considered that this was their main concern. Most respondents emphasise the explanatory aspect of their role and that they try to share their tacit knowledge and professional expertise with their students. They indicate that providing emotional support, including reassurance and nurturing, are important aspects of their work. Mentors generally felt student teachers should take some responsibility for their own professional progress, though indicated this was a shared responsibility overall.

Section 2

The data derived from section 2 (questions 15-18) reveals the values, principles and attitudes which inform the mentoring process in Wales and how subject mentors understand the socio-cultural nature of their role.

Respondents' responses suggested that there is considerable support for mentoring to be perceived as a process which involves the whole school community, however there is much less support for the proposition that ITE should be a catalyst for change within the school community, with half the mentors indicating ambivalence about this. Respondents indicated that the aim of the mentoring process should be to produce teachers who are able to operate effectively in any school though they did not attach the same importance to helping students to fit into the social context of the placement school.

In summary the survey provided a broad insight into the range of perceptions and attitudes of mentors in Wales. This insight was used to inform how I went about data collection in the case study schools. I wanted to ensure I was able to collect data that would enable me to reflect on the wide range of mentoring practices that the survey indicated were prevalent across Wales. I also wanted to be able to explore nuance in day-to-day practice in order to understand how mentors appear to hold divergent views about their role. Therefore, I sought to gain insight into all aspects of mentoring by seeking a range of data from each school and speaking to all the participants involved in ITE and mentoring. As reported in chapter 3 I was able to collect a wide range of data in each of the schools (see table 4, and table 5) though

this was accessed and curated in different ways as previously explained. I reflect on how this has shaped my findings below.

Thick descriptions of the case study schools

Each case study is presented as a thick description subdivided into subsections to support ease of reading. Table 5 provides an overview of each school.

	School X	School Y	School Z
English medium co-educational 11-18 comprehensive school	X	X	Х
Number on roll	748	1212	1133
Number in sixth form	198	158	154
Number of pupils receiving free school meals	less than 5%	just over 12%	29%
Number of pupils with statements of special educational needs	2.7%	6%	2%
Number of pupils who speak Welsh as their first language	"virtually none"	"very few"	"most" pupils speak English

Table 5: Overview of the case study schools

Why are the findings from the case study schools presented differently?

The findings from my three case study schools all address my research questions but as I explain below there are some differences in the way the findings are presented. This is due largely to the terms of access I was granted in each school. This is described briefly below for each school and then unpacked further in the detailed presentation of the case studies as thick descriptions.

School X

I was invited by the senior mentor in school X to a preliminary meeting where he outlined his perceptions of the mentoring process together with the values which he believed guided him in his work. He subsequently invited me to visit the school to undertake a programme of lesson observations of mentors working with their ITE students.

The senior mentor had explained to his mentoring team the reason for my visits and all mentors not only facilitated my lesson observations but also welcomed me to their feedback meetings and also allowed me to discuss their perceptions of the mentoring process in individual interviews. In addition, I observed some lessons which were overseen by departmental colleagues rather than the subject mentor. In almost all cases I was able to attend the feedback sessions. This was valuable for a number of reasons. It gave me insight into how class teachers responded to becoming involved in the mentoring process and in some cases class teachers commented to me that they felt that this was helping their own professional reflection and development. It

suggested to me that there was a strong feeling of inclusion within the community of practice at the school.

Their individual approaches underline the opinion of the senior mentor that diversity is to be celebrated and that students should work with as many members of staff as possible to observe and incorporate a variety of teaching strategies. This access has enabled me to gain insight and gather data from formal research tools and informal conversations recorded in my notes (see table 6). I was therefore afforded fairly free access to respondents and processes within the school, and this has shaped the nature of the presentation of the case.

School Y

The senior mentor invited me to attend her first Professional Studies with her ITE students and she also provided me with an opportunity to attend a group interview with four of the subject mentors which gave me an opportunity to listen to their perceptions of the mentoring role in school Y.

I subsequently observed each ITE student teach during the first practicum and saw several others during the second placement. I was able to interview individual mentors and ask how they worked with their ITE students to develop their understanding of teaching and learning. In addition, I attended mentor meetings and spoke to the ITE students, listening actively to their comments about their experience

of the process of mentoring at school Y. I have incorporated the data gained into a descriptive narrative account.

I was fortunate that the senior mentor provided so many opportunities for me to visit the school and observe how the mentoring process is understood by the stakeholders in the process. The senior mentor curated my access to respondents in this school and arranged all the opportunities I had for data collection (see table 6). As such I was able to gain a deep insight into how mentoring took place in this school, and this is reflected in the presentation of this case.

School Z

I visited the professional mentor at school Z to explain the purpose of my research at the beginning of the academic year. He, in turn, explained why the school had deliberately chosen to appoint trainees from Teach First Cymru rather that following the rather more traditional PGCE partnership with one or more university. The social and cultural context of the school influenced this choice as did the ideological perspective of the head teacher and the senior leadership team. The trainees were envisaged as potential agents of change, who might revitalise some members of the teaching staff. The professional mentor explained his concept of mentoring as based upon support and challenge and willingly arranged for me to attend two formal lesson observations which he was arranging over the next two terms with each student. These lesson observations were followed immediately by mentor

meetings in which the professional mentor provided detailed feedback and encouraged student comment and reflection.

I was not able to meet individual subject mentors due to their teaching commitments and attempts to arrange telephone or email conversations failed. I therefore had structured opportunities for data collection in school Z (see table 6), and this has shaped the presentation of the case study below.

Data type	School X	School Y	School Z
Discussion with SM/PM: The data took the form of a typed record of unrecorded conversation created using notes taken during the conversation and augmented with reflective comments. See appendix 4	Formal preliminary meeting in which the senior mentor explained his mentoring philosophy commenting on the values and perceptions which informed his stance	I interviewed the senior mentor at school Y twice formally and had the opportunity to speak to her informally on my visits to the school	I met the professional mentor before beginning my lesson observations of the Teach First trainees at the school. In this meeting he set out his subjective values and perceptions of the mentoring process
Focus group interview with subject mentors Data took the form of a written record of unrecorded conversation created using notes taken during the conversation and augmented with reflective comments. See appendix 5	I did not conduct a focus group meeting	The senior mentor arranged a focus meeting attended by subject mentors B, C and L	I did not conduct a focus group meeting

Individual interviews with subject mentors Data took the form of transcription from recorded interview augmented with reflective notes and written as a narrative of the interview. See appendix 6.	I held individual interviews with mentors C, L, D, N	I held individual interviews with mentors B, C, L, M, A	I was unable to interview the subject mentors
Individual interviews with ITE students/Teach First trainees Data took the form of transcription from recorded interview augmented with reflective notes and written as a narrative of the interview. See appendix 7.	I interviewed ITE students B, I, L, P S, T, U	I interviewed ITE students A, E, J, S,R	I was not able to arrange individual interviews with the Teach First trainees
Lesson observations: Data took the form of my written notes made during the lesson, typed up after the event. See appendix 8	I observed lessons taken by ITE students B, I, L, P, S, T, U	I observed lessons taken by ITE students A, E, J, S, R	I observed 2 lessons delivered by trainee 1, two lessons taken by trainee 2 and 1 lesson taught by trainee 3
Feedback sessions: The data took the form of transcription and my additional postfeedback notes. See appendix 9	I attended 10 feedback sessions.	I attended 7 feedback sessions	I attended 5 feedback sessions

Table 6: Detailed comparison of the dataset from each of the case study schools. Exemplar of each in appendices 4-9.

I present the findings from each of the case study schools in a descriptive narrative format which provides an overview of the school and comments from the

senior mentor, subject mentors and ITE students which reflect their values, perception and experiences in the case study schools.

School X: thick description

School X is an English medium, 11-18 rural, co-educational, community school of approximately 750 pupils in mid-Wales. The pupils are drawn from a wide catchment area which centres round a small town but includes several neighbouring villages. A recent Estyn report reported that "virtually no pupils spoke Welsh as their first language" and only 4.7% of pupils came from minority ethnic or mixed-race backgrounds. Additionally, the majority of pupils are drawn from "economically and socially advantaged backgrounds" and less than 5% are entitled to free school meals.

The school describes itself on its website as a "high achieving school for teaching and learning". This view is supported by reference to a recent Estyn comment which stated that "the most striking feature of the school is its strong ethos for learning. External examination results for the summer of 2015 support the headteacher's comment that "the school is one of the best achieving secondary schools in Wales" as 98% of pupils achieved 5 or more A*-C grades at GCSE and at Advanced level 100% of pupils achieved grades A-E. The school believes that all pupils "can discover and develop their full potential" and a broad-based curriculum and dedicated and highly qualified staff support the learning needs of all pupils. The headteacher believes that all pupils should acquire a "wide range of good qualifications during their time at the school". Accordingly, the school seeks to identify More Able and Talented pupils and

those who have Additional Learning Needs, and to provide appropriate courses and challenges for these pupils. The Welsh Government recommends that approximately 20% of a year group be categorised as More Able and Talented but in school X 30% of each year group in Key Stage 3 and Key Stage 4 have been identified as belonging to this category. Around 20 pupils currently have Statements of Educational Needs and though the number of ALN pupils without statements fluctuates, it is in the region of 100 pupils. They are supported by a Director of Additional Learning Needs, A Special Educational Needs Coordinator, a qualified Teacher of the Deaf and 10 Teaching Assistants who provide literacy and numeracy support in the classroom. The focus for all pupils, irrespective of their natural ability, is upon "developing skills" and ensuring progression. The headteacher lays stress in her address to parents in the Governors' Report on the school's vision of "continual improvement" and its determination to become a school "for the 21st century" which helps to prepare its pupils for a "national and global context".

The school suggested that it should be involved in my research study after receiving and responding to the questionnaires which I sent to all secondary schools in Wales during the academic year 2013/14. The member of the SLT with whom I liaised when I was ready to begin my programme of school-based observations, but when I did so I found that he was leaving to become the headteacher of a school in England which was outside the scope of this study. However, he spoke to a number of his colleagues, and they expressed a willingness to assist me.

The school enjoys a partnership for ITE with a university in mid-Wales. This partnership is well-established, and the school expects to welcome ITE students in a

range of subjects each academic year. The newly appointed senior mentor is a very experienced subject mentor, and the professional studies programme involves a range of staff to lead pedagogical discussions.

The school states on its website that it aims "never to be complacent" and "to consider all comments carefully". I was told when the school initially expressed an interest in this research that critical reflection was at the heart of professional staff development and the senior mentor in our preliminary meeting emphasised that this was a skill that he hoped to foster in all of the ITE students irrespective of the stage they had reached in their practice. He stated that he was always ready to offer the students his support and encouragement, but he emphasised that the need to maintain standards and challenge the students was equally important. He stated that the theoretical and practical elements of the school placement are designed to encourage critical reflection in the PGCE students, but also to allow them to set targets and take responsibility for their further professional development as teachers.

Research Question 1

What are the perceptions, values, expectations and assumptions which mentors in Wales bring to their role?

The Senior Mentor

The senior mentor at school X leads a multi-disciplinary team of subject mentors and is responsible for setting out his vision of the relational, developmental, and cultural parameters of the mentoring process at the school.

My analysis of the values and perceptions of the senior mentor regarding the mentoring of ITE students at school X is based upon data accessed from an initial meeting which took place before the first practicum.

The discussion which ensued was recorded with his knowledge and consent and the resulting transcript submitted to him to ensure that his opinions had been accurately represented. In addition, I have referred to my field notes and subsequent reflexive comments.

To discover the over-arching values and beliefs which influenced his work in leading the mentoring process of ITE students at school X. I asked the senior mentor why he became a mentor and what he believed to be the most important challenges implicit in the work. In response he identified, and outlined briefly, the professional, relational, and cultural aspects of his role which will be discussed more fully below.

Relational Findings

The following relational perceptions were identified by the senior and subject mentors at school X as significant elements in the mentoring of ITE students at the school.

Providing emotional support	Nurturing, encouraging, reassuring, guiding	SM
Establishes a positive relationship	Based upon collegiality, mutual respect, and trust	SM
Non-judgmental	Open- minded, empathetic approach	SM
Availability/ accessibility	Students should approach their mentors if they need support at any time	SM
Emotional support	Caring, concern for the student's well-being	L, C, D,
Collaboration	Sharing advice and strategies	L.C, D
Role fluidity	Willingness to learn from the student	С
Open-minded	Encouraging, non-judgmental	L, C, D
Availability	Indicates concern for the student's welfare	N, L C, D
Professional friendship	Respect, equity, empathy	N, L, C
Guidance and advice	Couched in the form of suggestion	C, SM
Developing student self confidence	Letting student take the lead in an activity	L, C, SM
Challenge	Within a supportive relationship	All mentors

Table 7. Mentors' relational values and perceptions school X

The senior mentor emphasised his commitment to the emotional and relational aspects of his role. He stated that he "cares deeply" about his role and is committed to supporting, guiding, nurturing, and supporting the ITE students and his mentoring team. He stated that he recognised the importance of establishing a positive mentoring relationship with each student based upon an open-minded empathetic approach based upon collegiality, trust, and mutual respect. Within such a non-judgmental (Hobson and Malderez, 2009) relationship he felt that the ITE students were enabled to "fulfil their individual potential" and achieve the requisite standards for QTS.

The Subject Mentors

The research literature suggests that the establishment of a personal and professional relationship between mentor and ITE student is a "pivotal" (Aderibigbe, 2009:23) factor. The subject mentors and ITE students I spoke to in school X suggested that relational issues were an extremely important part of a successful mentoring process. There were six trained mentors working with ITE students from three different universities during the academic year in which this research was conducted. I was able to observe lessons, attend feedback sessions, and discuss informally and individually, the perceptions and values which influenced their approach to the mentoring process at school X. Dawson (2014:144) spoke of the "diversity of mentoring" attitudes and I was interested to discover to what extent this was true of the subject mentors in school X. The process of mentoring is complex, contains subjective elements and is capable of interpretation in myriad ways. The senior mentor

in school X respects the individuality of his mentoring team and appreciates the differing approaches they demonstrate. In my review of my data below I have identified the ideological position of each mentor and recorded the key perceptions and beliefs which emerge.

Mentor N

Subject mentor N emphasised the importance of establishing a "positive, constructive relationship" based upon collaboration which she believed to be "a cornerstone of mentoring". She stated that within a supportive relationship founded on principles of equity she believed that her students would gain self-confidence and self-esteem. She added that honesty should permeate the relationship of subject mentor and ITE student so that trust and respect became recognised as "vitally important aspects of the process".

She stressed that she felt that such a relationship could be "mutually beneficial" though she did not comment specifically on any potential gains for subject mentors. However, she may have felt that this was implicit in comments she had already made which indicated that in her view each partner in a collaborative and reciprocal dyadic relationship benefits from the expertise of the other.

Mentor N expressed very clearly her attitude toward the issue of availability. She stated that she believed that this was an important relational issue and that mentors should be "readily available" so that any problems could be dealt with quickly and students reassured that their mentors were supportive and caring. This was

particularly important if students lacked confidence. She emphasised that she recognised the importance of regular mentor meetings to discuss "issues arising" and explained that she met her ITE student each week as she felt that this contributed to the development of a constructive, professional relationship.

Mentor N explained that she worked to establish a relationship based upon the tenets of "professional friendship" (Gardiner, 2008) with her students. She explained that this was an effective way to offer encouragement and reassurance and to foster self- efficacy. She added that she believed that such an approach could "facilitate students' professional progress" thus linking the relational and developmental aspects of the mentoring process.

Mentor C

The senior mentor emphasised that tolerance, respect, and collegiality were significant elements in establishing a professional relationship with ITE students. Mentor C appeared to share many of his values and beliefs. She commented that the values of emotional support, respect, collegiality, and inclusion, were vital in establishing a "warm personal relationship" with her ITE students. She stressed her belief that mentors needed to be "available" and "accessible" to their students to demonstrate their commitment and concern. This positive and supportive attitude to the process of mentoring was appreciated by student L who noted "I felt that my mentor put aside loads of time for me. She kept asking me if I was ok and stressed that she was always available if I needed to speak to her."

Professional Development

The Senior Mentor

I attended the first Professional Studies session convened by the senior mentor for the students at school X at the beginning of their first practicum. He stated that he believed that professional development was the "fundamental goal" of the mentoring of ITE students at school X so that they would extend their understanding of teaching and learning as practised in school X through discussion, dialogue, critical reflection, and target setting. He advocated flexibility "nothing is set in stone" suggesting to the students that they should be willing to "give that a try" if they encountered a novel yet effective strategy which promoted pupils' learning. Risk taking, he concluded was an essential part of learning to teach and the students should not fear failure as reflection upon this was an integral part of the learning experience.

He stated that he believed the students should become actively involved in their professional development and that he valued the potential of peer observation as a basis for dialogue and reflection.

He expressed the beliefs and values which guided him in his role, but he ended by stating that "there is no one right way to teach" and emphasised that he and his subject mentors would support the students in their quest to develop an independent professional identity.

The Subject Mentors

The comments of the subject mentors at school X demonstrate their belief that developing the professional learning and understanding of their ITE students was "a major aspect of the mentoring process and a major responsibility for mentors to fulfil" (subject mentor N). Her comments were fully supported by other members of the mentoring team at the school. Subject mentor C stated that she had a responsibility "to share knowledge and strategies" with her ITE students but she agreed with Schoper (2017:2) that learning is not a passive process and student participation in the process enhances their success. She added that it was important for the students to gain an understanding of "how they learn" and this will be discussed further in my comments on RQ2 in due course.

Cultural Findings

Mentors need to make plain the "shared motives, values, beliefs and interpretations of significant events that result from the common experiences of members" (House and Javidan, 2004:15) of the community. The table below summarises the values and perception held by mentors in school X.

Dillard (2016) has pointed out that ITE students need support to understand the norms and values of the community of practice at their placement school. Several mentors at school X accepted this opinion and agreed that they had a responsibility to help students understand the culture of the practice school as advocated by Patrick et al (2010) and Kochan et al (2015).

Fitting in	Helping students understand the cultural norms of the school	All mentors
Extending student's COP	Mentors are conduit for student inclusion in COP	L, C
Community involvement	Facilitating student involvement in wider school/community link. Engage with local community the school serves.	N
Catalyst for change	Helping students to contribute to a dynamic and fluid school culture.	SM, D, C, L
Socio-cultural values	Helping students to understand the socio-cultural background of pupils they teach	L, SM, C

Table 8. The cultural values and perceptions of mentors in school X

Mentor D and mentor N adopted a "traditional" cultural framework stating aim was to help students to "fit in" to the social and cultural community of the school and to understand its values. Mentors L and C adopted a transitional cultural mentoring framework emphasising their belief that subject mentors could play an important role in providing opportunities for students to engage with the whole school community of practice as "experts rather than novices" (Patrick et al, 2010:283) and as such create the possibility of cultural change.

Several of the subject mentors expressed their belief that it was important for mentors to understand the socio-cultural background of their pupils more fully and for them to inculcate stronger links with the local community which the school served to facilitate student inclusion in the wider community of practice.

Research Question 2

How do subject mentors work with their ITE students to help them to achieve success?

Research question 2 examines how mentors at school X help ITE students to develop effective learning skills which will inform their future practice.

The accepted focus for the mentoring of ITE students in school X is to facilitate their professional development and understanding of the role of the classroom teacher. This vision of the mentoring process at school X is communicated to all members of the school mentoring team by the senior mentor though he accepts that individual mentors will seek to realise this aim in different ways. Chan (2008) points out that the benefits of mentoring have been extensively researched but "there is a relative paucity of research on how mentors actually work with their proteges" (Chan, 2008:263) to achieve this goal. The purpose of this research question is to examine the perceptions, attitudes, and values of the subject mentors at school X. Research suggests that "mentor teachers have pre-determined conceptions" (Hall et al, 2008:329) of their role which "inevitably affect how they enact their responsibilities" (ibid) and influence their inclination for a reciprocal, collegial, or more directive model of mentoring behaviour.

I was able to observe student lessons, conduct brief informal interviews with subject mentors and ITE students and attend some feedback sessions. These opportunities yielded rich data which provided insight into how the mentoring process is enacted at school X.

The subject mentors at the school, in an initial meeting in which I explained the purpose of my research, collectively subscribed to the view that mentoring was a deliberate process (Bullough, 2005) designed to provide the student with a knowledge and understanding of teaching and learning (Feiman-Nemser, 2001:8).

The senior mentor endorsed this view emphasising that his mentoring team provided guidance and "a structured experience" to ensure that the professional needs of individual ITE students are met. However, he was not prescriptive explaining that the concept of "teaching expertise must be understood within the practice of individual teachers". I will structure my study accordingly to take account of the attitudes, perceptions and beliefs of subject mentors and students in school X as I observed and interpreted them.

Collegiality

Research suggests that "professional development is enhanced" (Patrick et al, 2010:280) by the establishment of supportive, collaborative relationships with colleagues which take account of individual needs. The less formalised elements of collegiality include building a cooperative atmosphere and creating a two-way relationship through dialogue.

Mentor L

Mentor L stated that he believed that he had established a positive personal and professional relationship with his student and had worked with him throughout the

practicum in a collaborative and collegial manner. He explained that he had introduced student S to classes as a colleague rather than a student, which contributed to the student's confidence and self-esteem. Student S in my subsequent discussion with him emphasised how much he appreciated this display of "professional friendship" (Gardiner, 2008) "I think the most important attitude which he's signalled to me is that he's willing to work with me in a real partnership". Mentor L was at pains to support student S offering guidance, support, inclusion, availability, and challenge as needed, and creating a constructive relationship for learning.

Mentor L stated that he recognised the importance of creating a reciprocal mentoring relationship with student S to enhance his understanding of teaching and learning. Student S stated "what I really like is that we discuss and plan lessons together. We discuss tactics, for example we thought about the shock factor involved in showing clips from Schindler's List." The subject mentor signalled his concern about whether some emotionally fragile statemented pupils should be allowed to opt out of watching the extracts and student S commented "I wouldn't have thought about things like that".

Wink and Putney (2002) explain that "in reciprocal mentoring the more experienced or capable other can alternate as leader or supporter" (Wink and Putney, 2002:161). Mentor L created opportunities to challenge student S and to develop his professional skills and understanding by creating a range of teaching scenarios. On one occasion he left the classroom signalling to pupils that student S was the teacher in charge of the activity. His mentor's demonstration of trust in his ability was a significant factor in consolidating student S' sense of self-confidence. On his return to

the classroom the subject mentor immediately posed a key question "what can we learn from this activity?" demonstrating his involvement and willingness to collaborate with student S. He then encouraged student S to lead the discussion and collate pupils' responses signalling to the student his belief in his ability, providing further evidence of emotional support (Tickle, 1992; Hargreaves and Fullan, 2000). On other occasions the subject mentor modelled advanced teaching strategies. He demonstrated how to introduce an emotive subject sensitively and how to develop the pupils' capacity to respond. Student S stated that he had "learned so much just by watching him". He reflected on the signals that his mentor had relayed during the lesson demonstrating the importance of enthusiasm, subject knowledge, explanation, inclusion, and challenge to extend pupil learning. Mentor L offered his student guidance, support, and challenge as needed. Mentor L demonstrated high levels of self-efficacy and was happy to allow the students to observe him modelling strategies. He was guick to scaffold learning (Bruner, 1987). His relational values of trust, support, respect, kindness, and encouragement created a positive relationship and a basis for professional learning.

Hudson (2016:39) suggests that support, respect, mutual trust, and professionalism are important features in the establishment of a rich and productive professional relationship between mentor and ITE student. The subject mentors at school X signalled their acceptance of this view and their awareness that close and meaningful personal relationships with their ITE students provide a basis for further professional development and "progression in their learning" (Harrison et al, 2005:4).

Professional Development

Mentoring "is central to the process of student professional development"

(Bryan and Carpenter, 2008:47) and the mentors at school X were concerned to

provide support in the technical aspects of teaching, to offer insights into their

classroom practice, and to support their students as they began to develop as

independent practitioners.

An important aspect of the work of the subject mentor is to help student teachers

understand that "teaching expertise is subtle, complex, and individual" (Dreyfus and

Dreyfus, 1986:33). Mentors have a responsibility to support their trainees in acquiring

an understanding of what constitutes good classroom teaching by discussing,

exploring, and sharing their expertise. However, during a yearlong ITE course mentors

can only begin the process of encouraging students to analyse their lessons critically

and to learn from even unsuccessful tactics. Professional craft knowledge is

embedded within the intuitive classroom practice of the experienced teacher. It is

largely tacit (Shim et al, 2008:6) and the challenge for the subject mentor is to make it

explicit and accessible. Modelling may be one way to achieve this aim.

Modelling

Mentor L

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Mentor L acted as a role model to extend his student's repertoire of classroom behaviour. He confided to me about student S "he's a bit stilted" and demonstrated several strategies to broaden the student's repertoire of teaching behaviours. The mentor's excellent subject and anecdotal evidence engaged the pupils from the outset. He demonstrated the importance of knowing the class well and using his knowledge of individual pupils to extend discussion, exploration, and pupil learning "N can tell us more". Mentor L stated that he believed that "dialogue and discussion" of practical situations as they occurred in lessons would "empower" his student and encourage reflection. He believed that it was important to provide diverse viewpoints (Toll, 2006) for the student's consideration and emphasised the values of mutuality, active listening, and formative comment. He demonstrated his belief in role fluidity stating that he encouraged student S to question and challenge him so that he too might extend his professional development by considering alternative approaches to learning.

Classroom Management

Many ITE students claim that classroom management "causes them concern" (Hudson, 2011:2). The mentors at school X were clearly aware of this concern and discussed and modelled a variety of strategies for their students to consider.

Mentor C

Mentor C saw it as an integral part of her role to provide support with the technical aspects of teaching including planning, classroom organisation, and establishing clear rules and routines. Mentor C demonstrated the importance of creating a positive environment for learning, focusing upon the individual to solve potential problems before they escalated. However, it was noteworthy that mentor C was very consistent in her approach in delegating responsibility for her further professional development to the student. Student L stated that her mentor had modelled an enquiry- oriented approach to encourage her to be flexible and consider innovative alternative approaches to lesson delivery.

Mentor C was willing to offer advice and suggestions drawn from her professional experience and expertise but as student L stated, "the final decisions were mine".

Mentor D stressed the benefits of observing the practice of teachers who were adept at behaviour management whilst Mentor N stressed the importance of providing creative and innovative tasks to engage pupils and thus minimise disruption. The senior mentor stated that he provided support for less confident students by sitting where all pupils could see him and signalling to them that he would monitor on task behaviour. Finally, mentor L reiterated his belief that it was vital to develop positive relationships with pupils and to explain to ITE students how this influenced behaviour positively.

The senior mentor encouraged the ITE students to discuss the advice they had been given by their individual mentors and to incorporate strategies they found useful into the development of an independent professional identity, delegating to them further responsibility for their continuing professional development.

Pedagogy

The research literature I consulted at the time this research was undertaken suggested that many mentors did not routinely discuss pedagogy with their ITE students. This may be because of a prevalent attitude of regarding theoretical issues as predominantly the concern of the university, whilst the role of the school is to provide practical experience. However, the data suggests that several of the subject mentors in school X disagreed with this view and valued pedagogical dialogue as central to developing the students' understanding of teaching and learning. Mentor C felt strongly that an important aspect of her work as a subject mentor was to discuss pedagogy and to link the theoretical aspects of the course studied at university, with the practical experience provided during the school placement. As student L recalled "my mentor used her experience and expert subject knowledge to present me with the theory of dealing with MAT pupils which we had studied at Uni, but she showed me that the theory didn't always work, and we talked about better approaches for our subject area".

Mentor L also placed great value on pedagogical dialogue as a focus for his student's learning. Student S stated "subject mentor L believes that we should focus on the theory underlying the strategies we are trying". This comment suggests that mentor L viewed his work as a subject mentor as analogous to that of a teacher

educator who supported his student "by putting into focus the theories we learned at university". This comment suggests that this mentor values the concept of partnership within the mentoring process between school and university.

In conclusion, Mentor N spoke for several of her colleagues when she explained that she believed mentors should encourage their students to engage in dialogic learning conversations and be challenged to justify their philosophical beliefs about the nature of teaching and learning. Mentor E added that he believed that mentoring should be a holistic experience and that the students should be encouraged to appreciate that theory and practice are indissolubly linked.

Reflection

The literature indicates that reflection upon practice is a core skill of effective teachers (Flick et al, 2010; Hudson, 2013). Cornish and Jenkins (2012) argue that reflection is a skill which needs to be taught, practised and developed, whilst Wilson and Demetriou suggest that one important aspect of the subject mentors' work is "to create opportunities and facilitate experiences" (Wilson and Demetriou, 2007:422) that will develop the trainee's capacity to reflect upon her practice and begin to explore the nature of teaching. Research suggests that when teachers reflect upon their practice, they are able to develop greater skills in teaching (Lopez, 2013:305).

Subject mentor L explained in discussion that he believed that his student should be actively involved in his professional development. He believed that a way to achieve this was to inculcate habits of professional dialogue and reflection. Dewey (1933) defined "reflective thought" as a "habit of critical examination and enquiry"

(Dewey, 1933:29) which could lead to "reflective action" and consequent changes in action and belief. The attitude of "open-mindedness" (ibid) which he espoused as a vital attitude to encourage reflection was demonstrated by mentor L in dialogue and action. Schon (1983; 1987) identified "reflection in action" and "reflection on action" as significant contributory factors in professional progress and development, as reflection involves the "ability to frame and reframe practice in the light of experience or new knowledge" (Clarke et al, 2014).

Encouraging reflection amongst ITE students has become an accepted aim of the mentoring process in many practice schools including school X. Subject mentor L commented "I believe that skills of reflection need to be taught and that it's my job as a mentor to guide my student to think about his practice and develop further". He stated that he valued "shared reflection as a learning opportunity for us both". In mentor meetings which I observed he encouraged student S to explore his practice and move through what Heron (1988) identified as the three levels of reflection, descriptive, evaluative, and constructing future knowledge and understanding, by posing questions such as "how did you feel this went"? or "what would you do differently if you repeated this lesson? And crucially "why would you change things?" He employed active listening and "wait time" and considered student S' responses very carefully signalling encouragement by facial expression, nodding or remarking "uh huh" or "I see" and guiding subsequent professional dialogue of the effectiveness of the pedagogical strategies implemented (Hudson, 2013:373).

Feedback and Assessment

Feedback and assessment were viewed by all the subject mentors at school X as valuable opportunities for professional learning conversations about the progress of their ITE students. However, the mentoring approach to the students' professional development varied according to the subject area and beliefs and attitudes of individual mentors. In some practical skills- based subjects the mentoring approach was instrumental, functionalist, and goal-directed (Black and William, 1998) and the "learning outcome was implicitly or explicitly prescribed" (Brockbank and McGill, 2006:73).

Mentor D conducted a feedback session which included "specific comment" (Thurlings et al, 2012) which detailed skills and competences which she felt her student had achieved. Goals for the lesson were systematically reviewed and progress against these was assessed. The student concentrated on what was being said and targets for further development were set by the mentor though she sought the consent of the student for them. There was little discussion though the mentor stated that she was available to comment further in her free time. There did not appear to be an attempt to consider alternative approaches or to reframe thinking. The impression was that though the mentor was encouraging, positive, and supportive, the student was regarded as an apprentice whose development would be aided by emulation of existing traditional and successful practice. When I spoke briefly to the student a little later, she emphasised that she valued this structured approach which would enable her to achieve QTS and teach effectively within her subject area.

Mentor N's attitude towards the provision of feedback and evaluation of her student's learning was that it should be "honest" and "balanced". Mentor N accepted that "mentors are required to assess students' progress" but she highlighted her belief that assessment should always be "constructive" and emphasised the need to encourage and reassure if the lesson had not gone well. She appeared to espouse the original attitude of Mentor, that of "critical friend" (Cullingford, 2006). Formal mentor meetings allowed for discussion and the student's workbook provided evidence of progress from the perspective of the subject staff who worked alongside the student. Mentor N believed that the workbook was "a massive source of strength for student and mentor alike" as targets for further development could be prioritised from this material. She stated her belief that in this way "assessment supports professional development and provides an opportunity me to challenge my student to reflect on his progress and begin to think about alternative approaches". Student self-evaluation was for mentor N a valuable product of feedback sessions.

The ITE students collectively stated that initial feedback was provided immediately after the lesson whenever possible, and subsequently in more depth in the subject mentor's free time. Student S spoke for his peers in stating that this willingness to set aside time for discussion signalled a generosity of support which indicated that the subject mentors in school X were committed to extending their students' professional understanding. All the students professed their satisfaction with the quality of feedback and nature of the assessments they received.

"Mentoring occurs within a context" (Kochan et al, 2015:87). In this section of my findings, I explore the social and cultural factors which influence the mentoring process in school X. There is no universally agreed definition of culture but Kochan et al (2015) believe that this captures its essence. "Culture" refers to "shared motives, values, beliefs, identities, and interpretations or meanings of significance that result from common experiences of members of collectives that are transmitted across generations" (House and Javidan, 2004:15).

The challenge for the subject mentors in school X is to raise the awareness of their ITE students of the accepted social practices, values, assumptions, and attitudes which characterise the community of practice in school X.

Traditional, Transitional, and Transformative Approaches to Mentoring in School X

Kochan and Pascarelli (2012) suggested three cultural purposes for mentoring: traditional, transitional, and transformative. Within the traditional frame the mentor is the teacher and the student the apprentice or learner. There appear to be examples of this approach within the mentoring of student P by mentor D where the student is encouraged to "fit in" and emulate the teaching style of her mentor. More prevalent within school X is the transitional frame where the mentor and student cooperate in a more collaborative partnership. Several mentors, including C, L, and N adopted this approach and involved departmental staff in the mentoring process

which the senior mentor valued as "a means of raising awareness of new ideas" within the community of practice.

The students confirmed that this open culture was present in the attitudes of some of their subject mentors. Student L stated that she was given many opportunities to learn about the social and cultural values of the wider school community. Her mentor had provided an enquiry- oriented approach within which she was encouraged to consider alternatives. Her work as a form tutor brought her into contact with a very experienced teacher who provided her with an insight into the different social relationship teachers build with their forms. He did this by "sort of just sitting back and watching and giving me a free rein to try out things". His relaxed attitude combined with praise "they really enjoyed that" helped student L to feel accepted as a member of a school community which was open to experiment.

Some subject mentors believed that their students could on occasion act as agents of change within the school community. The senior mentor agreed explaining that "they can share their new ideas and their greater expertise in areas like technology with members of staff they work with" and in this way act as catalysts for change within the school community and influence the reflection and practice of experienced teachers. When this occurs, perhaps in Inset sessions or more likely in daily classroom work the role of mentor is "fluid and interchangeable" (Kochan and Pascarelli, 2012:88) suggesting a cultural community which accepts the possibility of Kochan's (2015) "transformational" mentoring frame.

Several of the subject mentors expressed the view that mentoring should be considered a "whole school issue". The active participation of school leaders in initiatives like the Professional Studies programme suggests a positive and supportive cultural stance which was echoed by the departmental staff who worked with ITE students. Teacher R stated that "I think working with ITE students has made me a better teacher. Students come with a variety of talents and areas of expertise, and I have learned a lot from watching them" and subject teacher J emphasised that "working with student T has encouraged me to reflect on my own teaching and the values which inform it". Their comments suggest a culture open to discussion and willing to consider new approaches.

All the students without exception stated that they had been welcomed into the school community warmly and helped to understand the values which permeated the school by all staff they worked with. As student S explained "Teacher T was great. He helped me to understand that this is a community school, and I need to understand the work of a teacher in this particular school".

In conclusion, Hudson remarked that "mentors are individual in their mentoring approaches" (Hudson, 2013:374). However, the mentors at school X appear to share a number of important values and attitudes in their approach to mentoring. They are committed to offering guidance and support, encouraging flexibility, innovation, creativity, experimentation, and reflection, and providing insight into the contextual and cultural norms of the community of practice.

School Y: thick description

School Y is a co-educational 11-18 English medium comprehensive school situated in the suburbs of a city in south Wales. 12% of pupils are eligible for Free School Meals and just under 6% have Statements of Educational Needs. The Estyn Reports comment that learning outcomes for pupils with Special Educational Needs are "significantly higher" than expected.

The Estyn Reports emphasises the school's "very positive and inclusive ethos" which it regards as "outstanding". Pupils are "well supported" and have a "highly developed sense of well-being".

The school describes itself on the school website as a "community school" and this is echoed in the head teacher's regular bulletins to parents where he refers to his wish to "achieve a partnership between governors, parents, staff and pupils". Advice to help parents support their child's developing literacy and numeracy skills is posted online and parental responses to this are welcomed. Parents' Evenings provide opportunities to discuss individual pupil progress and welfare. News of sporting or charity events are always highlighted on the school website and parents are invited to support these and to become actively involved.

The Inspection Report comments very favourably upon the school's "high academic expectations and achievements "and he head teacher described the last set of GCSE results as the "best ever achieved" by pupils. The school offers Advanced Level and Welsh Baccalaureate courses in the sixth form. It is also in an active

partnership with neighbouring schools to deliver Advanced level courses in some subjects which have a limited take up. Advanced level results are good, and sixth formers regularly gain entry to a wide range of university courses in England and Wales. Vocational courses are run in conjunction with the local College of Education.

ITE students are drawn from a local University and are pursuing a PGCE course leading to QTS. The school has well established links with the HEI and does not envisage taking students from any other training route. The senior mentor has been in post for three years and is very positive about her role and the range of experiences provided for the ITE students. There is a well-developed programme of Professional Studies, and the senior mentor customarily leads many of the sessions herself though she utilises the expertise of other staff as appropriate. The senior mentor leads a team of subject mentors, most of whom are experienced, though she explained that on occasion some departments would find themselves unable to host ITE students for that particular academic year whilst others might opt in. She sees this as a valuable way to facilitate the development of the mentoring process as a whole school issue. The senior mentor is very supportive of students' welfare. She stated that she takes pains to build positive and supportive relationships with the PGCE students as she feels this helps when evaluating progress and giving feedback.

One reason why I selected school Y as a case study school is because of its willingness be involved in a collaborative investigation concerning Lesson Study as an integral part of the mentoring process. The senior mentor believes that this approach encourages genuine collaboration as it encourages students and mentors to work as equal professional colleagues to plan, deliver, evaluate and amend lessons. She

believes that this initiative will provide an opportunity for a discussion of various pedagogical approaches and for genuine professional development. Regular input from university link tutors will allow curriculum tutors to be closely involved in reviewing the progress of ITE students and discussing pedagogical issues with them.

Research Question 1

What are the perceptions, values, expectations and assumptions which mentors in Wales bring to their role?

My data from school Y is gained from the transcription of an audio-recorded focus group interview with three of the subject mentors, individual informal interviews with mentors and interviews with four ITE students which were similarly recorded and transcribed, four lesson observations and feedback sessions, and my reflexive field notes. The data was collected over a 6-month period which spanned the two teaching placements at the school.

Mentoring is a complex concept which is interpreted differently by individual stakeholders in different cultural contexts. To present as complete a picture as possible of the process of mentoring in school Y I have chosen to present the opinions of each of the groups identified above in turn.

Ambrosetti et al (2014) stated that the process of mentoring involved relational, developmental and socio-cultural dimensions and I have chosen to examine each of

these in relation to the stakeholders identified above to determine whether there is any degree of consistency in their response.

Relational Elements

Many researchers have stated that the relational issue lies at the heart of the mentoring process (Mullen, 2012; Merchant, 2019). I was interested to ascertain whether stakeholders at school Y favoured a supportive, and nurturing approach as advocated by Feiman-Nemser or a more hierarchical, asymmetrical stance as exemplified by the apprentice model of learning (Lave and Wenger,1991). In addition, I wanted to identify the values which influenced their practice.

The table below summarises the relational findings which emerged from the data from School Y.

Collegial and collaborative approach	Providing a warm, supportive, constructive relationship	Mentors C, L, M, SM
Empathy	Key to establishing a rapport	Mentors B, C, L, M
Accessible	Available to deal with students' perceived needs	All mentors
Honesty, trust, respect	Key relational factors in developing a relationship	Mentors, C, M, B
Supportive	Reassuring, supporting, encouraging, kind	Mentors C, B, L, M
Open minded	Non-judgmental	Mentors B, C, M, SM

Reciprocal relationship	Recognising student and mentor can learn from each other	Mentors M, B, C
Creating a secure relationship	Within which challenge can occur	M, C, B, SM

Table 9. Relational values / perceptions of subject mentors school Y

I was invited by the senior mentor in school Y to attend the first professional studies meeting which she held with her ITE students at the beginning of their school placement.

The Senior Mentor

The senior mentor in her first professional studies meeting with her ITE students in the first practicum was at pains to provide professional friendship, (Gardiner, 2008) emotional support and community inclusion. She deployed support, encouragement, and reassurance using warmth and humour as a mechanism to achieve her objective. She demonstrated respect, reciprocity, and collegiality from the beginning of the session. Importantly she emphasised her availability and accessibility if students encountered difficulties. Her purpose in this initial meeting was to establish a positive relationship with each student and to ensure that they felt secure enough to approach her if they encountered difficulties which their subject mentors could not resolve.

When I interviewed her later in the second practicum, she emphasised the importance she accorded to the provision of positive pastoral support which she

believed to be central to the student mentoring experience. She also stated that the second student placement challenged her as it was "a very different experience" from that of the first practicum. She stated that her role in this placement was to manage the transition of new students to a new environment to create a positive, collegial relationship with them "as quickly as possible and to assist subject mentors to do the same". Her sustained emphasis upon establishing relationships of trust, honesty, and respect with each individual student revealed her fundamental belief in the importance of relational factors within the mentoring process at school Y.

The Subject Mentors: Focus group meeting

I was interested to explore the perceptions and values of the subject mentors at school Y regarding the relational aspects within the process of mentoring. I wanted to examine whether there was general agreement about the overall approach employed at school Y or if individual mentors interpreted the demands of the role for themselves. Gormley suggests that mentoring relationships "occur along a spectrum from highly functional to highly dysfunctional" (Gormley, 2008:45) with most occurring "in between" and I wished to examine the nature of the relationships which had been established at school. I was interested to uncover evidence which might indicate support for the nurturing, collegial, relational stance advocated by Feiman-Nemser (2009), or the opposing apprentice model described by Lave and Wenger (1991).

The comments of the subject mentors which emerged in formal group discussions, informal conversations, and feedback sessions with their students

revealed the following values and perceptions concerning the relational aspects of the mentoring process. All the mentors at school Y agreed that they believed that a successful mentoring relationship was based upon trust, honesty, and mutual respect.

Mentor L stated that she believed that mentors should offer guidance, encouragement, and emotional support adding that "you have to be a good listener" and problem solver who is responsive to the needs of individual students.

Mentor B agreed though he emphasised that "sometimes if things are not going well" the mentor "should be prepared to say so". He explained that he took pains to establish a positive relationship with his ITE students but felt that honesty was important in establishing trust and respect and that "sometimes you have to be blunt". Mentor M stressed that in her view mentoring was a reciprocal activity, "we can learn from each other" and suggested that "each member of the dyad can take the lead on occasion" suggesting that she viewed the relationship as fluid and potentially transformative (Kochan, 2012). Finally, mentor B stated that the mentoring relationship necessarily involved "giving of yourself" to recognise and serve the needs of the individual student.

Mentor C commented he felt that accessibility and availability were important issues to consider when developing relationships with ITE students as they established the mentor's concern for the student welfare. All his colleagues concurred in this view. He added that "praise, reassurance, building self-confidence and self-belief" were important mentoring activities which contributed to building strong

relationships which formed the basis for dialogue on professional issues and served to develop the student's professional identity.

Mentors M, B and C noted the need for mentors to be "open-minded" and willing to create a "non-judgmental" (Hobson and Malderez, 2008) relationship within which students were able to experiment with a range of teaching strategies without fear of censure.

These comments indicate that the subject mentors in school Y recognise the importance of establishing supportive encouraging, yet professional interpersonal relationships with their ITE students.

Mentor C added that, whilst he agreed that support was fundamental to an effective mentoring relationship, he believed that challenge was equally important (Daloz, 1986). He explained that he created opportunities to develop his student's self-confidence through providing practice in "dealing with the unexpected" such as covering a lesson at short notice. However, he stressed that in such circumstances he would provide "unobtrusive" support to scaffold the experience.

Mentor M agreed with these comments as she felt that challenging her students was an important part of the relational aspect her role. She stated that having "high expectations" for her students whilst "wanting them to succeed" and demonstrating a positive non-judgemental attitude (Hobson and Malderez, 2009) was a vital factor in

creating a balanced relationship based upon values of honesty, trust, and mutual respect.

The comments of the subject mentors from school Y would seem to indicate their belief that relational factors are at the centre of their approach to the process of mentoring. A positive relationship based upon professional friendship, support, guidance, constructive criticism, and challenge appears from their comments to be the preferred approach to mentoring ITE students at the school. All the mentors interpreted the role in accordance with their professional experience and they acknowledged the breadth and diversity of the role. However, there appeared from their comments to be a high level of agreement in the importance they attached to creating a collegial, reciprocal, relationship with their students based upon trust, honesty, and mutual respect.

Student Comments

The comments of the ITE students about the expectations, attitudes, and values which characterised their relationships with their subject mentors support the mentors' comments. All the students I met were eager to emphasise that their mentors had provided help, support, reassurance, encouragement, guidance, and advice from the beginning of the practice.

The selection of student comments which follow are, I believe, an accurate representation of the opinions of the whole ITE school Y cohort regarding the

relationships established with the subject mentors at the school. Student S stated how much she appreciated the quality of the emotional support which her mentor provided. She highlighted his sense of empathy "he knew what I was going through" which she felt was the basis of a "very professional but like supportive relationship".

Student E commented that her mentor was the "linchpin" of her teaching experience at school and that she had a "strong" relationship based on mutual trust. He reinforced her self-confidence and self-esteem as "he was always ready to help" and "I felt my progress mattered to him".

Student A commented upon the collaborative and collegial relationship she had established with her subject mentor who assured her that "we can learn from each other". In addition, she stated that she had found her subject mentor "always ready to listen" to her identified needs or problems. The above comments suggest that the ITE students at school Y found that the process of mentoring afforded them a supportive and reciprocal mentoring experience. In conclusion, the comments of the senior mentor, the subject mentors and the ITE students suggest that all involved in the mentoring process at school Y regarded relational factors as important elements in the process.

Developmental Aspects

The task of developing the professional expertise of ITE students during the school practicum is emphasised in the research literature as a key task for subject mentors (Hudson, 2016; Lofthouse, 2017).

Providing a rich learning experience	Focusing on scaffolding, guidance, sharing professional expertise	All subject mentors
Helping with the practical aspects of teaching	Lesson planning, classroom management.	Mentors, B, C, M, L
Supporting professional learning	Sharing professional expertise	Mentors C, B, M, D, L
Facilitating professional practice	Modelling, making the tacit explicit, problem solving	Mentors C, M, L
Pedagogy	Creating opportunities for learning conversations, linking theory and practice	Mentors, C, B, M
Observation and feedback	Supporting professional learning and development through providing honest, balanced, constructive, comment	Mentors M, B, C, L, SM
Professional identity	Helping ITE students to develop their professional persona and move toward independence and autonomy.	All subject mentors
Flexible and adaptable	Responding to the changing needs of individual ITE students at different stages of their practice.	Mentors B, C, M
Listening to the student	Encouraging dialogue to support reflection on practice	Mentors M, C, B.
Challenging ITE students	Advocating risk-taking or putting students in unexpected or unfamiliar situations	Mentors C, B
Challenging themselves	To reflect critically upon their own practice	Mentors C, B, M
Pupil learning	Encouraging ITE students to focus upon extending pupils' learning	All subject mentors

Table 10. Developmental values/ perceptions of the subject mentor in school Y

The Subject Mentors

It was apparent from their conversation that the subject mentors in school Y perceived developing the professional learning and understanding of their students to be central to the mentoring process.

They stated that they worked to provide a "rich" learning experience for their students, through scaffolding a variety of learning experiences, providing guidance, sharing their professional expertise and tacit knowledge, helping with problem solving, and linking theory and practice.

Their comments indicated that they wanted to share good practice from their personal experience, though they allowed that the initiative to develop as independent practitioners lay with the students. There did not appear to be any attempt to limit or prescribe learning styles, they offered advice which as mentor C remarked "they can choose to accept or ignore". Mentor B supported this standpoint stating that "they" (the students) "have to learn to think for themselves" as they develop a professional teaching identity and move toward autonomy.

Mentors C, M and B argued that professional development must be suited to the needs of the individual student and mentors must be sensitive to this. They suggested that it was important for mentors to recognise that students' developmental needs changed as the practicum progressed and that mentors needed to be aware of this (Stanulis and Ames, 2009) as they delegated the responsibility for their professional development to the students. They demonstrated to their students their belief that flexibility, creativity, reflection, and rigour can enhance professional

expertise at any stage of a professional career. and encouraged them to adopt innovative, imaginative, and creative approaches to facilitate pupils' learning.

The concept of challenge emerged as a fundamental attitude which the mentors at school Y shared regarding the professional development of their ITE students. "My role is to make her the best teacher she can be" (Mentor M). Mentor C stated that an important challenge for the subject mentors was to create opportunities for their students to experience and learn from unfamiliar situations. He explained how he did this, for example, by encouraging his student to take responsibility for planning a series of lessons or supporting the learning of pupils with special needs. He added that he believed that risk taking encouraged the students' development of flexibility and adaptability, and consequent discussion in mentor meetings provided an opportunity for dialogue, critical reflection and further insight and understanding into the process of teaching.

Interestingly the mentors at school Y suggested that their participation in the process of mentoring ITE students challenged them to reflect upon their own practice and to accept that innovation and amendment could improve their own practice and enhance their own professional development.

Fostering the development of ITE students as independent autonomous practitioners was an issue which the subject mentors at school Y returned to several times during group and individual meetings. They agreed that helping their students to develop the skill of critical reflection was one of the most difficult and challenging aspects of their work, yet all believed this was essential if their students were to construct independent professional identities which could be applied not only in school

Y but in any teaching context. Lesson observation, dialogic "learning conversations" and assessment of ITE students' learning through balanced and constructive feedback were suggested as potential strategies to achieve this end.

The mentors collectively stressed the importance of lesson observation which could subsequently form the basis of informed "honest, balanced, and constructive" feedback (Mentor M) in time-tabled mentor meetings. They viewed these sessions as opportunities to extend their comments, to explain the tacit, to link theory and practice, and to enable their students to make further progress. Mentor C claimed that it was essential "to listen to students' comments and concerns, to foster a climate of reciprocal learning" whilst mentors B, and L argued for "role fluidity" (Kochan, 2012) which they felt could be best achieved by allowing the students to lead the discussion on occasion.

The subject mentors at school Y were fully aware of their role as "gatekeepers" to the profession and the need to ensure that the professional experiences they provided facilitated the development of the students' skills and knowledge which would lead to QTS. None of the mentors or ITE students I spoke to at school Y suggested that the assessment of the professional development and progress of the students had resulted in tension, challenge, or disagreement, perhaps because of the strength of the interpersonal relationships which existed within the mentoring dyads at the school. Mentor M spoke for her colleagues when she stated that in her view all members of the mentoring team worked hard to provide student assessments which were "balanced and fair" and set out positive achievements as well as mutually agreed targets for improvement.

The mentors noted a general concern to ensure that the students moved away from a preoccupation with their own teaching (which they conceded was completely understandable at the beginning of the practicum) to focus upon pupils' learning. Here individual mentors explained that they drew upon their own professional experience and expertise, modelled strategies they found effective, and broke down the elements of their practice for their students to consider. For example, Mentor B stated that he preferred, whenever possible, to delegate the responsibility for their learning to his pupils. He modelled this approach for his ITE students and encouraged them to experiment and be prepared to take risks to extend the panoply of teaching strategies they could adopt.

The ITE Students

The ITE students at school Y identified many ways in which the process of mentoring at school Y had contributed to their professional learning and development.

Student S stated that her subject mentor provided her with "invaluable help" with "the technical aspects of teaching such as lesson planning and classroom management" and advice on how to organise activities to involve and engage pupils. She valued his supportive attitude, his questioning and probing to encourage her to consider alternatives and his professional advice which she made plain "I could accept or reject". Student S was aware that her mentor recognised and provided for her specific individual learning and developmental needs, sharing effective strategies to help her manage a mixed ability class which she admitted "I struggled with" and encouraging her further professional development by advocating risk-taking and

"letting them go a bit more" instead of "leading from the front". Student S was reluctant to follow his advice "see you want to keep them there, you don't want to let them go" but as her mentor's attitude was non-judgmental and he stressed that she retained the initiative and the decision was hers, she followed his advice.

Student S believed that her mentor's attitude to pupil learning was a very positive influence upon her professional development. Student S was "excited" by the innovative strategies her mentor shared with her, such as giving his pupils responsibility to set targets for their own learning and believed that they contributed to the development her professional identity. This encouraged her to experiment to extend the range of teaching strategies she could employ.

Student E stated that her mentor's emphasis upon pedagogical discussion clarified her understanding of the links between theory and practice allowing her to incorporate the theoretical standpoints discussed at university into her practice. Such dialogue prompted critical reflection and "helped me to become a better teacher".

Student J felt that his professional developmental needs were "at the heart of the discussions" he shared with his mentor. These "learning conversations" helped him to solve problems in classroom management, develop his powers of inquiry and critical reflection and construct a professional persona.

The ways in which the subject mentors achieved these outcomes will be discussed more fully in comment on RQ2 which seeks to understand how the process of mentoring at school Y effected these objectives.

Contextual/Cultural Issues

Supportive architecture for mentoring	Active involvement of Head Teacher and Senior Leadership team	Mentors L, C, students S, E
Impact on whole school community	Reciprocal learning opportunities e.g., Inset discussions	All subject mentors, students S, E, J
Helping students to "fit in"	Helping students become aware of the ethos and cultural identity of school Y	Mentors L, M, C, and B
Lesson Study	Envisioning mentoring as a catalyst for cultural change within the school	Mentors C, B, M
School ethos	Helping students to become aware of the values and cultural norms which underpin the teaching role at school Y.	All subject mentors
Community involvement	Challenging students to make a positive contribution to the wider life of the school community	Mentors M, C

Table 11. Contextual values/ perceptions of the subject mentors school Y

The Subject Mentors

Langdon et al state that mentoring occurs "within the context of variable, powerful school cultures" (Langdon et al, 2018:249). The roles of student and mentor are inevitably contextualised and the cultural and social norms and values which permeate the school community influence the direction of the endeavour.

I was interested to canvas the perceptions of subject mentors and ITE students on this aspect of the mentoring process in school Y.

All the subject mentors in school Y stated that they attached considerable importance to helping their students become aware of the ethos and cultural identity of the school. This awareness was facilitated by the involvement in the mentoring process of the head teacher and the senior leadership team. Mentor L explained that the head teacher "actively welcomed" the students to the school and promoted a policy of inclusion from the outset remarking that "he's interested in everything they do". Her colleagues concurred commenting that the head teacher was committed to the concept of partnership between the university and the school to deliver high quality Initial Teacher Education. He facilitated mentor attendance at university mentor training sessions and had secured the school's involvement in a PLP (personal learning project) partnership between the school and the university to support mentors in advancing their students skills, competences, and learning.

All the subject mentors highlighted the contribution of the senior mentor in facilitating this approach. Her practice of disseminating administrative information including details of school policies on issues such as discipline referral and bullying in accordance with the work of Shaw (1992), McIntyre (1994) and Geen (1996) ensured that the students were quickly integrated into membership of the school community of practice. They stated their common belief that the involvement of key staff from the beginning of the induction period demonstrated that learning to teach is not viewed in school Y as being solely concerned about delivering subject knowledge. Indeed, there was an emphasis upon helping the ITE students to understand the school's

collaborative and collegial culture and to encourage them to contribute to the wider life of the school community. Mentor M emphasised that she believed that it was important for the students to understand the socio-cultural values and attitudes which characterised school Y. Their participation in a variety of initiatives during their induction week allowed them to see pupils in different social contexts which helped them to gain insight into the school as a community and to understand its cultural and contextual values and norms.

The mentors were in broad agreement that an important aspect of their work was to help the ITE students "fit in" to the school community. Mentor C believed that "it's our role and duty" to do this and stated that in his opinion it was a "vitally important" aspect of the subject mentor's work. He added that raising student awareness of the accepted norms and practice of the community would allay their fears about making mistakes through ignorance which might infringe these. He commented that through guidance, explanation, and the provision of opportunities for inclusion, the students would be able to gain an understanding of the culture of the community of practice at school Y.

Mentors B and M agreed with this comment, accepting that the ITE students wanted to be accepted as supportive members of the school community. However, they went further, suggesting that the ITE students could contribute to a programme of change, innovation and transition which could occasion critical reflection by all members of the school community upon the status quo, and conceivably become a catalyst for change. Mentors C and L cited the contribution that several of the students had made to a school Inset session by demonstrating new technological approaches

to teaching and learning or sharing research findings they had encountered at university and suggesting their practical application in the classroom. This suggests a degree of support for "role fluidity" (Kochan, 2013) within the mentoring team at school Y and an appreciation that the mentoring process may be a potential catalyst for cultural change.

Langdon et al (2018) suggested that there may be a "disconnection" on the part of most staff in a school from the process of mentoring. Whilst a full consideration of this hypothesis is beyond the scope of this study, it is certainly the case that school Y has in place some initiatives to minimise this occurrence as discussed above. All the subject mentors involved departmental colleagues in the mentoring of ITE students and the discussion of pedagogy and the inclusion of a range of staff with specialist expertise provided the opportunity for learning conversations to begin which could be continued in informal staffroom discussions. Student comments (see below) support these perceptions.

The ITE Students

I asked each of the ITE students to what extent they felt part of the social and cultural community of practice at school Y.

Student A's response to this question was overwhelmingly positive. She stated that she recognised the need to "fit in" to the wider school community and that she had felt "welcomed" and "accepted" as a member from the beginning of the practicum. The involvement of the head teacher and the senior leadership team in the student

induction programme meant that she felt "included in things from the beginning". Students E and J agreed citing the willingness of senior staff to answer questions about the cultural identity of school Y in timetabled sessions during their induction period at the school.

All of the students during the first practicum participated in the ERW PLP Lesson Study project that School Y was involved in. Student S stated she appreciated the opportunity for involvement in this initiative which the head teacher supported as "he wanted something which would help our teaching". She commented that this emphasis on helping students came "from the top" and informed the social and cultural mores of the school.

Student J stressed that in his opinion mentoring was "a whole school issue" in school Y. He noted the involvement of many specialist staff in the Professional Studies programme as evidence of this. He also commented that he believed that his discussions with his departmental colleagues had provided an opportunity to raise awareness of the mentoring process within the wider professional community.

The comments of the senior, subject mentors, and the ITE students appear to support their view that the culture of school Y is open to "experimentation" and "evolution". The involvement of the ITE students in whole school Inset sessions in which they share innovative resources or teaching strategies with the school staff may have contributed to this. Mentoring already plays a part in this process and may be a catalyst for further development within the school community of practice in the future.

However, not all members of staff wished to be involved in the mentoring process at school Y.

Student E was delighted with the relationship she developed with her subject mentor and departmental colleagues, but she was disappointed with her experience of the role of the form tutor. Attached to a KS3 tutor group, she stated "I don't do much with them. I observe what they are doing rather than being involved with them" suggesting that not all members of the school community viewed involvement in the mentoring process as part of their role. Student E did not discuss this matter with her mentor, nor does he seem to have enquired how her work with her tutor group was helping her to understand the pastoral elements of the teacher's work at school Y. Neither student nor mentor appeared to think that this aspect of student E's school experience was of high importance, but it seems that an opportunity for helping to raise her awareness of social and cultural traditions within the school, and to develop the perception of mentoring as a whole school issue was limited in this instance.

There are indications that suggest that the mentoring process influenced some members of staff who were not directly involved in working with the students daily within their subject departments. The Inset sessions which the students contributed to may have prompted established staff to reflect on their approach to some elements in their own teaching e.g., the innovative use of technology, and whilst it is beyond the scope of this study to quantify the impact of this, it seems reasonable to conclude that school Y is a community which is open to considering cultural change. It also seems fair to suggest that the process of mentoring within the school has proved to be a valuable means of revising accepted attitudes to teaching and learning and has helped

to establish a transitional cultural context which is reflective, flexible, and open to further change and innovation.

Research Question 2

RQ2 asked how mentors achieved their aims in helping their ITE students to develop into reflective, flexible, and independent practitioners.

I examined the perceptions and values which influenced mentoring practice at the school in my previous comments on RQ1 and found that though there was a significant measure of agreement amongst the mentoring team regarding the importance of the relational, developmental, and contextual elements of the process, there was less consensus about how these should be delivered in practice.

Mentor C was a very experienced subject mentor who was head of a multidisciplinary department. He stated that he felt that it was essential that he took the initiative in establishing a relationship of professional friendship based upon trust, honesty, and open-mindedness with his students from the beginning of the placement and to demonstrate his willingness to respond to their individual developmental needs. He stated that "you have to be flexible and reliable and available" explaining "We've got mentor meetings, but we meet after school as well, and we drop in" to lessons regularly. He commented "I think that's an important part" of developing a positive mentoring relationship which helped the students to feel that their progress mattered to their mentors.

Mentor C explained that he believed that it was essential that mentors should also challenge students to consider alternative approaches saying "Right these are our worksheets. Have a look at them but don't just use them as they are. I'd like you to make them better...you know by putting your slant on them". In this way he challenged students to move toward the acquisition of an independent identity and a degree of autonomy so that they can teach effectively in any school context.

For mentor C the development of his students' self-confidence, self-reliance, and self-esteem were very important aspects of his work. He linked this to helping his students deal with the unexpected and unfamiliar.

"I find a lesson where they're free and tell them that they need to go and cover X's lesson period 4 as X is busy. They usually say they don't know what to teach so I give them a couple of lesson plans to help. During the lesson I go in to see how they're

getting on. They panic at first but then they realise they <u>do</u> know what to do what to do and their confidence grows".

Mentor C also felt that this experience increased his students' flexibility and adaptability in line with Vygotsky's (1967) and Daloz's (1986) view that the role of the mentor, the MKO, is to provide support coupled with challenge. Planning lessons, classroom management, timing, and pace, and structuring a sequence of lessons were all technical aspects of teaching which the mentor identified as important issues which he felt could be discussed in learning conversations. He was especially concerned to ensure that his students considered the above in relation to the pupils' learning. For example, he worked to help them understand that lessons did not always go to plan "they might go into the workshop thinking that the class will complete a unit of work. And the class may not...or it might be something which they thought the pupils would find easy and would only take 5 minutes which took much longer. They need to learn that different classes will approach the tasks set differently and understand that "it's not their fault if pupils fail to finish". In this way mentor C facilitated his students' skills of reflection and self-evaluation and emphasised that the learning needs of pupils lie at the heart of the teaching process.

Mentor M stated that mentoring allowed her to share her professional experience and expertise with her student. She felt that this opportunity to discuss pedagogy provided "insight" and "clarity" to her student's understanding of the process of teaching and learning. In addition, she believed that these discussions helped her to develop and formalise her conception of the mentoring role.

Mentor L agreed and provided explicit comment on how she achieved this aim, stressing the importance of practice. "The students need an opportunity to practice. My role is to guide them and show them things that work and things that don't work". Modelling and expert subject knowledge was shared so that the students could begin to construct a repertoire of professional skills.

Mentor C commented that he felt that guidance involved an element of balanced criticism. In a lesson observation you might sit there and think that's not right" but you must explain it in a way that they understand why you are suggesting changes. You need to be critical but also supportive so that you encourage reflection and together find a way forward". He also stated that it was important to explain his own professional practice to his students and encourage them to think about alternatives "what could you do with that? His generosity in sharing departmental resources with his student created a positive relationship but this support was coupled to challenge as he explained he told his students "Use them by all means but make them better... work out an alternative way of doing it".

Mentor C added that he ensured that his students had opportunities "to observe the whole department... we try to make sure that they see lots of different key stages and discuss pedagogy and the needs of classes at different levels". He added that it was up to each individual student to decide which strategies to incorporate into their practice emphasising that this was an important aspect in developing an independent professional identity.

Mentor B stated that he felt that students were sometimes "bombarded with information before they go in" to observe a class". Consequently, he suggested to his students that they should be selective in their focus for lesson observations and choose to concentrate on specific skills on different occasions which could then be discussed in formal or informal mentor meetings.

Regarding the lesson observation of his students, he stated that "it must be honest... sometimes you need to be blunt... it must include positives and negatives" for students to make progress. However, he also emphasised that "it has to be a dialogue" and that he felt that both partners in the mentoring dyad could learn from the discussion. Mentor L agreed adding that "you've got to listen to them", to understand their individual concerns and perspectives.

The comments of the subject mentors at school Y suggest that all mentors considered the need to encourage students and reinforce their self-confidence and self-esteem as important elements in the mentoring process.

Mentor C explained how he helped his ITE student to develop her confidence and become self-reliant. She came to me and said, "I'm really worried, they're doing engineering, and you never did that with me". Mentor C reassured her that the method of delivery "isn't going to be vastly different from the way you'd deliver resistant materials. You just need to get a grasp on the content". Student H successfully completed the engineering module "it was actually easier than resistant materials" and mentor C had, through a blend of encouragement, reassurance, and challenge, provided her with increased confidence in her teaching ability.

Mentor C added that "we've always done this (provided a confidence boost) especially towards the end of the first practice". He stated that "the unpredictable and unexpected can happen in schools", for example "they may have to teach a PSE lesson or something like that and they panic". He stated that he would scaffold the experience by giving them "a couple of lesson plans to help" and "when they get in there, they realise they <u>do</u> know what they are doing" which results in a growth of self-confidence and self-efficacy.

The inclusion of their ITE students in the community of practice was important for all the mentors in school Y. This ranged from giving practical advice for example where to sit in the staffroom to working with as wide a cross section of the school community as possible. So, mentors C, B, and M suggested to their students that they talk to the technicians, work with children and staff in the special learning needs unit, and "move out of their comfort zone".

The mentors conceded that it was sometimes difficult to challenge the preconceptions of some established members of the school community who viewed the newcomers as "students" rather that new members of the school community but believed that their attempts to raise the profile of the newcomers through creating opportunities for them to share their knowledge of new research or teaching strategies in school Inset sessions helped to raise awareness of the mentoring process amongst the wider school community.

The subject mentors at school Y were unanimous in their view that an important part of the mentoring experience for ITE students at the school was to help them come to terms with the "reality" of working with pupils in the classroom. Sometimes ITE

students may have unrealistic expectations about the work pupils will complete in a lesson and as mentor M explained "they may not for all sorts of reasons". Not only do mentors have to encourage their students to reflect critically on what occurred but also, they have "to understand that it's not their fault if pupils fail to finish". The mentor's role here is complex providing support and reassurance, suggesting modifications, and encouraging reflection and self- evaluation to improve future planning.

The subject mentors had stated in the group interview I conducted at the school that they strongly believed that mentoring was a reciprocal learning experience. Mentor C explained how he enabled student J to overcome a problem with class management. "He (student J) took over a Year 10 class and the first two lessons were terrible. But it wasn't the teaching it was the way he was managing the kids. So, I suggested he needed to be loud and make his presence felt. He did that and the class was great".

Student J was potentially a very strong student who had learned to reflect on his lessons honestly and he felt that he "needed something to settle the pupils" at the beginning of the lesson. He suggested to mentor C that he try this "draw a monster thing". Mentor C admitted that he thought "I don't get this" but asked student J to "talk me through it". He agreed that student J should use this lesson starter for a few lessons and "it was fantastic". Mentor C thought "I've never seen that before, but I'll use it in future", demonstrating his sense of equity and collegiality, and willingness to "get ideas" from his student.

Mentor L agreed with this view "they bring new ideas with them... they're suggesting packages and things we haven't come across". In both instances the mentors demonstrated a willingness to learn from their students.

Language and Signage

Language is an extremely important indicator of attitudes as indeed is gesture and signage. The language of the subject mentors at school Y was focused yet whenever possible colloquial and accessible. It was punctuated by warmth of tone and humour and seldom bordered upon the merely didactic. It revealed the strength of the interpersonal relationships which had been created within the various mentoring dyads and was an effective vehicle for delivering pedagogy. Affirmative gestures, e.g., nodding, interjections also help to create the sense that language and signage are tools which mentor and student use to extend understanding and learning.

The ITE Students

I asked the ITE students at school Y how they felt their subject mentors had helped them to gain an understanding of the process of teaching and learning during their practicum. Student S stated that her mentor provided "help, support and advice" from the outset, technical aspects of teaching things like lesson planning and how to organise activities effectively, "I would make schemes of work, and he would check them over and make sure they were correct". Through annotating her lesson plans he offered advice drawn from his professional expertise which were tailored to her specific individual learning and developmental needs.

As the placement progressed her mentor began to challenge student S to take risks and move away from "leading from the front and encourage more pupil interaction". He acted as a role model delegating the responsibility for teaching and learning to the pupils and though initially apprehensive student S concluded "this is something which is definitely working" and chose to emulate his teaching style. She described to me the sense of excitement she felt by the innovative strategies her mentor shared with her, and she chose to "borrow", "the pupils were teaching themselves, and teaching each other".

Student S appreciated her mentor's emotional support and sense of empathy "he knew what I was going through" and was always available "to talk things through with me". In addition, in feedback sessions he "always started with something I did well" whilst his practice of setting realistic and achievable targets for continuing development in her lesson comments book helped her to focus on her professional learning.

Availability and accessibility were "enormously important" for student E who appreciated her mentor's willingness "to be available at lunchtime or after school" reassured her that her mentor was "genuinely concerned with my well-being" and "prepared to help in any way he could."

Her mentor encouraged student E to reflect on her professional development by offering "alternative strategies" for her to consider and advice on how to teach different classes. He says thigs like "change the resources you use with this class" and "above all remember to be flexible".

Student A stated that "my mentor is sensitive and considerate". She promoted a collegial and collaborative relationship assuring student A that "we can learn from each other" which helped to increase her student's self- confidence and self-belief. Student A recognised that the developmental aspects of the mentoring role were also important. She commented that her mentor had given her "really good feedback… we talk things through". Student A appreciated that her mentor was "another pair of eyes in the classroom" who "notices things I don't realise I'm doing". She felt that this process of dialogue and the reflection that ensued helped her to move toward professional autonomy.

Finally, student J stated that he felt that his experience of the mentoring process at school Y had been "overwhelmingly positive". He commented that individually the senior mentor, the subject mentor, and the class teachers he worked with had been "brilliant" in the level and quality of support they had provided. Student J stated that his subject mentor was always available to help him to resolve problems. Sometimes this took the form of specific practical advice regarding for example timing and pace or "projecting a firm but fair" teaching persona. Feedback sessions provided opportunities to discuss pedagogy, and assessment was always constructive and linked to targets for improvement. He stated that in his opinion mentoring in school Y was certainly a "whole school initiative". He was grateful for the opportunities arranged for him by his subject mentor to observe the lessons of several of his departmental colleagues. This not only helped to develop his subject knowledge of areas which were less familiar to him but also helped him to understand that "there was more than one effective way to teach" and that flexibility was key to success. His discussions with his departmental colleagues had contributed to the development of his professional learning and his

professional identity. He valued the levels of support, guidance, and encouragement he had received which had prompted critical reflection and sometimes resulted in amendments to his practice.

School Z: thick description

School Z is a newly built, co-educational 11-18 English medium comprehensive school of approximately 1400 pupils, though it has the capacity to accommodate1600 pupils on site. The school was formed by the amalgamation of three relatively small secondary schools in the vicinity. School Z delivers the National Curriculum to pupils at key stage 3 and thereafter prepares pupils for GCSE, AS and A level examinations, as well as the Welsh Baccalaureate, Entry Level, and Skills Based qualifications. The school is situated in a socially and economically deprived area of South Wales where over a third of pupils are in receipt of free school meals. This is nearly double the national average for Wales which is 17%. However, the head teacher and the teaching staff are determined to "break the link" which they perceive between "deprivation and achievement". The headteacher commented on the school website that external examination results in the school's first year increased by 10% above those of the founder schools.

The school's website emphasises the need to "nurture and develop" the needs of all learners. The stated intention is to develop a learning culture which encourages the development of pupils' "appetite and motivation for learning" and promotes their "independence and autonomy".

The school is committed to inclusion for all, including groups from "minority faiths or ethnicities, travellers or asylum seekers who have English as an additional language" as well as pupils who have been identified as More Able and Talented (MAT) or possessing Special Educational Needs (SEN). In addition, the needs of those with physical, sensory, or mental impairment have been considered. A differentiated curriculum has been introduced at the school to "meet the needs of all" and to set "suitable learning challenges" which allow staff to "respond to students' diverse learning needs".

The school's policies on Literacy and Numeracy are centred on developing pupils' ability to use these skills "effectively in all areas of the curriculum" and in everyday life.

Although the school is not situated in a geographical area where Welsh is widely spoken as a first language the school sets out on its website its commitment to participating in the Welsh Government's initiative "laith Pawb". The school seeks "to encourage continuous contact with the Welsh Language and Culture" through bilingual signage and the regular use of incidental Welsh in all lessons. All staff attend training courses to help them to develop their linguistic skills and lists of appropriate terms are provided. Extra- curricular visits for pupils also "engage pupils with the language and culture of Wales" and promote their "values and heritage".

School Z is a community school, and parents and carers are invited via the school website to become members of the Partnership Forum for Parents, Additionally they have full access to all school policies together with a school prospectus which gives detailed information concerning the academic courses and ECA which are

available for Key Stage 3, Key Stage 4, and the Sixth Form. Parents' Evenings provide opportunities for further discussion of pupil progress. Parents/carers are directly invited to help the school to create "a culture of praise and encouragement" within which all pupils can achieve, based upon a "shared involvement" and "mutual respect".

The school has three Teach First Cymru students who have been appointed to the staff and are just beginning their work at the school. In addition, a Physical Education student from University D will be joining the Teach First students in October. The school will not be accepting other PGCE students during the current academic year.

Staff from two of the original founding schools of school Z have previous experience of working with Teach First Cymru trainees. Together they took four Teach First Cymru Trainees and worked with them over a two-year period. When I interviewed the History subject mentor last summer, he stated that there was little apparent difference in the quality of their practical work between Teach First Cymru and PGCE student by the end of the course. One of the Teach First Cymru trainees left the course school during the Autumn Term, having decided that teaching was not the right career for her, but the others completed the course and two obtained teaching posts before the end of the academic year. They were both offered the opportunity to join the staff of school Z but declined and sought appointments elsewhere. In an attempt to retain the current students care has been taken to appoint those with familial links to the area.

Research Question 1

What are the perceptions, values, expectations and assumptions which mentors in Wales bring to their role?

The Professional Mentor

The Professional Mentor is very experienced as he previously occupied this role for several years in one of the founding schools. He sees the students informally on a daily basis and is available to offer support and advice should the need arise. In addition, he carries out the requisite number of classroom observations and feed-back sessions demanded by the Teach First Cymry programme. The trainees have subject mentors who teach in rooms which are next to them or close by. The subject mentors have safeguarded time to discuss teaching strategies as appropriate. Finally, the trainees have a regular programme of professional discussions scheduled, most of which are delivered by the Professional Mentor.

Relational Factors

The purpose of my study is to explore the perceptions, values and beliefs which guide the Professional Mentor at school Z in his work with the three Teach First Cymru trainees attached to the school. Mentoring "lends itself to a multiplicity of interpretations and approaches" (Aderibigbe et al, 2016:13) and I wished to ascertain how the Professional Mentor's theoretical conception of the mentoring process influenced his practice.

I was able to meet the Professional Mentor at school Z before beginning my programme of observation of the Teach First Cymru trainees and was able to discuss the values and perceptions of the process of mentoring which guided him in his work. I recorded this discussion and transcribed the data as soon as possible, submitting it to the Professional Mentor to ensure his views were set out accurately.

In our initial meeting the Professional Mentor explained that he accepted that the mentoring of Teach First Cymru trainees was multi-dimensional and complex (Ambrosetti and Dekkers, 2010) and included relational, developmental, and cultural elements. He emphasised that he was committed to providing emotional support, facilitating professional learning, and explaining the values and social and cultural norms of the community of practice to each trainee.

The table below summarises the relational values and perceptions which guide the Professional Mentor in school Z in his work.

Sustained emotional support	Praise, encouragement, consolidated self- esteem and sense of progression	PM
Building a rapport	Warmth, sincerity, empathy, positive regard	PM
Professional friendship	Honesty, trust, mutual respect	PM,.
Collegial relationship	Students viewed as colleagues not apprentices	PM.
Accessibility	Regular meetings	PM and teach first trainees.
Open-minded	Non-judgmental relationship established	PM

Scaffolding	Support coupled with challenge in	PM
progress	accordance with individual needs	

Table 12. Relational values and perceptions of the professional mentor school z

The Professional Mentor stated that he wished to act as a "critical friend" (Cain, 2009) to each of the Teach First trainees, establishing individual relationships based upon empathy, trust, respect, honesty, and collegiality (Hudson, 2016). He believed that collegial dialogue and discussion would help the trainees to link theory and practice, extend their pedagogical knowledge and understanding, and encourage reflection, innovation, and creativity. He commented, "unusually" in the view of Bryant and Carpenter (2008:47) that he wished to discover the values and beliefs which shaped the trainees' perceptions of teaching and learning. He commented that he hoped to facilitate the assimilation of the trainees into the culture of the school, whilst also providing opportunities for them to contribute to a process of cultural transition (Kochan, 2012) which might revitalise the practice of some established and experienced staff. He recognised the wider organisational aspects of his role in coordinating the work of the subject mentors, Teach First representatives and University tutors in delivering a positive and productive mentoring experience for the trainees.

Professional Development

Sharing professional	Enhancing students' understanding of the process	PM
expertise	of teaching and learning	

Scaffolding progress	Support coupled with challenge in accordance with individual needs	PM
Pupils' learning	Emphasising the need to focus upon pupil needs	PM
Consider alternative approaches	Challenging students to set creative, imaginative tasks to enhance pupils' learning	PM
Critical reflection	Challenging, questioning, probing to support student reflection on practice	PM
Pedagogy	Linking theory and practice	PM,
Formative Assessment	Offering guidance and advice as necessary; problem solving	PM
Feedback sessions	Dialogic learning opportunity. Goals for students' further development negotiated not imposed	PM and Teach First Cymru trainees
Professional identity	Probing students' underlying values and assumptions to encourage independence and autonomy	PM
Observation of other staff	Allowing students to note new strategies and teaching approaches	Whole school initiative
CPD	Students encouraged to accept responsibility for this	PM

Table 13. Professional values / perceptions of the professional mentor school Z

However, he stated that his priority was to support the trainees' professional learning and development, (Roberts and Pruitt, 2003), enabling them to fulfil their individual potential, and promoting their understanding of the values and social and cultural norms of the community of practice (Lave and Wenger, 1998).

He stated his belief that the mentoring process was valuable in facilitating the emergence of well- trained teachers who had a secure knowledge and understanding of the relational and professional developmental aspects of their work and consequently satisfied the demands of QTS. In addition, he commented that he hoped that the trainees would bring new ideas and approaches to their work and that they would influence the practice of some more experienced members of staff through sharing their ideas in informal dialogue and discussion and through demonstrating technological expertise. In summary, the Professional Mentor stated that he believed that the mentoring of the Teach First students would prove to be a catalyst which could encourage experienced staff to reflect critically upon their role and ultimately contribute to cultural change. In school Z then, the process of mentoring the Teach First Cymru trainees is seen by the professional mentor as an initiative which can impact upon the whole school community.

Contextual Values

Architecture of mentoring	Head teacher and senior staff committed to mentoring process	HT, PM, SLT
Catalyst for change	Students can introduce new teaching strategies to experienced staff	HT, PM
Ethos of school	Explaining the cultural norms and values of the school to trainees	PM,
Inclusion	Facilitating membership of the COP	PM,.
Whole school targets	Students encouraged to contribute to these initiatives.	PM, school staff

Table 14. Contextual values / perceptions of the professional mentor school Z

The Head Teacher

I was able to hold a short meeting with the Headteacher (HT) of school Z who emphasised that she welcomed the presence of the Teach First trainees in the school. She suggested that the mentoring process at the school would provide the requisite levels of support and challenge (Daloz, 1986) to enable them to develop into excellent teachers. She stated her belief that all members of the community of practice would assist in this process, sharing expertise, making tacit knowledge explicit, and providing friendship and support as appropriate. Finally, she expressed her hope the trainees would not only come to understand the existing culture of school but would also, over time, bring a new dimension to the practice of some experienced members of staff through discussion and dialogue. and thus, become "transformative" (Kochan, 2012) agents of change within the community of practice.

The Subject Mentors

The subject mentors teach in rooms next to their trainees whenever possible and have safeguarded time to discuss progress with them but as they have heavy teaching responsibilities, I was unable to meet them formally to discuss the process of mentoring. I suggested that they might be willing to discuss the attitudes, values, and beliefs which guided their work as subject mentors through individual telephone conversations or via email, but it was not possible to arrange such discussions. In consequence I am unable to comment in any detail on their individual subjective values and perceptions of the mentoring role nor upon their involvement in the professional development of their trainees.

The Teach First Trainees

I was unable to arrange interviews with the Teach First trainees as they had demanding teaching commitments and were generally not free to talk to me during my school visits. However, I have included comments which they made in feedback sessions which I believe indicate how they viewed the mentoring process at school Z and the perceptions and values which informed their work.

Research Question 2

How do subject mentors in Wales work with their ITE students to help them to achieve success?

My second research question focuses on how the process of mentoring in school Z supports the professional development of the Teach First trainees who are working towards the achievement of QTS at the school during the current academic year.

I was invited to observe formal lesson observations of each of the trainees by the Professional Mentor and to attend the feedback sessions which took place immediately afterwards in each case. The sessions were recorded with the consent of all participants, and the data transcribed as soon as practicable. In addition, I have referred to my field notes and reflexive comments to provide a rich description and analysis of how the professional mentor utilised the opportunities which the session provided to enhance the professional development of the trainees.

The importance of feedback in improving the practice of student teachers is well documented in the literature (Hattie, 1999; Hall et al, 2008; Voerman et al, 2012; Lofthouse, 2017). Lofthouse claims that "relatively little research" (Lofthouse, 2017:29) has been conducted into the "nature" of the dialogue which ensues or how this might "enhance learning" (Voerman et al, 2012:1107). I hope to contribute to this in my study.

Trainee 1: Year 8 ALN Pupils

Trainee 1 taught Mathematics. She was confident, vibrant, enthusiastic, and at ease in the classroom on both occasions when I observed her practice.

Feedback

The Professional Mentor's focus during the debriefing was upon trainee 1's professional progress and development. He explained that the lesson would be assessed formally for the external mentor, the university partnership, the Teach First evidence file, and the school, but he reassured the trainee from the outset that his approach was positive and not based upon the discrepancy model identified by Hattie and Timperley (2007) or the judge-mentoring approach described by Hobson and Malderez (2009). Instead, he chose to focus upon progression in order to provide specific and effective feedback (Shute, 2008) which was designed to help the trainee reflect upon her performance and "enhance learning" (Voerman et al, 2011:1108).

The Professional Mentor stated that he felt student 1 was "really progressing now" and should be "really proud of the progress you have made". He noted that she

should "think about how things have improved since September" noting that linking the standards for QTS to her lesson plan provided evidence of careful thought and reflection upon previous advice. He praised the trainee's use of differentiation, and her focus on the learning needs of individual pupils "it's obvious from the lesson plan that you know the children well, you know their needs, you'd tailored the work to them, and I really liked the inclusion of hints for them to follow on the back of your handout". Importantly he conveyed to trainee 1, from the outset, through body language, facial expression, and humour that he wanted a learning conversation in which her values and beliefs were fully represented.

The Professional Mentor offered advice at several points during the feedback session, but these were couched in the form of suggestions, and he listened actively to trainee 1's replies. He asked open questions to encourage trainee1 to explain how she challenged pupils to develop the skills that encouraged independent learning, and this prompted the trainee to provide a considered explanation and justification for her approach. She explained that her starter task was designed to help the pupils move toward understanding the concept of division and in response to the Professional Mentor's direct question "how do you deal with that?" she outlined her strategy to support pupils' learning, "we'll do a whole lesson on division". She also provided evidence of appreciating the importance of collaboration with departmental colleagues to ensure there would be further opportunities for pupils to practise their numeracy skills.

Hattie and Timperley (2007) suggest that feedback on tasks set can enhance learning. The Professional Mentor at school Z chose to focus on several tasks which

trainee 1 had used during her lesson to support learning. For example, he noted that she had devised a kinaesthetic task to help the ALN pupils understand the concept of volume. The Professional Mentor appreciated that the task though challenging "really suited" the special needs pupils and trainee 1 agreed showing an awareness of how her pupils learn "they really need to touch and have concrete examples". The Professional Mentor stated that he "was confident" when he spoke to the learners "that they really understood what volume was".

The second activity devised by trainee 1 involved partner activity and the Professional Mentor commented that this engaged pupils and promoted further conceptual understanding. He praised her for "guiding what was happening next" without intervening directly unless this was necessary. In conclusion he noted both her "excellent teaching" and "the pupils' excellent learning".

The professional Mentor praised the opportunities which trainee 1 had created for pupil self- assessment whereby pupils were challenged to think for themselves and review their progress. He cited the evidence he had noted of pupils challenging themselves in the third activity and of their increasing autonomy "by now they were really keen to challenge themselves and they were making rapid progress going from the bronze to the diamond level".

The Professional Mentor was prepared to be a "critical friend" commenting that trainee 1 "could have used the LSAs present in class better". This prompted a discussion about the management of other staff present in the classroom. Trainee L explained that she never knew how many learning support assistants would be present

in a lesson and that her priority was to position at least two of them with pupils who "won't do anything" without one-to-one support. She recognised the problem as a learning opportunity and was willing to re-assess and reflect upon the way she worked with additional staff in the classroom to enhance their contribution to pupil progress.

In conclusion the Professional Mentor reiterated that "this was a really good lesson with high-quality learning and high-quality teaching" bolstering trainee 1's sense of self-efficacy. The final section of the feedback was characterised by the Professional Mentor offering advice based upon his professional experience and considering the responses from trainee 1. The "learning conversation" was wide-ranging and collegial in tone and it was apparent that trainee 1 was actively reflecting on the developmental strategies suggested to extend some aspects of pupils' learning still further. The Professional Mentor ended by commending her creativity and her commitment to pupil progression.

Mentoring is essentially about offering support to "newcomers," but the literature explains that mentors also assess their mentees' progress. This can affect the relationship within the mentoring dyad. The Professional Mentor at school Z was able to provide balanced feedback which recognised many excellent aspects of trainee 1's work, but he also probed, questioned, and listened actively to trainee 1's explanations about choices she had made. This learning conversation encouraged the trainee to reflect upon her actions and to accept responsibility for further professional development.

Trainee 1: Year 7 Top Set Maths

I attended a second lesson given by trainee 1 during the spring term. Once again, the lesson was formally assessed by the Professional Mentor.

Relational Issues

The professional mentor created a positive atmosphere for the discussion of trainee 1's lesson. His warmth, praise and encouragement were evident from the outset as he commented "the first thing to say is that it was a very good lesson, I thoroughly enjoyed watching it". His relaxed demeanour and eagerness to listen to trainee 1's responses created a collegial relationship based upon trust and mutual respect and contributed to the trainee's self- confidence and sense of self- esteem as a classroom practitioner. Trainee 1 was aware that this was a formal assessment of her progress, but the professional mentor took pains to encourage, reassure and compliment her on her performance whenever possible. He acknowledged her rapport with the class stating, "you've got a fantastic relationship with them which is brilliant, they really respond well to you, and you to them" and linked this to his comments on pupils' learning and progress. In this way emotional support was coupled to evaluation and supporting professional development from the outset.

Professional Development

The focus of the discussion was on professional learning and assessment of the lesson against the standards required for QTS. The professional Mentor reassured the trainee "I ticked off lots and there are some I haven't ticked off that I probably could have, but there was really strong evidence for these". Classroom routines were obviously well established "they all arrived on time and got straight on with the starter.

That was great" and the task provided "scope for differentiation" and "independent learning". The Professional Mentor noted that pupils responded well to this challenge, praised trainee L's effective use of praise to motivate pupils and the quality of advice which she provided. Once more he noted evidence of trainee 1's creativity, and the imaginative approaches she devised to engage pupils recognising her innovative practice which he stated was "characteristic of your work". These initial remarks developed into a dialogic discussion about the use of praise, to excite, engage, and motivate pupils and help them to progress. Trainee 1 explained that her next written assignment was "all about the use of praise" and she linked the theoretical and the practical as she discussed with the Professional Mentor this aspect of pedagogy.

The Professional Mentor listened very carefully to her comments, whilst subtly probing to extend the discussion. The dialogic approach continued with a discussion of the equal importance of clear learning objectives and the provision of success criteria. Within this collegial learning conversation, the Professional Mentor ensured that he and trainee 1 worked together as co-enquirers and co-constructors of professional practice.

The Professional Mentor identified trainee 1s success in challenging pupils to engage in problem solving and stated that her questioning technique played an important role here. Praise was repeated and there was also respect for trainee 1's planning and lesson delivery "their numeracy skills were much better than I expected... it's a credit to you".

However, he did not lose sight of the need to challenge trainee to improve other aspects of her work through discussion on pedagogy and linking theory and practice. Thus, he introduced the concept of Assessment for Learning, a strong focus for Teach First, challenging the trainee to "stretch them a little more... think about pitching it higher" to ensure pupils' progression. Trainee 1 reminded him that she had set one difficult example, but the Professional Mentor repeated that he felt pupils could be challenged to go further and asked trainee 1 to reflect upon this.

The Professional Mentor noted that trainee 1 had departed from her lesson plan on occasion during the lesson. In discussion she explained that she believed the lesson had to be driven by pupil needs and stated that "I thought that the pupils needed different tasks at that time. As much as it's nice to have a presentation I often go off it with them because you don't know what they'll come up with next". The Professional Mentor agreed that it was important to maintain flexibility and consider pupils needs adding "it's about what happens in the lesson isn't it?".

He was aware that trainee 1 created a secure environment for learning within which "they're comfortable about getting it wrong". He commented that he had been "delighted" by the way she had responded to pupil R's mistake "you all kind of stopped and learned from her mistake". Trainee 1's response revealed a lot about her teaching values and beliefs. She explained that she printed out big pink rubbers which said, "the biggest mistake you can make is not making any". The Professional Mentor praised her approach emphasising that the pupils trusted her and were willing to put forward their ideas without fear of ridicule stating that a pupil had told him "we're allowed to get it wrong". He also commented that alongside support, encouragement, and

reassurance, trainee 1 extended pupils' thinking skills, "you dealt with wrong answers well. You didn't give them the answer, but you gave them the knowledge they needed to work it out for themselves".

The feedback session ended with ended a discussion about developmental goals for trainee 1 to consider. The Professional Mentor emphasised that he expected trainee 1 to contribute to this. He displayed empathy when the trainee commented that she found formal lesson observations "nerve-racking" and agreed that the presence of an observer affected the classroom climate. He shared his lesson evaluation with the trainee explaining that from a school perspective it would be graded as a "top good". He then spent time offering advice "to make it an excellent". In this part of the session, he acted as a "more knowledgeable other" (Vygotsky, 1967) scaffolding her learning and demonstrating support and challenge in equal measure. He made sure that he listened to trainee 1's responses to his comments and that he considered these before raising a new point.

The Professional Mentor used humour to emphasise his points suggesting that once all pupils had moved "from the peak to the soaring" she could add another level "something like stratospheric or for want of a better term infinity and beyond" to challenge the strongest pupils to develop further mathematical skills. He reminded her that "you could have the school MAT programme in mind" as "teaching these pupils is a school priority, emphasising the socio-cultural values of the community of practice. He suggested that she think about strategies she could use, thus encouraging reflection to allow for further professional development and progress. The discussion then focused on how to stretch individual pupils and ensure that their learning potential

was fulfilled. Advice, the sharing of professional expertise, and suggestions for the trainee's continuing professional development were notable aspects of this conversation which was characterised by collegiality and a focus upon enhancing pupils' learning.

These feedback sessions demonstrated the predominant attitudes and values of the Professional Mentor at school Z. The professional mentor wanted to improve the trainee's professional practice by facilitating the discussion of a range of professional issued which came to the fore as the lesson developed. He used evidence from the lesson to illustrate his comments and his use of praise and encouragement combined to make the session a positive experience for her. He worked with trainee L to establish a collegial learning conversation and listened actively and attentively to her views. He clearly viewed the debriefing session as an opportunity to explore what happened in the lesson and to foster professional dialogue. This allowed the trainee to comment upon the values and theories which had informed her practice and enabled him to offer suggestions for her to consider which might facilitate further progress.

This approach to debriefing provided trainee 1 with the opportunity to examine and reflect upon her professional practice and encouraged her to begin to take responsibility for her further professional development, encouraging her capacity for reflection and facilitating the development of her professional identity.

Trainee 2

Trainee 2 taught Science. He was a well-qualified graduate who was concerned to develop his professional practice and to resolve the problems he had encountered in class management with some groups.

I first observed trainee 2 teaching science to a mid-range ability year 9 class for the final lesson of the school day in company with the Professional Mentor who was carrying out a formal lesson assessment. The comments which follow are taken from my notes made during the lesson and the feedback session which followed immediately afterwards.

Relational Issues

The Professional Mentor had formed a supportive relationship of professional friendship (Gardiner, 2009) with trainee 2, and he ensured in the feedback session that he focused on providing a positive learning experience to facilitate the trainee's continuing professional development. He understood that student S was less confident than some trainees and chose to adopt the approach advocated by Oproiu (2015) to deliver feedback that was descriptive rather than critical in tone in the first instance.

Professional Issues

The Professional Mentor demonstrated sensitivity and an awareness of trainee 2's lack of confidence from the outset and used the feedback session as an opportunity to praise and support the trainee whenever possible stating that he felt that trainee 2 had demonstrated "progression" (Voerman, 2012:1108) in several teaching standards.

However, he also challenged the trainee by including some "discrepancy feedback" (ibid) using evidence from the lesson observation to set targets to encourage reflection and progression. These included lesson planning, classroom management, and questioning skills.

His comments created an opportunity for pedagogical discussion. Trainee 2 stated that he had "pushed them as much as I could" and that he "couldn't understand" why some pupils were disruptive. He remarked that strategies like bringing pupils back for detention had proved to be ineffective and he asked the Professional Mentor "what more can I do"? It was apparent that trainee S not only respected the Professional Mentor but trusted him too as he felt able to ask for advice and support.

The Professional Mentor responded with advice drawn from his professional experience. He scaffolded the learning experience for trainee 2, demonstrating empathy, encouragement, and professional friendship. He engaged in problem solving as the More Knowledgeable Other (Vygotsky, 1967) within the dyad and made tacit knowledge explicit whilst listening actively to the trainee's comments. Goals, and targets for improvement were negotiated rather than imposed and focused upon inclusion, differentiation, and clear explanations.

He also advised trainee 2 to "drop into lessons and watch this group in other contexts to see how they are managed by different colleagues. You can then try out some of strategies which seem to be effective". The Professional Mentor clearly saw no difficulty in advocating this approach. Teaching and Learning were whole school priorities and he anticipated that support for a new member of the community of

practice would be readily forthcoming. The Professional Mentor concluded the feedback session by indicating that he was available to offer further support to the trainee whenever necessary. This supportive stance demonstrated his ability to provide advice focused upon individual needs.

The second formal lesson observation of trainee 2 by the professional mentor took place in the spring term and in the feedback session which followed the Professional Mentor adopted a different approach. The emphasis in the first feedback session had been upon providing reassurance, support, encouragement and advice and the trainee had been reluctant at first to engage in professional dialogue. However, in the interim the trainee had worked hard to reflect critically on his performance and appeared to be much more at ease in the classroom.

The Professional Mentor quickly established a positive tone for the discussion, praising trainee 2 for the improvements he had made in many areas of his work, including lesson planning, re-capping prior knowledge, timing and pace, and classroom management.

The Professional Mentor stated that he had been impressed by the level of engagement and enjoyment the pupils had demonstrated and that this had established a secure environment for learning. He commended trainee 2 for sharing "clear learning objectives" with the pupils and linking these to the school "learning ladders". The tone of the lesson was much more inclusive than upon earlier occasions, Trainee 2 posed open questions such as "how can we improve our enquiry?" and pupils shared ideas willingly.

Trainee 2 was very ready to explore what had happened during the lesson and to explain the beliefs and theories which informed his practice. I noted that the Professional Mentor was less prepared to lead the discussion on this occasion, instead questioning, probing and encouraging trainee 2 to explain the reasons for the decisions he had made. He listened actively to the trainee's explanations of the choices he had made during the lesson to promote pupil learning and noted that the "creative, enjoyable, and challenging tasks" he had devised enabled pupils to extend their knowledge and understanding.

The Professional Mentor continued to offer reassurance, encouragement, and support to trainee 2 and to take opportunities to create opportunities for learning conversations based upon exploring tacit knowledge and his professional expertise. When pupils failed to complete the penultimate task, he commented "this can happen, and you made the good decision to leave further work on graphs until the next lesson. Above all don't worry, this sort of thing happens and learning to deal with it comes with experience". He finished his feedback comments with praise, commenting that "your plenary was clever and provided a basis for your next lesson". However, he continued to set clear targets for further progress suggesting "make use of pupils more to develop learning", for example ask pupil G to "tell everybody what they have to do".

In conclusion, though the Professional Mentor continued to offer emotional and practical support in this feedback session there was a real emphasis on encouraging the trainee to examine his professional practice, to engage in self-evaluation and to accept responsibility for his continuing professional development.

Trainee 2 had also begun to contribute to departmental discussions. He mentioned that "my head of department has asked me to talk to the department about Assessment for Learning in our departmental meeting next week". This suggests that the hopes expressed by senior management that the trainees would bring new knowledge of research topics which might interest and inform established members of staff were beginning to be realised.

Trainee 3: Year 8 Lower Set 1

Trainee 3 is a well-qualified English graduate. He is confident and at ease in the classroom.

I observed trainee 3 introducing the first in a series of lessons on "inference scanning" and "connotation" to a year 8 lower set 1 class in the spring term. Key words were displayed on the white board throughout the lesson and trainee 3 had planned to make these abstract concepts accessible to all learners through a discussion about monsters. The feedback session was held immediately after the lesson and my attendance was welcomed by both the Professional Mentor and the trainee.

Relational Issues

The relationship between the Professional Mentor and trainee 3 was founded upon mutual respect, honesty, trust, and professional friendship and, once more the Professional Mentor demonstrated his belief that feedback should be positive, constructive, supportive, and encouraging (Opriou, 2015). He began by commenting on the good relationship trainee 3 had developed with the class and praised some

"excellent opportunities" for pupils' teaching and learning. "Your classroom management was very good, and pupils were interested in the subject matter". Pupils had understood the challenging concepts of inference and connotation and were able to explain these in their own words. He concluded that "this was an ambitious lesson and demonstrated your excellent planning and creativity. You should be proud of what you have achieved" contributing to trainee 3's sense of self-efficacy and self-esteem.

Professional Development

The Professional Mentor remarked that trainee 3 had devised stimulating and varied tasks suitable for the age and ability range. He stated that the lesson objective, to understand how to learn to apply key terms such as "inference" and "connotation", was a challenging one but praised the quality of trainee 3's explanation of these key words which he considered accessible to all learners. The Professional Mentor had commented prior to the lesson that he believed that trainee 3 had the potential to become an excellent practitioner and perhaps for this reason, though he praised several aspects of the trainee's work, he also probed, questioned, and challenged, to stimulate reflection and self-evaluation. There was no sense of "judge-mentoring" (Hobson and Malderez, 2009) though the Professional Mentor was concerned to encourage and extend trainee 3's critical reflection and developing sense of identity and professional autonomy.

Task 1 involved watching a series of video clips which presented different interpretations of Dracula. The Professional Mentor praised good use of AV material which involved and engaged pupils. Discussion began from the pupils' own experience

and understanding and Trainee 3 circulated and listened to pupils' comments whilst monitoring on task behaviour. Trainee 3 then challenged pupils to make inferences about Dracula et al and to explain the reasons for their views, but the Professional Mentor felt that "few pupils made meaningful observations". He counselled, "be precise, key words could be used directly here, and comments developed with guidance from these". He offered advice drawn from his professional expertise, "clarity of instruction is vital and key to success. You could model the approach to take or you could do it together to extend their learning".

The Professional Mentor suggested targets for improvement, "think about the needs of all pupils, don't let those few boys dominate as they did in your random generator task. Try to encourage and include the quieter pupils". His questions encouraged reflection on action (Schon, 1983): "Did you put too much in or try to achieve too much? Realistically, I felt there was quantity rather than quality of learning". Trainee 3 considered these comments responding, "I suspect I went in full pelt". The Professional mentor was sympathetic and shared his professional expertise "don't be afraid of giving them time to develop ideas, give them scope to get it right or wrong. Sometimes as teachers we need to sit back and allow the pupils to make mistakes."

Trainee 3 appeared to be at ease throughout this discussion. He explained why he made certain choices, acknowledging that he might act differently if he repeated the lesson. He listened carefully to the suggestions and advice the Professional Mentor offered but it was noticeable that the responsibility about implementing or adopting any or all of these was delegated to the trainee. The Professional Mentor offered alternatives and choices drawn from his own professional experience and expertise,

but it was apparent that he respected trainee 3's developing sense of professional identity and move towards autonomy.

The feedback session recognised progression in trainee 3's work and set goals for further development providing opportunities for pedagogical discussion and critical reflection.

In conclusion, the evidence from the lesson observations and feedback sessions revealed that the Professional Mentor in school Z was concerned to focus upon the professional development of each individual trainee. He offered emotional and practical support as appropriate but also focused on initiating discussion to understand the values and attitudes that characterised each trainee's approach to teaching and learning. He listened actively to comments made and took every opportunity to facilitate the trainees 'development as thoughtful reflective practitioners. Responsibility for progression was increasingly delegated to the trainees through questioning, probing, and challenging. In every feedback session which I observed the Professional Mentor created a collaborative, reciprocal learning culture and facilitated a dialogic approach not only to assess strengths and areas for improvement, but also to encourage reflection, professional learning, and development.

Chapter Five

The mentoring of ITE students is widely recognised as "central to the process of teacher education" (Aderibigbe et al 2016:8). In this chapter of my study, I consider the theoretical and practical implications of my research findings concerning the mentoring of ITE students in Wales in the aftermath of the Donaldson (2015) Tabberer (2013), and Furlong (2015) reports and outline the contributions of the thesis as well as discussing the limitations of the study, and implications for further research. In this chapter I address my research questions.

RQ1 What are the perceptions, values, expectations and assumptions which mentors in Wales bring to their role?

RQ2 How do mentors in Wales work with their ITE students to help them to achieve success?

My first research question seeks to explore the "beliefs, values and perceptions" of subject mentors that "construct and sustain deep learning cultures" (Gilchrist 2017:35) within my case study schools and in the questionnaire responses.

Mentoring is complex (Mackie 2017:30) and has been defined and interpreted variously by those involved in different cultural contexts. However, there is a significant measure of agreement (Ambrosetti 2014; Hudson 2016; Langdon et al 2017) that the concept possesses relational, developmental and socio-cultural dimensions. In this

chapter I set out to discuss how these elements of the mentoring process are perceived by stakeholders in the ITE process in Wales and comment on these areas with reference to my findings and the research literature.

The chapter is organised by three over-arching areas, relational, professional, and cultural, and within each area I have created a number of sub-headings to explore, illustrate, and explain the significance of the different elements. For example, within the discussion of the relational dimension of the mentoring process I consider issues such as trust, respect, availability, accessibility, the provision of emotional support, and collegiality. These provide a response to RQ1. I employ a similar organisational structure for my discussion of the professional developmental and cultural elements of the mentoring of ITE students, which provide a response to RQ2.

The subjective values of individual subject mentors have a fundamental effect on their perception of their role. Those mentors who hold innately conservative values may be inclined to encourage their ITE students to accept and replicate the norms of the community of practice and the accepted patterns of behaviour and performance (Gibb 2003:239). They perceive their role to be a means of ensuring the continuity of traditional methods of practice which they value as a stabilising force within the community. My survey and interview data reveal some support for the strengths of such a traditional perception of the mentoring process amongst subject mentors in my case study schools and in the responses to my questionnaire. This will be discussed more fully below.

Subject mentors who hold more liberal values are likely to regard mentoring as a powerful means of inculcating social and cultural change within the school community (Gibb 2003:239). They perceive their role as challenging, through dialogic discussion and critical reflection with their ITE students, the accepted norms and practice of the community. The data from this study suggests that mentors who encourage their ITE students to pursue creative, imaginative, and innovative approaches to teaching and learning, may influence transition and change within the community of practice. My survey and interview data reveal considerable support for this transitional perception of the mentoring process amongst subject mentors which I will discuss more fully in due course.

Student perceptions, values, assumptions, and expectations also impact upon the mentoring process. Indeed, Hagger and McIntyre (2003:42) assert "when beginning teachers embark on training, they are no more empty vessels than are children as they enter classrooms. It is now widely accepted that the personal knowledge and beliefs they bring with them are both complex and influential". Hobson et al (2006:13) suggest that it is an important task for mentors at the beginning of the practicum to seek to understand the perceptions, values, experiences, expectations and assumptions of individual ITE students so that they may offer "appropriate support and challenge" (ibid). This data from this study offers the student perspective on these issues and is considered below.

I have structured this discussion to explore the varied perceptions, values, expectations, and assumptions which influence mentors in Wales as revealed in my data drawn from my survey of subject mentors in Wales and my case study schools.

In the following sections of this chapter, as mentioned above I report on the relational, professional and cultural dimensions of the mentoring process in Wales and provide below a list of sub-headings that I use in the following text to delineate each area.

Relational aspects (responding to RQ1)

Professional friendship, trust and respect, emotional support, availability, accessibility, collegiality.

Professional aspects (responding to RQ2)

Practical support, lesson planning and preparation, lesson observation, pupil learning, student reflection, pedagogy, scaffolding student learning, tacit knowledge, active listening, role fluidity.

Cultural aspects (responding to RQ2)

Explaining the cultural norms and values of the placement school to the students to help them to "it in". Providing opportunities for the ITE students to contribute to transition within the school culture, supporting student understanding of the sociocultural links between the school and the wider community, introducing the ITE students to a range of ancillary staff and SLT.

The mentoring process is complex and my comments on the aspects identified above have emerged from my data analysis.

The relational dimension

Mentoring "encompasses personal and professional dimensions" (Mackie 2017:30) and she suggests that relational aspects "lie at the heart of the mentoring process". For a number of researchers including Hagger and McIntyre (2003:4) and Hudson (2016:32) the provision of relational support which encompasses nurturing, reassurance, building self-confidence and self-esteem, are fundamental aspects of the mentoring process, whilst for others, including Daloz (1986), the relationship also necessarily encompasses an element of challenge. The comments of the subject mentors in this study and the responses from their ITE students emphasise the relational aspect of the mentoring process.

Aderibigbe et al (2016:10) suggest that different types of mentoring relationships occur on a continuum ranging from a traditional conception of the mentor, as an "experienced and mature person who offers emotional support and guidance to a novice to" one who provides a collaborative, egalitarian and shared experience" (ibid). They argue that a positive mentor-student relationship is an essential prerequisite for a productive teaching practice placement and suggests that the personal values and perceptions of the subject mentor define the experience. There are examples in the data for this study of support for both traditional and transitional mentoring approaches in Wales which I shall refer to below.

Professional friendship

Gardiner's (2008) concept of professional friendship characterised the personal and professional elements which she perceived as central to the mentoring process and there was support for this interpretation of the mentoring process in the survey and within my case study schools. Friendliness is an important means of developing a positive mentoring relationship between mentor and ITE student, especially in the early stages of a school placement as student A in school Y emphasised in a professional studies meeting "I felt lost when I came here but my mentor has helped me settle in" but it "is not in itself sufficient" as respondent U in my survey stated.

Subject mentor N in school X highlighted the importance of establishing a relationship of professional friendship (Gardiner 2008) with her student, which though friendly and supportive, incorporated an element of professional detachment in recognition of the mentor's role as evaluator and assessor of student progress. This perception of the mentoring role was shared by several of her colleagues including survey respondent V who stated, "mentors have a responsibility to provide support for their students but one of the mentor's major roles is to judge student progress against the standards for QTS".

The data in this study suggests that perceptions of Gardiner's construct have changed over time for both ITE students and their mentors. Whilst the majority of student teachers respect the professional relationship which they enjoy with their mentors, for others the distinction between professional and personal friendship has become blurred and expectations and assumptions reflect this.

Student L, for example, in school X talks of her mentor providing friendship and support in wider areas mentioning difficulties in her personal life which she has shared with her mentor "my friend got ill at the end of the placement and mentor C was really good at supporting me through it. It wasn't a school issue, but I could share it with her, and she totally understood". Student A in school Y lacked self -confidence and in an informal conversation with me stated that she was "sure" that her mentor would provide encouragement, friendship, reassurance and support. Comments from many survey respondents emphasise their belief that establishing a positive relationship with their students is vitally important, for example respondent X stated, "my most important role is to support my trainee".

Trust and respect

The development of mutual trust and respect is an important element within the mentoring relationship (Hobson et al 2006:76; Mackie 2017:3). Indeed Mullen (2005:5) suggests that it is a vital contributory factor in the development of a rapport between student and mentor. My data from this study suggests that the mentors in my case study schools appreciate this and work to establish these goals through adopting a non-judgmental, open-minded approach characterised by honesty, collegiality, and active listening to student views. This was evidenced in several of the learning conversations I observed where mentors such as the senior mentor in school Z, mentor C in school Y and the senior mentor in school X were at pains to understand the underlying values which their students held about teaching and learning and to respect these views, although they sometimes suggested alternative strategies to help their students move further toward target setting and self – evaluation. The senior

mentor in School Z identified the values which characterised trainee 1's approach to teaching and learning "it was great when you all stopped and learned from X s mistake and told them (the pupils) "the biggest mistake you can make is not to learn from them". He appreciated that trainee 1 wanted her pupils to feel confident enough to take advantage of every learning opportunity which occurred demonstrating her flexible and creative approach to teaching and learning.

Emotional support

Emotional support is perceived by many to play an important role in creating a positive and productive mentoring relationship. Anderson and Shannon first identified this concept as significant within the mentoring process in 1986 and nurturing, supporting, advising and guiding are widely perceived by researchers and mentors as good practice. More recently Davis and Fantozzi (2016:252) are amongst those who accept the view that emotional support for ITE students which includes the above within a "caring environment" (ibid) helps ITE students' development as effective practitioners and record their finding that dialogic discussion and supportive learning conversations are an increasingly common expectation from student teachers (Davis and Fantozzi 2016:257). They suggest that the personal values of individual subject mentors influence their perceptions of their role and the evidence in this study suggests that the majority of subject mentors in schools X and Y together with the senior mentors in all three case study schools adopt this stance. For example, the senior mentor in school Y offered advice and support on a range of issues, including peer mentoring and linking theory and practice in the professional studies sessions

which I attended but took care to provide reassurance and encouragement throughout the discussions which followed.

Calderhead and Shorrock (1997:197) contend that whilst emotional support is vital it is of itself "insufficient". They focus upon the link between the personal and professional aspects of the relational dimension of mentoring and suggest that mentors need to present their students with new experiences and alternative perspectives and practices which will encourage reflection and self-evaluation. My data in this study suggests that a significant number of mentors in my case study schools agree with this view, and I will discuss this further in my comments on professional development below.

Availability/accessibility

The comments of several subject mentors and ITE students in this study suggest that they students perceive that ready access to their subject mentors contributes to the formation of a positive supportive relationship. Student J in school Y emphasised how much he valued the availability of his subject mentor to offer support or solve problems which had arisen. Students S and E in the same school stated that their subject mentor's willingness to make time to discuss problems which had occurred and to offer reassurance reinforced their belief that he was genuinely concerned for their welfare. Student L in school X explained how important she felt that "my mentor put aside loads of time for me. She was friendly and patient. She would sit down with me in her free periods before I took a lesson, and we would go through my plan together and she would help me to improve it".

Subject mentors in all of the case study schools agreed that they valued such informal contact as well as regular time-tabled mentor meetings as a means of demonstrating care and concern for their students' welfare. Subject mentor B in school Y stated, "I am available to discuss any problems or help with lesson planning at lunchtime, after school or via email at evenings or weekends". The study indicates therefore that for some subject mentors there is a blurring of lines between personal and professional particularly in relation to the provision of personal time to support students, which appears aligned to the notion that to mentor is to give freely of oneself.

Collegiality

The data in this study suggests that there was considerable support for a mentoring relationship that was based upon the concepts of collaboration, equity, reciprocity and partnership which values the views of all participants. Mentor C, in school Y, for example, perceived his role as being to establish a supportive, sensitive and fluid professional relationship within which his students were encouraged to express their views freely.

Mentor L in school X established a collegial and collaborative relationship with his students designed to encourage, support and reassure them "even when things haven't gone well" (Student S) whilst subject mentor C in school X emphasised that she believed that the creation of a collaborative, supportive, balanced and constructive relationship was an essential requirement in working with her student to develop her

professional knowledge and understanding. She was clear that this was a major aspect of the mentoring process and a major responsibility for subject mentors to fulfil.

The senior mentor in school Z used praise, encouragement warmth and humour to create a close personal yet professional relationship with the Teach First Cymru students at the school which enabled him to support their professional development. Hudson (2016:32) emphasises that mentoring is founded upon the professional relationship which exists between mentor and student teacher whilst Hagger and McIntyre (2003:42) point out that the personal qualities, perceptions and subjective values of both members of the mentoring dyad which are "complex and influential" may affect its development.

My data suggests that though there is evidence from all of the case study schools of an increasing acceptance amongst mentors of the concepts of collegiality and reciprocity, the concept of master/ apprentice has not disappeared completely, but it holds less sway generally. Mentor D, for example, in school X adopted a functional and instrumental approach to the mentoring process. Her student was provided with clear guidelines and lesson plans to follow as her mentor aimed to help her to emulate successful traditional methods of practice, but I didn't find any of the students I observed and spoke to in my case study schools (except the student and the mentor cited) setting out to follow and emulate explicitly the example of their mentor.

The survey data revealed rather more support for a traditional master/ apprentice relationship where mentors, such as respondent W perceived their role as providing guidance by demonstrating their skills and expertise for their students to

emulate to develop their professional competence and fulfil the requisite demands for QTS.

Mentors in my case study schools generally encouraged diversity of approach and celebrated students' individuality and developing sense of professional identity and independence, and responses from the questionnaire and the case study schools supported this attitude as respondents stressed the need for both members of the mentoring dyad to "work together" (survey respondent P) so that students can discover "their own teaching style" (subject mentor L, school X).

The literature points out that the mentoring relationship may be "stressful" (Geber 2003) for either of the members of the mentoring dyad, but I did not find evidence to support this claim in the questionnaire responses or my discussions with subject mentors. The ITE students in each of my case study schools appear to have forged close personal and professional relationships with their mentors. Student B in school Y commented "my mentor is nice" and student A in the same school explained that she valued the reassurance and encouragement her mentor provided.

In conclusion, the literature and my data suggest that the personal values of individual subject mentors influence their perceptions of their role. Honesty, support, a non-judgmental approach and an ability to empathise with the student teacher all contribute in the views of many subject mentors in this study to the development of a personal rapport within which professional development can occur.

Now I turn to the findings pertinent to RQ2: How do mentors in Wales work with their ITE students to help them to achieve success?

This "neglected" (Chan 2009:239) area within mentoring research draws upon data gained from questionnaire responses, semi –structures interviews with subject mentors and ITE students, lesson observations in my case study schools, and my reflexive field notes to explore mentoring practice in Wales

I have structured my comments to focus on how subject mentors work with their students to support their professional learning and development.

Professional aspects

At the core of student professional development are the concepts of support and challenge (Daloz 1986). The mentoring role focuses upon developing the professional learning and understanding of the individual ITE student and helping her to develop an independent professional identity and a measure of autonomy. The values and perceptions of the subject mentor which may range from the traditional, emphasising the acquisition of knowledge and skills, to a more supportive collaborative approach emphasising "working together". Hobson et al (2006 p13) state that students' preconceptions and subjective values can affect their teaching experience and professional development in their placement schools.

Facilitating the professional development of their PGCE students was a key priority for all subject and senior mentors in my case study schools, and indeed for the

majority of survey respondents, though there were differences in how they felt this could best be achieved .Mentor D in school X set out clearly the aims and objectives she expected her student to follow in order to teach the skills she wanted pupils to achieve in her subject area. Several survey respondents advocated a traditional monological mentoring approach as they stated that they felt that the ITE students needed guidance in lesson planning and delivery especially at the beginning of the school placement. Others including Mentors B, Cand M in school Y and mentor L in school X together with the senior mentors in all three of the case study schools advocated a professional approach which combined support with challenge to encourage the development of thoughtful, reflective practitioners. There was a consensus that mentoring involves innovation, dialogue and sharing professional expertise. Different schools and mentoring teams interpreted these aims in different ways depending on the subjective values of the individual mentor and the cultural ethos of the school and the community of practice, though almost all of the subject mentors in the case study schools in this study valued dialogue and learning conversations as a means of discussing pedagogy and linking the theoretical and practical elements of the ITE course. Mentor M in school Y emphasised how important she felt timetabled mentor meetings to be "my mentor meetings are sacrosanct" as they provided opportunities for her to discuss theory and practice with her student. Mentor C in the same school also emphasised that mentor meetings allowed him to share tacit knowledge and also through dialogic discussion and an appreciation of role fluidity to learn from his student indicating a transformative approach to the mentoring process. "Though I didn't understand why student J wanted to use this draw a monster thing for a lesson starter it worked, and I'll use it in future".

Practical support

Many ITE students claim that "classroom management causes them concern" (Hudson 2011:2). The creation of a positive environment for learning "appears to be at the centre of managing pupil behaviour" (Burden 2003:3). The subject mentors at school X were clearly aware of this concern and discussed and modelled a variety of strategies for their ITE students to consider. In student T's lesson her mentor moved to stand behind pupils who were slow to settle, signalling to them that he was vigilant and actively monitoring their behaviour. This sensitive, low-key stance helped to increase his student's confidence and signalled his support to her effectively. Mentor L in school X worked collaboratively with his student to demonstrate how to engage pupils in creative, imaginative activities whilst mentor B in school modelled for his students how delegating responsibility for their learning to his pupils promoted their engagement and inclusion. In both examples the mentors demonstrated to their ITE students that well planned activities such as appropriate extracts from films or risk taking by allowing the pupils to "get out of their seats and move round" (student S, school Y) challenged and supported pupil learning.

Lesson planning and preparation

The data from this study reveals that the subject mentors in my case study schools appreciated that their ITE students welcomed support in activities such as lesson planning and preparation. This involved sharing their professional expertise and in- depth subject knowledge, sharing departmental resources, drawing upon tacit knowledge and explaining the reasons for their decisions. In mentor meetings which I

observed mentors invited student comments and listened attentively to them, responding fully to queries. They encouraged their students to consider carefully the strategies and activities they planned to introduce in their lessons. Student L in school x commented "I had the schemes of work, and I adapted them then for each lesson me and mentor C sat down, and I'd talk through what I wanted to do, and she'd give advice" which resulted in an agreed overview of the lesson". Student S in school X commented "what I like most is that we sit down and plan lessons together". The data from the case study schools suggests that the ITE students recognised the importance of joint planning or revising an initial attempt to reflect agreed aims as did survey respondent X who suggested that "joint planning is a major factor contributory factor in student professional progress".

Senior mentor T in school Y explained how she had set up activities to support the planning of her ITE students. She explained in her first professional studies meeting which I attended that she wanted to focus on lesson planning and "slowing things down "so that "there would be time to really think about this", She advocated joint planning between students from different subject areas and set up a paired student partnership to facilitate this. For example, student S (English) was paired with student J (Design and Technology). The senior mentor stated "you will plan a joint lesson, exactly the same lesson with the same starter, activities and plenary. The only thing that will be different is the content which will be linked to your subject area. You will each teach your lesson while your partner observes you and later feeds back on your performance". In addition, "while one of you is teaching the lesson it would be good if the other could focus on how three pupils you have identified together are reacting to the experience. How effectively are they learning?

The students' post lesson discussions with the senior mentor revealed that they felt that this exercise had helped them to focus on how lesson planning and delivery supported the development of their understanding of pupil learning. Student S for example had noted how student J had involved his pupils in his lesson by encouraging them to move around the classroom and discuss the tasks they had been set and to learn from each other. She confessed that she had been surprised to "see you want to keep them in their seats" but through observing the reactions of the pupils resolved to "take more risks in future" because "the pupils were really trying to solve the problem they had been set".

This experience of joint planning, teaching and evaluation encouraged the paired students I observed to discuss pedagogy and their approaches to teaching and learning. The collaboration between students J and S seemed to me to have encouraged dialogue and reflection. On the quality of the learning experiences they provided for pupils, Student J stated that "our collaborative lesson made sure that the learning of the pupils was at the forefront of our planning" whilst student S commented "one of the things I realised when observing the selected pupils is that there are limitations when you are only teaching from the front of the class".

Lesson observation

Mentors and students alike in this study stated that they valued lesson observation and the feedback sessions which followed as opportunities for dialogue and discussion. In the sessions I observed feedback could be formative or summative and might focus upon an agreed area or upon a critical incident which occurred during

the lesson. Students and mentors agreed that the most valuable meetings were those where each member of the dyad contributed to the discussion of pedagogy as equals and explained the reasons for their actions or comments in the learning conversations which ensued. This was a marked feature of the mentoring approach adopted by the senior mentor in school Z in his post lesson discussions with Teach First Cymru trainee 1.

In school Y subject mentors B and C encouraged their students to observe a range of staff and to consider incorporating unfamiliar approaches into their own practice. The senior mentor in school X advised his students "never stop observing" whilst the senior mentor in school Z advised trainee 2 to "drop into lessons to see how staff deal effectively" with a class the trainee found difficult to manage.

Pupil learning

Several mentors in the case study schools encouraged their students to delegate responsibility for their learning to the pupils to facilitate discussion, and engagement. Students E and S in school Y were initially unsure about following mentor B's advice to provide opportunities for pupils to take the lead in classroom activities "see you don't want to let them go" but as they trusted their mentor, they risked doing so and "it was fantastic, the pupils were teaching themselves". Mentor L in school X demonstrated how open questioning could encourage pupils to thank more critically about a topic and inviting pupils to "tell us more" shared responsibility for learning amongst class members.

Student reflection

Reflection is the ability to frame and reframe practice through a critical consideration of past experience (Schon 1983;1987). It is an important skill for student teachers to gain and mentors can offer support and advice through dialogue, prompting, challenging, advising, listening to student comments and suggesting alternatives to promote a deeper, richer, and greater understanding of professional practice.

The data from this study suggests that mentors in Wales appreciate the strengths of critical reflection and encourage students to engage in sustained evaluation of their progress. For example, in school X student T was challenged by her mentor to consider problems she had encountered in class management and reflect upon the underlying reasons for this. In the ensuing learning conversation, the mentor was quick to offer praise, encouragement and reassurance to the student for "trying a number of things to engage the pupils". He commented "the pupils accept you as their teacher and trust your knowledge of the topic". In addition, he noted that "they were actively involved in answering your questions and your powerful plenary provided opportunities for discussion and sharing ideas". Through such comments the subject mentor signalled recognition of the student's professional progress, and supported the development of her confidence, self- esteem, and capacity for critical reflection. His comments were not prescriptive. The subject mentor did not regard student T as merely an apprentice, indeed he recognised the development of her individual teacher identity, echoing Eriksson's (2013:12) view that it was the student's responsibility to

take an active part in the mentoring process by discussing experiences, asking questions and engaging in reflection.

Pedagogy

Dialogue about the process of teaching and learning is an important element in the mentoring of ITE students. The literature suggests that this is also an area which is neglected in the literature (Chan 2009:239) and that in many cases the emphasis in mentor meetings is upon practical issues such as how to develop questioning skills, manage behaviour, and develop students' subject content knowledge.

My data from this study contradicts this finding. Mentor M in school Y stated that "teachers have very limited opportunities for discussing theoretical issues or explaining or justifying their point of view". However, she stated that "in mentor meetings, there is an opportunity" to inculcate such professional dialogue and clarify standpoints for "both members of the mentoring dyad" which she felt was enormously important for the on-going professional development of both members of the dyad. This view was shared by departmental staff who were involved in the mentoring process, for example Teacher R from school X claimed that "mentoring has made me a better teacher" through post lesson pedagogical discussions which encouraged him to consider alternative approaches to practice. His comments suggest that the mentoring process at the school was revitalising and transform his practice.

Student S in school X stated that "mentor L believes that we should link theory and practice" and explained that his mentor had modelled strategies to help him in

this. "Mentor L showed me that I needed to get to know the pupils and find out about their interests. He knew that pupil B was very interested in the weapons of World War one, so he invited him to take the lead in sharing his knowledge with the class". Student S realised that this promoted inclusion and increased questioning and discussion amongst class members and commented "this was really helpful. I wouldn't have thought of that".

Scaffolding student learning

ITE students unsurprisingly focus upon their own professional development during the first stages of their school placement but the challenge for their mentors is to change this preoccupation to focus upon a wider consideration of pupil learning and pupil needs. This may occur in a number of ways through advice, discussions based upon personal experience, listening to student difficulties, and ensuring the experience is scaffolded and students feel free to experiment with a variety of approaches without fear of censure.

My data suggests that mentors in my case study schools are adept in supporting students in this transition and student comments attest to this.

Student B in school X lacked confidence in his ability to manage a year 9 class who were undertaking group work in the unfamiliar setting of the school library. The subject mentor was aware of the student's concern and his actions demonstrated how he had decided to provide reassurance and support. The subject mentor provided visible support signalling throughout the lesson effective strategies for the student to

follow. He sat where all pupils could see him clearly making it clear from the outset that he would monitor pupils' on task behaviour. During the lesson he supported his student by moving constantly from group to group, examining completed work and commenting on progress. Student B followed his example and visibly gained in confidence as pupils worked to complete the tasks set. It was interesting to note that in this instance the subject mentor adopted the role of the MKO or master to provide reassurance, model effective behaviour and instil student confidence. This strategy enabled student B to work with individuals and small groups effectively and provided much for him to reflect upon regarding his classroom management in the future. What was interesting was not only what the mentor did but how he unobtrusively assessed the learning needs of student B and through his actions provided for them, emphasising that mentoring activities should be tailored to individual student needs.

The relationship which existed between student B and his mentor was complex. It contained vestiges of the master/apprentice mentoring model but went beyond this to offer emotional support encompassing praise, guidance and reassurance to an insecure student at the beginning of the first practicum. However, even at this early stage in the practice the subject mentor signalled his intention to challenge student B to reflect upon the lesson and consider "how could you have improved it further to support pupil learning?" In this manner a degree of reflection was delegated to the student signalling to him that he needed to think about his planning and performance and the effectiveness of the strategies he employed. The senior mentor signalled clearly through questioning and probing the student's responses that student B needed to evaluate his progress critically and honestly. This was an interesting lesson to observe as indeed was the feedback session which followed as the mentor signalled

his belief that the mentoring process combined the elements of support (Vygotsky 1978) and challenge (Daloz 1986) to facilitate student professional development.

My data indicates that the subject mentors in the case study schools in this study respected the individual needs of their ITE students and, though they shared a common understanding the requirements of the mentoring role, they adapted their practice to offer support and opportunities for further professional development within the accepted norms of the community of practice.

In school X mentor L worked collaboratively with his ITE student to scaffold the latter's professional development. The mentor demonstrated the importance of combining excellent subject knowledge with anecdotal evidence to enhance pupils' learning. The mentor's use of drama in his lesson starter engaged pupils from the outset and allowed the student to introduce the first task with confidence. Student and mentor worked together and circulated whilst pupils were on task to support, question. or prompt further thought. The second task, modelled by the mentor demonstrated to the student how emotive extracts from films could be used to enhance pupils' knowledge, understanding and sense of empathy and enquiry.

The subject mentor continued to signal creative, imaginative and effective teaching strategies to his student in the later stages of the lesson. Student I 's data capture sheets provided little opportunity for pupil exploration. Mentor L was aware of this limitation and intervened to model the value of open questioning to the student. He showed his student how to develop pupils' learning by asking "how"? or "why"? or inviting them to "tell me more" or submitting a judgement. By these means he

demonstrated professional expertise of a high order to student I, signalling the importance of allowing pupils to compare, assess, and reach independent judgements.

Subject mentor L worked in a collaborative and collegial manner with student I throughout the lesson. He demonstrated how to use resources effectively to explore and extend pupils' learning. Perhaps the most important thing he did was to empathise with the student, offering support and reassurance and modelling advanced teaching strategies e.g. demonstrating how to introduce an emotive subject sensitively and developing pupils' capacity to respond.

The lesson provided an opportunity for the student to learn about many aspects of classroom practice. The student commented "I've learned so much, lots of tips, just from watching him. I admire his energy and the way he knows so much, the importance of narrative. H keeps a discussion going, saying things like "can anyone help out?" He makes the pupils really think about the work".

The data in this study suggests that a collaborative and collegial approach to mentoring ITE students was widely employed in school X. Advice designed to stimulate student reflection "in your own time" was offered by several mentors who provided guidelines but challenged their students to reach independent judgements. Student T, after struggling with classroom management, was advised by the senior mentor (who also acted as a subject mentor) "here is something to think about...the level of noise later in the lesson... give them guidelines about what's acceptable. If they used partner voices that would address that issue". Her mentor's comments signalled his intention to encourage student T to reflect on the advice given and

ultimately reach her own conclusions and accept a degree of responsibility for her continuing professional development.

Survey responses too supported the decision of many subject mentors to scaffold student progress as respondent Y commented "I try to explain the ideas underlying my professional practice ...and provide guidance".

Tacit knowledge

Shim and Roth (2008:6) comment that expert teachers (mentors) possess deep subject knowledge and considerable tacit knowledge about the process of teaching effectively, but they state that little is known about how they share this knowledge and make it explicit for students (ibid:7). The data from the case study schools in this study suggests that mentors employ a range of different strategies to share their subject knowledge and tacit expertise. Polanyi (1963:4) considers whether "mentors know more than they can tell" as such knowledge is largely intuitive, internalised and hard to explain. Kratka (2015:837-38) suggests it is deeply rooted in the mentor's actions, experience, cultural context and values. Modelling, discussion, deconstructing the mentor's actions are some of the techniques which the mentors in this study demonstrate to encourage student reflection and improve the quality of their performance. The data from the case study schools in this study suggests that many subject mentors deliberately try to break down their practice e.g. mentor L in school X, mentors B, C, and M in school Y, and the professional mentor in school Z who in post lesson discussions explained clearly the reasons for the choices they made during their lessons to support their students' professional development.

For Eraut (2000:118) tacit knowledge and learning are difficult to define. It is the "glimpse" the "insight" we "strive to make it explicit to improve quality of performance and develop critical acumen". Students' acquisition of tacit knowledge takes time, involves experimentation and listening to experienced teachers. Learning often occurs when the student teacher is unaware that it is taking place. Hager and McIntyre (2006:86) define tacit knowledge as follows "experienced teachers take for granted the expertise and thinking embedded in their day- to- day teaching, do not recognise its complexity and often find it difficult to unpick in any detail". However, the data from this study reveals that the senior mentors in the three case study schools, mentors B, C and L in school Y and mentors C, L and N in school X all spent time deconstructing their practice to extend their students' professional understanding through inviting their students to observe how they used tacit knowledge during the lesson to solve a problem which had arisen which they had encountered in the past and "bringing it to the surface" (Shim and Roth 2007:7) in post lesson learning conversations.

Active listening

Groysberg and Sind (2012:79) contend that "few behaviours enhance conversational intimacy as much as attending to what people say. True attentiveness signals respect". There was evidence during the post lesson discussions that the mentors in the case study schools supported this view.

The senior mentor at school X acknowledged the subjective values and perceptions which encouraged "diversity" of approach amongst his team of mentors.

However, the feedback sessions which I observed, based upon dialogue, discussion and active listening signalled a common belief amongst the mentoring team in this school that students should be actively involved in the learning process. In several sessions, including those held by mentors L and C, it was noticeable that both student and mentor expressed their opinions on a range of professional issues. Kwan and Lopez Real (2005:285) found in their research that mentors often used feedback sessions "to help student teachers develop their own strengths" and consider alternative approaches they could employ to enhance pupils' learning.

Role fluidity

Finally, there was some evidence of role fluidity in the post lesson discussions in this study which signalled the subject mentor's recognition that she could, on occasion, learn from her student. The senior mentor in school X cited a practical example of this "I liked your idea of linking the collection of books to the dismissal of individual pupils. I've never done that, and I usually end up with some missing. Good idea. I'll give it a try". He signalled further that he and his departmental colleagues were aware that they could employ teaching strategies introduced by the student teacher "I liked your cross-curricular task, that's something we don't do often enough".

Cultural aspects

Aderibigbe et al (2016:25) stress the importance of ITE students "new to a school context" (ibid) being helped to "understand and respect" (ibid) the social and cultural norms of their placement school. Langdon et al (2017:249) state that

mentoring occurs "within the context of variable, powerful school cultures". The roles of student and mentor are "inevitably contextualised and the expectations and assumptions of the community of practice influence the direction of the endeavour" (ibid). The data from this study reveals that the subject mentors in the case study schools sought to help their students understand the cultural context of the placement school and to explain the underlying values in several different ways.

Mentor M in school Y considered that it was a "vitally important" aspect of her role to help her students "fit in" to the community of practice and in time achieve full membership of that community. Mentor C in school Y agreed commenting that he considered that it was his "duty" to explain and explore the cultural ethos of the school with his students to help them appreciate the underlying accepted cultural values of the school community. Survey respondents agreed that it was important for the ITE students to "fit into their practice school" but many went further including questionnaire respondent Z who commented that "we should aim to produce teachers who can teach effectively in any context".

The senior mentor C in school X appreciated the need to help his students understand the accepted cultural values of the wider school community, However, he also envisaged that the ITE students might contribute to cultural change and transition. He felt that the sharing the up -to- date pedagogical knowledge, skills and knowledge of recent research that students brought with them provided opportunities for dialogue, reflection and experiment might change perceptions of the process of teaching and learning and revitalise the practice of established members of staff.

In each of the case study schools in this study the subject mentors created opportunities for their students to share their knowledge of new teaching strategies and newly published research in departmental discussions and school Inset thus establishing opportunities for continuing dialogue and change and facilitating the acceptance of the ITE students as members of the community of practice.

Mentor N in school X stated that "mentors have a responsibility to help students understand the culture of the practice school". She explained that she encouraged her students to engage not only with the whole school community of practice but also with the wider community which the school served. She felt that this helped her students to understand their pupils' socio-economic background and socio-cultural background Mentor N also highlighted the close links which existed between school X and the wider community and suggested to her student that he engage in one of the projects designed to serve community links.

Mentor M in school Y emphasised how important she felt it was for her students to understand the social and cultural values of the wider community from which pupils were drawn. Mentor B in the same school stated that he encouraged his students to walk around the school catchment area to gain information about the area where pupils lived.

The school leadership team

The data from this study suggests that subject mentors in the case study schools consolidated a sense of belonging to the community of practice amongst their

ITE students by introducing them at the beginning of the practicum to key members of staff such as the headteacher and the senior leadership team who det out how their roles contributed to shaping the underlying socio-cultural norms of the community of practice.

The subject mentors in each of the case study schools stressed their perception that it was important for the ITE students to appreciate the contribution of school leaders to the cultural ethos of the school, ranging from their desire to contribute to teacher education in partnership with the university in schools X and Y, to perceiving ITE students as dynamic agents of change who might become a catalyst for transforming the practice of established members of staff in school Z.

In school Z the headteacher revealed that she had made a deliberate decision to work with Teach First Cymru to revitalise the practice of some established members of staff by providing opportunities for them to work alongside the Teach First trainees and observe the new strategies they brought to their lesson delivery. In addition, informal staffroom conversations provided a basis for dialogue and reflection upon alternative teaching strategies and student comments in school Inset sessions contributed to the creation of a coherent cultural identity for the newly formed school.

In school Y the lesson study project created a close partnership between the university link tutor who visited the school regularly to lead student reflection on this and the school mentoring team who had the opportunity to become involved in professional dialogue through discussing theoretical views or explaining or justifying their point of view. The senior mentor in the school believed that this partnership had

the potential to make mentoring a catalyst for change, firstly for the mentor, secondly for departmental colleagues, and finally reaching wider into the community of practice.

In school X the headteacher and senior mentor stated that they viewed the mentoring process as a means of encouraging reflection upon the professional practice of established members of staff and promoting whole school involvement in professional development which they suggested could lead to discussion and potential change within the school community.

The mentors in schools X and Y in this study were concerned to encourage their students to forge links with a wide range of administrative and ancillary staff such as teaching assistants and resource assistants. Discussions with these members of staff not only helped the ITE students to appreciate their roles but extended their understanding of community values and demonstrated respect, equity and collaboration.

There was evidence in the data in this study that mentoring was viewed by some staff as a whole school issue to which they could contribute. In this context I observed student P teach a class of 20 Year 7 pupils to "improve their fitness" toward the end of her first teaching placement at school X. Her subject mentor was not present, but the head of department settled the group and explained the lesson aims and objectives. This signalled to student P the willingness of other members of the department to be involved in the process of mentoring at the school. Student P stated that she was confident of her ability to teach the lesson alone, though the proximity of other departmental staff provided reassurance and support. This example indicates that the

involvement of departmental staff in the mentoring process is viewed as a whole school responsibility in school X. Similarly in school Y student S recognised the willingness of the departmental staff to contribute to her professional development "they would sit at the back of the class and write comments in my workbook. Really, I felt they all mentored me in a way".

In conclusion, though mentoring as a process is generally accepted as focusing on developing the skills, knowledge and professional understanding of ITE students, the data from my study suggests that the relational and cultural dimensions of the process are also significant factors to consider. The underlying subjective values of individual mentors may vary but my data reveals that there is general agreement that the relational values of trust, respect, honesty, friendship, empathy and emotional support from the basis of a positive and constructive mentor/ student relationship within which professional development can occur. Subject mentors perceive the importance of establishing a relationship based upon the construct of professional friendship which advocates a friendly supportive stance toward the ITE student whilst remaining aware of the requirement that they assess their students' progress toward QTS. The data suggests that there is a general perception of the need to establish a collegial relationship with very few mentors preferring a more traditional master/apprentice approach.

The data in this study reveals that subject mentors in each of my case study schools shared a sustained focus on helping their students develop into reflective, flexible, innovative and independent practitioners. The comments of senior and subject

mentors discussed above are balanced by those of the ITE students in order to explain how the strategies chosen supported the students' learning and understanding.

Finally, the context of mentoring and the aims of senior leaders influence how mentoring is perceived and practised. Mentoring is evolving in response to sociocultural change in society as mentors and students "see themselves as both teachers and learners and work together... in equitable interactions" (Aderibigbe et al 2016:22) and thus act as a catalyst for cultural and professional change.

Contribution

What contributions does this study make to our understanding of how mentoring is perceived and practised in Wales at a time of transition and reassessment of Initial Teacher Education?

The study examines the values and perceptions of subject mentors which influence their mentoring practice. Data accessed via a survey of secondary school subject mentors was balanced with qualitative data from three coeducational 11-18 comprehensive schools to provide an insight into the subjective and experiential perceptions of participants.

The findings in this study contribute to an understanding that the process of mentoring in this context, if not entirely "idiosyncratic" does celebrate diversity and individuality.

Mentoring in ITE considers the relational, developmental and sociocultural values of participants and this study examines these elements from the perspective of subject mentors, whilst also examining the important issue of student voice. The subjective values of ITE students affect their perceptions, assumptions and expectations of the mentoring process and the data from the case study schools adds to our understanding of how ITE students in Wales perceive that their expectations are met.

The study contributes to our understanding about how subject mentors work with their ITE students to help them to move from being "newcomers" in their placement schools to achieving an understanding of the process of teaching and learning within the classroom context. Individual subject mentors employ a range of strategies to support and challenge the differing needs of individual students. The study contributes to our understanding about how mentors reach their decisions about which strategies to employ with different students or how they implement these to scaffold pedagogical understanding and practical progress. The case studies add to our knowledge of how mentors work with their students to forge professional and supportive relationships, share tacit knowledge and professional expertise, explore links between theory and practice in dialogic learning conversations, appreciate their students' underlying subjective values which affects their perception of teaching and learning, and create opportunities for their students not only to "fit in" but also for them to contribute to the socio-cultural norms of the community of practice. This study indicates that some mentors are adopting an approach that may be understood as educative mentoring (e.g. Langdon 2011), in that they value the professional learning opportunities provided by the mentoring process to develop their own practices.

The study also gives the ITE students in the three case study schools a voice. The data from this study considers the expectations and assumptions of ITE students in a range of subject areas and records their comments on the personal and professional dimensions of the relationships they established with their subject mentors, their classroom experience, their membership of the community of practice and their contribution to its evolution. It also explores from the student perspective how their understanding of teaching and learning is developed and enhanced through the process of mentoring and adds to our understanding of this under-researched area.

The study contributes to our understanding of how subject mentors strive to share their tacit knowledge with their ITE students through creating opportunities to "bring to the surface" (Shim and Roth 2007:7) and make explicit the reasons for their decisions and actions within the classroom. Observation, modelling, dialogic learning conversations all help the ITE student to begin to understand, appreciate, and begin to build up her own library of tacit knowledge.

The data from the survey and the case study schools reveals a mixed approach to the process of mentoring in Wales at the time that this research was undertaken. However, there is evidence in the data from the case study schools that the mentoring process is beginning to transform the culture of those schools. Mentoring has become a recognised and influential means of encouraging reflection and revitalising the practice of established members of staff and as such contributing to cultural change.

Limitations

Here I consider the research process and the extent to which I was able to ensure credibility, robustness and trustworthiness throughout. I propose that these criteria have been met in the manner in which I engaged deeply in each case study school, with the mentors, senior mentors and ITE students. I engaged in many and various conversations, observations and discussions with these participants and felt that I had empathised and understood their points of view, perspectives and practices. I immersed myself in my data through the analytical process, which enabled me to provide robust and trustworthy accounts of the intricacies of the mentoring process and how it is experienced in these schools. Of course there were challenges along the way. Access to the schools was generally good although I had more limited opportunity to freely engage with participants in school Z, possibly because of the demands of the Teach First Cymru requirements. That said, I felt that the professional mentor in school Z provided me with valuable opportunities to appreciate how the process of mentoring was undertaken in this school. Negotiation of the qualitative research process involved lengthy engagement with data collection and more lengthy consideration of the data during analysis. That the data was collected at a specific moment in time in inevitable, it occurred at the beginning of a period of transition in Wales which has now come to an end. However, the findings remain relevant for those working in ITE both within the Welsh context and also beyond. The contribution of the study and the detailed insights provided within it are valuable in any context, local, national or international, where practicing teachers are working with those new to the profession to develop their professional practice.

There are of course a number of limitations in this study. One of the most important is the lapse in time from when the research was undertaken to presenting the findings in written form as indicated above. In the interim there have been significant changes in the landscape of Initial Teacher Education in Wales. The Estyn report of 2018 found as I have done in this study a mixed picture concerning how mentoring was perceived and practised in Wales and the Welsh Government responded to these findings by legislating for a new approach to ITE. The new Professional Standards emphasise partnership, collaboration, critical thinking, and a move away from merely fulfilling the demands of the standards required for QTS, to a much wider conception of the role of the teacher. The culture of the new partner schools emphasises transition and transformation and the mentoring role has necessarily expanded to complement these new demands. I have not explored these issues in this study though I have indicated that here were some mentors who had begun to envisage their roles as that of teacher educators.

Although I have considered how some subject mentors use language to offer emotional support or to challenge their ITE students I have not focused specifically on the tone, inflection, vocabulary or formal/colloquial language they employ. Research on the above would contribute further to our understanding of how the mentor's use of language supports the development of the mentoring relationship.

Finally, mentoring is a powerful agent of change within the cultural context of individual schools and further research to consider to what extent the mentoring process has transformed the culture of mentoring in Wales would be welcomed.

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Appendix 1: Mentoring Questionnaire

This questionnaire seeks to ascertain the views of subject mentors about the process of mentoring. I would be grateful if you would indicate your response to the following statements using the scale:

- 1. Strongly agree
- 2. Agree
- 3. Uncertain
- 4. Disagree
- 5. Strongly disagree.

The first section of the questionnaire asks for your opinion about the process of mentoring.

$$Q. 1 - 14$$

The second section asks for your views about the process of mentoring within the school community.

$$Q. 15 - 18$$

The final section asks for your views about the importance of mentor training in shaping your professional practice.

$$Q.19 - 21$$

Section 1

1.	 Mentoring should be based upon a relationship akin to that of Master and apprentice. 		2	3	4	5
2.	I encourage my trainees to reflect critically	1	2	3	4	5
	on their process.					
3.	The mentor is responsible for the wider professional development of my trainees.	1	2	3	4	5
	professional development of my trainees.					
4.	My trainees should see me as a role model.	1	2	3	4	5
		1	2	3	4	5
5.	I think that trainees and mentors are equal partners in the mentoring process.	,	2	3	4	5
		1	2	3	4	5
6.	The role of the mentor is to make continuous	•	_	•	•	•

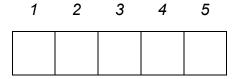
judgements against QTS standards.

7 .	7. As a mentor I am always willing to explain the ideas underlying my professional practice to my trainees.		2	3	4	5
8.	Mentors should offer emotional support to	1	2	3	4	5
	their trainees whenever necessary.					
9.	_		2	3	4	5
	professional risk taking.					
10.	Mentoring should be flexible to meet the needs of individual students.	1	2	3	4	5
	needs of individual students.					
11.	I work collaboratively with my trainees to resolve problems they encounter in the	1	2	3	4	5
classroom.						
12.	There is no single right way to mentor.	1	2	3	4	5
13.	Mentoring allows trainee teachers to accept	1	2	3	4	5
	responsibility for their own professional					1

progress.

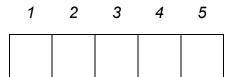
1 2 3 4 5

14. Trainees need a clearly structured programme of mentoring.



Section 2

15. Mentoring should be a whole school initiative.



16. Involvement in initial teacher training should be a catalyst for change within the school community.

1	2	3	5	

17. Developing trainee's skills in the social context of the school community is one of my priorities as a mentor.

1	2	3	4	5

18. The mentoring process should produce teachers who are able to adapt to the changing needs of their school.

1	2	3	4	5

Section 3

19.	9. University based mentor training has helped me to become aware of new approaches to mentoring.		2	3	4	5	
	_						
20.	20. University based mentor training has helped me to keep up to date with the latest research on teaching and learning.		2	3	4	5	
21.	Clear guidelines from the university help me	1	2	3	4	5	
to understand my role as a mentor.							
Thank	you for taking the time to complete this questic	nnaire					
I would be grateful if you could tick all applicable boxes.							
Δ							
Are yo	u:						
MALE		FE	MALE				
Are you a subject mentor?							
Y	ES	NO)				

if so, now long have you been a subject mentor?	
Less than a year	
1 – 4 years	
5 – 9 years	
Over 10 years	
Are you a senior mentor?	
YES	L NO
If so, how long have you been a senior mentor?	
Less than a year	
1 – 4 years	
5 – 9 years	
Over 10 years	
Do you work with students from a school-based ITT	programme?
YES	NO

Do you work with students from a university-based ITT programme?				
YES	NO			
Do you work with trainees towards QTS by another route?				
YES	NO			
Please specify:				

Letter to Accompany Questionnaire (English version)

Dear Colleague,

My name is Margaret Simpkins and I am Ph.D student at the University of Wales, Trinity St David, Swansea in the Department of Education. I am conducting research into the process of mentoring in secondary schools in today. I am particularly interested in accessing the perceptions of the mentoring process held by current subject and senior mentors.

My interest in this research area stems from my own work as both a subject mentor and subsequently as a senior mentor in a large comprehensive school in South Wales. This led me to become convinced of the important role of mentoring in supporting the progress and professional development of ITT students.

I attach a short Questionnaire which seeks to ascertain the views of current senior and subject mentors regarding the process of mentoring in secondary schools today. There is an additional short section which asks for your views on university/school based mentoring partnerships if this is appropriate to your situation. This questionnaire forms a very important part of my investigation, and I should be very grateful for your views.

If you are willing to be involved, please complete the questionnaire and return it directly to me by

. You may send it by post (stamped addressed envelope enclosed) or by email attachment.

The questionnaire will take around 15 minutes to complete. At the end of the questionnaire there are a few short questions which ask for details of your experience.

You do not need to write your name and you will not be identified in any way.

Anonymity and confidentiality are assured.

If you have any questions, please do not hesitate to contact me. I very much hope that you will feel able to participate in this project. May I thank you in advance for your valuable assistance.

Margaret Simpkins.

Letter to Accompany Questionnaire (Welsh version)

Llythyr i gyd-fynd â'r holiadur

Annwyl Gyfaill,

Fy enw i yw Margaret Simpkins ac yr wyf yn fyfyriwr PhD ym Mhrifysgol Cymru Y Drindod Dewi Sant yn Abertawe yn yr Adran Addysg. Rwyf yn cynnal ymchwil i mewn i'r broses o fentora mewn ysgolion uwchradd heddiw. Yn benodol, rwyf am gasglu canfyddiadau mentoriaid pwnc ac uwch fentoriaid cyfredol ynglŷn â'r broses o fentora. Mae fy niddordeb yn y maes ymchwil yma yn deillio o fy ngwaith fy hun fel mentor pwnc ac uwch fentor mewn ysgol gyfun fawr yn Ne Cymru. O ganlyniad, cefais fy mherswadio bod y rôl bwysig o fentora yn angenrheidiol ar gyfer cefnogi cynnydd a datblygiad proffesiynol myfyrwyr HCA.

Yr wyf wedi atodi Holiadur byr sy'n ceisio canfod barn mentoriaid uwch a mentoriaid pwnc ar hyn o bryd ynglŷn â'r broses o fentora mewn ysgolion uwchradd heddiw. Yn ychwanegol, mae yna adran fer sy'n gofyn am eich barn ar bartneriaethau mentora Prifysgol / ysgol os yw hyn yn addas i'ch sefyllfa. Mae'r holiadur hwn yn rhan bwysig iawn o fy ymchwiliad a byddaf yn ddiolchgar iawn am eich barn.

Os ydych yn fodlon i gymryd rhan, gallwch chi lenwi'r holiadur a'i ddychwelyd i mi erbyn Gorffennaf 15, 2014 os gwelwch yn dda. Gallwch anfon drwy'r post (amlen barod â stamp amgaeedig) neu drwy e-bost (gwelir isod).

Bydd yr holiadur yn cymryd tua 15 munud i gwblhau. Ar ddiwedd yr holiadur mae ychydig o gwestiynau byr sy'n gofyn am fanylion eich profiad chi. Nid oes angen

i chi ysgrifennu eich enw ac ni fyddech chi'n cael eich adnabod mewn unrhyw ffordd. Yr wyf yn sicrhau anhysbysrwydd a chyfrinachedd.

Os oes gennych unrhyw gwestiynau, peidiwch ag oedi i gysylltu â mi. Yr wyf yn gobeithio'n fawr y byddwch yn teimlo y gallwch gymryd rhan yn y prosiect hwn. Diolch i chi ymlaen llaw am eich cymorth gwerthfawr.

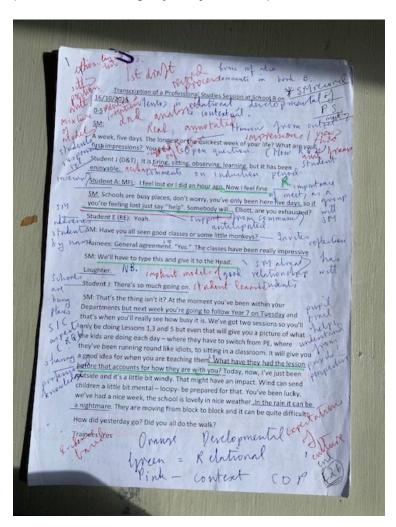
Margaret Simpkins.

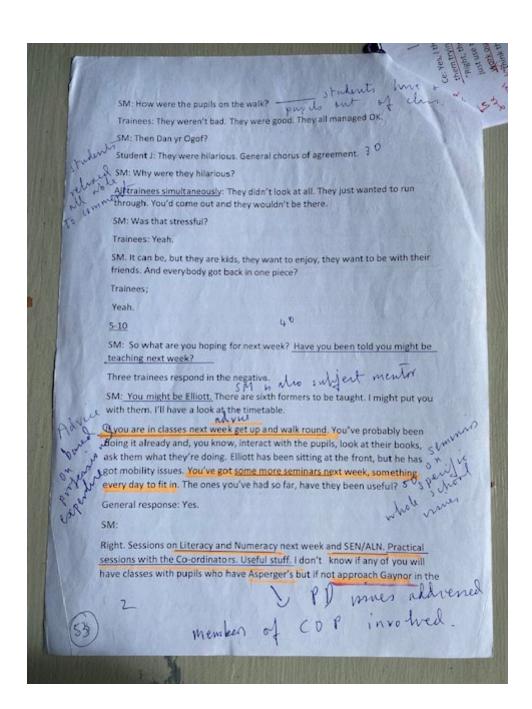
Appendix 3: Coding exemplar

Here we see two pages of one transcript from a professional studies session at one of the case study schools.

The deductive familiarisation process is indicated by underlining using a colour code, noted at the bottom of the page, orange – developmental aspects, green – relational and pink – contextual aspects.

The notes made in red and blue around the text are part of the inductive coding process, recording my subjective impressions of the data, at different turns of reading.

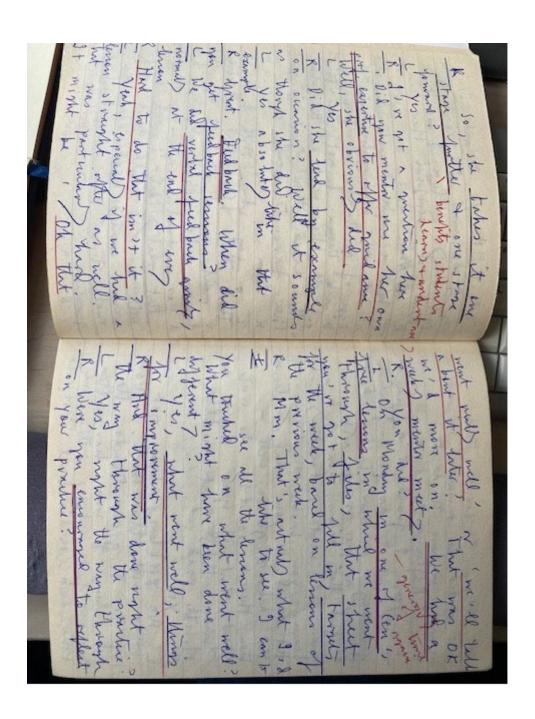




A typed record of unrecorded conversation created using notes taken during the conversation and augmented with reflective comments.

Comments of SM (school x) not able to meet the headteacher during my visits to the school but the senior mentor explained very clearly how the school valued being involved in the mentoring of ITE students in several different subject areas and from four different universities. The senior mentor explained that he felt that it was a privilege to be able to work with beginning teachers and to support their professional development. He stated that he felt that developing positive professional relationships with his students was hugely important, indeed at the heart of the mentoring experience. The senior mentor at school C leads a large team of subject mentors and has confidence in their ability to support and challenge their ITE students according to their personal and professional needs He is not prescriptive, rather he values the professional expertise of his mentoring team. Tolerance, respect, support, challenge, active listening, and flexibility are corner stones of the senior mentor's approach to his role. His concern for his ITE students was evident in every conversation we shared and he employed warmth and humour as effective devices to create positive relationships with individual students. Praise and encouragement were marked features of his approach (the senior mentor worked also as a science subject mentor) but on occasion he shared his professional expertise to challenge student reflection or to suggest alternative approaches. However, in the last analysis he emphasised that professional choices made were the student teacher's responsibility, their mentors were there to guide refection, to advise, to listen and to engage in dialogue and discussion but decisions about which strategies to adop must be made by the student concerned.

Written record of unrecorded conversation created using notes taken during the conversation and augmented with reflective comments.



Appendix 6: Example - Individual interviews with subject mentors.

Written as narrative record of the interview.

I was also able to arrange a short interview with subject mentor N who was extremely willing to comment on her involvement in the mentoring process at school C. Mentor N had worked as a subject mentor at school C for 5 years and therefore classified her as an experienced subject mentor. Mentor N stated that she felt that the university had provided her with excellent mentor training and access to detailed online resources, including information about QTS standards and grading procedures. Thus she stated that she believed that she had a clear overview of the aims and requirements of the Within school C she stressed that the senior mentor was a valuable source of advice/problem solving and his support for his subject mentors was unqualified. Though meetings for the team of subject mentors at school C were infrequent much information was circulated online and she stressed that she was always informed of any issues which might affect her student. I asked subject mentor N what she considered to be the most important elements in the mentoring process. Her comments are taken from my field notes which were made at the time. Subject mentor N stated that it was important for a subject mentor to be reflective. In addition she stated that mentors should be flexible and should be prepared to learn from your students". Thus she acknowledged that through the mentoring process the "good or excellent lessons I observe can influence my practice". NB. Subject mentor N emphasised that she felt that honesty should permeate the relationship of subject mentor and student. She said that it was "vital" that mentors should provide their students with "a true representation" of the teaching process. By this I believe that she meant a balanced presentation of the process and that mentors should strive to provide an experience which Micluded both positive and more challenging aspects of teaching. For mentor N "collaboration is a cornerstone of mentoring" and she stressed that she did her utmost to create a collaborative and collegial relationship with her students. Thus, she explained that mentors should share resources and expertise freely with their students. However, she did not comment on any potential gains for mentors through this process though she may have felt that this was implicit in the comments she had made.

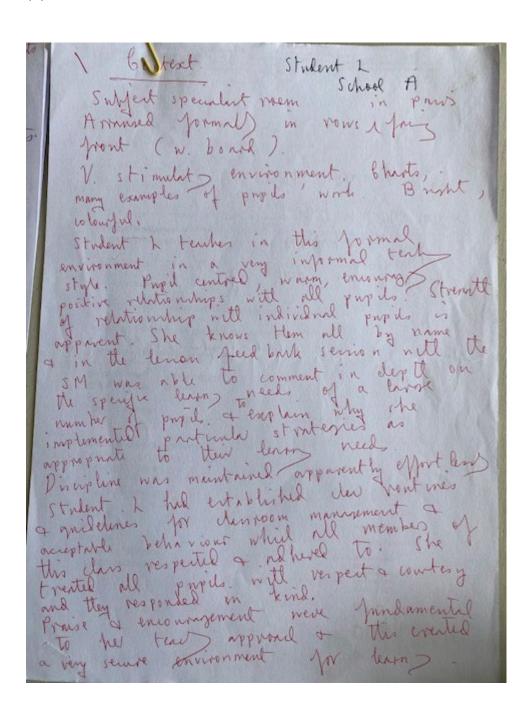
Appendix 7: Individual interviews with ITE students/Teach First trainees

Written as narrative record of the interview.

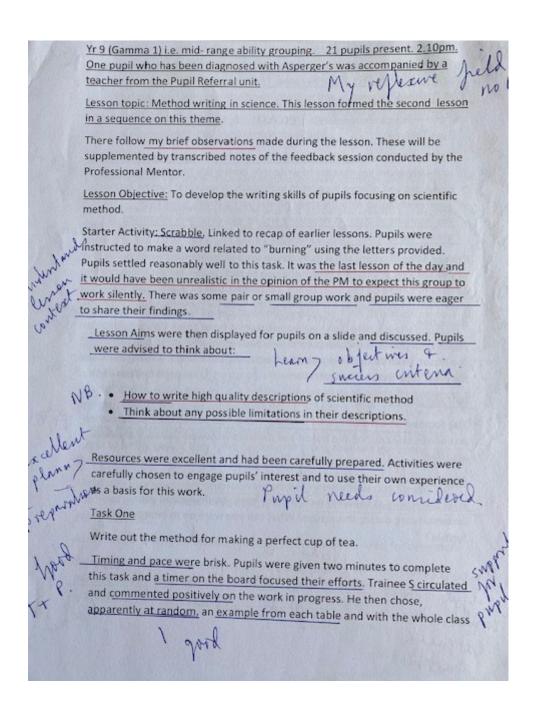
about the work and that means they go further" in their learning. Now Student S stated that "what I really like is that we discuss and plan the lesson together. We discuss tactics and I've learned about how much there is to think about". For example "we thought about the shock factor involved in showing clips from Schindler's List - how much should we prepare them for what they were going to see?" Student S stated that his subject mentor "knows these kids really well" and was able to discuss with student S whether pupil X should be invited to "opt out" of watching the extract because of his statemented needs. Student S realised that "I wouldn't have thought about things like that". Through planning the lesson with subject mentor L "I've learned a lot about the importance of subject knowledge. But I've also learned it's important to know the pupils really well" and to consider their needs. Student S emphasised that "I think the most important thing for me about working with mentor L is that he's been willing to work with me in a real partnership". Mentor L's willingness to adopt a collaborative, collegial approach was clearly valued by student S "he's going to lead in some lessons and I'll lead in others" He was also grateful for his mentor's flexibility "he's planned the sequence of lessons but I can plan activities and make resources if I want to for my lessons". Thus support and challenge were balanced by subject Mentor L to allow student L to gain confidence and develop his professional expertise. lunchtimes of "quickly before the next class". He also stated that subject mentor L was "always encouraging community." Student S stated that feedback was usually formative and often given at mentor L was "always encouraging even when things haven't gone very well". Finally I asked about formal mentor meetings. Student S confirmed that these took place regularly and in these meetings "subject mentor L believes we should focus on the theory underlying the strategies we are trying". He felt that such an approach "helps to put the techniques we learned in University into focus" and as such helped his critical reflection and professional development. Student I During the second teaching placement I observed Student I with subject mentor L. On this occasion I observed a lesson with a Year 9 group of 30 pupils. The subject mentor was present for most of the lesson though he was called 31

Appendix 8: Examples of both written (a) and typed up (b) notes from a lesson observation.

(a) Hand written notes made at the time of lesson observation:



(b) Typed up notes taken from handwrittnen notes augemntd with relfection after the lesson observation:

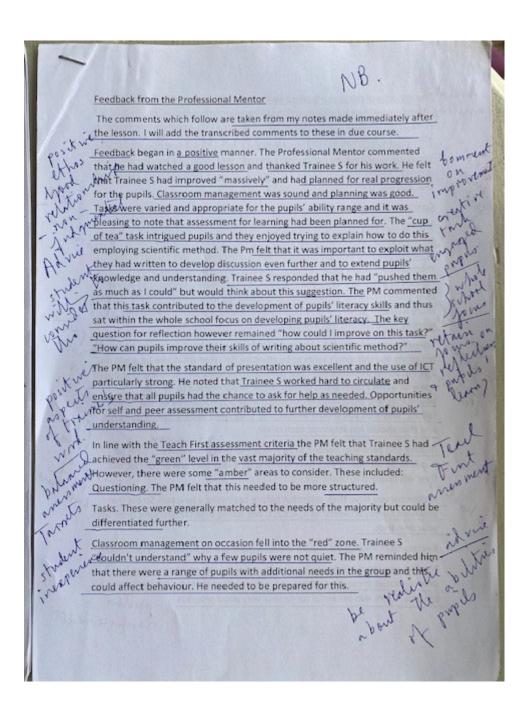


Appendix 9: Feedback from lesson observation (a) transcription and (b) notes typed up after the feedback was observed.

(a) Example of transcription of a feedback session

Feedback Session for Trainee L at School A 12/11/2015 YEAR 7 Top Set Maths 12.25 Trainee L: They're a lovely class PM: They are! Trainee L: I often lose some of the boys for rugby. PM: OK. So, first of all, I think the first thing to say is that it was a very session. I thoroughly enjoyed watching it. Well done. I think the sturber made. It was fantastic. Looking down the standards for QTS. Trainee L: Yes? PM: ticked off lots, and there are some that I haven't ticked off they probably could have, but there was really strong evidence for these than the starter activity. They all arrived on time and they all got swith the starter activity. Trainee L: Yes PM: It was great. I was really happy to see you using differentiation the lesson. So in the starter there was the peak and the soaring elesson. So in the starter there was the peak and the soaring elesson. So in the starter there was the peak and the soaring elesson. So in the starter there was the peak and the soaring elesson. I thought during the starter activity you circulated well and gave readvice. You gave a lot of praise. You praised really effectively. Trainee L: They love the raffle tickets PM: Mm	hi
Trainee L: They're a lovely class PM: They are! Trainee L: I think today there were quite a few missing PM: The boys were in rugby. Trainee L: I often lose some of the boys for rugby. PM: OK. So, first of all, I think the first thing to say is that it was a well-beson. I thoroughly enjoyed watching it. Well done. I think the sturperformed really, really well. And I was really impressed with the performed really, really well. And I was really impressed with the performed really, really well. And I was really impressed with the performed really, really well. And I was really impressed with the performed really, really well. And I was really impressed with the performed really strong down the standards for QTS. Trainee L: Yes? PM: I ticked off lots, and there are some that I haven't ticked off the probably could have, but there was really strong evidence for these. Trainee L: Thank you. PM: The starter activity. They all arrived on time and they all got so with the starter activity. Trainee L: Yes PM: It was great. I was really happy to see you using differentiation the lesson. So in the starter there was the peak and the soaring elements. They love the peak and the soaring. PM: Yes. They responded really well to it. You could tell that they get onto the soaring activity which was great. I thought during the starter activity you circulated well and gave readvice. You gave a lot of praise. You praised really effectively.	
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Trainee L: And they're so easy.	
PM: It's a really good idea. vero ymses student's vertir 5/	ry mulity

(b) Example of typed up notes following an observed feedback session



Example of comments made on survey responses.

and the second			
111			
1	4.	My trainees should see me as a role model to emulate. Depends . Early en in 1st placement potential the en	1, 1 2 3 4
111	5.	I think that trainees and mentors are equal partners in the mentoring process.	1 2 3 4 5
11			
1	6.	The major role of the mentor is to make continuous judgements against QTS standards.	1 2 3 4 5
	7.	As a mentor I always try to explain the ideas underlying my professional practice to my trainees.	1 2 3 4 5
	8.	Mentors should offer and	
1		Mentors should offer emotional support to their trainees wheneve necessary.	1 2 3 4 5
	9.	Effective mentoring involves an element of professional risk takin	1 2 3 4 5
Y	10.	Agree as experimental in in approaches in accessory to the first what works for the first what works for the first war to the f	
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	i	explain to my trainces how to resolve problems they encounter in the classroom. Sonetimes At ther limes I allow them to pender issues themselves	1 2 3 4 5
	12. T	them to pender issues themselves or we discuss in menter meetings.	
			1 2 3 4 5
	13. Me the	entors should expect trainee teachers to take responsibility for ir own professional progress.	1 2 3 4 5
			V
112	14. All t	trainces should follow the same mentoring programme.	1 2 3 4 5
	11 11 11 11 11		The same of the sa