

Journeys in feedback

Undergraduate primary student teachers' uses of personal and professional social networks to gather and interpret feedback, and the extent to which feedback influenced their reflective practices

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of the requirements of
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DECLARATION

I certify that this work has not been accepted in substance for any degree, and is not concurrently being submitted for any degree other than that of Doctorate in Education (EdD) being studied at the University of Greenwich. I also declare that this work is the result of my own investigations except where otherwise identified by references and that I have not plagiarised the work of others.

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DEDICATION

For Mum and Dad, who gave me more than I can tell.

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I have valued the support and feedback of many people during my research journey: from formal contributions to passing words of encouragement, I would not have completed the journey without them.

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ABSTRACT

This study explored how a cohort of undergraduate primary student teachers gathered, understood and interpreted feedback through their personal and professional social networks. It considered the extent to which feedback influenced their 'reflective practice': defined here as a 'threshold concept' (Meyer and Land, 2003) of Qualified Teacher Status in initial teacher education (DfE, 2011a).

While the UK's *National Student Survey* (NSS) (HEFCE, 2016) consistently identified 'feedback' in higher education as weaker than 'assessment', Evans (2013) noted that students' 'feedback landscapes' went beyond their 'academic learning communities'. Structured upon Blumer's (1969: 2) three premises of symbolic interactionism, where meaning 'is derived from social interaction', this study combined 3-year, longitudinal social network analysis data at cohort [$n=115$] and ego-levels with seven students' diary-interview data and related statistics. Cumulative analysis revealed students' use of trusted, informal networks of peers and family members for emotional and academic feedback. Complex stories of students' feedback journeys exposed students' making meaning of tacit 'tutor-constructed artefacts' (Orsmond and Merry, 2015) and identified peer feedback networks that aided information flow and social capital growth through communities of practice. Tunnel metaphors illustrated students' journeys through light, darkness, obstacles and 'personal epiphanies' (Denzin, 1989) with collegial explorations and prompt feedback usage facilitating progress. Models identified that production-level and content-level peer feedback, when used with tutor feedback and artefacts, enabled deeper interpretation. Informal feedback networks influenced individuals' reflective practice which then 'filtered back' to benefit other students' feedback journeys.

Through its auto/biographical discussion, the study contributed new knowledge, exposing the existence and use of students' personal and professional feedback networks. Three inter-related professional practice recommendations to improve feedback were made: firstly, through identifying overt cross-course connections; secondly, through cross-course feedback moderation; thirdly, by empowering students' engagement with professional and academic reflective practices.

It's about the journey not the destination

Anonymous

I learned that all feedback, whether positive or negative, could be used as a tool to become a reflective practitioner.

3rd year BA QTS student assignment, Hope University (2012)

One of the commonest misconceptions about research is that it is an 'ivory tower' activity, far removed from reality and from social contact with others....It is not like that at all.

Phillips and Pugh (1987: 11)

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ABBREVIATIONS

AfL	Assessment <i>for</i> Learning
BA QTS	Bachelor of the Arts with Qualified Teacher Status
BERA	British Educational Research Association
CETL	Centres for Excellence in Teaching and Learning
ITE	Initial Teacher Education
GTCE	General Teaching Council for England
HEFCE	Higher Education Funding Council for England
HEI	Higher Education Institution
KIS	Key Information Set
NC	National Curriculum
NCTL	National College of Teaching and Leadership
NSS	National Student Survey
OFSTED	Office for Standards in Education
QAA	Quality Assurance Agency
QTS	Qualified Teacher Status
SECI	Socialisation, Externalisation, Combination and Internalisation
SI	Symbolic Interactionism
SNA	Social Network Analysis
TESTA	Transforming the Experience of Students through Assessment project
TIB	This is Because
TS	Teachers' Standards
WALT	We Are Learning To
WILF	What I'm Looking For
ZPD	Zone of Proximal Development

GLOSSARY OF TERMS A: PROFESSIONAL ROLES

Link tutor – a tutor employed by the university to visit students in their placement schools, observe practice, read documentary evidence, offer guidance to the student and school and work with the school placement mentor to assess and report the student's professional progress in relation to the *Teachers' Standards* (DfE, 2011a).

School placement mentor – a mentor employed by the school who oversees the student's placement in a school by liaising with the school placement teacher on day-to-day matters and working with the link tutor on matters relating to the student's entitlement, professional progress and assessment.

School placement teacher – a teacher whose class is taught by the student during a professional placement, usually through a gradual 'handover' process, during which time the teacher maintains an overview of practice.

Teaching assistant – an assistant who is attached to the class and/or teacher to provide support in teaching and administrative duties.

University tutor – a tutor who designs, teaches and assesses courses within a degree programme.

GLOSSARY OF TERMS B: SOCIAL NETWORK ANALYSIS

Actor – a social unit. In this study, each actor is a student teacher.

Alter – actors who have a relationship with ego.

Arc – a directed tie. In this study, all ties are directed.

Asymmetric relationship – where one actor identifies a relationship with another but this is not reciprocated.

Authority centrality – the level of influence ego has over the whole network due to combinations of position and connectedness. Higher values show greater influence.

Boundary – the population of a defined social group. In this study, the boundary is membership of the 2011-12 entry cohort of the BA QTS in Primary Education at Hope University.

Broker – a focal ego whose nodal position in a social network can allow or curb information flow between two alters

Centrality – measures of an actor's importance within the whole network. In this study, I have considered in-degree, closeness and authority measures of centrality.

Clique – a group formed of actors who are all tied to each other. The minimum number of actors within a clique is three.

Closeness centrality – a measure that identifies how close the actor is to all other actors in the network. Higher values show greater closeness. Closeness is a reciprocal of farness.

Digraph – a directed graph.

Dyadic relationship – two actors who are linked by relational ties that are Mutual or Asymmetric or Null (Holland and Leinhardt, 1970). There are four possible dyads.

Edge - an undirected relational tie.

Ego – the focal actor.

Ego network – the network of the focal actor and the ties between all the actors (also called alters) identified in this network.

In-degree centrality – the number of arcs to a single node. In this study, the number of actors who identified ego as a source of feedback support.

Isolate – an actor within the whole network who has no relational ties.

Line – a line between two nodes on a sociogram denotes a relational tie.

Mutual relationship – where one actor identifies a relationship with another and this is reciprocated. In this study, a mutual tie is shown within a sociogram using a two-direction arrow.

Nodes – a node on a sociogram denotes an actor. In this study, a node is shown within a sociogram using a circle with a student code.

Null – where two actors do not identify relationships with each other.

Out-degree - the number of arcs from a single node. In this study, the out-degree has been constrained to a maximum of three.

Path – is the shortest journey between two actors on a sociogram.

Social Network – a set of actors connected through relational ties.

Star – an actor with a high number of in-degree centrality, evidenced by a star-like appearance on a sociogram. In this study, actors with in-degree centrality of five or more are referred to as 'stars'.

Structural hole – a space within a social network where actors are not connected and information flow is restricted.

Tie – a connection between two actors, defined by the relationship being explored within the study.

Triadic relationship – three actors who are linked by relational ties that are mutual or asymmetric or null (Holland and Leinhardt, 1970). There are 16 possible triads.

Whole (or complete) network – a network of all actors within a defined boundary.

CHAPTER 1: Journeys

1.0 Introduction

My thesis explores student teachers' journeys in assessment in relation to feedback and the extent to which it may influence their reflective practice. Using an auto/biographical approach, I reflect upon my own journey and research those of students undertaking an undergraduate degree in primary education with qualified teacher status (BA QTS) at Hope University¹.

In this chapter, I introduce the rationale for my research and the structure of the thesis. The chapter is written in three sections through which I introduce the main components of my study and identify some of the authors and ideas that have been most influential to my journey.

In Section 1.1, I discuss some of the key challenges of biography and autobiography, before employing an autobiographical approach in Section 1.2, where I consider how my journey has led me towards my main research question²:

In what ways do undergraduate primary student teachers gather, understand and interpret feedback through their personal and professional networks and to what extent does feedback influence their reflective practices?

and its four subsidiary research questions, derived from Blumer's (1969) three premises of Symbolic Interactionism (SI) (Figure 1.1):

- 1. What do the terms 'feedback' and 'reflective practice' mean to students?*
- 2. In what ways does social interaction through their personal and professional networks enable student teachers to gather feedback?*
- 3. In what ways do student teachers make meaning from the feedback gathered through social interaction?*
- 4. In what ways do students interpret and use the feedback they encounter?*

¹ Hope University is the pseudonym I have given to the university in the south of England which provided the context for my research. Based in a metropolitan area, it provides for some 25,000 students across three campuses, partner colleges and overseas locations.

² My main research question and its four sub-questions are repeated at several points during the thesis for ease of reading.

Figure 1.1: Three premises of Symbolic Interactionism (Blumer, 1969: 2)

1. *Human beings act towards things on the basis of the meanings that things have for them*
2. *The meaning of such things is derived from, or arises out of, the social interaction one has with one's fellows*
3. *These meanings are handled in, and modified through, an interpretative³ process used by the person in dealing with the things [she/]he encounters*

In Section 1.3, I provide the wider context by highlighting key events in the journey of the primary teaching profession during my career.

In Section 1.4, I identify my research journey. I provide the reader with a guide to the thesis by summarising the chapters and identifying how each of these contributes to the study as a whole, to ascertain and analyse undergraduate primary student teachers' journeys of feedback and reflective practice.

In Section 1.5, I consider the place of my thesis in relation to the growth of knowledge, identifying four areas of originality.

1.1 Biography and autobiography

From an early age, I have been interested in peoples' accounts of their life journeys and, taking the role of family historian, was fortunate to be able to record my elderly parents' memoirs of their childhoods and formative adult years. I was fascinated by the incidents and emotions they recalled and that some of their life experiences appeared to be more dominant than others.

Denzin (1989) suggested that personal accounts operate at two levels, providing an outer world of events and experience and an interpretation of the inner world of thought and experience. As a daughter who is also a researcher, the questions I asked my parents did not simply aim to reveal the chronology of events. With their increasing age, this was becoming muddled – although fortunately, the chronology was usually verifiable through other family members and documentary sources (National Archives, 2015). But my parents' recollections also

³ Where Blumer (1969) used 'interpretative', Denzin (1989; 2001) used the shortened 'interpretive'. I have chosen to use the latter throughout this study unless using a direct quote from a source using the former.

demonstrated interconnections between events of wider importance and those of their everyday lives (Corti, 1993; Massobs, 2015; Roberts, 1998), such as their experiences through the 1920s, 1930s and 1940s of the Great Depression and the Second World War. They highlighted personal epiphanies, the 'interactional moments and experiences which leave marks on people's lives' (Denzin, 1989: 70) and how these physical and emotional 'moments of crisis' had changed the direction of their life journeys. These revelations provided me with greater insight into my parents' characters and allowed me to understand them in new ways. I also realised how much of my parents' journeys were not spoken of directly but emerged through narratives (Labov, 1972; Riessman, 1993) which included analogy, metaphor, imagery and storytelling (Cortazzi, 1993; Creswell, 1998; Kostera, 2006; McDrury and Alterio, 2003). I became familiar with these approaches from childhood and used them frequently in personal and professional interactions and in my writing.

I was very aware of the difficulties of questioning my parents about their lives, as biography is never complete (Denzin, 1989). It is an interpretation of a life, based on data selected from a much greater whole by the individual, which is then reinterpreted by its receiver. Subjectivity and bias are ever present and influenced by the ebbs and flows of engagement with lived experiences and the emotional responses these experiences may bring. Conversely, in autobiography, through an internal dialogue which encompasses the physical, emotional and intellectual, the 'author' draws upon 'rich, full accounts that include the messy stuff - the self-doubts, the mistakes, the embarrassments, the inconsistencies, the projections and that which may be distasteful' (Tenni *et al.*, 2003:2). The challenge of autobiographical data analysis is, in Creswell's (1998) view, the ability to step outside of oneself, to be objective whilst also being immersed in personal subjectivity. As 'interpretation' is central to biography, so a cyclical and reflective approach of construction and reconstruction in the light of further data and analysis is central to autobiography (Tenni *et al.*, 2003).

This study uses autobiography to construct, analyse and reconstruct my understanding of student teachers' experiences. As the study progresses, it draws upon the biographies of students who have shared their outer worlds and provided research insight into interpretations of their inner worlds. Ethical implications were

paramount within this study, as gaining insight into other peoples' lives required a careful balance of intimacy *and* objective detachment. Accessing such detailed knowledge of students' thoughts, interactions and experiences required their trust in me as a researcher, in addition to their confidence in the research process (British Association for Educational Research (BERA, 2011)). Researching students on a programme which I had once taught required close attention to ethical processes, particularly in relation to conflict of interest, coercion, anonymity and confidentiality (BERA, 2011). Through the process of writing this thesis, I came to terms with and ultimately overcame these challenges.

1.2 My professional journey

The origins of this thesis date back to 1976, when I began studying for a first degree in primary teacher education. In the first term of the modularised programme I was introduced to the constructivist work of Piaget (Phillips, 1975) and was required to trial his conservation tasks in a primary classroom. As an 18 year old, I felt the structured nature of these tasks, and the hierarchical identification of stages of development, provided an achievable approach to the business of teaching. At that stage, there appeared to be clear-cut answers in primary teaching which, as I was later to find out, was in fact a far more complex area. But, as a student teacher, I wanted to find the most direct, strategic route to success and to challenge the work of a well respected academic appeared quite irreverent within the context of my naivety. Consequently, Piaget's work became the main foundation stone of my early teaching career, whether I agreed with it fully or not.

Unfortunately, the module pathway I had chosen did not return to an examination of learning theory during the degree. It concentrated instead on curriculum knowledge and pedagogy. As a student and teacher I was immersed in the day-to-day practicalities of primary school teaching. These included the processes of review, reflection and restructuring that I undertook instinctively and which were referred to by tutors as 'reflective practice'. I remained oblivious, until 1991, of social constructivism and the emergence in the West of Vygotsky's (1978) *Mind in Society*. It was at this point that I studied a module called *Teaching, Learning and the Curriculum* as part of my master's degree and was encouraged to critique two major aspects of the *Education Reform Act 1988* (Great Britain, 1988) – the newly

developed National Curriculum (NC) and its assessment – in relation to learning theories.

In addition to Vygotsky's (1978) seminal work, I was introduced to Donaldson's (1978) and Wood's (1988) arguments. Coupled with my reflections upon 11 years of primary school experience as a class-teacher and advisory teacher, their works served to emphasise the discomfort I had felt with Piaget's ideas as I had taught children between the ages of 5-13 years. By this point, I felt my experiences had value. I was no longer a naive student teacher.

While teaching, I had intuitively gravitated away from using an integrated day (Brown and Precious, 1968) which focused on the development of individual learners and often employed discovery techniques. I moved towards whole class introductions followed by group work activities which emphasised discussion with and between children and the identification and remediation of misconceptions through observation, questioning and appropriately timed teaching. I aimed to provide children with a sense of progression in their learning by involving them in reviewing their achievements and taking some responsibility for the next steps they would take (Hughes, 2014), while keeping note of and sharing their progress with others through systematic record keeping and reporting mechanisms. Formative feedback, along with ipsative, peer and self-assessment and reflective practices were central to my teaching although I had yet to employ these terms. I had drawn serendipitously upon the social constructivist approach suggested by Vygotsky's (1978) 'Zone of Proximal Development' (ZPD) (Section 2.0.1) and when I read his work I felt my approach was vindicated. It all made sense.

Having acknowledged my social constructivist values, I drew upon the teaching styles I had favoured in the classroom when I became a higher education lecturer working in Initial Teacher Education⁴ (ITE) in the 1990s. Wherever possible, I made myself available to students and provided workshop activities that would model peer discussion and formative feedback. I noticed that similar techniques were not always used by colleagues, some of whom preferred more didactic methods. These colleagues appeared less comfortable with the demand for interactive teaching methods, driven by the introduction of standards for qualified teacher status (QTS)

⁴ My choice of ITE throughout this thesis is deliberate and reflects my ideological view that student teachers should be 'educated' to take the profession forward, not 'trained' to achieve an imposed standard.

(DfEE, 1998a) (Section 2.3.2) and the Office for Standards in Education (OFSTED) inspections of ITE that resulted from the *Teaching and Higher Education Act 1998* (Great Britain, 1998).

I found issue with the disparity between taught approaches that emphasised activity and discussion in seminar, lecture and online environments and the individualised essays and examinations methods used for assessment. Price (2003: 14) commented, 'it is commonly accepted that assessment drives learning' and, rather than demonstrating their creative abilities, discussing ideas, reflecting upon and sharing prior experiences, I witnessed students reverting to strategic approaches to tackle traditional methods of assessment.

A personal mission to change this culture was energised through my work on Assessment for Learning (AfL) in the school sector (Headington, 2000; 2003). I was heartened to see its gradual emergence in the higher education sector (e.g. Bloxham and Boyd, 2007; Merry *et al.*, 2013; Sambell *et al.*, 2013) (Section 2.1.1). Coupled with developments in students' off-campus access to technology and the potential use of blended learning approaches (JISC, 2007a; Ryan *et al.*, 2008), there was, in my view, the possibility of revolutionising students' experiences of study. Recognition of the value of formative assessment leading into summative assessments, while contested by some colleagues, was to me a breath of fresh air that would enable student teachers to become more actively involved in their learning (Headington, 2009; Headington and Hales, 2010). Web 2.0 technology could be used to pedagogical advantage within a social constructivist framework to aid provision. The emphasis on reflecting upon experiences and engaging in discussion with tutors and peers in order to critique ideas seemed to me to provide the opportunity to empower teachers of the future, enabling them to make decisions to benefit the children they taught.

What I had failed to appreciate was that many of the students I taught were not dissimilar from my 18 year old self. My discussions with new students over several years highlighted similar levels of naivety. They wanted to know 'how' to become effective teachers and assumed there was a clear path towards this goal. Most had come through the National Curriculum testing system which focused on goals and strategic approaches to achieve outcomes, often to the detriment of reflective

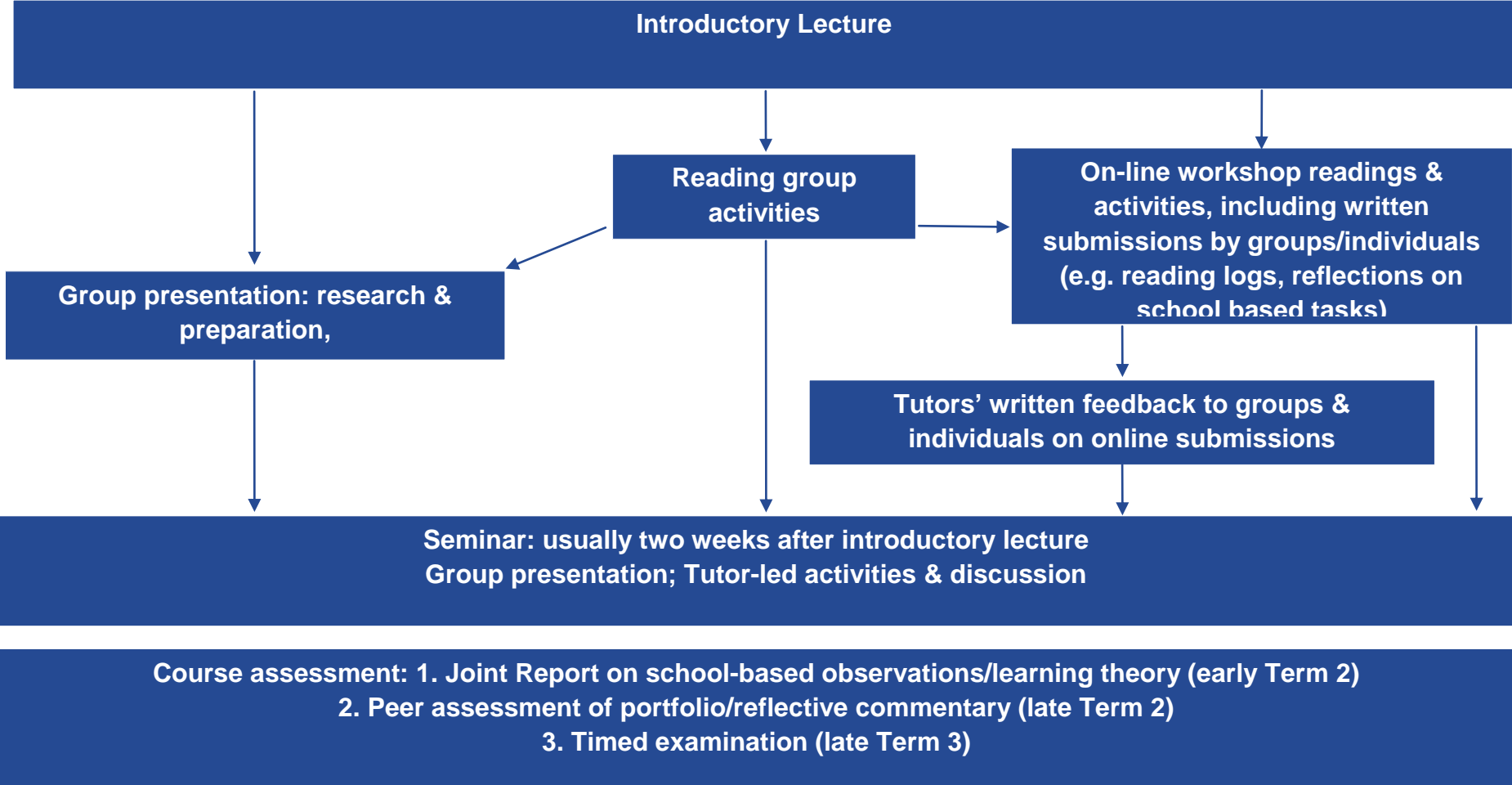
processes. The challenge was far greater than I had appreciated, as the students had experienced an instrumentalist system.

However, not all students demonstrated this approach. Some from an early stage appeared to recognise that higher education was not simply about passing assignments but about learning through the process of completing them. They read and explored other peoples' ideas, used these to examine personal experiences and applied their new insights to develop knowledge and understanding. They appeared to use a reflective cycle instinctively and, when introduced, via Pollard (2014), to the work of Dewey (1991), Schön (1983) and others, seemed at ease with the challenges ahead.

Others appeared unwilling, or perhaps did not understand the need, to read beyond the set texts. They demanded clear cut assignment guidance and multiple opportunities to resubmit to improve their grades, to find out what the tutors wanted and deliver it successfully. There was a great temptation to 'hold the hands' of these needy students, to assist them over the hurdles of higher education rather than to find ways to empower them to self-regulate their learning (Nicol, 2007; Nicol, 2009a; Schunk and Zimmerman, 1994).

In 2006, I designed a new 60 credit Level 4 blended learning course which centred on the notion of social constructivism in theory and in practice. It focused on providing regular formative feedback; not to 'hold hands' but to 'scaffold' learning (Wood *et al.*, 1976). The course was designed to demonstrate learning as being socially constructed (Figure 1.2). Tutors modelled the use of oral and written formative feedback to groups and individuals, encouraging students to become more confident in giving and asking for feedback from their peers, and to be more aware of themselves as 'self-regulated learners' (Nicol, 2009a; Schunk and Zimmerman, 1994) (Section 2.1.5) who employed reflective processes instinctively to review personal progress (Hughes, 2014) and 'self' (Mead, 1934) (Section 2.0.1). With lectures, online directed activities and a follow-up seminar stretching over a two week period for each of nine 'units', students experienced a range of teaching and

Figure 1.2: Course model (Headington and Hales, 2010: 2)



learning approaches and were expected to work independently and with others. They were to work in small groups to read materials that some might find challenging and to share the reading they had undertaken beyond the set texts. Tutors provided formative feedback on students' notes on essential readings, to monitor and guide understanding. Students were then required, in seminar presentations and discussions, and through a paired assignment, to share their experiences as learners and student teachers.

It became evident from evaluations and assessment outcomes that the vast majority of students enjoyed the course and learned from it. But whether students could transfer their 'learning about learning' from this course to others, and whether the course's focus on feedback had helped students' understanding of their developing self, remained unanswered questions. I wondered whether students had been able to understand the focus on feedback as a means of enhancing their reflective practice.

This concern manifested itself following my introduction to Meyer and Land's (2003; 2006a; 2006b) work on 'threshold concepts' (Land, 2007) (Section 2.3.5). It seemed to me that, in the world of ITE, reflective practice may indeed be a threshold concept. I had no memory of the term 'reflective practice' being defined by my tutors or teaching colleagues, yet we seemed to share a tacit knowledge (Section 2.3.3) of its meaning and importance to the profession. It appeared to meet all the requirements of Meyer and Land's (2006a; 2006b) theoretical framework, demonstrating Polanyi's (1966:4) statement that 'we know more than we can tell'. I began questioning whether it was possible for me, as an individual tutor, to provide student teachers with feedback that would enhance their understanding of the profession's all-encompassing, essential yet tacit area of reflective practice.

Within the same decade as Meyer and Land's work, the National Student Survey (NSS) (HEFCE, 2016) and the National Union of Students' (NUS) online survey (NUS/HSBC, 2011) brought to the fore students' problematic experiences of feedback across the higher education sector (Sections 2.1.2 and 2.1.3). The NUS (2010) used its *Charter on Feedback and Assessment* to highlight disparities between theory and practice. While reactions from the sector (THE, 2010), focused on the protracted nature of change in tutor mindset and practice, technology appeared to offer some immediate solutions. My course (Figure 1.2) became a

vehicle for exploration of innovative approaches to feedback such as audio feedback (JISC, 2015a), automated peer review and electronic feedback (JISC, 2015b; Nicol *et al.*, 2014; Watkins *et al.*, 2014). The possibilities and outcomes of such diverse approaches rippled into some courses within the degree programme, but not across all. It became evident that developments were required at programme, not just course, level (TESTA, 2015; Van der Vleuten, 2014) to benefit students' holistic experiences of degree study (Gibbs and Dunbar-Goddet, 2009; Headington, 2011a; Kerrigan *et al.*, 2011).

I was discovering that students' journeys in higher education, and specifically ITE, were far more complex than I had initially considered. I decided to use my knowledge and skills in educational research to explore student teachers' lived experiences of feedback across one year of study, and to consider how their interpretations of the feedback they receive may enhance their understanding of and approaches to reflective practice. However, I was also aware that the teaching profession had changed considerably since I had been a student teacher and that I would need to consider these changes in order to gain a greater understanding of students' experiences today.

1.3 My profession's journey

As an undergraduate student teacher in the late 1970s, I had found myself part of a major transformation of the teaching profession as it moved into graduate level entry. Etzioni (1969) had labelled education, along with nursing and social work, as one of the 'semi-professions'. This was based on factors including less autonomy than the traditional professions, such as medicine and the law, a shorter period of training and a less specialised body of knowledge. However, the B.Ed. Honours, with its emphasis on the study of the sociology, psychology, history and philosophy of education to provide a theoretical foundation for the craft aspects of teaching while emphasising the value of pedagogy (Furlong, 2013; Waring and Evans, 2015; Wilkin, 1996), appeared to be a positive move in raising the profession's status.

At that point, prior to the National Curriculum, teachers had the autonomy to determine what to teach and how to teach it in the interests of the children they taught. Taught sessions could focus on children's development and pedagogy rather than on subject content. But such approaches were not without their critics. Following criticism of so-called 'progressive education' in the *Black Papers* (Cox and

Dyson, 1971), the Labour Prime Minister James Callaghan's speech at Ruskin College in 1976 asked for rational debate. He stated that 'if everything is reduced to such phrases as 'educational freedom' versus state control, we shall get nowhere' (Gillard, 2016). His speech raised concern as it appeared that politicians were trespassing into what Donoughue, then head of the No. 10 Policy Unit, referred to as the 'secret garden' of education (Adonis, 2006). The 'Great Debate' into education continued, culminating in a raft of legislation under the Thatcher government (1979-1990) with its centre piece of the National Curriculum and its assessment.

As a teacher and teacher educator in the 1980-90s, I witnessed challenges to teacher autonomy and, in my view, the potential erosion of any professional status gained, in schools and initial teacher education. Public funded professions, such as education, became subjected to increased regulation and accountability, hastened not only by societal changes, but by occasionally problematic high-profile cases and the media scrutiny they received. They also witnessed the diminution of specialised knowledge as access to online information increased. Alongside a lessening of trust in professionals, increased demands for accountability through targets, evaluations, performance management and bureaucratic form filling became part of an 'audit explosion' (Lunt, 2008). The combination of the NC and accountability measures, through publication of assessment and inspection outcomes, focused schools on meeting government targets, floor standards and progress measures within a narrow range of subjects (DfE, 2014; DfEE, 1997; Headington, 2011b). Similarly, in ITE standards for QTS (DfE, 2011a; DfEE, 1998a; DfES/TTA, 2002; TDA, 2007) emphasising the National Curriculum and its assessment and government priorities, combined with OFSTED inspections across the ITE sector to narrow the content of degrees. Consideration of sociology and psychology gave way to government advocated teaching methods for mental arithmetic and phonics, with the four iterations of the standards to date appearing to be dominated by government dogma rather than developments in pedagogy and practice based on independent research evidence.

Even the General Teaching Council for England (GTCE), launched in 2000 as a means of building the status of the teaching profession by providing independence and self-regulation in parallel with organisations such as the General Medical Council, was short-lived. The GTCE's (2011) website claim that 'We work for children, through teachers' was further evidenced through its *Code of Conduct and*

Practice for Registered Teachers; a document which emphasised the professional responsibilities of teachers as a 'skilled and trusted profession' (GTCE 2009: 2). While the council's birth hinted at autonomy and self-regulation within the profession, with its powers to award QTS and to discipline teachers found guilty of incompetence or misconduct, this vision was short-lived. The then Secretary of State for Education, Michael Gove, abolished the GTCE in 2012 (DfE, 2010b) in favour of the government-led *Teacher Agency* stating 'I believe this organisation does little to raise teaching standards or professionalism' (Sheppard, 2010).

The state not only held the purse strings, but, as my career has progressed, it gradually took more control by defining what, when and how teaching should take place and monitoring this through structured regulation and accountability measures. Far from achieving the government's supposed dreams of professional autonomy and unity, these measures led to increased instrumentalism, managerialism and fragmentation in the teaching profession (Whitty, 2008). The flowers that had flourished in the 'secret garden' were, in my view, gradually being replaced by the concrete of conformity. Yet, Truss (2013), returning to the same metaphor, suggested that recent reviews of the NC would enable the state and educationalists to play their part in developing the garden:

The School Curriculum is best described as the life within the National Curriculum. Government has a part to play in setting out the trellises and marking out the footpaths. How the garden grows is for schools to decide. And in order for teachers to be able to give life to the garden, government has to give them freedom: freedom from excessively prescriptive top-down diktats and the freedom to innovate.

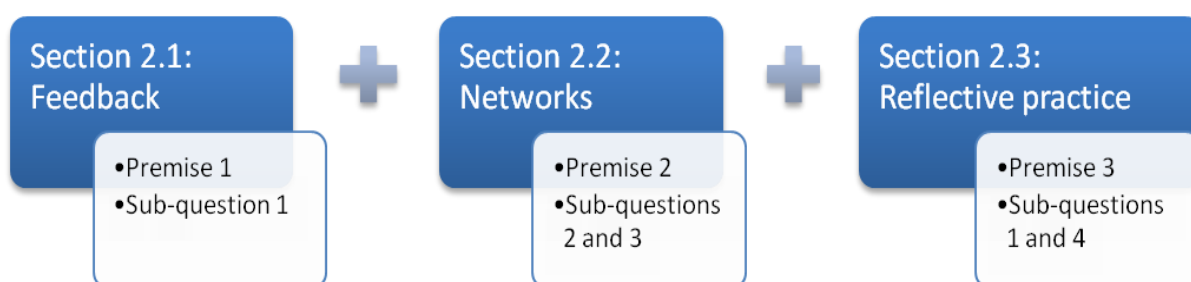
And within ITE, the *Carter Review of Initial Teacher Training* (2015: XVII) declared 'it is important that trainees understand how to interpret educational theory and research in a critical way, so they are able to deal with contested issues'. Whether the positive remarks of Truss and Carter signpost a new professionalism for teachers remains to be seen.

1.4 My research journey

Having reflected upon my professional journey and that of my profession, the following chapters reveal the research journey I took and the extent to which my research questions were answered. Chapter 2 provides a foundation to the study by defining social constructivism and symbolic interactionism and identifying their

common emphasis on language and socialisation (Section 2.0). Building on the work of Mead (1934), I then draw upon Blumer's (1969) three premises of symbolic interactionism (Figure 1.1) as a basis for my research sub-questions and use these to frame my review of the literature across feedback, networks and reflective practice (Figure 1.3). I write with particular reference to primary school education which forms the professional context of the undergraduate primary student teachers within this study.

Figure 1.3: Using Blumer's (1969) three premises of SI to frame the literature review sections



Section 2.1 draws on Blumer's (1969: 2) first premise, that 'human beings act towards things on the basis of the meanings that things have for them' by exploring, through major studies in the field, the meaning of feedback in HEIs and primary schools. Conflicts between the meaning and use of feedback in higher education and its pedagogical application in primary school classrooms highlight the potential mismatch between student teachers' lived experiences as learners and teachers. The section progresses by examining students' perspectives of feedback through a critical examination of the National Student Survey (NSS) (HEFCE, 2016) and considers how HEIs have used NSS outcomes to investigate and develop feedback practices across the sector. Identifying sources within the students' 'academic learning community' (Evans, 2013), it explores the rise of formalised peer feedback in higher education and considers how ipsative feedback may support students' self-regulation.

Section 2.2 draws on Blumer's (1969:2) second premise, that 'the meaning of such things is derived from, or arises out of, the social interaction one has with one's fellows', by examining students' social interactions in relation to feedback. Discussions explore the notion of student teachers as networked individuals by examining their professional communities of practice (Lave and Wenger, 1991), personal and professional social networks and the social capital gained through

interaction. It recognises that students' lives go beyond the strictures of the HEI environment and that a range of sources may be used to seek and give feedback at a number of levels.

Section 2.3 draws upon Blumer's (1969: 2) third premise that 'these meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things [she/]he encounters' by considering students' use of reflective practice as an 'interpretive process' and the role played in this by feedback from their personal and professional networks. From discussion of the meaning of reflective practice and its use in ITE, it identifies the difficulties inherent in sharing tacit knowledge and how metaphor is often used to bridge this divide. The complexities of reflective practice are explored through Meyer and Land's (2003) notion of 'threshold concepts'.

The structure of Chapter 3 is developed from Crotty's (2003: 2) four questions to be considered when undertaking research. Returning to an autobiographical genre, I explain, in Section 3.1, my approach to educational research and the epistemological and theoretical perspectives that form the basis of this study in the interpretivist paradigm, explored from the standpoint of symbolic interactionism. In Section 3.2, I discuss the main and subsidiary questions of the study, derived from Blumer's (1969) three premises of SI (Figure 1.1). In Section 3.2, I identify my research design, the timeframe in which the study was undertaken and the nature of the population and sample of primary undergraduate primary student teachers. My primary research methods are discussed within Section 3.4. I consider the nature of triangulation and the advantages and limitations of each of my chosen research methods, namely questionnaires, Social Network Analysis (SNA) surveys, diaries and interviews (i.e. mixed methods). The development of the methods through pilot studies and my approach to ethical issues completes the chapter.

Chapters 4, 5 and 6 form the heart of the study. Systematically, they present, analyse and discuss the data in response to the study's sub-questions and its main research question. Chapter 4 explores the quantitative data outcomes, derived from questionnaires and SNA surveys, at cohort level. It considers whether the cohort's satisfaction in assessment and feedback, as defined by the NSS, changed through the second year of their BA QTS degree. It identifies students' informal feedback network sources and the changing composition of the cohort's peer feedback

network. Chapter 5 draws upon students' personal and professional networks to explore the qualitative data outcomes, derived from diaries and interviews. It reveals the lived experiences of seven students through the second year of study. Chapter 6 brings together the research findings of Chapters 4 and 5, to consider the ways in which student teachers gather, understand and interpret feedback through the networks and the extent to which this feedback influences reflective practice. It begins by exploring students' definitions of 'feedback' and 'reflective practice' and how social interactions with their personal and professional networks have supported their interpretations. The students' feedback journeys are presented through the extension of the tunnel metaphor, introduced in Chapter 2, and through models of practice that recognise these journeys as both shared and personal.

Chapter 7 recognises the thesis as the end of one journey and the beginning of others. Ending this research journey, in Section 7.1, I draw from the previous chapter to identify five contributions to the knowledge of feedback, while acknowledging the limitations of my research in Section 7.2. Looking towards the beginning of other journeys, in Section 7.3, I offer the three inter-related recommendations for professional practice of connecting courses, moderating feedback and empowering students. I discuss my recommendations for future research in Section 7.4, identifying the replication of my research methods and new areas of investigation that build upon the outcomes of my thesis. The chapter and thesis conclude, in Section 7.5, with reflections upon my own feedback and research journey and how it has, in many ways, echoed those of the students I studied. I consider how the doctoral experience has motivated me to move forward; taking new directions and using my newfound research skills, not by remaining in an 'ivory tower', but through my 'social contact with others' (Phillips and Pugh, 1987: 11).

1.5 Originality

Original research enables the growth of knowledge; it builds upon previous knowledge and reveals areas for further study (Murray, 2011; Phillips and Pugh, 1987). My claim for originality is in four main areas, based upon the study's subject matter, research perspective, methods and sample.

Firstly, my study's investigation of informal feedback networks addresses a gap in the literature identified by Evans (2013). Her meta-analysis of 'feedback', found that

studies had focused *within* the students' academic learning communities, not *beyond* them (Section 2.1.2). My work investigates students' informal feedback interactions with families and peers.

Secondly, my exploration of the literature demonstrated the emergence of studies that combined symbolic interactionism with social network analysis (Section 3.1.3). However, no previous studies combined SI and SNA within the educational research context of 'feedback' and 'reflective practice'.

Thirdly, my study provides the only application to date of SNA within a three-year longitudinal cohort study of 'feedback' in ITE (Section 3.4.2).

Fourthly, the research sample was unique to my study. The students who responded were from a specific cohort within an undergraduate BA QTS programme at Hope University (Section 3.3.2). The students did not partake in similar studies.

While previous knowledge is discussed within the literature review and methodology chapters, areas for further study are discussed within the concluding chapter.

1.6 Conclusion to Chapter 1

This chapter provided an overview of the thesis. It identified the main and subsidiary research questions and introduced symbolic interactionism as the study's underlying theoretical perspective. Within the chapter, I set the scene for the research and identified its central characters through discussion of biography and autobiography, my professional journey and the journey of the primary teaching profession. The chapter identified the research journey and how this is addressed through the structure of the thesis, by exploring and building upon the work of others to make an original contribution to the growth of knowledge.

CHAPTER 2: Literature Review

Main question:

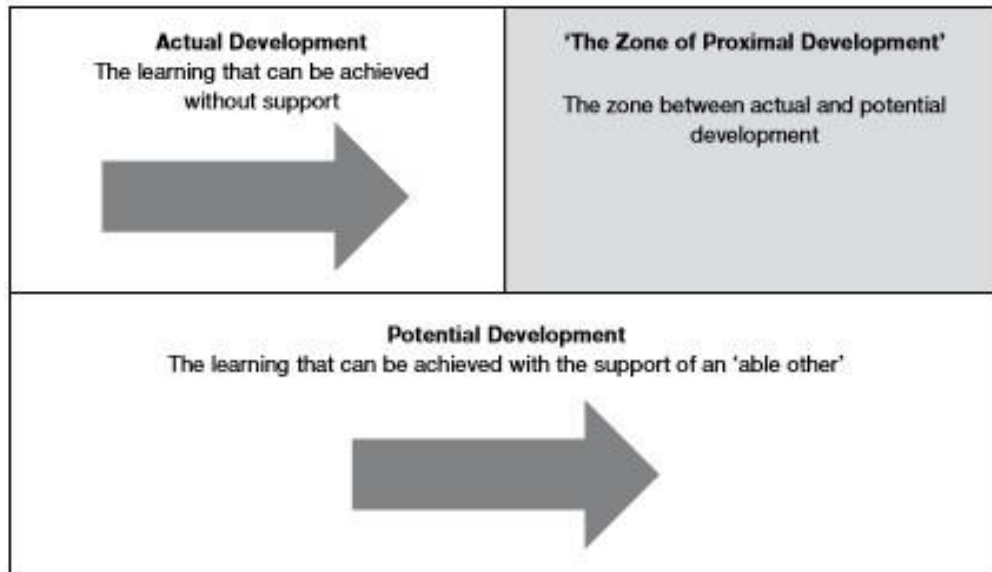
In what ways do undergraduate primary student teachers gather, understand and interpret feedback through their personal and professional networks and to what extent does feedback influence their reflective practices?

2.0 Introduction to Chapter 2

2.0.1 Language and socialisation: social constructivism and symbolic interactionism

Lev Vygotsky (1896-1934) is viewed as the major proponent of social constructivism, a learning theory popular within the ITE literature (e.g. Cremin and Arthur, 2014; Moyles *et al.*, 2011; Pollard, 2014). His theory of the *Zone of Proximal Development* (ZPD) (Vygotsky, 1978), first published in his native Russia in the early 1930s, saw learning as constructed upon prior knowledge and understanding and strengthened through social interaction. This contrasted with the constructivism of Piaget (Donaldson, 1978; Philips, 1975; Wood, 1988), a Swiss clinical psychologist with roots in biology, who theorised on cognition and maturation through intellectual stages of development. While both identified the biographic aspect of prior learning, Piaget (1896-1980) placed less emphasis on language as he considered children to be learners who discovered in isolation. Vygotsky (1978), however, saw language as central to learning. He posited that while individual learners were able to reach an 'actual development' level independently, with the support of a 'more capable other' they were able to reach a level of 'potential development'. Vygotsky referred to the area between actual and potential development as the ZPD (Figure 2.1). Wood *et al.* (1976) developed the metaphor of 'scaffolding' to explain how the more capable other might provide and then reduce support through the ZPD. In relation to children's early use of language, Bruner (1983: 60) identified the 'handover principle' from parent to child, saying that the former 'provides a scaffold to assure that the child's ineptitudes can be rescued or rectified by appropriate intervention, [by removing] the scaffold part by part'.

Figure 2.1: Vygotsky's ZPD (Headington and Hales, 2010: 18)



Writing at a similar time in America, George Herbert Mead (1863–1931) theorised on the social self (Mead, 1934). Mead saw himself as a social behaviourist but was later identified as a social psychologist (Charon, 2007; Cronk, 2015). Although influenced by 'the philosophy of pragmatism, the work of Charles Darwin and behaviourism', Mead determined that 'the origin and foundations of the self, like those of thinking, are social' (Charon, 2007: 31). Social interaction used language and, in particular, words as symbols for objects, emotions, experiences and so on. Although the meanings taken from these interactions were both personal and internal, they were framed through social interaction, providing individuals with realities that were socially defined and multi-layered (Berger and Luckmann, 1966; Woods, 1992). Mead (1934: 167) identified the interpretive process used by the individual to find meanings as an internalised 'conversation of gestures'. To Mead, this represented thinking.

Although the term 'Symbolic Interactionism' (SI) (SSSI, 2015) was applied after his death by his student Blumer (1969), Mead became one of the perspective's major proponents. SI was defined by Wallace and Wolf (2006: 199) as a social-psychological perspective that:

...focuses primarily on the individual 'with a self' and on the interaction between a personal's internal thoughts and emotions and his or her social behavior [sic]. Most of the analysis is of small scale interpersonal relationships. Individuals are viewed as active constructors of their own conduct who interpret, evaluate, define, and map out their own action, rather

than as passive beings who are impinged upon by outside forces. Symbolic interactionism also stresses the processes by which the individual makes decisions and forms opinions.

Mead's (1934) theory identified two phases in the development of the 'self', the spontaneous 'I' phase and the socialised 'me' phase (Charon, 2007; Woods, 1992). Denzin (1992: 5) summarised this by stating that the self 'begins with an impulse, moves through a phase of manipulation, and culminates in a consummation phase'. However, Weigert and Gecas (2003) highlighted a conundrum. As the 'I' became 'me', over-writing the existence of the former, they suggested that the socialised 'me' was therefore unaware of itself as a spontaneous and impulsive 'I', always seeing itself as 'objectified' (Weigert and Gecas, 2003: 267) 'as one would be viewed by another' (Woods, 1992: 346).

Figure 2.2: Stages of self (Mead, 1934)



In common with Vygotsky (1978), Mead (1934) viewed language and socialisation as central to his theory. Rather being purely biological in origin, Mead proposed that the self began in childhood and developed across stages (Figure 2.2) through a process of socialisation. As individuals increasingly experienced the world from alternative perspectives, they would become aware that others' realities differed from their own (Charmaz, 2014; Woods, 1992). Mead (1934) saw 'play' as providing the opportunity for the child to recognise that a 'significant other', such as a parent, acted in particular ways towards particular objects. With the acquisition of language, the child would move beyond mere imitation to take the role of the 'significant other'. At the 'game' stage Mead (1934) saw the child beginning to identify and apply the rules of social engagement. Wallace and Wolf (2006: 210) used a sports analogy to suggest that rather than taking the role of *one* other, the child would simultaneously 'anticipate *all* the attitudes and roles of the other players' within a team game [my emphasis]. Following the 'play' and 'game' stages, Mead (1934: 154) theorised that the individual would eventually take the role of the 'generalized other'. This moved beyond individuals' roles to the perspectives of 'reference groups' encountered by

the individual, such as a dance troupe or a political party. In doing so, individuals would recognise themselves as distinct from, but sharing, the perspectives of others (Charon, 2007).

Blumer's (1969) three premises of SI (Figure 1.1) encapsulate Mead's ideas by focusing on the individual's internal meaning making through social interaction. The premises provide a useful vehicle for research (e.g. Gallant, 2014; Kleiner, 2009). Within this study, I have used the three premises across this study to frame the main and sub-questions of my research (Section 3.2) to explore feedback through students' personal and professional networks and the extent to which it influences their reflective practices. Therefore, the premises also provide a framework for my discussion of the previous literature (Chapter 2) and the outcomes of my research (Chapters 4-6).

2.0.2 Overview of Chapter 2

The remainder of Chapter 2 considers the main and subsidiary research questions through the critique of literature in the areas of feedback (Section 2.1), networks (Section 2.2) and reflective practice (Section 2.3). I make reference throughout to the professional contexts of the student teachers who are central to my research that is, higher education institutions (HEIs), where they take academic courses based on content knowledge and pedagogy and primary schools, where they undertake professional placement experiences. Hope University is identified as one of 58 universities that combine academic and professional elements within undergraduate degrees in primary education leading to qualified teacher status (e.g. BA QTS in Primary Education) (Whatuni?, 2016).

Student teachers are both learners and teachers. They have traditionally explored 'the meanings that things have for them' (Blumer, 1969: 2) through social interaction; communicating their understanding in two ways. Firstly, at university they engage in discussions with university tutors⁵ and peers and complete academic assignments, such as essays and oral presentations. Secondly, within professional placements they assume teachers' roles for a number of weeks in primary schools or early years' settings and undertake enrichment placements in organisations associated with

⁵ See Glossary of Terms A: Professional Roles

primary education⁶. During placements, students interact with link tutors⁷, placement mentors, teachers, teaching assistants and peers. Through this social interaction with 'more capable' others (Vygotsky, 1978: 86), students encounter the language of oral and written feedback to scaffold their knowledge, understanding and skills in primary education. This feedback is provided to help students to refine and develop 'meanings' (Blumer, 1969: 2) and encourage them in the reflective practices that are considered necessary for entry to the teaching profession. As such, feedback appears to be critical to students' academic and professional growth.

Within this thesis, I consider the extent to which feedback influences student teachers' reflective practices by looking beyond the strictures of the BA QTS programme and students' pragmatic use of feedback to improve grades. To do this, I define 'reflective practice' as a threshold concept in teaching (Section 2.3.5) and employ the metaphor of a journey through a tunnel and a gate, to explore how the feedback that is gathered, understood and interpreted through the students' personal and professional networks, influences their journeys by providing 'meaning'. I apply the *Pocket Oxford Dictionary's* definition of 'influence' as action that is 'invisibly exercised'.

2.0.3 Literature search strategies

The literature search for this thesis began nearly ten years ago and built upon my existing professional and academic foundations. During this time, I witnessed that some academic issues remained under discussion, while others changed or were resolved to some degree. Changes of government resulted in documents being developed and others being archived, as new policies and practices came to the fore.

My initial literature searches were systematic and undertaken across a range of media (Burton *et al.*, 2008; Hart, 1998) and several academic libraries. I employed, in a cyclical manner, the steps advocated by Punch (2009) of searching, screening, summarizing, documenting, organizing, analysing, synthesizing and writing. My search evolved through regular keyword searches of academic databases including Ebscohost (which incorporates Academic Research Premier, Education Research Complete, and Teacher Reference Center), SpringerLINK, Sage Journals, Taylor and Francis Online and EthOS, using the Boolean terms 'feedback', 'networks', 'reflective

⁶ The enrichment placements of students in this study included a special needs school, museum and city farm.

⁷ See Glossary of Terms A: Professional Roles

practice' and 'higher education'. Signposts within the literature and my attendance at conferences, workshops, expert lectures and membership of organisations (e.g. *Assessment in Higher Education* (AHE) conference, *European Association for Research on Learning and Instruction* (EARLI) Assessment Special Interest Group (SIG), *Society for Research into Higher Education* (SRHE)) aided the introduction to further sources and enabled me to keep abreast of developments in the field through discussions with experts and peers.

Table 2.1: Keyword search for 'feedback' using EBSCOhost on 13 November 2015

Keywords	Limiters	Search result numbers
Feedback	Education databases Scholarly (Peer Reviewed) Journals Published date: 2006-2016	124,688
+Assessment		17,938
+Higher Education		1,850
+Student experience		274

Searching the literature across three major areas (i.e. feedback, networks and reflective practice) required the maintenance of bibliographic record-keeping systems to keep track of texts, journal articles, dates and keyword searches. Refining the results of academic database searches proved challenging. For example, keyword searches using the term 'feedback' revealed items related to engineering as well as educational assessment. Even within an education database, further keywords and limiters were necessary to filter the search towards the context of my thesis and reduce search results to more manageable proportions (e.g. Table 2.1). However, keywords and limiters also needed to be used with caution to avoid items of interest being concealed and lost to the study.

Several academic journals had a direct relationship with my field of study (e.g. *Assessment and Evaluation in Higher Education*, *Reflective Practice*, *Social Networks*, *Studies in Higher Education* and *Symbolic Interaction*). These proved advantageous in identifying current and historic areas of discussion, leading proponents and research approaches. Several journal articles offered, or identified the sources of, meta-analyses in feedback and reflective practice. Although compiled for secondary purposes (e.g. to provide data for reports to government sources), these meta-analyses served to highlight seminal works, influential studies and the fluidity of knowledge. Websites were beneficial in providing access to archived and live documents, from government departments and organisations associated with education (e.g. DfE, HEFCE, Unistats).

2.1 Feedback

2.1.0 Overview of Section 2.1

<p>Premise 1:</p> <p><i>Human beings act towards things on the basis of the meanings that things have for them.</i></p> <p>Blumer (1969: 2)</p>	<p>Thesis sub-question:</p> <p>1. What do the terms ‘feedback’ and reflective practice’ mean to students?</p>
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Blumer’s (1969: 2) first premise of symbolic interactionism identified the importance of the meanings we ascribe to things. Thesis sub-question one discusses the meanings of the terms ‘feedback’ and ‘assessment’ and this section explores the meaning of ‘feedback’ within the literature. Similarly, the meaning of ‘reflective practice’ is discussed within Section 2.3. These discussions will be used to support investigation (Chapter 3) and analysis (Chapters 4-6) of the meanings ascribed to these terms by the student teachers within this study.

This section begins by addressing the principles and practices of feedback and how students perceive it, particularly in relation to the National Student Survey. It goes on to consider peer-feedback and self-regulation and the influences of these within the students’ academic learning communities (Evans, 2013).

2.1.1 Feedback: principles and practices

Mead's colleague at the Universities of Michigan and Chicago, the pragmatist Dewey (1859-1952), identified thinking as 'a *forked road* situation, a situation which is ambiguous, which presents a dilemma, which proposes alternatives' (Dewey, 1991: 11). He implied that the lack of challenge when 'activity glides smoothly along from one thing to another' reduced the need to reflect critically (Section 2.3). Within ITE degrees, summative assessment points are designed to present dilemmas that will challenge student teachers' thinking, each providing, in Dewey's terms (1991: 107), a 'slight or great' crisis which forces students to identify and use their knowledge and experience, explain their thinking and make judgements.

Assessment points are used as milestones throughout the education system, from school to university, to provoke learners' thinking and judge or measure their progress (Headington, 2011b). The Task Group on Assessment and Testing (DES, 1987: 4) on the newly formed National Curriculum asserted that:

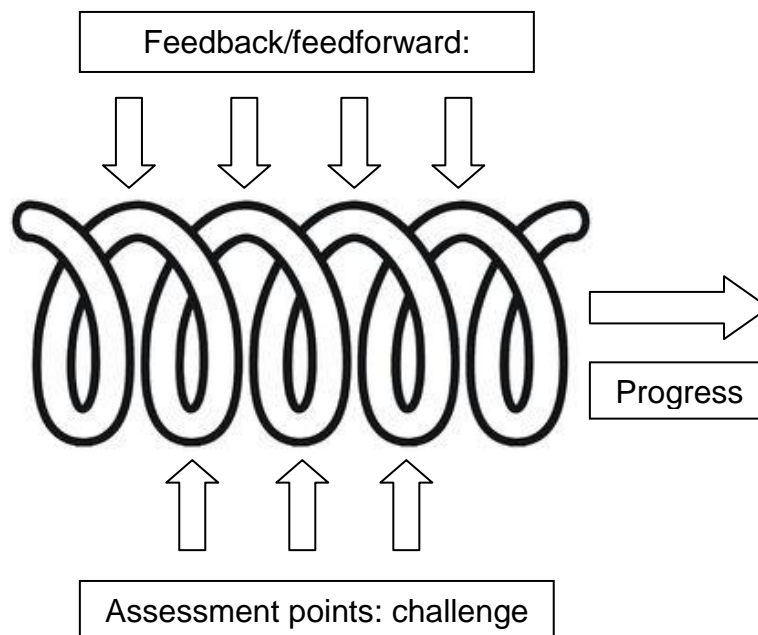
...the assessment process itself should not determine what is to be taught and learned. It should be the servant, not the master, of the curriculum...it should be an integral part of the educational process, continually providing both 'feedback' and 'feedforward' [and] needs to be incorporated systematically into teaching strategies and practices at all levels [my emphasis].

While Rowntree (1987) and Cowan (2006) cautioned that assessment was used to coerce and drive learning as 'the master of the curriculum', Brown (2007: 1) suggested that feedback on assessed work was 'the oil that lubricates the cogs of understanding', its 'servant'. The relationship between assessment and feedback/feedforward should enable progress through a cyclical yet dynamic model of challenge and review (Figure 2.3).

Continuing the metaphor of a journey, higher education students are provided with several 'tutor constructed artefacts' (Orsmond and Merry, 2015: 5) to define their progress. These include 'maps' of their programme of study, showing the dates when assignments are to be submitted and returned, assignment briefs and the assessment criteria against which the assignments will be judged and measured (Headington, 2011b). Tutors act as 'guides' who support the students' journey through feedback, much of which is written. While the assessment grades they

achieve on assignments show whether students reach identifiable milestones along the journey, 'feedback' demonstrates how well they follow the maps and 'feedforward' directs them towards future milestone(s) within the programme (Headington, 2014a). Hughes (2014) suggested that milestones set by others, through norm-referenced and criterion-referenced assessments, were more competitively based and focused on achievement over progress. She argued in favour of ipsative-referenced assessment, where learners would determine progress against previous personal performance (Headington, 2003; Hughes, 2014) (Section 2.1.5). Her approach recognised the individuality of each student's journey and the value of self-regulation required to progress.

Figure 2.3: Progress through assessment and feedback/feedforward



Although student teachers follow programme maps across academic and professional contexts, Boud (2015: 3) indicated that higher education tutors find difficulty in 'following students' work over time'. Tutors give feedback on individual pieces of work (Hughes *et al.*, 2015) within the courses they teach, but students alone have an holistic experience of feedback across the courses within their programme of study and can determine whether the feedback from one course can be used for another. Noting that research studies on assessment and students' performance had been at course rather than programme level, Gibbs and Dunbar-

Goddet (2009) suggested that the modularisation of programmes had reduced holistic approaches to assessment and feedback. Beyond issues with the quality and quantity of feedback, the *Transforming the Experience of Students through Assessment project* (TESTA), which built upon Gibbs and Dunbar-Goddet's (2009) work, found that students experienced inconsistencies of expectation across courses (Jessop *et al.*, 2014). Further investigations, through the mapping of whole programme assessment and feedback points (Headington, 2011a; JISC, 2010; Kerrigan *et al.*, 2011), demonstrated 'bunched' submissions that limited the opportunity for students to use the feedback received on one assignment to inform future assignments. Additionally, tutors' lack of awareness of the students' holistic assessment and feedback journeys across programmes negated potential connections between course assessments. This reduced tutors' ability to provide developmental feedback (Gibbs and Dunbar-Goddet, 2009; Headington, 2011a; HEA, 2014; Hughes *et al.*, 2015).

Boud (2000) and Boud and Falchikov (2007) noted that quality assurance systems, which authorised, moderated and regulated students' journeys to maintain equity within HEIs and across the sector, often appeared to accentuate certification over learning. Such systems required tutors to focus on reliability and manageability when setting assignments, rather than validity (Carless, 2009; Sadler, 2009; Sadler, 2010) (Section 2.1.3; 2.3). Additionally, Biggs' (2015: 1) 'constructive alignment' approach advised tutors to 'start with the outcomes we intend students to learn, and align teaching and assessment to those outcomes'. He advocated the use of 'tutor constructed artefacts' (Orsmond and Merry, 2015: 5) where feedback was written in relation to assessment criteria which had been made transparent to students before they had tackled an assessment item (Section 2.1.3; 2.3.1). Adherence to these systems and approaches have been identified as inadvertently supporting students' use of strategic and potentially behaviourist learning approaches to achieve higher grades (Orsmond and Merry, 2015; Race, 2010; Sadler, 2007; Torrance, 2007).

Focusing upon the school and college sectors, Black and Wiliam's (1998a: 39) seminal review of 681 articles and chapters used the metaphor of a 'black box' with inputs and outputs to challenge behaviourist approaches that 'stress(ed) measurement against objectives'. Writing ten years after the *Education Reform Act 1988* (Great Britain, 1988) which gave rise to the National Curriculum and testing in

schools, they championed the use of social constructivist approaches that 'integrated assessment into learning' (Black and Wiliam, 1998a: 39). They focused on the work of Ramprasand (1983) and Sadler (1989) to highlight the role of feedback in helping to close the gap between current understanding and desired goals. In social constructivist terms, Black and Wiliam (1998a; 1998b) saw feedback as a means of 'scaffolding' learning (Wood *et al.*, 1976) and enabling learners to move through the 'Zone of Proximal Development' (Vygotsky, 1978) with the support of more able others.

Further research, undertaken by members of the Assessment Reform Group (ARG), of which Black and Wiliam were members, challenged the dominance of National Curriculum assessment and the reporting of schools' results in performance tables (AAIA, 2015). 'The provision of effective feedback to pupils' became the first of ARG's five 'deceptively simple, key factors' for improving learning through assessment (ARG, 1999: 4-5). The remaining four factors focused on developing pupils' involvement in the assessment process and teachers' use of assessment within teaching (Appendix A). ARG's work gave rise to the terms 'Assessment of Learning' and 'Assessment for Learning' (AfL) and the group developed the 10 AfL principles that came to underpin schools' approaches to this area (ARG, 2002).

But Black and Wiliam's (1998a; 1998b) work was not without its critics. Bennett (2011:11) questioned the conclusions they had drawn from the study suggesting 'the research covered is too disparate to be summarised meaningfully through meta-analysis'. While acknowledging how influential their contribution had been, Taras (2007a) identified inconsistencies and inefficiencies across three articles in relation to their 'Assessment for Learning' theory. She cited 'dual definitions of formative assessment' (Taras, 2007a: 364) that focused in some cases on product and in others on process. Taras (2007a: 368) viewed 'the dichotomy of summative assessment as bad and formative assessment as good' as highly problematic and stated that it detracted from the 'neutrality of assessment'. Furthering her argument, she challenged Black and Wiliam's (1998a; 1998b) use of metaphor. She posited that while the notion of a 'black box' provided a useful conceptual framework, it may also constrain and distort views of assessment (Section 2.3.4).

While AfL stressed the potential for feedback to engage learners within the learning process, evidence emerged of flaws in its practice in primary schools which resulted in the reduction of learner autonomy. For example, Hargreaves (2013: 236) witnessed feedback hindering the flow of learning by being too frequent, detailed or 'overly directive'. However, Van den Bergh *et al.*'s (2013) research found that only half of the teacher-pupil interactions they videoed demonstrated any form of feedback and of these only 5% of teachers related feedback directly to a learning goal.

Simplistic and mechanistic techniques also emerged as theory moved into practice in primary school classrooms. On the advice of AfL proponents such as Clarke (1998; 2001; 2005), teachers shared learning objectives and success criteria using techniques that would appeal to young children. For example, WALT (we are learning to), WILF (what I'm looking for) and TIB (this is because) were used at the start of lessons (Figure 2.4) and revisited at the end. Through 'thumbs up', 'traffic lights' and 'two stars and a wish' activities (Figure 2.5) children were asked to identify their understanding, the progress they had made and their next steps in learning. Although Clarke's work was based on her interpretation of literature in the field of AfL, Crossouard and Pryor (2012) warned of the behaviourist interpretations that might ensue where teachers lacked sufficient theoretical understanding of the social constructivist principles upon which they were founded. The *Carter Review of Initial Teacher Training* (Carter, 2015: 2.3.34) identified that understanding of theories and concepts was necessary for teachers 'to feel confident and secure in their assessments of pupils', however, this appeared to be a far from straightforward process. For example, Headington (2003) highlighted issues with teachers' construction of the learning objectives upon which their assessments were based. She noted the failure to differentiate learning objectives from long term aims, activities and teaching objectives. She also questioned the quality of examples provided in documents such as the National Numeracy and Literacy Strategies (DfEE, 1998b; DfEE, 1999) which teachers were encouraged to use to model effective practice.

Figure 2.4: WALT, WILF and TIB

WALT

- We are learning to
- This tells you the skills you are going to learn

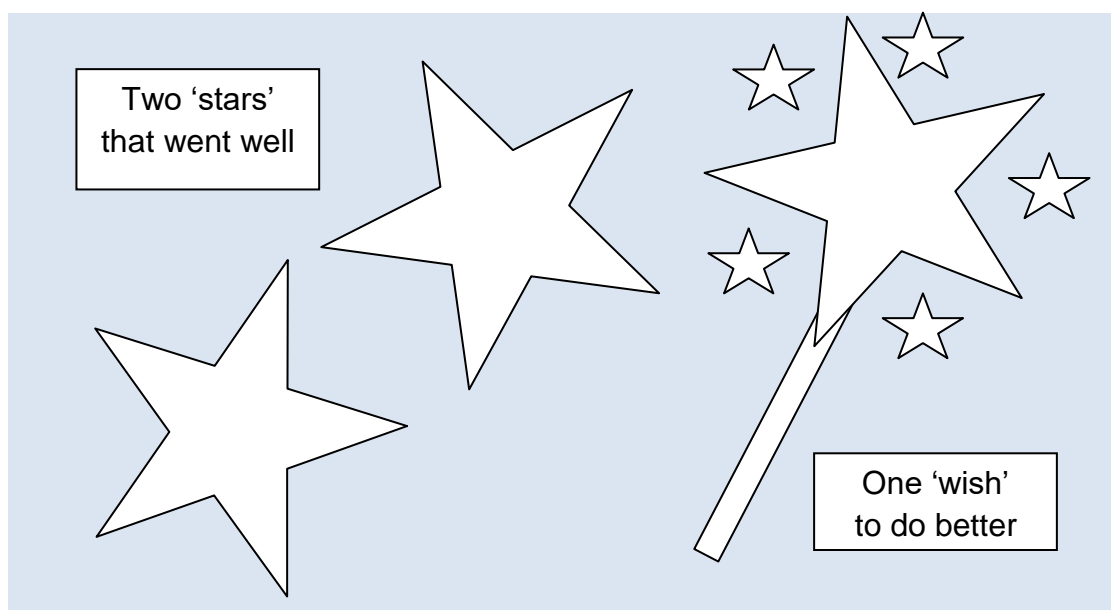
WILF

- What I'm looking for
- This tells you what you need to concentrate on

TIB

- This is because
- This tells you why you are doing the activity

Figure 2.5: Two stars and a wish



In higher education, debate turned to social constructivist approaches which placed learners at the centre of the learning process and brought into focus the role of feedback (e.g. Gibbs and Simpson, 2004; Nicol and Macfarlane-Dick, 2006; Rust *et al.*, 2005). The *Centres for Excellence in Teaching and Learning* (CETL), funded by the Higher Education Funding Council for England (HEFCE) from 2005-2010 (Evidencenet, 2011), and the *Re-engineering Assessment Practices project* (REAP) (JISC, 2007b), funded by the Scottish Funding Council from 2005-2007, were at the

forefront of discussions concerning assessment and feedback principles and practices. Leading proponents in the field formed the Weston Manor and Osney Grange group. Through its *Manifesto for Change* the group stated its belief that in higher education an over-emphasis on 'the measurement of learning [was] often at the expense [of] assessment *for* learning' (ASKe, 2009:4). The manifesto called for stakeholders within the sector to make changes to policy and practice that would enable the effective use of feedback. Yet, discussions about the meaning of 'feedback' continued in the literature.

Boud and Molloy (2013: 698) identified feedback as a 'contentious and confusing issue' and systematic literature reviews across several years (e.g. Black and Wiliam, 1998a; Evans, 2013; Falchikov and Goldfinch, 2000; Hattie and Timperley, 2007; Shute, 2008; Van Zundert *et al.*, 2010) noted that the term 'feedback' lacked clarity of definition. Hattie and Timperley's (2007:81) meta-analysis resulted in their conceptualization of feedback 'as information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding'. Through further analysis, they identified three questions which they considered effective feedback should answer, namely: 'Where am I going?', 'How am I going?' and 'Where to next?' (Hattie and Timperley, 2007: 87). They defined these respectively as feed-up, feedback and feedforward and considered their application at the four levels of task, process, self-regulation and self. Price *et al.* (2010: 278), on the other hand, saw as highly problematic the 'multiple purposes of feedback', which they defined as *correction, reinforcement, forensic diagnosis, benchmarking and longitudinal development*. Without clear definition, they suggested, any attempt to measure the effectiveness of 'feedback' would be challenging. Boud and Molloy (2013) explored the changing definitions of feedback practice from 'engineering' to 'sustainable models', labelling them respectively as 'Feedback Mark 1' and 'Feedback Mark 2'. They considered that Mark 1 rested on information being given to learners with the onus on the giver, whereas Mark 2 rested on learners' engagement as 'constructors of their understanding' (Boud and Molloy, 2013: 703).

Shute's (2008) review of more than 100 literature sources examined the role of feedback as students' construction of their understanding through the social constructivist metaphor of 'scaffolding'. She likened scaffolding to 'training wheels'

that, before their removal, enabled learners to extend their range of activities and thinking and gain confidence in their own abilities. Van de Pol *et al.* (2010: 274) seized upon the temporary and dialogic nature of scaffolding, emphasising it as an '*interactive* process that occurs between teacher and students who must both participate actively in the process'. For such a process to be effective, the timing of feedback appeared to play a central role (Hargreaves, 2013; Nicol, 2010). However, Shute's study (2008: 163-4) found inconclusive evidence of this, saying that:

Some researchers have argued for immediate feedback as a means to prevent errors being encoded into memory, whereas others have argued that delayed feedback reduces proactive interference, thus allowing the initial error to be forgotten and the correct information to be encoded with no interference.

Although Shute's (2008) comment appeared to focus on feedback provided by the tutor for the student, akin to Boud and Molloy's (2013) Feedback Mark 1, higher education students' limited contact with their tutors gave little opportunity for immediate feedback. This stood in contrast to school and further education practices (Denovan and Macaskill, 2013; Foster *et al.*, 2012; Yorke and Longden, 2008) where students had the opportunity to submit assignments for prompt, formative feedback several times before final submission. Research into the first year experience of higher education reiterated that transition into the higher education sector was far from straightforward for students (Kift, 2009). HEI tutors may have wanted first year undergraduates to be autonomous, self-regulated learners, able to drive forward their learning by making effective use of feedback, but the view that pervaded was one of students being 'spoon fed' to produce correct answers before entering higher education (Foster *et al.*, 2012).

Yet HEIs were not without fault. Harvey *et al.* (2006: 19) pointed to the 'superficial nature of first year assessment' and suggested that 'if academics want to promote deep learning then it needs to be reflected in assessed assignments'. Similarly, Torrance (2012) identified that some feedback practices, rather than engaging learners within the learning process, had reduced learner autonomy. He suggested that moves 'towards transparency of objectives and assessment criteria, coupled with clear feedback being provided in relation to these criteria' had led to '*conformative* assessment' (Torrance, 2012: 332). They provided a scaffold that was too rigid and

was based upon meeting externally derived criteria rather than meta-cognitive development evidenced through personal progress in learning (Hughes, 2014).

Reduced opportunities for student-tutor contact due to the 'massification' of higher education (McNay, 2006) proved detrimental to the growth of dialogic approaches deemed central to social constructivist learning (Nicol, 2010; Vygotsky, 1978). For some practitioners, Web 2.0 technology appeared to provide a solution; offering ways to develop students' meta-cognitive skills through their active engagement with feedback (JISC, 2007b; Wilson *et al.*, 2015). Researchers worked with these practitioners to explore areas including electronic voting systems to create feedback opportunities within 'interactive lectures' (JISC, 2007b; Nicol, 2009b), audio feedback (Gould and Day, 2013; Lunt and Curran, 2010; Merry and Orsmond, 2008) and the use of asynchronous discussion boards and forums within virtual learning environments with 24/7 feedback from tutors and peers (Lindorff and McKeown, 2013; Wilson *et al.*, 2015). Others suggested technology did not provide a panacea. Views that students were digitally literate and eager to learn through Web 2.0 technology (Prensky, 2001; Oblinger and Oblinger, 2005; Teach Web, 2008; Wesch 2007), were countered by research that demonstrated a lack of uniformity in students' technology skills and their preferred approaches to learning (Bennett *et al.*, 2008; Bennett and Maton, 2010; Helsper and Eynon, 2009; Lanclos, 2016). For example, Lindorff and McKeown's (2013) research into the use of blended learning with first year undergraduates in an Australian context concluded that students preferred direct tutorial contact in preference to online forums. Similarly, Wilson *et al.* (2015: 15) identified students' disquiet when asked to 'mark someone else's stuff' in an online environment.

While technology may have provided opportunities for students to engage with feedback through peer review, the giving and receiving of appropriate feedback of quality appeared to be a multifaceted issue. Nicol *et al.* (2014), however, advocated feedback through peer review (Section 2.1.4; 2.1.5). They argued that 'the capacity to produce quality feedback is a fundamental graduate skill, and, as such, it should receive much greater attention in higher education curricula' (Nicol *et al.*, 2014: 102). This placed the onus on tutors to teach students how to give effective and timely feedback, despite some tutors' limited skills in providing feedback (Carless *et al.*, 2011; Ferguson, 2011; Hounsell *et al.*, 2008; Nicol, 2010). Putting theory into

practice appeared somewhat more complex than simply providing students with a 'map' and a 'guide'. At the same time, students' perspectives became increasingly dominant in the sector.

2.1.2 Students' perspectives

The introduction of tuition fees from 1998 (Bolton, 2014), following the Dearing Report of *Higher Education in the learning society* (NCIHE, 1997), increased interest in students' learning experiences, engagement and satisfaction (e.g. DBIS, 2011; DBIS, 2014; HEFCE, 2016; Soilemetzidis *et al.*, 2014) and emphasised the importance of 'value for money and the accountability of HE institutions to those who fund them' (Ramsden and Callender, 2014: 7). While Tuck (2012) argued that far more attention had been given to students' perspectives of feedback (e.g. HEA, 2014) rather than those of the tutors who provided it, McLean *et al.* (2015: 921) warned of the complexities of undergraduate students' conceptions of feedback, which ranged from 'a focus on one-way message transmission, to a more socially situated process'.

Large-scale surveys (e.g. DBIS, 2014; HEFCE, 2016; Soilemetzidis *et al.*, 2014) were uniform in identifying assessment and feedback as the sector's weakest area, confirming Knight's (2002: 107) blunt statement more than 15 years earlier that assessment was higher education's 'Achilles Heel'. Focusing on validity and reliability measures, Knight contended that 'high stakes summative assessment data, grades and degree classifications, are routinely mis-manipulated, tend to be unreliable, and give incomplete and uninformative pictures of student achievements'. While more recent reports proved far less bleak, they offered the consistent message that 'feedback on assessed work still does not always meet students' expectations' (DBIS, 2014: 7).

Surveying the views of 99 managers and 36 student representatives across 33 HEIs in England, the *Improving the Student Learning Experience* research report (DBIS, 2014: 11) focused on 'improving [undergraduate] student learning opportunities'. It identified changes for the better that had been made in the four areas of assessment and feedback practice of turnaround time for feedback on assessed work, the length, level and detail of written feedback to students, the use of IT systems to manage

coursework and the opportunities for regular reviews of individual progress. The *HEPI-HEA Student Academic Experience Survey 2014* (Soilemetzidis *et al.*, 2014: 22), based on data from 9,364 HEI student responses, explored the negative experiences of provision, with 26% of respondents identifying poor feedback as one of the reasons students believed their 'academic work was worse/worse in some ways than expectations'. Showing similarity with Gibbs (2010), other areas the survey highlighted included a lack of interaction with staff (26%) and students (19%) and large teaching groups (19%), although students also admitted that the amount of effort they had exerted (36%) was the greatest reason for academic work of less quality. However, the *HEPI-HEA* survey, run annually since 2006 with the aim of 'identifying sector-wide issues for further investigation' (Soilemetzidis *et al.*, 2014: 13), received far less publicity than the high response rates of the more influential *National Student Survey for England* (NSS)(HEFCE, 2016).

Since its launch in 2005, the NSS, comprising 22 main statements with a 1-5 Likert scale and the opportunity for respondents to provide free-flow comments (HEFCE, 2016), has been completed online by final year undergraduate students in HEIs. Its three purposes were to inform prospective student choice, enhance their academic experiences and ensure public accountability (Callender *et al.*, 2014) and its results formed part of the Key Information Set (KIS) (UNISTATS, 2016) that potential students are encouraged to examine before making their choice of university.

Despite claims at the pilot stage that the NSS would avoid league tables being drawn from the data (Richardson *et al.*, 2007), Ramsden and Callender's (2014:5) review of the NSS suggested it had been used by the media as 'an uninformed way to create league tables', with strap-lines such as 'Students are most satisfied with teaching, least happy with assessment and feedback' (THE, 2014) becoming commonplace. As league table positions became an annual feature of HEI life, the utility, validity and reliability of the survey came under increasing scrutiny in the media and through research articles (e.g. Yorke, 2009). In a letter to the *Times Higher Education* before his dismissal from the Higher Education Academy, Harvey described the NSS as a 'hopelessly inadequate improvement tool' (Attwood and Gill, 2008). A statistical analysis of NSS data from 2005 and 2006 by Cheng and Marsh (2010: 707) also raised concerns. They stated that results provided 'limited support...in relation to the original [intended] purposes of the NSS...[and called] into question their usefulness

for comparing universities as they are presently used by the media and...the universities themselves’.

More recently, Bennett and Kane’s (2014: 150) statistical analysis of 191 surveys revealed that students ‘often ascribed *disparate meanings* to critical dimensions of the NSS’ [my emphasis]. Their research suggested that students’ interpretations of the statements varied according to learning orientation and levels of engagement, rendering less meaning to the averaged data produced. However, unlike the majority of university students, student teachers engage with the pedagogical and technical aspects of assessment and feedback during the academic and professional aspects of their studies. The *Teachers’ Standards* (TS) (DfE, 2011a) (Figure 2.6) dominate ITE and are central to the award of QTS, with the standard TS6 placing emphasis on the formative use of feedback based upon regular interaction, the opportunity for dialogue and accuracy in marking, while noting the importance of combining formative and summative assessment. Whether this level of engagement alerts ITE students to the need for a deep rather than a surface approach to feedback (Rowe, 2011), enabling them to ascribe meanings that are consistent with rather than disparate from critical dimensions of the NSS, remains an unanswered question.

Figure 2.6: TS6 Make accurate and productive use of assessment (DfE, 2011a)

6. Make accurate and productive use of assessment

- know and understand how to assess the relevant subject and curriculum areas, including statutory assessment requirements
- make use of formative and summative assessment to secure pupils’ progress
- use relevant data to monitor progress, set targets, and plan subsequent lessons
- give pupils regular feedback, both orally and through accurate marking, and encourage pupils to respond to the feedback.

An announcement in December 2014 added a further dimension when National College of Teaching and Leadership’s (NCTL) indicated that it would withdraw funding for ITE participation in the NSS. The NCTL favoured the Newly Qualified

Teacher survey, taken in the first year of employment, over the NSS, taken in the final year of study. The move was met with condemnation from across the sector (Elmes, 2015); with concerns expressed that such a move would serve to isolate ITE from mainstream university provision. It would potentially play into the hands of those who advocated ITE as a school-led programme (DfE, 2011b; DfE, 2016) and ignore Chief HMI Sir Michael Wilshaw's warnings of the need to consider both the quality and proportional distribution of entrants to the profession (OFSTED, 2014a). HEFCE responded rapidly to NCTL's announcement by stating in an email to university vice chancellors (Lester, 2015) that 'all students should have a voice'. NCTL agreed to fund student teachers' participation in the NSS on an 'exceptional basis' during 2015 and continued to do so in 2016 (Hilditch, 2016).

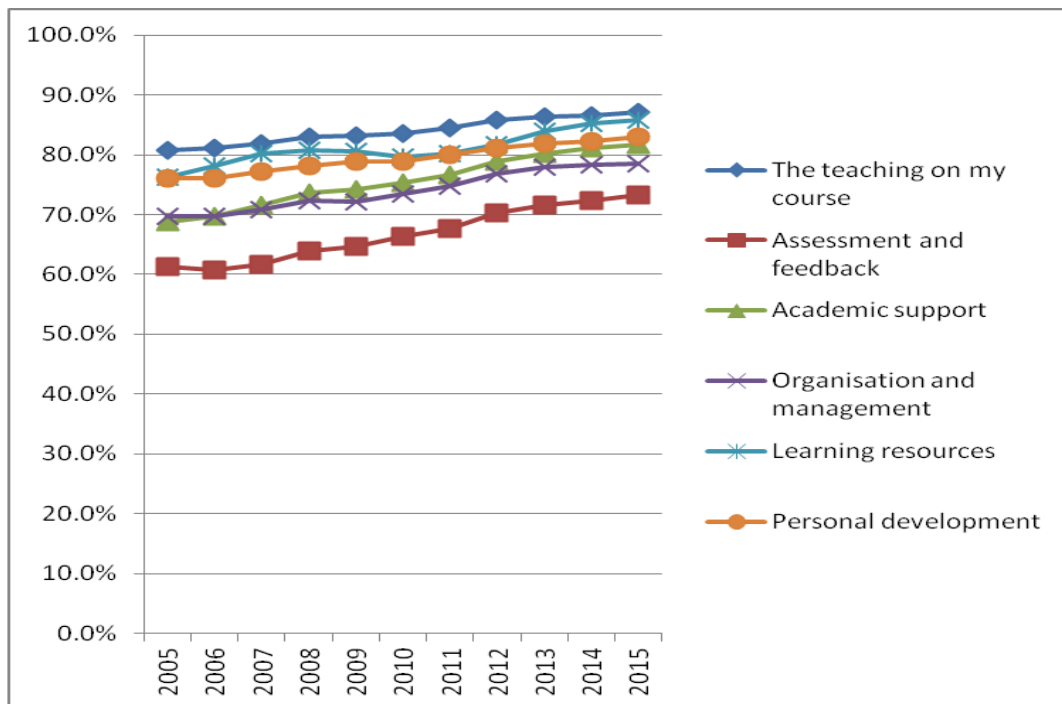
2.1.3 NSS assessment and feedback statements

Notwithstanding the political and technical issues of the NSS and the 'unintended consequences' of media-created league tables (Callender *et al.*, 2014: 19), year-on-year sector outcomes showed that students' experiences of the five assessment and feedback statements remained more poorly regarded than any of the other sections surveyed (Figure 2.7). The feedback statements (7, 8 and 9) consistently produced lower scores than the assessment statements (5 and 6) (Figure 2.8). Students' responses to the statements were deemed highly influential, providing data for higher education 'consumers' or 'customers' (Mark, 2013; Naidoo *et al.*, 2011). As a result, the need to improve NSS outcomes in assessment and feedback became dominant across the sector, together with concerns that quick fix, instrumental solutions might be sought over more principled, longitudinal approaches (Nicol and MacFarlane-Dick, 2006; Price *et al.*, 2008; Price *et al.*, 2015). Indeed, Callender *et al.* (2014: 19) warned that such actions 'may shift HE provider behaviour from educationally appropriate to educationally inappropriate'.

Yet within this furore, there appeared to be little discussion of the merits and demerits of the assessment and feedback statements themselves or the issues they raised about 'accepted' views of HE processes. Callender *et al.*'s (2014) review of the NSS which proposed alterations to the use of individual words (Figure 2.9) served to demonstrate the complexity of the statements and highlight potential difficulties in their interpretation. More problematically, the NSS assessment and feedback statements lacked context. There was no commentary to specify whether students

should focus on summative or formative aspects, or on written or oral assessment and feedback. Detailed research on students' interpretation of the statements would be required to determine the range of contexts applied by respondents and whether responses were based on the whole programme or experiences within the final year of study (Section 3.4.1).

Figure 2.7: NSS sections by sector, % agree scores for all years

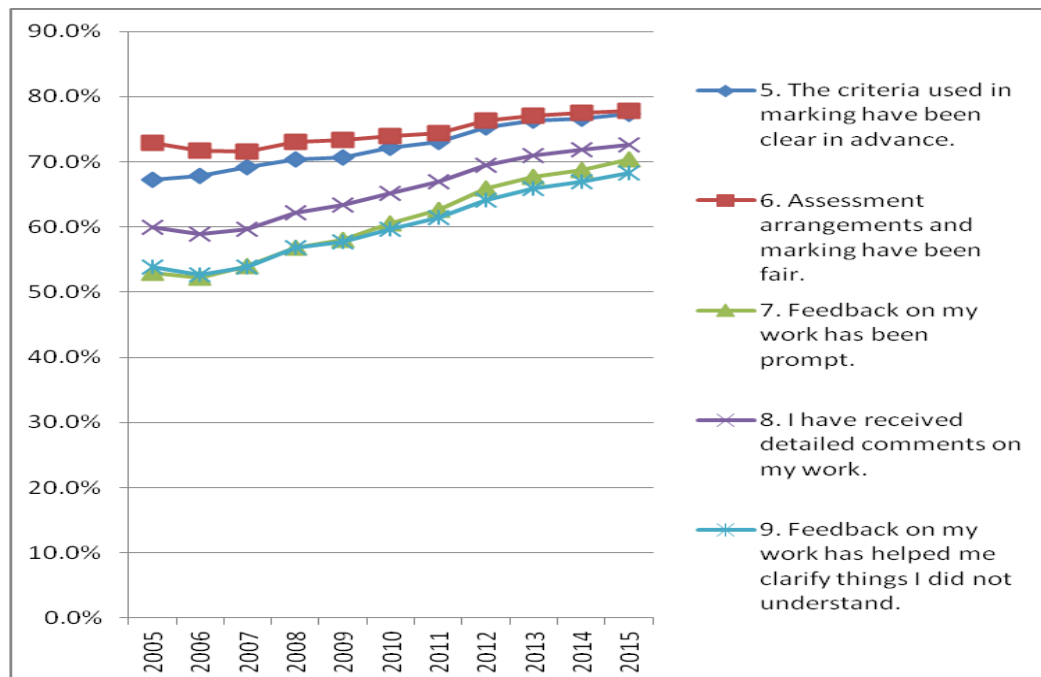


Source: Hope University (2015) HEFCE NSS Benchmarking Report: NSS topline results

Despite these issues, the five statements succinctly alluded to a range of important factors in assessment and feedback. The assessment statements (5 and 6) focused on the technical aspects of criteria and the fairness of marking and assessment arrangements. Extensive quality assurance systems that include external examiners have grown around criterion-referenced assessment to define and clarify assessment processes in higher education (Bloxham and Boyd, 2007; Gibbs and Simpson, 2004; Knight, 2000). The use of criteria and marking rubrics appeared to provide greater levels of detail across grades and degree classifications while aiding transparency (Bloxham, 2009; Bloxham *et al.*, 2011; Bloxham, 2013). Although providing students with criteria in advance may have been deemed a mechanistic exercise, ensuring the criteria were clear and understood was far more contentious (Sadler, 2007; 2009), as

was the consistency of their interpretation and use by marking tutors (Bloxham *et al.*, 2015; Headington, 2010; Orsmond and Merry, 2015).

Figure 2.8: NSS assessment and feedback questions by sector, % agree scores for all years



Source: Hope University (2015) HEFCE NSS Benchmarking Report: NSS topline results

Figure 2.9: Summary of recommended changes to NSS statements (Callender *et al.*, 2014: 56

Assessment and feedback	
5. The criteria used in marking have been clear in advance	
6. Assessment arrangements and marking have been fair	
7. Feedback on my work has been prompt timely	See Section 4.7.1
8. I have received detailed helpful comments on my work	See Section 4.7.1
9. Feedback on my work has helped me clarify things I did not understand	Similar to Q8 and highly correlated with it. See Section 4.7.2. Mark as possible candidate for deletion after pilot study.

Sadler (1989: 124) considered criteria design to be far from straightforward, with many criteria being more ‘fuzzy’ than ‘sharp’. Fuzzy criteria that engaged with tacit knowledge (Section 2.3.3) at the heart of a discipline (Collins, 2010; Polanyi, 1966),

when brought together with the language of the *Quality Assurance Agency's* (QAA) level descriptors (QAA, 2008), had the potential to result in concise but jargon-based statements. While at surface levels appearing clear, fuzzy criteria remained open to debate between marking tutors, the connoisseurs and 'experts with a rich knowledge of the field' (Knight, 2007: 77). Indeed, the HEA (2015: 3) noted as a central tenet that 'assessment lacks precision'. The acceptance that contextualised and honest professional discourse was needed between markers, moderators and external examiners to resolve disputes of content or construct, offered little prospect for novice students to have criteria 'made clear in advance' (Headington, 2010).

Nicol (2009a) contended that all who use criteria should be engaged in their development to ensure that appropriate language was used and interpretations were shared. Meaning needed to be derived from social interaction (Blumer, 1969; Nicol, 2010; Orsmond and Merry, 2015). This was seldom the case in higher education, where continuity, or discussion, could not be guaranteed between the tutors who wrote or updated criteria for validation documentation and those who applied them in practice. Even the student representatives on validation panels were unlikely to be those who went on to use the criteria.

The use of 'descriptive statements and exemplars' (Sadler, 1989: 127) to show criteria in practice was identified as a way forward (Handley and Williams, 2011; Hendry, 2013; O'Donovan *et al.*, 2008; Sambell *et al.*, 2013). However, Torrance's (2007: 282) suggestion that criteria also had the potential to encourage instrumentalism, and that students learned 'criteria compliance', appeared to show resonance with experiences in the school sector (Section 2.1.1).

Like tutors, students also needed opportunities for contextualised and honest discourse to gain understanding of the criteria's expectations. Several studies suggested that peer assessment activities, when appropriately supported and moderated by tutors, could facilitate this process (Bloxham and West, 2004; Carless, 2015; Handley and Williams, 2011; Headington, 2009; Sambell *et al.*, 2013). Put simply, the greater the students' engagement with the criteria, with the guidance of a 'more capable' other (Vygotsky 1978: 86), the greater their ability to clarify the requirements that define the characteristics of good performance (Nicol, 2009b). This suggested a need for ongoing dialogue of guidance and feedback between students and tutors throughout the assessment process (Hounsell *et al.*, 2008) to

prevent criteria being hidden away in a course handbook while avoiding instrumental approaches that stultified student expression. Such activities served to bring students into sharing knowledge as part of growing a 'community of practice' (Lave and Wenger, 1991; Wenger *et al.*, 2002) (Section 2.2.1). They enabled novices to be 'inducted into the culture, language and practices of the community by [legitimate peripheral] participation in its processes, experiences and relationships' (Bloxham and West, 2007: 78). 'Making criteria clear in advance' demanded far more action than the advance publication of concise statements.

The fairness of assessment and marking arrangements centred on reliability, through consistency and the reduction of bias. Reliability often appeared to be in conflict with validity, which focused on assessing what is intended to be assessed (Race, 2010). The goal of high reliability with high validity appeared to be an elusive ideal, resulting in what Knight (2000: 237) called a 'reliability-validity trade-off'. A third aspect of this pedagogical trade-off was manageability. Headington (2003) noted that considerations such as time and money also had an impact on assessment in the primary school sector. She used examples from first NC assessment for seven-year olds in 1991, which aimed to increase content and construct validity by mirroring everyday classroom practices through practical group work with teachers (DES, 1987). Despite the use of teachers trained as NC assessors and supported by LEA moderation procedures, variations in the assessments' delivery and decision making were not alleviated. Reliability was reduced when children witnessed or discussed the assessment tasks with those who had completed them. Manageability proved problematic as teachers needed the time and space to complete the tasks with small groups of children while ensuring the rest of the class was not disadvantaged. Within a few years, the 'high validity' task approach advocated by the *Task Group on Assessment and Testing* (DES, 1987) was replaced in favour of formalized NC tests which favoured greater reliability and manageability.

Similarly within ITE, balancing validity, reliability and manageability posed dilemmas within assessment. While traditional written examinations on theory and practice may, in common with the NC example, favour reliability and manageability, student teachers were required to undertake professional school-based placements in order to demonstrate attainment of the *Teachers' Standards* (DfE, 2011a) (Section 2.3.2). These placements appeared to provide a valid and authentic environment for

assessment, with link tutors, school mentors and teachers offering high levels of individual, contextualised and dialogic feedback. However, achieving reliability across numerous combinations of schools and personnel was far more problematic, with Kovacs *et al.* (2010) identifying placement issues as a particular source of concern for student teachers in the NSS. The potential for diversity of experience, unsurprisingly, led to reliability across professional placements becoming a major focus for OFSTED inspections (OFSTED, 2014b), with moderation across a range of assessors as a central challenge for HEI/school partnerships.

Following Knight's (2007: 77) warning that 'it is patently impossible reliably to measure complex achievements', Bloxham (2009) cautioned that the expansion of moderation procedures to assure reliability in professional and academic contexts would divert resources away from areas of growth and development in assessment and feedback. This did not curb the increased use of moderation through joint observations (in ITE), double blind marking and external assessors, all of which were considered fundamental to fairness in assessment (Nuttall, 2007; Race, 2010). Nevertheless, Falchikov and Boud (2007) and Molloy *et al.*, (2013) noted that variations of place, resources and personnel affect students' experiences of assessment and feedback, academically, professionally and emotionally (Section 2.1.5). With such variations, fairness in assessment arrangements and marking may be no more than an elusive ideal.

The NSS feedback statements (7, 8 and 9) explored students' experiences of the promptness and quality of the feedback they had received and whether it had helped them to clarify their understanding. They received consistently poor results across the HE sector (Figure 2.9).

Although Callender *et al.* (2014) recommended that, in Statement 7, the word 'prompt' should be changed to 'timely' from 2016 (Figure 2.9), emphasis appeared to remain on summative assessment where feedback was given by markers within the constraints of HEI quality assurance regulations. Rust *et al.* (2005) however, advocated a social constructivist assessment process model that offered prompt, frequent 'low stakes' formative feedback when students were sufficiently engaged with the assignment under consideration. They posited that formative feedback was essential to learning and often occurred in the form of dialogue (Nicol, 2010). Presentations, debates, joint writing and multi-stage assignments, supported through

group work and the use of Web 2.0 technology increased in use (Orsmond and Merry, 2015) and provided vehicles for feedback from tutors, peers and the students themselves (Bloxham and West, 2007; Carless, 2006; Headington, 2009; Nicol, 2009a; Sambell *et al.*, 2013). However, whether the minimal levels of scrutiny applied to formative feedback necessitated that receivers had a high level of trust in givers, their knowledge and the accuracy of their judgements appeared to receive less consideration (Carless, 2015).

Statement 8 of the NSS concerned the feedback comments received by students. Notwithstanding the statement's construction, which by its use of 'on' may imply written rather than oral comments and give value to passive 'receipt' over interactive 'dialogue', tutors' written comments came under scrutiny in the literature. Mutch (2003: 29), for example, considered the issue of detail. His textual analysis categorised a sample of tutors' comments on feedback sheets and scripts. From this, he suggested that the quantity of words used is 'down to individual practice...A few well-chosen words, after all, may be much more valuable than dozens of illegible comments'. While he acknowledged that mass higher education had the propensity to lead markers to employ terse feedback, Mutch was more concerned that students should be able to understand and act upon the comments given.

Similar themes were central to the work of Chanock (2000), Weaver (2006) and Walker (2009), who all analysed students' responses to tutors' written comments. Where Chanock (2000) found students were concerned with language ambiguity, Weaver (2006) found instances of negativity which, in addition to being unhelpful in improving learning, could undermine students' morale (Falchikov and Boud, 2007; Rowe, 2011). Walker's (2009) analysis concurred with Chanock and Weaver's studies. It identified that students considered usable comments to be those that offered explanation. It appeared highly appropriate that Callender *et al.* (2014) recommended that the word 'detailed' be changed to 'helpful', moving the emphasis of the statement away from quantity and towards quality and purpose. If tutors spent many hours providing feedback (Bloxham, 2009) it needed to be used productively to engage and empower students (Nicol 2009b; Price *et al.*, 2015; Rowe, 2011).

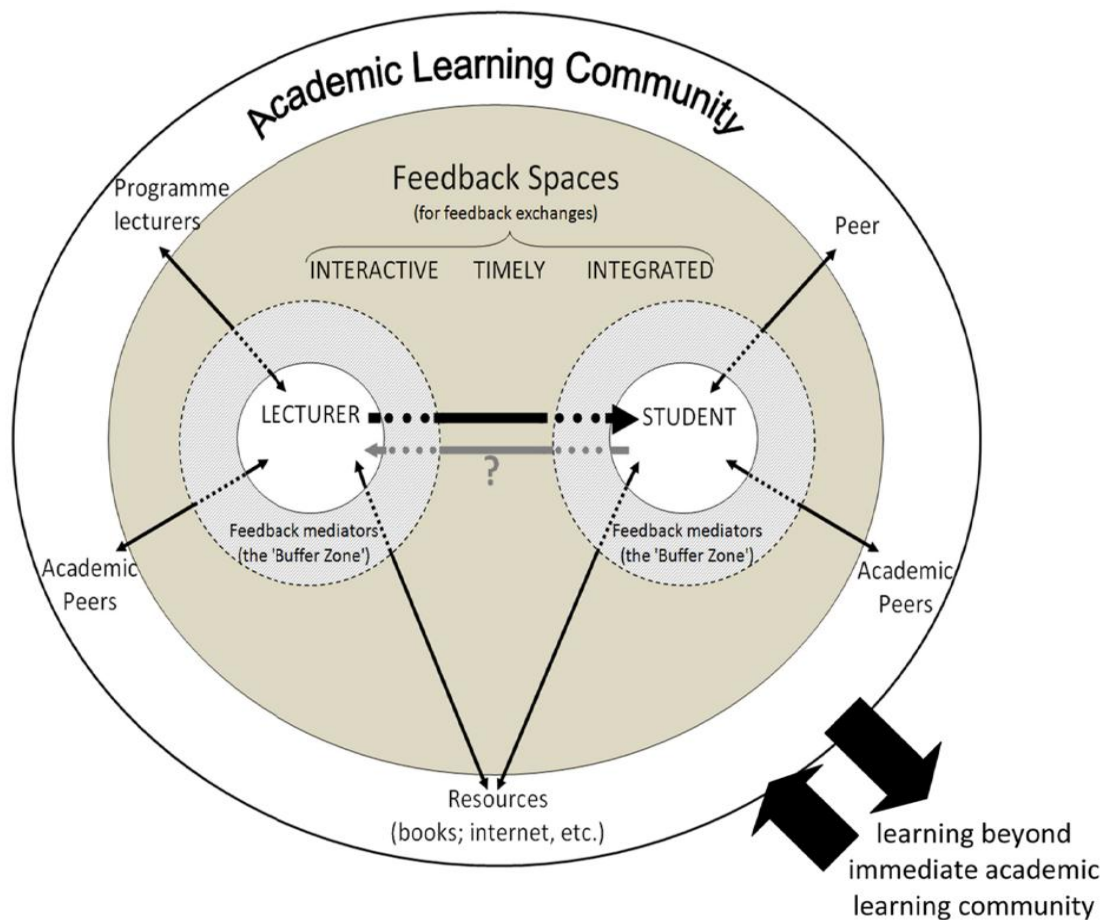
The final feedback statement of, 'Feedback on my work has helped me clarify things I did not understand', appeared multifaceted. It considered not only the quality of the feedback but how it had been interpreted and used by students. Despite issues of

students focusing on the grade rather than the feedback, or simply failing to collect or read marked work (Black and Wiliam, 1998a; Gibbs and Simpson, 2004; Pitt and Norton, 2016), the statement's consistently low NSS outcomes (Figure 2.8) resonated with Mutch's (2003) view that feedback needed to be productive for students. A number of studies (e.g. Sadler, 1989; Black and Wiliam, 1998a; Gibbs and Simpson, 2004) identified the need to clarify understanding. They considered it to be a critical area that was poorly addressed by HEIs (Chanock, 2000; Weaver, 2006; Walker, 2009). Black and Wiliam (1998a) noted the tendency for tutors to comment on the secretarial aspects of written work, rather than using feedback as an opportunity to develop understanding. Using what Boud and Molloy (2013) were to identify as an 'engineering' model, their study emphasised the need for feedback to include explanations of the 'current state' and the provision of tools and strategies to move through 'the gap' towards the 'desired state'. Where Knewstrubb and Bond (2009) posited a lack of 'communicative alignment' between the understanding of students and tutors, Mutch (2003) found evidence of limited explanation and feedforward in written feedback. Although technology-enhanced approaches (Ball *et al.*, 2012), including online submissions and marking, helped to alleviate some difficulties, communication skills, power, trust and emotion remained at the heart of the process (Carless, 2015; Nicol, 2010; Pitt and Norton, 2016; Rowe, 2011).

Chandler (2014: 11) commented on the assumption 'that texts are invariably read as was intended by their makers'. Yet, if the written feedback provided by tutors contained both explicit and tacit information (Section 2.3.3), students may find difficulty understanding what was said and interpreting what was meant. Nicol (2010) emphasised the need for assessment dialogues aimed at breaking down barriers of communication and facilitating trust and empathy. Extending the social constructivist approach of Rust *et al.* (2005), Nicol (2009b) championed greater use of formative feedback to enhance the quality of interaction between tutors and students. Taking this further still, Taras (2006) suggested the authentic experience of writing through drafting and feedback should apply equally to undergraduate students as it does to academics writing for publication, enabling students to become part of an academic community of practice (Section 2.2.1). This scenario appeared beyond reach with large student numbers but multi-stage assignments and interactive cover sheets (e.g. Bloxham and Campbell, 2010; Headington *et al.*, 2011) that allowed 'redrafting in the light of feedback' (Rust *et al.*, 2005: 234) were taken forward with some success with

recommendations that feedback should be provided at a formative rather than a summative point.

Figure 2.10: The feedback landscape (Evans, 2013: 98)



Evans (2013) suggested that for formative feedback to have greater impact on students' work it needed to be interactive, timely and integrated. She identified HEI lecturers (tutors) as central to this process; a point acknowledged through the number of studies which focus on tutors' roles as providers of feedback (e.g. Bloxham and Campbell, 2010; Taylor and Burke da Silva, 2014). But Evans (2013) also noted that students' 'feedback landscape' (Figure 2.10) included others within and beyond their academic learning communities. Peer assessment and feedback *within* the academic community is well rehearsed in the literature (Section 2.1.4) as an aid to self-regulated learning (Section 2.1.5). But far less is known of students' feedback networks *beyond* their immediate academic learning community (Section 3.4.2) and whether these networks are used to help clarify things they did not understand within the community or support students in ways not offered by the

community (Headington, 2012; 2014b; Orsmond and Merry, 2015) (Sections 2. 2; 3.4.4; 3.4.5).

2.1.4 Peer assessment and feedback

Where Goffman (1959) distinguished between individuals' differing reactions to external audiences and those of trusted confidants through the terms 'frontstage' and 'backstage', Mårtensson and Roxå (2015) identified that much learning takes place informally. Evans (2013: 100) noted that 'the lecturer is not the sole or primary source of feedback, nor necessarily the most used and valued source'. She identified students' use of their varied personal and professional feedback networks as an under-researched area. Yet in her 'feedback landscape', the identification of 'peers' and 'academic peers' as sources of feedback within the academic learning community commensurate with resources, such as books and the internet (Figure 2.10), may have negated the dialogic potential of peer feedback within a social constructivist paradigm. Additionally, more studies have explored the role of peers *within* the academic learning community rather than peers (and others) *beyond* it. For example, Topping (1998) stated that peer assessment incorporated peer-marking, peer-correction, peer-rating, peer-feedback, peer-review and peer-appraisal. More recently, Nicol *et al.* (2014: 103) showed preference for the term 'peer review', which focused on dialogic and formative aspects of feedback. They contended that the social constructivist paradigm, evident in learning research for two decades, 'is only now having an influence on feedback research'. Gielen *et al.* (2011) noted that publications in peer assessment had multiplied two or three fold since Topping's study and that the common use of terminology often belied a diversity of practice. Van Zundert *et al.* (2010) and Gielen *et al.* (2011) agreed that the diversity of recent peer assessment practice that was integral to students' academic studies, coupled with the outcomes of research, make effective practice 'difficult to describe' (Van Zundert *et al.*, 2010: 270). Although both commented on the rise of collaborative learning approaches and students' active engagement in the learning process, neither directly ascribed this to social constructivist theory. This stood in contrast to others who based their discussions of peer assessment firmly within this context (e.g. Falchikov and Goldfinch, 2000; Nicol, 2009b; Rust *et al.*, 2005).

Formalised peer assessment organised by a tutor as part of the taught course was identified as advantageous for tutors and students (e.g. Headington, 2012; JISC, 2015b). Direct engagement with the complexities of the assessment process, such as making sense of assessment criteria and standards, helped students to become active participants in their learning (Bloxham & West, 2004; O'Donovan *et al.*, 2008). It engaged students in communities of practice (Lave and Wenger, 1991; Wenger, 1998; Price *et al.*, 2012) (Section 2.2.1) in preparation for graduate professions (Barrie, 2006; Hughes and Barrie, 2010), while extending the limited time available for tutor-student dialogue (Nicol, 2010; Sadler, 2010). Additionally, peer assessment benefitted students who were wary of exposing their level of understanding to tutors they perceived as experts. Students could instead find solace in trusted peers who shared a common language, experience and an immediate awareness of the emotional issues intrinsic to assessment (Carless, 2015; Falchikov and Boud, 2007; Molloy *et al.*, 2013; Rowe, 2011).

Despite students' initial scepticism, Bloxham and West (2004) and Falchikov (2005) suggested that peer assessment was usually followed by positive outcomes. But, while environments engineered by tutors may have enabled students to take increased responsibility for their learning, peer assessment was not without its problems. It required students to have sufficient knowledge and skills to use assessment criteria and standards to critique others' work supportively, without personal bias. It required students to be able to accept, interpret and use the feedback given by others (O'Donovan *et al.*, 2008; Sutton and Taylor, 2011). Additionally, the use of grading was shown to cause resentment, raise questions of reliability and potentially undermine formative exploration of shared issues (Liu and Carless, 2006; Nicol, 2010; O'Donovan *et al.*, 2008; Wilson *et al.*, 2015).

Gielen *et al.* (2011) explored the range of variables used to compose groups undertaking assessments and whether this was determined by students or tutors. Coupled with Orsmond and Merry's (2013) study, which found differences in high and low achieving students' commensurate abilities to interpret and make use of feedback, Gielen *et al.*'s (2011) work added a further dimension to group composition in peer assessment. It threw into question whether low achieving students benefitted from peer assessment without the support of a 'more capable peer' (Vygotsky 1978: 86) or tutor. Indeed, Nicol (2010) saw peer assessment as complementary to tutor-student interaction rather than detached from it, intimating

that tutor facilitation should always be available within formalised approaches. His comments may be seen to imply that informal peer assessment contexts, away from the support of a tutor, form deficit models of practice. Yet students' frequent use of online and face-to-face social networks to undertake informal peer assessment, in groups composed by the students themselves, had been recognised (e.g. Ryan *et al.*, 2008; Sutton and Taylor, 2011).

Headington (2014b) posited three potential advantages of informal approaches to peer assessment. Firstly, contexts would be entirely formative, low stakes and based on trusting relationships between the assessor and the assessed to enable a full and honest dialogue (Carless, 2013; Headington, 2012; Nicol *et al.*, 2014). Secondly, peer assessment would be more spontaneous, enabling it to take place as part of the learning process and through a medium of choice (e.g. face to face, using social media) (Ryan *et al.*, 2008). Thirdly, informal peer assessment may afford students greater continuity between assignments and across courses. However, in common with formalised peer assessment, group composition and the quality of feedback may still play their roles (Gielen *et al.*, 2011; Nicol, 2010; Orsmond and Merry, 2013) and in some cases serve to exacerbate rather than solve problems.

In her meta-analysis of 460 articles on feedback in higher education produced across a period of 12 years, Evans (2013: 106) identified a need for further investigations to provide 'an enhanced understanding of how individuals process information within the complex networks of learning communities'. Her acknowledgment that students' feedback interactions went beyond their immediate academic learning environment (Figure 2.10), served to highlight the multifaceted nature of feedback. She also acknowledged feedback as 'a two-way process...moderated by a number of mediator variables for both the giver and receiver of feedback' (Evans, 2013: 97), exposing a lack of research in this area and a paucity of longitudinal studies in feedback (Section 3.4.2).

Headington's (2012) survey of first year undergraduate students identified that family and friends also played roles in providing feedback but had not revealed the nature of this feedback. With a fifth of undergraduate students in England and Wales reported to be living at home by 2006-07 (HEFCE, 2009), increased higher education tuition fees, to around £9,000 in 2014-15 (Complete University Guide, 2016), cost of living concerns and term-time student employment (Callender, 2008; Christie, 2007; NUS,

2012; Studentroom, 2015) may have served to fuel greater levels of informal assessment through students' personal networks. The extent to which students used personal networks for informal assessment throughout their studies merited investigation, as did the nature, and perceived benefits, of the feedback provided by family and friends, who operated beyond the academic learning environment (Sections 3.4.2; 3.4.4; 3.4.5). Yet, it was the students' ability to gather, understand and interpret feedback from these varied social interactions that may aid their 'meaning' making (Blumer, 1969) and benefit individual student's growth of 'self' (Mead, 1934).

2.1.5 Self-regulation and feedback

The need for greater learner self-regulation and autonomy has been acknowledged as vital to sustainability (Boud, 2000; Evans, 2013; Nicol, 2009a; Price *et al.*, 2012; Wiliam, 2011). Building on social constructivist notions of 'scaffolding' and 'hand-over' (Bruner, 1983; Vygotsky, 1978; Wood *et al.*, 1976), learners progressed from being supported by more capable others towards greater self-reliance.

From a symbolic interactionist perspective, this required individuals to make meaning from the symbols used within social interaction, progressing through what Mead called the 'play' and 'game' stages before taking the role of the 'generalized other' (Mead, 1934: 154) (Figure 2.2) (Section 2.0.1). In terms of assessment, Price *et al.* (2012: 7), for example, proposed that students should become 'active participants' in the exploration of assessment literacy. This approach would involve students in becoming familiar with the 'symbols' of assessment and, through social interaction, taking the roles of their assessors to enhance their meaning making (Blumer, 1969).

With overtones of Mead's (1934) discussion of 'self', Bloxham and West (2004: 721) proposed that students should know the 'rules of the game'. Not unlike Price *et al.* (2012), Bloxham and West suggested that students should engage with criteria before, during and after an assessment event to gain a greater depth of understanding of language and processes. This would aid self-assessment and detract from the more superficial 'normative feedback' of grades (Black and Wiliam, 1998a: 13). However, whether such adherence to the 'rules of the game' enabled learners or promoted instrumentalism remained questionable (Torrance, 2007; 2012).

Hughes (2014) instead advocated greater use of ipsative assessment which, rather than being focused upon attainment, emphasized progress related to the individual's performance from a personally defined starting point. She provided a 'utopian' vision of engaged and motivated individuals driven towards achieving their 'personal best', rather than being subjected to external regulators who provided criteria to be met or rank ordered attainment through norm-referencing. Hughes (2014) considered that ipsative approaches enabled feedback to be immediate, cumulative and longitudinal, with the individual as an active participant in the assessment process.

Boud *et al.* (2015) considered self-assessment to be advantageous to learning. While Pitt (2014: 272) found that 'the 'better performing' students are often the ones capable of self-regulating and therefore able to make the best use of the feedback available to them', Orsmond and Merry (2013) reported variation in its use by high and non-high achieving students. The latter, they found, were drawn towards externally regulated feedback. In Vygotsky's (1978) terms, these students remained within the 'Zone of Proximal Development', reliant on a more capable other. In Mead's (1934) terms, they were at an earlier stage within their 'conversation of gestures' (Mead, 1934: 167), as they had yet to interpret the symbols used or take the role of the generalized other. Hughes (2014: 85) commented that, just as athletes reach a point where they were unable to better their performance, 'it could be argued that the same limitations occur in academic learning and that every learner will reach a level that it is not possible to exceed'. She acknowledged that not all practising teachers challenged themselves to progress beyond externally required standards, resonating with Csikszentmihalyi's (2004) findings that challenge, as well as skill, was necessary for the individual to achieve 'flow' and motivation.

Molloy *et al.*'s (2013: 55) study of the emotional impact of feedback observed that biases also affected judgements of personal performance. They cited studies where poorly performing learners 'over-inflated' their performances and high performers were 'overly critical'. Where some appeared satisfied with lower expectations, others, to achieve the challenges they set themselves, required resilience, a characteristic defined by Reivich and Shatté (2002: 1) as 'the ability to persevere and adapt when things go awry'. While Rowe's (2011: 346) study defined emotions in relation to feedback as 'particular episodes of feeling as well as longer-term affective states'. She noted that feedback's social and emotional functions were challenged

by increased staff-student ratios and greater student diversity. Conversely, Värlander (2008: 152) identified the effect of 'perceived power asymmetry' in student-tutor relationships and that the emotional impact of feedback could be moderated through peer interaction. Her review of literature in the area of feedback and emotion revealed that studies focused upon formal feedback situations within the 'academic learning community' (Evans, 2013: 98) rather than informal feedback situations beyond the community.

Boud (1995: 11) had previously suggested that 'students are always self-assessing' but noted that much of this was *ad hoc*. He stated that effective self-assessment should be based on knowledge of standards and criteria and the capacity to make judgements. Paradoxically, studies by both Lew *et al.* (2010) and Boud *et al.* (2015) focused on students' self-assessment against criteria provided by others. Rather than self-determining personal progress and goals, it was necessary for students to take the role of others (Mead, 1934) and interpret externally derived criteria. This gave opportunities for comparison and competition with others who were using the same criteria, coupled with demotivation through a lack of autonomy (Hughes, 2014; Pitt and Norton, 2016; Wiliam, 2011). However, Hughes' (2014) examples from practice used ipsative approaches alongside externally derived criteria. Where individuals could 'feedback' on the progress they had made, it appeared that 'feedforward' required them to go into unknown areas beyond personal experience and understanding. This could only be achieved through social interaction, if moving forward required a map and a guide (Headington, 2014a) (Section 2.1.1). This echoed Vygotsky's (1978) theory of the ZPD (Figure 2.1). While an 'actual level' was achieved independently, a 'potential level' of development was achieved with the support of a 'more capable other'. Although an internal process, self-regulation arguably required individuals to draw upon others within and potentially beyond their academic learning community networks (Evans, 2013). It is to these networks that the discussion now turns.

2.2 Networks

2.2.0 Overview of Section 2.2

Premise 2: <i>The meaning of such things is derived from, or arises out of, the social interaction one has with one's fellows</i> Blumer (1969: 2)	Thesis sub-question: 2. In what ways does social interaction through personal and professional networks enable student teachers to gather feedback? 3. In what ways do student teachers make meaning from the feedback they gather through social interaction?
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Blumer's (1969: 2) second premise of symbolic interactionism identified how meaning develops through social interaction. This section considers how the literature perceives social interaction to occur through students' personal and professional networks. It begins by considering communities of practice (Section 2.2.1) before exploring social network theory (Section 2.2.2) and social capital (Section 2.2.3). Discussion of the flow of information and composition of relationships that enable student teachers to gather feedback is placed against constraints in trust, time, communication and reciprocity that may inhibit meaning making.

2.2.1 Communities of practice

Evans (2013) noted that, within the 'feedback landscape' (Figure 2.10), shared understandings could be developed through students' engagement within 'communities of practice' that included the tutors, peers and resources of an 'academic learning community'. Wenger *et al.* (2002: 4) defined communities of practice as:

...groups of people who share a concern, a set of problems, or a passion about a topic, and who deepen their knowledge and expertise in this area by interacting on an ongoing basis.

These were groups that formed for a particular purpose to 'share information, insight and advice', who developed a common vocabulary and tacit understanding (Section 2.3.3) of each other's perspectives. Although Wenger's (1998) study set in a claim

centre concentrated on the actions and interactions of a closed group that met physically to focus on specific practices, a continuum of communities of practice appears to exist. Technology has enabled communities of practice that formed in the physical world to maintain contact through cyberspace. Similarly, new groups have been formed through the virtual environment and digital habitats have grown globally across distributed communities (Wenger *et al.*, 2002; Wenger *et al.*, 2009). The emergence of online communities in recent years provided research evidence of student teachers in different contexts, for example gaining 'emotional connectedness [which] appeared to be as keenly sought as professional support' through an online community in China (Hou, 2015:9), 'social recognition' through Twitter feed in Turkey (Kim and Cavas, 2013) and the opportunity to reduce isolation and gain feedback by developing teaching materials using a Wiki in Israel (Shriki and Movshovitz-Hadar, 2011). However, the longevity of communities formed in cyberspace has been questioned with research collated by McPherson *et al.* (2001) pointing to the importance of physical proximity in building and maintaining relationships.

Whether informally developed, or formally constructed with a specific meeting place or website, communities of practice are fluid and dynamic in their membership and function, drawing on the needs and experiences of individuals (Lave and Wenger, 1991; Wenger, 1998; Wenger *et al.*, 2002; Wenger *et al.*, 2009). Similarly, individuals become members of different communities of practice over time and may be members of different communities at the same time, often in different roles. Those at the boundary position, for example, demonstrated the ability to operate as knowledge brokers across different communities (Wenger, 1998) or took a peripheral role, determining whether, or not, to become a more central member of a community (Lave and Wenger, 1991).

Communities of practice appeared to acknowledge the need to make meaning through social interaction and to draw upon the experiences of others in order to confirm or modify our interpretations to develop knowledge and identity (Blumer, 1969; Mead, 1934; Vygotsky, 1978). This required trust, reciprocity and the willingness to invest time in developing personal relationships. Wenger *et al.* (2002) identified that commonalities between individuals were central to the structure of communities of practice. As McPherson *et al.*'s. (2001: 415) study of the homophily principle identified, 'similarity breeds connection'. This in turn could lead to the formation of cliques within communities and networks (Section 3.4.2). McPherson *et*

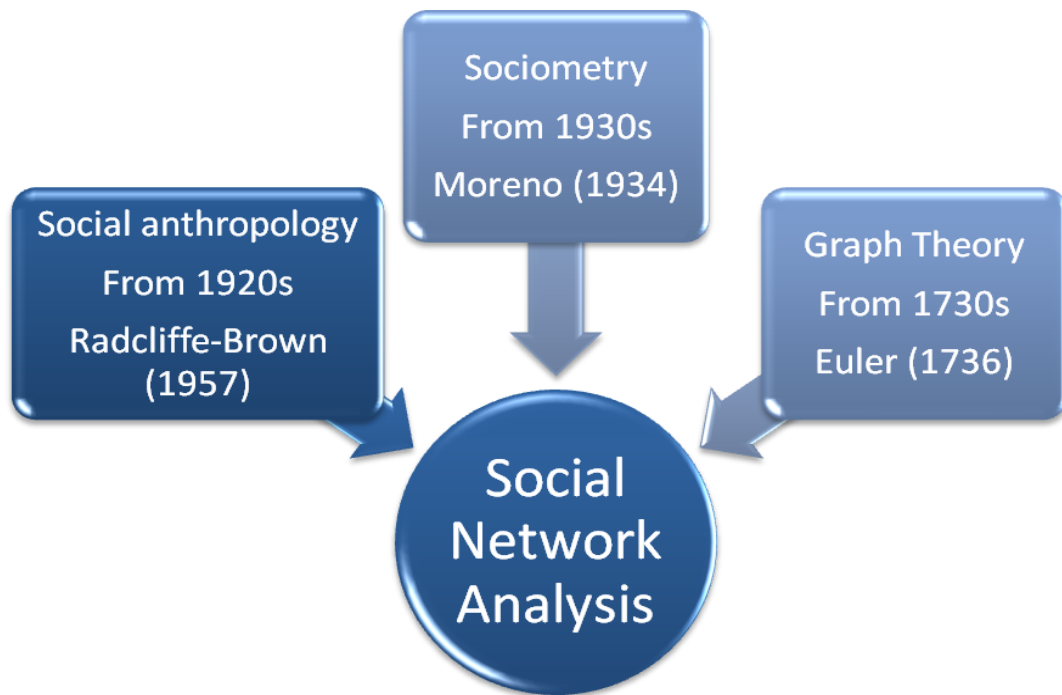
al.'s (2001: 419) study charted the influence of 'status homophily' and 'value homophily', examples of which in the student teachers' context might respectively be similarities in educational qualifications and experiences and similarities in beliefs in particular approaches to teaching or studying. Similarities appeared to enable greater strength within a community of practice. However, a lack of fluidity within the community was also noted to be potentially detrimental by stifling growth, leaving ideas unchallenged and denying access to new knowledge (Krackhardt, 1999). Alternatively, peripheral members of a community of practice (Lave and Wenger, 1991) were in a position to question ideas and act as knowledge brokers, sharing learning across the different communities and networks of which they were part (Wasserman and Faust, 1994).

Similarly, brokers played a significant role in social network theory (Section 2.2.2) which contested that, far from working in isolation, individuals and groups draw upon the flow of information that comes through not just one community of practice, but through the personal and professional networks of the individuals within that community (Jewson, 2007). The connectedness of its members would allow an apparently closed network to have overlaps with many other networks. Not unlike Aristotle's (384-322 B.C.) assertion that the whole becomes greater than the sum of its parts (Ross, 2009), synergies would be created through the inter-connection of ideas across social networks.

2.2.2 Social networks

Social network theory's origins (Figure 2.11) emerged from the work of social psychologist Georg Simmel's (1858-1918) study of dyadic and triadic relationships (Simmel, 1950). It developed through Jacob Moreno's (1889-1974) work on sociometry (Borgatta, 2007; Moreno, 1953) and Alfred Radcliffe-Brown's (1881-1955) social anthropological exploration of tribes (Kuper, 1977) and built upon the mathematics of graph theory, developed by Leonard Euler (1707-1783) in the 1730s (Carrington and Scott, 2011; Wasserman and Faust, 1994).

Figure 2.11: Origins of social network theory



Social network theory contends that the social networks humans form allows information to flow in single or reciprocal directions. The extent of the single flow between individuals was evidenced by Milgram's (1977) small world experiment which, through parcel delivery across the USA, demonstrated the interconnectedness of individuals within the so-called 'six degrees of separation'. The reciprocal flow of information between individuals affords resonance with social constructivist theory (Vygotsky, 1978), as each actor formally or informally takes the role of teacher and learner, building upon and making connections with prior knowledge through social interaction. Conversely, a refusal or inability to exchange information can inhibit growth by restricting or even controlling others' access to resources (Wellman, 2001). Within the higher education context, the expansion of communication technology, such as virtual learning environments (e.g. Blackboard, Moodle) and social networking sites (e.g. Facebook, Twitter) has enabled the 24/7 flow of reciprocal information, both synchronous and asynchronous. Students who do not, or cannot, take advantage of these media may find themselves at a distinct disadvantage, operating instead in isolation without extended networks of information and support. Even at doctoral level, study is not an "ivory tower' activity' (Phillips and Pugh, 1987: 11).

Just as the reciprocal nature of social interaction enabled individuals to gain from, or be denied access to, the knowledge and experience of other actors, Marin and Wellman (2011: 14) observed that ‘multiple group membership...[created] bridges between some groups and, just as significantly, [did not create] bridges between others’. At its best, a reciprocal flow of high quality information, from one individual to the next and from one group to the next, could be of great value to all concerned, providing consolidation and enhancement from different perspectives. But, as the childhood game of *Chinese Whispers* suggests, if information is not effectively communicated or fully understood, the original ideas risks significant dilution or distortion, with the reliability of the source, as well as the reliability of the information, being thrown into question.

Discussing the successful flow of information, Gladwell’s (2000) popularist text, *The Tipping Point*, developed a similar premise by suggesting it hinged on the three issues of the ability of the individual to transmit a message, the importance of the message itself and the context in which the message was transmitted. His example of Paul Revere’s 1775 night ride, to notify his fellow countrymen of an imminent British attack, demonstrated how a successful flow of information was achieved. His conclusion that each member of the network must have the need, desire and ability to pass the information appears sound. However, a lack of information flow and the myriad reasons for this would necessarily be more problematic to evidence without detailed investigations of the message and the social networks through which information flowed.

Sociometry was recognised as a sociological technique that could be used to identify and visualise the relationships within social networks (Section 3.4.2). Rather than using ability grouping, for example, when the sociology of education was, with philosophy, comparative education and the history of education, one of ‘the four disciplines of [initial teacher] education’ (Wilkin, 1996: 53), the exploration of children’s friendship networks in classrooms aided teachers’ organisation of groups for learning activities (Musgrave, 1972; Pollard, 2014). Ball’s (1981) study of networks within a comprehensive school in England was unique in its large scale use of sociometry in an educational context prior to the use of technology, which later enabled the use of social network theory with larger, and sometimes global, samples across a range of contexts from cyber-communities to crime, and within industry and business (Carrington and Scott, 2011; Cronin, 2014). Studies in these areas far

outnumbered the infrequent application of social network theory to education (e.g. Dawson, 2011; Gewerc *et al.*, 2014; Grunspan *et al.*, 2014; Hommes *et al.*, 2012; Kezar, 2014; Rienties *et al.*, 2015). However, Wellman's (2001: 238) notion of 'networked individualism' made it possible to conceive of learners who operated in diverse but personal social networks and drew upon information that flowed between these networks. Such individuals were also well placed to act as brokers across networks, enabling the flow of information (Wasserman and Faust, 1994).

Figure 2.12: Spider's web metaphor: 'Personal communities' (Chua *et al.*, 2011)



Source: foxypar4 (ND)

Extending the notion of 'networked individualism' (Wellman, 2001: 238), Chua *et al.* (2011:102) considered that individuals built 'personal communities' which related to different aspects of their lives and which may, or may not, overlap. A spider's web (Figure 2.12) provides a useful metaphor for 'personal communities'. While being made of separate yet inter-woven threads, some strong with extensive and well developed connections and others more tentative and fragile, the spider can move freely across the web to gain access to each part according to need. All parts of the web are connected, but separate threads will only come into contact with others if the spider chooses to strengthen the web by weaving additional threads between them. For example, at entry to higher education, student teachers' existing personal communities may include kinship, friendship, classmates or work colleagues, according to the age and experience of individuals and the purposes of the communities.

Chua *et al.* (2011:108) argued that kinship/family formed a 'specialised tie' that provided long-term emotional support across a range of circumstances. This may raise issues for students without such bonds or those who deliberately distanced themselves from the past as they move into higher education. Gladwell (2000) suggested that geographical proximity rather than similarity enabled the flow of information. However, the increased use of the internet and mobile technology has aided new forms of proximity driven by access to technology rather than by face-to-face encounters and place-to-place communication has been superseded by person-to-person communication (Chua *et al.*, 2011; Wellman, 2001). Friendships from childhood, school, leisure activities and employment, which in previous generations may have reduced or disintegrated as students moved away from their previous lives to attend university, have become readily accessible and cumulative through online social networks such as Facebook and Twitter (Ellison *et al.*, 2007; Ryan *et al.*, 2008; Zephoria, 2015). Individuals can no longer keep others from their personal communities in separate parts of the web and determine whether or not to initiate connections between them. These decisions are now at the behest of the actor⁸, as online social networks allow actors from different parts of ego's life to comment and interact. This level of connection has raised the opportunity for serendipitous developments within and beyond the personalized community. It has also aided information flow and the growth of social capital.

2.2.3 Social capital

John Dewey (1895-1952) addressed the notion of social capital in his 1899 lecture, *School and Social Progress*. In it he contrasted the 'individualist standpoint' (Dewey, 1900: 3) with 'the development of a spirit of social co-operation and community life' (Dewey, 1900: 14). From the former, students learned for personal benefit and were often in competition with others to accumulate the most information. From the latter, students learned through 'a spirit of free communication, of interchange of ideas, suggestions, results, both successes and failures of previous experiences' (Dewey, 1900: 13) and advantaged all involved in the process. As individual capital grew, he conjectured, so would social capital.

The interplay between 'individualist' and 'groupist' perspectives became apparent in more recent theories of social capital (Borgatti *et al.*, 1998; Lee, 2010; Prell, 2003).

⁸ See Glossary of Terms B: Social Network Analysis

Prell (2006) referred to Bourdieu (1986), Coleman (1988) and Putnam (2000) as 'the three giants' of social capital theory whose works, in the later part of the last century, were seminal in putting forward ideas and developing a vocabulary to explore its complexities. Building on their European (Bourdieu) and American (Coleman and Putnam) contexts, all considered the notion of individuals working in isolation for the purpose of 'self-improvement' (Bourdieu, 1986: 48) and the aggregation of 'actual or potential resources' (Bourdieu, 1986: 51), through membership of a network. Their works discussed the time and willingness needed to communicate with others and the levels of trust and reciprocity that may be necessary between resource-givers and resource-takers. They considered how social capital that emanated from kinship/family relationships could expand through personal and professional social networks.

Bourdieu (1986) saw the availability of an individual's social network as potentially divisive, suggesting it was both defined and constrained by social status at birth. Coleman (1988), however, explored what he saw as the pivotal nature of the family in enhancing social capital not just financially through the provision of resources, but through 'human capital...measured by parents' education [that provides] potential for a cognitive environment for the child that aids learning' (Coleman 1988: 109). Although family groupings have changed since Coleman's study, the view that 'blood is thicker than water' pervades, with Chevalier *et al.* (2010) identifying parents as a source of financial and cultural capital. Family members are long-term resource-givers who may not expect reciprocation to be immediate or equivalent.

Coleman (1988) stressed the relationship between children and parents, and particularly the central role of mothers, through his study of social capital in relation to college drop-out. But, as Field (2008) pointed out, he did this from the viewpoint of the traditional, nuclear family. Drawing on home-based mothers' expectations of their children attending college and sibling positions in large families, Coleman's work appeared quite dated in relation to the more familiar, multifarious family groupings and smaller families of current Western society. Yet, within a Middle Eastern context, Pishghadam and Zabihi's (2011) study of 320 Iranian undergraduate students found that mothers' educational levels provided a good predictor of students' grade point average, while fathers' educational levels did not. Initially, these outcomes appear compelling and in line with Coleman's work, but the subjects of the statements from Pishghadam and Zabihi's *Social and Cultural Capital Questionnaire* (SCCQ) are

questionable. Of its 42 statements, 13 asked about 'parents', three about 'mothers' and no statements referred directly to fathers. The high proportion of females taking part (77%), within a context where females have traditionally been considered subordinate to males, also raises issues regarding transferability of the study's findings to Western contexts.

Despite this, two recent Western studies (Chevalier *et al.*, 2010; Hernandez and Napierala, 2014) also identified the significance of maternal influences on children's education. Chevalier *et al.*'s (2010) study of parental income and education on children's schooling concurred with Coleman (1988) and Pishghadam and Zabihi (2011), with 'evidence of intergenerational transmissions of education choice from mothers to daughters' based on a 4% sub-sample of data from the *Labour Force Survey* of UK households between 1993-2006, which equated to some 43,000 items. While, in the USA, Hernandez and Napierala's, (2014:3) study found that although modern family groupings were complex, 'the vast majority [of children] live in mother-only or two-parent families; only four percent live in father-only families with no mother present'. Its findings, based on large-scale, statistical data sets from 2008-2014, appeared to highlight Bourdieu's concerns, demonstrating the disparity of social capital afforded by children of mothers with low educational attainment in comparison with those of higher educational attainment. The report recommended addressing this disparity through a 'dual-generation strategy...to break the intergenerational cycle of poverty by providing low-education, low-income families with education, workforce training, and related support services that move these families toward economic security and stability (Hernandez and Napierala, 2014: 4).

However, the studies by Coleman (1988), Chevalier *et al.* (2010), Pishghadam and Zabihi (2011) and Hernandez and Napierala (2014) all considered maternal influences *prior* to higher education. With a fifth of the England's 18-19 year old higher education students remaining in the parental home between 2003-04 and 2006-07 (HEFCE, 2009), the nature and influence of feedback provided by family members, particularly mothers, merits further investigation.

In his extensive review and analysis of secondary data sources from the USA spanning half a century, Putnam (2000), identified experiences within the formative years as key contributors to levels of trust between individuals. Showing commonality with Denzin (1989), he recognised how individuals may be influenced

by major events as well as personal experiences and, through macro-level statistical analysis, Putnam demonstrated how approaches to trust differed between generations. Where Baby Boomers were brought up by those who had experienced camaraderie through adversity during the Second World War, Generation X, and presumably its successors (Jones and Shao, 2011), had become increasingly absorbed in individual pursuits as mass media had made its mark. Putnam's (2000) main concern was that television had reduced communication between individuals but this may be only part of the picture. Student teachers, for example, juggle academic studies and professional placements with the need to pay fees (Universities UK, 2013). This may bring greater financial dependence on their family or the need to take part-time employment.

Putnam (2000) also recognised that the need for survival can lead to social withdrawal. Conversely, the building of trust required an investment of time to communicate with others, which in turn required time management skills to balance the demands of different parts of the individuals' lives. While meeting with others and building trust in the 'real' world may have been constrained by demands on time, the use of mobile technology and social media offer the opportunity for 24/7 synchronous and asynchronous communication in the 'virtual' world. Mobile technology has become more prolific in the USA (Pew, 2015) and the UK (ONS, 2010) and has brought a sense of social inclusion (Mobile Operators Association, 2015).

Cyberspace has enabled greater contact with current and past friends for students in higher education, but its use may result in numbers of passing acquaintances rather than long-lasting, trusting and reciprocal relationships. In terms of social capital, these 'weak ties' (Granovetter, 1973) can be advantageous (Section 3.4.2), providing links to networks beyond individuals' close circles to enable communication and information flow. But as Putnam (2000: 136) pointed out, the trust within 'dense networks of social exchange' necessarily reduces when 'the social fabric of a community becomes more threadbare' and 'thick trust' becomes 'thin trust' with minimal reciprocity. The willingness to help 'resource-seekers' without any immediate expectation of gain requires the 'resource-giver' (Johnson and Knoke, 2004) to trust that this action will be repaid at some point in the future. Far from being an altruistic act, it is an investment towards future transactions and more likely to be reciprocated by a close contact than a passing acquaintance.

In his study of social capital, social networks and education, Lee (2010:788) identified 'academic mentors' as resource-givers who may not appear to ask for reciprocation. As students employed by the university to provide peer support (Wisegeek, 2015), these mentors appeared altruistic in terms of the time and resource-giving, but Lee (2010: 788) suggested that this support was only offered 'in the expectation of remunerative repayment or for expanding their social influence'. Nevertheless, their resource-giving provided students with models of practice reminiscent of social constructivist 'scaffolding' or 'hand-over' (Bruner, 1983; Wood *et al.*, 1976). Similarly, role modelling within the professional element of ITE is provided by school based mentors and university link tutors (Carter, 2015). Their apparently altruistic resource-giving benefits individual student teachers and the profession as a whole. However, these resource-givers also hold power and take rewards; they act as gatekeepers to the award of *Qualified Teacher Status* and their schools receive funding for providing ITE placements. Such power relationships may influence the resource-seekers' approaches to the social capital offered.

To summarize, the professional and academic elements of ITE appear to encourage student teachers to engage with communities of practice (Section 2.2.1) while employing personal and professional networks (Section 2.2.2) to enable the flow of information and build social capital (Section 2.2.3). To do this, students need to build relationships to capitalize on the feedback encountered through a range of sources. These have the potential to be enhanced or thwarted by issues of trust, time, communication and reciprocity. How individual students interpret and deal with the feedback they encounter is the subject of the final section of this literature review.

2.3 Reflective practice

2.3.0 Overview of Section 2.3

Premise 3: <i>These meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things [she/]he encounters</i> Blumer (1969: 2)	Thesis sub-question: 1. What do the terms 'feedback' and 'reflective practice' mean to students? 4. In what ways do students interpret and use the feedback they encounter?
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Blumer's third premise focused on internal processes of interpretation and builds on the conundrum (Weigert and Gecas, 2003) of Mead's (1934) spontaneous 'I' and socialised 'me' phases which were introduced earlier (Section 2.0.1). Research into internal processes is problematic. Respondents need to be able to locate and interpret their understanding and their rationale for action and then express these to the researcher. I consider 'reflective practice' to be an internalized process. The extent to which feedback from their personal and professional networks influences student teachers' reflective practice is central to my research question.

This section of the literature review begins by considering how others have interpreted 'reflective practice'. It examines the complex definitions of 'reflective practice' before discussing the place of 'reflective practice' in ITE, with reference to the *Teachers' Standards* (DfE, 2011a). The section continues by delving into the nature of tacit knowledge as an internalised process and how metaphor has been used to convey tacit knowledge. It culminates in discussion of threshold concepts and defines 'reflective practice' in ITE as such a concept.

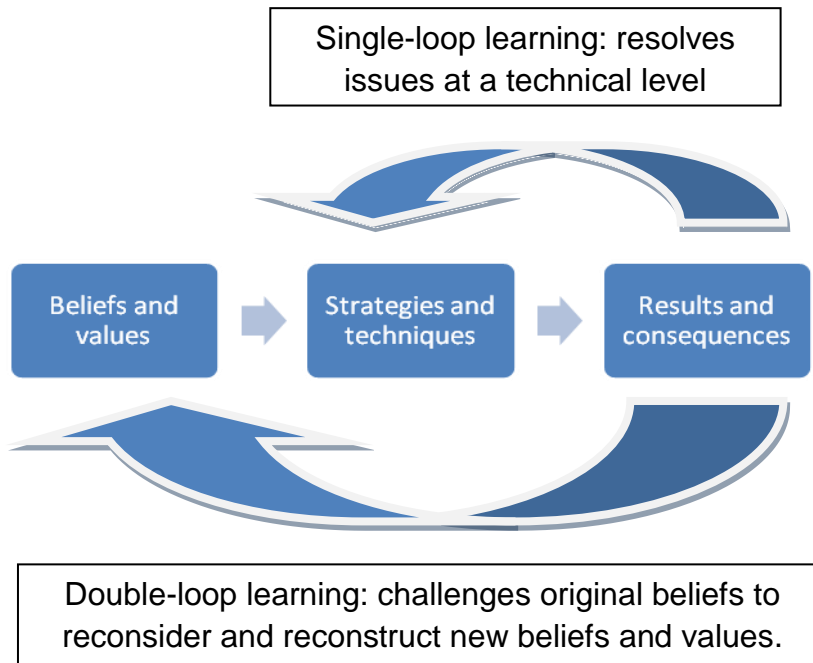
2.3.1 Reflective practice

Writing at the beginning of the 20th century, Dewey discussed 'reflection' as a process by which a difficulty could be acknowledged, explored and resolved. He identified:

...five logically distinct steps of (i) a felt difficulty; (ii) its location and definition; (iii) suggestion of possible solution; (iv) development by reasoning of the bearings of the suggestion; (v) further observation and experiment leading to

its acceptance or rejection; that is, the conclusion of belief or disbelief.
(Dewey, 1991: 72)

Figure 2.13: Single-Loop and Double-Loop Learning (Argyris and Schön, 1978)



The cyclical nature of reflection was revisited on several occasions, for example by Kolb and Fry (1975), Boud *et al.* (1985) and Gibbs (1988). Their studies exposed the cognitive, affective and tacit dimensions of reflection and the need to challenge prior knowledge and understanding. The work of Argyris and Schön (1978) suggested that difficulties could be addressed at a simple or a more complex level. Where the former, which they defined as ‘single-loop learning’, resolved the issue at hand at a technical level, the latter, or ‘double-loop learning’, challenged original beliefs and required these to be reconsidered and reconstructed (Figure 2.13). Double-loop learning demonstrated a deeper approach to learning but was also more difficult to achieve. It required personal commitment to cognitive development, emotional resilience and a willingness to change ingrained viewpoints through what Hughes (2009: 451) later referred to as ‘autobiographical internal dialogue’. Hughes suggested the need to identify a problem, reflect upon a situation and draw upon a unique range of personal experiences, including the perspectives of others, to gain a solution. In each of these cases, there appeared to be an assumption that individuals had the ability and willingness to identify, accept and resolve difficulties. This contrasted with the outcomes of Russell’s (2005) study. He found that ITE

students were, when left to their own devices, unlikely to reflect. Conversely, when presented with questions to answer and the guaranteed response of a tutor they would engage. Russell's (2005) high level of commitment to interaction with the students and his willingness to scaffold their learning has resonance with professional development planning (PDP) practices (Jackson and Ward, 2004). Designed to support reflection 'in' and 'on' action, the structured nature of PDP may, however, negate the opportunity for students 'to experience surprise, puzzlement, or confusion in a situation which [they find] unique or uncertain' (Schön, 1991: 68) and result in reflective practice being perceived as an explicit product for others rather than an internal process for the self. Similarly, undergraduate level assessment practices that focus on tutors or peers identifying difficulties and providing feedback for students, may detract from, rather than emphasise, the role of the individual within this process (Hughes *et al.*, 2014).

Writing before Nicol's (2010) discussion of dialogic feedback, both Russell (2005) and Schön (1987) recognised the role of dialogue in reflective practice. Earlier still, Schön (1983) claimed that reflective practice enabled professionals to use their specialist knowledge, qualifications and language to analyse general situations from theoretical and practical standpoints and apply their new understanding to unique situations. Contrasting the clear cut solutions of 'technical rationality' and its positivist epistemology with the 'artistry' of professions such as teaching, Schön (1983) coined the phrase 'reflection-in-action'. Complementing this, Schön (1983) identified 'reflection-on-action' as occurring away from the event in time or context. The latter appeared to echo HEI students' experiences of reflection based on feedback. Eraut (1995) criticised Schön's examples from teaching as they related to individual tutorials rather than professional decision making in crowded classrooms. Eraut believed the latter afforded little time for reflection. Indeed, Schön's (1987: 100) use of the term 'coach' rather than teacher or tutor, appeared to emphasise the individualised context and development of practical skills. Drawing upon Wenger's (1998) model of professional learning through apprenticeship, Hughes (2009) went on to challenge Schön's implication that reflection-in-action is an individual and non-contextualised process.

Within ITE, literature spanning more than twenty years (e.g. Beauchamp, 2015; Edwards and Thomas, 2010; Hatton and Smith, 1995; Heilbronn, 2011; Russell, 2007; Wilkin, 1996) identified reflection as an accepted 'cornerstone of teachers'

professional practice' (Waring and Evans, 2015: 161). However, the cornerstone has also been subject to the erosion of criticism. Waring and Evans (2015) noted that, while reflection, reflective practice and critical reflection were used interchangeably in the literature, they shared the common features of challenge, emotion, transformation, being critical and reflexivity. Beauchamp (2015) discussed the context for reflection. She indicated that levels of trust within a given context had the potential to help or hinder and could affect teachers' professional identities. As she explored the integration of 'mind and body' in the reflective process, Beauchamp (2015) questioned whether the role played by emotion and the self had been addressed sufficiently within Schön's work. Her exploration resonated with Japanese approaches to 'knowledge conversion' (Nonaka and Takeuchi, 1995) (Section 2.3.3).

Figure 2.14: Seven key characteristics of reflective teaching (Pollard, 2008: 14-15)

Seven key characteristics of reflective teaching

1. Reflective teaching implies an active concern with aims and consequences, as well as means and technical efficiency
2. Reflective teaching is applied in a cyclical or spiralling process, in which teachers monitor, evaluate and revise their own practice continuously
3. Reflective teaching requires competence in methods of evidence-based classroom enquiry, to support the progressive development of higher standards of teaching
4. Reflective teaching requires attitudes of open mindedness, responsibility and wholeheartedness
5. Reflective teaching is based on teacher judgement, informed by evidence-based enquiry and insights from other research
6. Reflective teaching, professional learning and personal fulfilment are enhanced through collaboration and dialogue with colleagues
7. Reflective teaching enables teachers to creatively mediate externally developed frameworks for teaching and learning

In an age of increasing accountability in education, both Russell (2013) and Waring and Evans (2015) questioned whether there was evidence that reflective practice enhanced the quality of teaching. However, Pollard maintained through his years of writing (Pollard, 2014; Pollard and Tann, 1987) that reflecting 'in' and 'on' action (Schön, 1983) was achieved through the synthesis of professional experiences and academic studies. His seven characteristics of 'reflective teaching' (Pollard, 2008: 14-15) (Figure 2.14) built upon social constructivist theory and iterative processes and

have been used in numerous ITE programmes (Amazon, 2016). Pollard indicated that teachers should meet unique situations with an attitude of 'open mindedness', drawing actively upon their previous knowledge and experience and that of others. Appearing to advocate the use of double-loop learning that required a re-evaluation of values and beliefs over 'quick fix' solutions, Pollard saw the 'cyclical or spiralling process' becoming more robust when informed by 'evidence-based enquiry' and 'collaboration and dialogue with colleagues'.

Although based in Canada, Beauchamp's (2015: 123) assertion that 'reflection has become accepted as an integral part of the preparation of teachers *in university contexts*' [my emphasis] is of particular significance to the current HEI context in England. UK researchers Beauchamp *et al.* (2015: 154) identify England as a 'distinct outlier' as it increased the number of students entering ITE through school-led programmes such as School Direct, (DfE, 2016; NCTL, 2014). The diversity of provision this has wrought (Beauchamp *et al.*, 2015) took its toll on the sustainability of HEI provision in England (Universities UK, 2014). Yet, the role of HEIs in providing access to research and theory to underpin teachers' professional practices was spoken of positively by the BERA/RSA (2014) report on the role of research in ITE and the *Carter Review of Initial Teacher Training* (Carter, 2015). Winch *et al.* (2015: 202), as part of the evidence base of the BERA/RSA (2014) report, asserted that critical reflection ranked alongside situated understanding and technical knowledge as one of 'three interconnected and complementary aspects of teachers' professional knowledge'. It moved teachers away from being regarded as 'craft workers' and 'technicians' to enrich their 'professional knowledge and practice'. Carter (2015: 2.3.19) advocated that 'structured assignments' should be used to support students in using theory to reflect upon their classroom experiences. However, greater use of school-led rather than university-led ITE programmes may, Furlong (2013) warned, result in ITE students having limited engagement with the theoretical aspects of reflection. He believed this would have consequences not just for student teachers but for practice in schools and the teaching profession as a whole.

Bell *et al.* (2011: 797) stated that 'without a unified and clear definition of reflection, identifying and assessing reflection is problematic for educators'. The complexity of assessing reflective practice was identified by Hatton and Smith (1995). Boud *et al.*

(1985) and Powell (1985), for example, maintained that *inter-rater* reliability within an area that was individual, autobiographical and ephemeral, and which may have included an emotional response, was highly problematic. Self-assessment of reflective practice may have been more valid than assessments made by others. Hughes (2011) and Hughes *et al.* (2014) championed greater use of ipsative and self-referential assessment where ‘the spotlight moves onto an individual learner’s progress and away from attainment of external goals or standards, at least temporarily’ (Hughes *et al.*, 2014: 34). However, Orsmond and Merry (2013: 738) cautioned that even ‘self-assessment is not carried out in isolation’ as thoughts and ideas are constructed through social situations.

Tummons (2011) provided insight into the students’ perspectives of assessing reflection. Ellison *et al.* (2007), Koopman (2011), Prell, (2003) and Tharp (2010) identified students’ greater use of Web 2.0 technology, including social networking sites, forums, wikis and blogs, suggested their willingness to share personal information and express viewpoints publicly as a means of increasing social capital and the flow of knowledge (Section 2.2.3). However, Tummons (2011) ascertained that students felt uncomfortable with the permanence and artificiality of articulating their thoughts in writing to fulfil the requirements of an assessed reflection. In his study, students demonstrated vulnerability when exposing their views and beliefs to ‘frontstage’ (Goffman, 1959) assessors, and difficulty in engaging with a genre so different from that of other academic assessments. This may be unsurprising, as such autobiographical discussions have traditionally been the preserve of a personal diary and hidden from public view (Powell, 1985). In Goffman’s (1959) terms these were ‘backstage’ activities. To avoid the assessment of reflective practice being seen as an end product for others rather than a developmental process for the self, Tummons (2011) recommended that it should be low stakes, formative and not open to the wider scrutiny required of summative assessment items.

Tummons’ recommendation may remove instrumental approaches and inauthentic purposes but would lie in opposition to constructive alignment (Biggs, 2015), based on the use of common descriptors across all HEI courses, to achieve consistency of outcomes (QAA, 2008). Biggs and Tang (2007) suggested that by starting with intended learning outcomes and aligning teaching and assessment to them, constructively aligned feedback could be written in relation to assessment criteria

which had, in turn, been made transparent to students before they had tackled an assessment item (Section 2.1.3). Such a neat package of teaching, learning and assessment fitted well within frameworks used by HEIs to develop and validate degree programmes (QAA, 2008) and appeared to promote holistic approaches focused on students' learning. Empirical studies by Wang *et al.* (2013) and Larkin and Richardson (2013), in Hong Kong and Australia respectively, found that constructive alignment encouraged students to engage with deep rather than surface learning, gaining greater satisfaction and improved grades. But Trigwell and Prosser's (2013) study was more measured. They revealed the susceptibility of constructive alignment to fragmented and mechanistic applications determined by tutors' intentions.

The saying, attributed to Einstein amongst others (Quote Investigator, 2015), that 'not everything that counts can be counted, and not everything that can be counted counts' appeared significant. The 'technical rationality' of constructive alignment may have been an attempt to make solid the 'swampy lowland where situations are confusing 'messes' incapable of technical solution' (Schön, 1983: 42), but as Eraut (2000: 133) commented, 'tidy maps of knowledge and learning are usually deceptive'. The QAA level descriptors (QAA, 2008), for example, provided 'tidy maps' of academic outcomes upon which to base constructively aligned programmes. However, complex peer-moderation and external regulation systems evolved to promote consistency in their interpretation and increase *inter-rater* reliability of assessments.

2.3.2 Teachers' Standards

A similar dichotomy was evident with the use of *Teachers' Standards* (DfE, 2011a) and came with the additional burden of frequent political intervention. First published in the late 1990s under the Labour government as *High Status: High Standards* (DfEE, 1998a), the standards were restructured in 2002 as *Qualifying to Teach: Professional Standards for QTS* (DFES/TTA, 2002) and in 2007 became the *Professional Standards for QTS* (TDA, 2007). The *Teachers' Standards* (DfE, 2011a) emerged as a fourth iteration, developed by the Coalition government following publication of their White Paper, *The Importance of Teaching* (DfE, 2010a). While the use of standards sought to provide uniformity and reliability across a

diverse number of routes into teaching (DfE, 2016; Prospects, 2015), their reductionist nature aroused condemnation in the research community (e.g. Burgess, 2000; Hallet, 2010; Harrison, 2006; Martin and Cloke, 2000; Menter *et al.*, 2006), particularly in the first decade of their existence. This was exacerbated when the then Secretary of State for Education, Michael Gove, implied that teaching could be reduced to a smaller number of behavioural and assessable, professional outcomes in which reflective practice appeared as peripheral, rather than central, to ITE, identifying their predecessor (TDA, 2007) as 'ineffective, meaningless and muddy, fluffy concepts' that were not 'rigorous, clear or effective enough' (BBC, 2011).

Menter *et al.* (2006) summed up the main thrust of the concerns by contrasting the politically-driven vocabulary and standards agenda with the need to develop professional judgement and decision making within complex scenarios. For example, within the standards the term 'initial teacher education' (ITE) was lost to 'initial teacher training' (ITT). Hayes (2011) claimed this to be a move towards de-professionalization. Martin and Cloke (2000: 184) saw the expression 'that 'when assessed' all trainees are required to 'meet all the standards' for QTS (DfEE, 1998a)' as a move towards summative assessment and the use of quantitative outcomes over the formative assessment they identified as critical to students' development as teachers. Burgess (2000) identified changes to curricula, noting that, although the standards' rhetoric had stated there was no specified 'course model or scheme of work and it is for providers to decide how training is best delivered' (DfEE, 1998a: 5), OFSTED (2014b) inspections instilled a backwash of compliance.

The standards model challenged the belief systems of tutors (Hallett, 2010) who witnessed an emphasis on explicit knowledge and skills, that could be assessed and measured to demonstrate the meeting of standards for QTS in the form of a product, over tacit knowledge (Section 2.3.3). Attempts to provide models of 'technical rationality' appeared to deny the value of 'complexity, uncertainty, instability, uniqueness, and value-conflict' (Schön, 1983: 39). The 'swampy lowlands' and 'confusing messes' (Schön, 1983: 42) enabled individuals to draw upon their differing prior experiences, knowledge, understanding and support networks where much knowledge was tacit and gleaned through interaction.

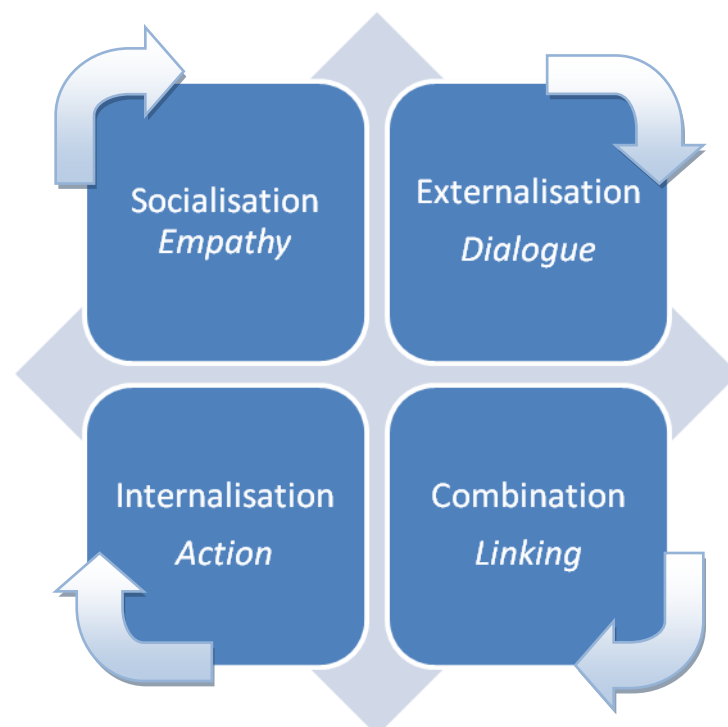
2.3.3 Tacit knowledge

According to Polanyi (1966: 4) 'we know more than we can tell'. When knowledge

was habitual, instinctive and no longer identifiable as discrete, it became ‘tacit knowledge’ that was so deep-rooted in our psyche it was difficult to identify and to convey to others. The work of Lave and Wenger (1991) and Wenger (1998) attested to the internalisation of tacit knowledge that came with experience. But, in opposition to Collins’ (2010: 85) statement that ‘the tacit is that which has not or *cannot* be made explicit’ [my emphasis], Lave and Wenger also considered how, often unknowingly, tacit knowledge could flow across a community of practice.

Nonaka and Takeuchi (1995: 29) suggested the difficulties of sharing tacit knowledge may be cultural and based on epistemological perspectives. Through various examples, they put forward the view that a dominant factor in Japanese companies’ organisational success was the notion of the ‘oneness of body and mind’ that enabled and exploited individuals’ tacit knowledge. Nonaka and Takeuchi’s ‘knowledge conversion’ or SECI (Socialisation, Externalisation, Combination and Internalisation) model (Figure 2.15) centred on creating opportunities for dialogue between individuals to share tacit knowledge. Through empathy and mutual trust, tacit knowledge was made explicit and, when processed, was used to develop new ideas. Their model appeared to reaffirm the value of social interaction through networks that went beyond information flow, to the transference of social capital and the social construction of learning.

Figure 2.15: SECI model (Nonaka and Takeuchi, 1995)



The spiralling process that Nonaka and Takeuchi (1995: 85) identified began with a 'field building' phase of organisation knowledge creation. This called upon individuals to share their 'emotions, feelings and mental models' often through the use of metaphor and analogy (Section 2.3.4) to provide common ground for dialogue and as a means of expressing tacit knowledge. The next phase saw the shared tacit knowledge made explicit and externalised, perhaps through diagrammatic means, to demonstrate the crystallisation of conceptual knowledge. By combining conceptual knowledge from different parts of the organisation, strategies and visions would be created leading to new products or services. The explicit knowledge used in their development would gradually become internalised and tacit and lead to new tacit knowledge being developed. And so the spiral continued.

Such a model, resting on the importance of 'the tacit acquisition of tacit knowledge by people who do not have it from people who do' (Gourlay, 2004: 4), appeared to be at odds with Polyani's (1966) and Eraut's (2000) views that that tacit knowledge cannot be communicated with ease or clarity. In his work on non-formal learning and tacit knowledge in professional work, Eraut suggested the difficulty of communicating tacit knowledge may be due to the knowledge itself, or to the inability of the communicator to convey its meaning or a combination of both factors. Nonaka and Takeuchi (1995) did not appear to take account of individuals' abilities to express their ideas and communicate these to others, emphasising instead the organisation's responsibility for creating an environment where dialogue was based on mutual trust. Nor do they recognise that, as communication demands a giver and a receiver, the giver's ability to communicate knowledge may still be impeded by the receiver's lack of ability to understand its meaning; negating the semiotic complexities of encoding, decoding and interpretation (Chandler, 2014). Instead, they focused on the use of metaphor and analogy to bridge the divide.

Whether the creation of such a utopian environment is transferable to cultural contexts that do not share the epistemological viewpoint of the 'oneness of body and mind', remains questionable. Indeed, two critics of the SECI model went further in raising issues. Where Gourlay (2004) queried the empirical evidence that Nonaka and Takeuchi used to substantiate their model, Collins (2010: 91) identified their conception of 'tacit knowledge' as narrow and 'relational'. He defined this as the weakest form of tacit knowledge where individuals 'could tell each other what they

need to know but either will not, or cannot for reasons that are not very profound'. The five reasons he identified for this were, firstly, the deliberate concealment of knowledge, secondly, ostensive knowledge that is conveyed through the use of an object of a practice, thirdly, knowledge that is too logistically demanding to be able to convey in its entirety, fourthly, where a mismatch occurs as the knowledge givers assume the receivers already have sufficient knowledge and, fifthly, when the providers do not recognise their knowledge as being of the importance to the receivers.

Echoing Nonaka and Takeuchi's (1995) internalisation phase and Collins' (2010) 'logistically demanding' and 'unrecognized knowledge', Sadler (2010) maintained that when marking, tutors developed an understanding of criteria which becomes tacit as they grow increasingly familiar with assessment standards through the quantity and range of assignments they encounter. Students' experiences, on the other hand, were limited to assessment frameworks and tutors' comments on their assignments. These held little meaning for students if they could not apply 'inductive reasoning to elicit tacitly what tutors cannot say explicitly; namely what the criteria and levels/standards definitively mean' (Handley and Williams 2011: 104). In Collins' (2010) terms, this exemplified 'mismatched saliences' as tutors assumed a prior knowledge that students do not have.

As professional communicators it would be hoped that university tutors and school teachers do not deliberately conceal knowledge. But communicating tacit knowledge of reflective practice through feedback appears problematic. In common with Collins' (2010) ostensive knowledge and the work of Dewey (1991: 72) and Pollard (2008: 14-15), the feedback may result in descriptions of processes and actions rather than the nature of reflection itself. Not unlike Nonaka and Takeuchi's (1995) 'field building' phase, the use of metaphor and analogy may provide common ground for dialogue and offer a means of expressing tacit knowledge.

2.3.4 Metaphor

The strategy of using narratives or stories (Cortazzi, 1993; McDrury and Alterio, 2003) to exemplify or act as metaphors may present the pedagogical scaffolding necessary to convey complex meaning and engage students (Carter and Pitcher, 2010), enabling them to move from explicit to tacit and tacit to explicit understanding

while linking theory with practice. But the use of metaphor is not without its problems.

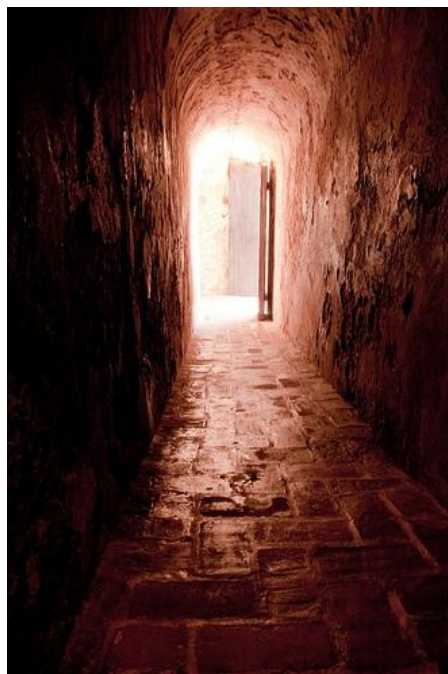
Bullough's (1991) study demonstrated how student teachers' tacit aspirations and concerns could be expressed and analysed through the use of metaphors. Recognising that students were building upon their tacit prior-knowledge of teaching, he asked 11 pre-service teachers to explore perceptions of themselves as teachers through metaphor. One student teacher for example, saw herself as a butterfly, growing inside a cocoon to emerge as a butterfly, and fully fledged teacher, who would 'bring beauty and enjoyment to others' (Bullough, 1991: 46). This contrasted with the reality of her experience in the classroom where she felt the need to become a chameleon that changed to suit its context. Another saw himself as a husbandman, or farmer, who would tend and nurture the children in his care. He reported that the metaphor continued into his teaching experience as he scattered seeds and learned 'how to prepare the soil and climate in the classroom so that an ever greater number of seeds may actually sprout and flourish' (Bullough, 1991: 47). While Mouraz *et al.* (2013) and Tannehill and MacPhail (2014) considered that metaphors allowed students to expand upon their personal identities, confront issues and challenge beliefs in a safe environment, Bullough (1991: 43) also noted that they could also result in 'glib or superficial analyses' if students did not recognise their purpose.

The aim of metaphors appears to be to enable understanding of complex concepts from a point of informality. Drawing on social constructivist metaphors, they may enable student teachers' learning to be scaffolded through their Zone of Proximal Development (Vygotsky, 1978; Wood *et al.*, 1976) by providing tangible links with prior experiences as they move into new areas of learning. Students may forget the metaphor when the underlying concept is understood or use the metaphor and concept together. Carter and Pitcher (2010) identified the level of understanding required for students to make sense of metaphors. This included vocabulary, concepts and the rules within which metaphors operated. They also warned that the metaphors students could not relate to 'may actually impede understanding' (Carter and Pitcher, 2010: 581). Similarly, in her critique of Black and Wiliam's (1998a) 'Black Box', Taras (2007b) suggested the powerful metaphors of Assessment *for* Learning had become too difficult to challenge. While metaphors had the potential

to bridge the divide between explicit and tacit understanding, they needed to be used with caution and not treated with levels of reverence that denied critique.

Metaphors are used at different levels within teaching. Indeed, although technology has moved on apace, classroom practice is still described as ‘working at the chalk face’ with the metaphor being used in teacher recruitment (Chalkface, 2015), web-based teaching resources (Chalkface Project, 2015) and television dramas on teaching (IMDb, 2015). In ITE, tutors and school-based mentors are recognised as ‘gatekeepers to the profession’. They are able to open the gate at the end of the tunnel through which all students must pass; determining who should be permitted to gain a degree and a teaching qualification, before joining them at the chalk face, on the other side of the gate (Figure 2.16). Similarly, Headington (2013) argued that Meyer and Land’s (2003) metaphor of ‘threshold concepts’ (Section 2.3.5) may serve to encapsulate the journeys student teachers take when interpreting the explicit and tacit feedback gleaned through personal and professional networks to enhance their reflective practice.

Figure 2.16: Tunnel and gate metaphors: entering the teaching profession



Source: tibi (ND)

2.3.5 Threshold concepts

Meyer and Land (2003) viewed 'threshold concepts' as those concepts within disciplines that were fundamental to success but which relied upon tacit knowledge (Section 2.3.3), making them inherently problematic to teach and to learn.

Using metaphor, they described threshold concepts as:

...akin to a portal, opening up a new and previously inaccessible way of thinking about something...a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress.
(Meyer and Land, 2006a: 3)

In common with others (e.g. Mead, 1934; Hughes, 2014), they referred to the internalized processes of transformation that were subject to experience and interpretation.

Meyer and Land's work identified five characteristics of threshold concepts as 'transformative...probably irreversible...integrative...possibly often (though not necessarily always) bounded...[and] potentially (though not necessarily) troublesome' [my emphasis] (Meyer and Land, 2006a: 7-8). Expanding upon these characteristics, they introduced the discursive nature of threshold concepts and the necessity for reconstitution that this implied (Meyer and Land, 2006b: 20-22).

Rowbottom (2007: 268) criticized the 'vague' nature of the language used by Meyer and Land and questioned whether threshold concepts would stand the test of empirical research. Others, exploring threshold concepts within varied disciplines since Meyer and Land's (2003) report for the *Enhancing Teaching-Learning (ETL) Project*, suggested that the five characteristics may not all be present within threshold concepts (Irvine and Carmichael, 2009). They advocated the framework as indicative rather than definitive (Jordan *et al.*, 2011; Lucas and Mladnovic, 2007).

The argument for identifying reflective practice as a threshold concept in ITE emerges through Pollard's (2008; 2014) emphasis on reflective practice as a concept that is fundamental to student teachers' success. Pollard (2014) saw reflective practice as 'transformative' and, once part of a teacher's repertoire, difficult to unlearn. Indeed, the *Teachers' Standards* (DfE, 2011a: para 14) provided a broad statement confirming that 'appropriate self-evaluation, reflection and professional development activity is critical to improving teachers' practice at all career stages'.

Reflective practice appears to be 'irreversible'. Returning to the earlier metaphor (Figure 2.16), which builds upon Land's (2007; 2011; 2012) visual imagery of a portal, the gatekeepers of tutors and school-based mentors have moved beyond the gateway into another world. In Nonaka and Takeuchi's (1995) terms, they have reached the fourth phase and internalised their tacit knowledge. However, in contrast with the SECI model which continually spirals forward, these gatekeepers still need to support those at an earlier stage of the journey. This is potentially problematic. The gatekeepers have an understanding of the concept of reflective practice that has become tacit and cannot go back to not having this understanding. Their knowledge has become 'logistically demanding' and 'unrecognized' (Collins, 2010). The irreversibility of the threshold concept suggests they are also unable to remember how it felt not to understand. Understanding of the concept has transformed them. They can no longer identify directly with those still on the journey, but can try to ease the travels of others through scaffolded and integrative programme and course design (e.g. Headington and Hales, 2010). In Nonaka and Takeuchi's (1995) terms, the gatekeepers can facilitate field building through socialisation, externalisation and combination to enable the sharing and use of tacit and explicit knowledge. As Collins (2010: 95) suggests, they can, as 'providers of knowledge welcome close proximity between themselves and learners' so the student teachers 'can learn by every kind of interaction'. In doing this, the gatekeepers can model empathy and encourage the growth of a community of practice (Section 2.2.1) built upon trust and reciprocity. However, if the gatekeepers are no longer able to identify directly with those still on the journey, others must be willing and able to take that role.

Reflective practice appears to be 'integrative'. Unlike other threshold concepts where 'transformation may be sudden' it is more likely to be 'protracted over a period of time' (Meyer and Land, 2003: 1) and include ostensive knowledge (Collins, 2010). Reflective practice is not based on one experience in one context, but demands that student teachers bring to bear a range of school placement contexts to explore links between theory and practice throughout the degree programme.

The 'bounded' nature of reflective practice in ITE is more questionable, as the discipline draws upon content knowledge from other disciplines (Schön, 1991). The epistemological and ontological changes that occur in students' approaches to

academic study and professional practice as they identify themselves as 'reflective teachers', stands witness to the discursive and reconstitutive nature of reflective practice as a threshold concept.

Through finer examination of 'troublesome knowledge', Meyer and Land (2006a), revealed several aspects of difficulty forming a 'liminal stage [where] there is uncertainty about identity of self and purpose in life' (Meyer and Land, 2006b: 22). They discussed the ritualization of students' knowledge which may leave them unable to identify underlying complexities. In Collins' (2010: 94-95) terms, this may be further exacerbated by gatekeepers who are unable to convey 'logistically demanding knowledge', or through 'mismatched saliences' when they assume students have sufficient prior understanding to make sense of the ideas they are able to convey. As Meyer and Land (2006a) suggested, the troublesome nature of knowledge may be that it is seldom used and lies inert, that it poses conceptual difficulty or a sense of conflict with current understanding makes it appear alien. The transmission of the knowledge may be troublesome as threshold concepts appear to rely upon tacit knowledge provided by an expert who has already passed, irreversibly, through the threshold. Or, they suggested, the student may bring a known, everyday interpretation to the language used rather than the more complex meaning intended by the expert (Bullough, 1991).

Meyer and Land (2006b) saw liminality as an acceptable part of the transformation process. Though uncomfortable, it was a necessary part of change where, reminiscent of the butterfly metaphor (Bullough, 1991), students stripped away old identities and were transformed. They also warned that this could lead to temporary regression. Worryingly, Meyer and Land (2006b: 377) observed that while some students were transformed by the experience of understanding threshold concepts, others remained wedged, unable to pass their 'epistemological obstacles'. They suggested that some responsibility for this lay with tutors whose scaffolding provided too simplified a model of the concept. Students chose to accept this rather than seeking a deeper level of understanding. This in turn led to mimicry rather than comprehension and closed down 'further avenues of enquiry of complexity' (Meyer and Land, 2005: 382).

Land (2012) acknowledged parallels between the liminal space and Vygotsky's (1978) ZPD but did not address their differences. In particular, the negative

connotation of Meyer and Land's (2006b: 24) 'compensatory...[or]...conscious mimicry' stood in contrast to Vygotsky's (1978: 88) more positive and developmental explanation of 'imitation' that moves beyond 'purely mechanical processes'. Neither was the role of the social interaction, through guidance or collaboration, considered with respect to the liminal space, although Vygotsky (1978: 86) identified it as fundamental to progress through the ZPD. Yet, within the higher education sector, the importance of social interaction and dialogue emerged through the assessment and feedback literature (e.g. Nicol, 2010; Rust *et al.*, 2005). Although the terms 'feedback' and 'feedforward' were not used in his discussion of children's learning, Vygotsky's (1978) emphasis on social interaction and language demonstrated the centrality of feedback within the learning process. Social interaction appears necessary in supporting students through Meyer and Land's (2003) liminal space or Vygotsky's (1978) ZPD.

Within the troublesome, unsettling, liminal space, student teachers who are grappling with a deeper understanding of reflective practice may view the standards (DfE, 2011a) as a ritualized and authoritative source (Denzin, 1992; Meyer and Land, 2006b). Offering a sense of order and respite, the technician approach to reflective practice within the *Teachers' Standards* (DfE, 2011a: Part 1, para 4) focused on behavioural aspects that could more easily be assessed by stating that 'a teacher must reflect systematically on the effectiveness of lessons and approaches to teaching'. Davies (2006: 76) pointed out that settling 'for the *appearance* of understanding' rather than working 'to truly 'get inside'' the concept and its underlying complexities was problematic. Similarly, Meyer and Land (2005) suggested such an approach led to mimicry. For students to grasp the nature of reflective practice as a threshold concept they needed to be resilient (Reivich and Shatté, 2002) and prepared to accept and embrace the uncertainties of the liminal space and savour the 'swampy lowlands' and 'confusing messes' (Schön, 1983: 42). Through feedback from personal and professional networks, and by drawing upon inert knowledge, they needed to tackle conceptual difficulties and come to terms with new meanings and language.

Students who were unsettled by the 'liminal space' might instead look for direct routes through the space and something firm to grasp as they moved through its uncertainties. The need to strip away old identities and be transformed, and the temporary regression it involved, was unlikely to be a comfortable experience (Meyer

and Land, 2005). Instrumental approaches to teaching practice, structured curricula, assessment criteria and the *Teachers' Standards* (DfE, 2011a) might appear to provide support. However, as students became more aware of the complexity of the language used and the infinite number of routes, based on contexts, individual prior experiences, aspirations and commitment, some may feel the need to vent their frustrations through programme and course evaluations and the National Student Survey (HEFCE, 2014). As fee-paying consumers of higher education, they were aware that their views carried weight. Knowing the detrimental effects that such evaluative instruments can have on a programme's reputation and funding, gatekeepers faced a professional dilemma. Providing greater scaffolding than they would otherwise consider appropriate simply to placate students' concerns would ensure students' successful completion of the programme and lead to higher student satisfaction levels. Permitting students to enter the profession with a superficial, instrumental understanding of the fundamental threshold concept of reflective practice could ultimately lead to its downfall. Gatekeepers needed to be able to impart their tacit knowledge without falling foul of instrumental approaches and maintaining the quality of entrants to the teaching profession.

2.4 Conclusion to Chapter 2

Through an extensive review of the literature, this chapter considered student teachers' feedback journeys with particular regard to reflective practice.

Building upon social constructivist and symbolic interactionist theories of ZPD and 'self' respectively, it introduced the metaphors of 'scaffolding' and 'play and game stages'. The chapter moved on to address theory and practice in relation to feedback. It identified inherent issues in assessment and noted that the NSS has served to voice students' perspectives by identifying weaknesses and driving forward changes to feedback practices in higher education. These aimed to create greater individual student self-regulation and autonomy within HEI systems that focused on accountability.

Through analysis of students' experiences of feedback, the chapter considered how student teachers' internal feedback dialogues were supported through social capital drawn from within and beyond the academic learning community. Their personal and professional feedback networks of peers, family members and professional

communities of practice, appeared to form individualized webs from which academic, emotional and practical support could be gleaned.

Definitions of reflective practice were explored and the centrality of its role within ITE was discussed. Further analysis of reflective practice led to consideration of the processes involved in sharing tacit knowledge and the role played by metaphor. The chapter culminated by defining reflective practice in ITE as a threshold concept; an internalized process of transformation subject to experience and interpretation. Building upon the work of Meyer and Land, it explored the metaphor of the students' experience as a journey through a tunnel, with practitioners acting as gatekeepers to the profession. It is the students' interpretations of feedback on this journey that are central to the study.

The thesis now moves on to discuss, in Chapter 3, how the study's epistemological, theoretical and methodological underpinnings were translated into research inquiry methods.

CHAPTER 3: Methodology

3.0 Introduction to Chapter 3

Crotty (2003: 2) identified four questions to be considered when undertaking research:

- What *methods* do we propose to use?
- What *methodology* governs our choice and use of methods?
- What *theoretical perspective* lies behind the methodology in question?
- What *epistemology* informs this theoretical perspective?

Within this chapter I explore each of these questions in reverse order, drawing on Cohen *et al.*'s (2011: 3) view that research methods are not 'simply a technical exercise' but are informed by the researcher's view of the world. For this reason, before addressing Crotty's (2003) questions, I begin the chapter by reflecting upon my view of educational research. I then move from theoretical debate, through consideration of the research questions and on to the specificity of my chosen research design and methods. Ethical issues are addressed at several points, particularly within discussion of the sample and methods and in summary later in the chapter. I identify some limitations⁹ to my research within this chapter.

3.1 My approach to educational research

3.1.1 Educational research

Cohen *et al.* (2011) suggested that the relative newness of educational research as a social science, in relation to the physical sciences, may have led to a reliance on experience over inquiry in the development of practice. The longevity of the physical sciences, with the use of hypothesis and testing with controlled variables to seek a single 'truth', has been at odds with the more recent development of the social sciences, where reliability and validity cannot be so readily defined or where multiple 'truths' are accepted. Examination of the human world, with its multiplicity of

⁹ Limitations are addressed at several points through the study (Sections 4.2; 5.6; 6.4; 7.2)

approaches and assumptions, has led to developments in social science research practice. No longer is it considered necessary to stand in objective isolation from the subject of study. Within the social sciences, researcher engagement with the subject of study is accepted as an appropriate means of gaining insight. But this also requires researchers to acknowledge personal biographies, biases and the impact their presence or interaction may have on the study. In an educational context, teacher-researchers must acknowledge their closeness to the situation, from ideological standpoints to relationships with those under investigation. Approaches taken always need to be considered within an ethical framework (e.g. BERA, 2011) to negate anecdotal approaches and maintain research rigour.

In my view, researchers *should* take the opportunity to engage directly with issues in education, the study of which necessarily focuses on the examination of the socially constructed world in which knowledge and human interaction are pivotal. This world is likely to be seen from many different perspectives (Crotty, 2003). The biographies of the individuals experiencing it influence their perceptions and interpretations, creating a multiplicity of personal truths (Denzin, 1989). These are often expressed through narratives where telling what is considered to be worth telling (Bruner, 1991) may include emotional responses through stories that include characters, plots and outcomes (Cortazzi, 1993; Labov, 1972; Riessman, 1993). As 'truthful fiction' (Denzin, 1989: 23), narrative accounts are well placed to provide bridges between tacit and explicit knowledge (Collins, 2010; Linde, 2001; Polanyi, 1966) (Section 2.3.3). It is the variety and individuality of 'truths' that are deemed advantageous to research outcomes within the social sciences and which hold particular interest to me as a researcher who is exploring the perspectives of the students I teach.

Throughout my career, I accepted that no two students shared identical backgrounds, experiences or perceptions. Rather than treating this as problematic, I deliberately exploited it within my teaching, encouraging students to share and learn from each others' varied viewpoints. I seek to build upon this approach by using my research and findings to extend professional insight.

3.1.2 Epistemology

- What *epistemology* informs this theoretical perspective? (Crotty, 2003: 2)

My epistemology for this study rests in the interpretive paradigm, rather than the positivist/post-positivist or critical inquiry¹⁰.

In opposition to positivism/post-positivism, I do not consider research into students' perceptions as possible through scientific method applied to social science (Greenwood and Levin, 2003). In my view, human activity cannot be quantified and positivism's attempt to constrain elements to gain certitude is fraught with difficulties. Post-positivist developments may have opened the doors to more diverse approaches but the fundamental problems of 'objectivity, validity and generalizability' (Crotty, 2003: 41) remain.

My rejection of positivism/post-positivism in favour of interpretivism is essentially due to my view of the subjects' personal histories and the impact these have on their perceptions (Denzin, 1989). The students who are the subjects of my study have unique personal histories. I am unable to accept that such individual histories can, or should, be isolated in an attempt to provide objectivity or seek validity. Indeed, I view these histories as a rich data source that will help in the examination of the subjects' approaches to the feedback given or received. As individuals, the students will use their personal histories to construct new understanding (Burr, 2003). This will necessarily be different from the understanding achieved by any other person. The results I derive from my chosen sample cannot be generalized, but can provide insight.

Similarly, I reject critical inquiry in favour of the interpretive paradigm. Crotty (2003) suggests the difference between the two is that the former seeks to challenge the *status quo* and demands change, whilst the latter seeks to understand. I view understanding as paramount to educational research. Max Weber (1864-1920), whose work provided a basis to the interpretive paradigm, used the term *Verstehen* to denote its focus on 'human action' (Cohen *et al.*, 2011; Wallace and Wolf, 2006). My interest is in 'human action', specifically the perspectives and interactions of the actors within the research sample. Rather than seeing this as challenging to the *status quo* and demanding change, I view the enhanced understanding of human

¹⁰ An exception to this is within my critique of macro-level issues, such as Section 2.3.2 Teachers' Standards.

action as an end in itself. Any action that follows the study will be to share new insights into the perspectives and interactions of others.

I find the focus of critical enquiry on 'conflict and oppression' (Crotty, 2003: 113) and 'issues of power and justice' (Kincheloe and McLaren, 2003: 436) to be problematic for my research. In terms of assessment, these notions hint of students as empty vessels to be filled with an indisputable knowledge held by expert tutors, a metaphor disputed by the constructivist Piaget (Phillips, 1975). As an acknowledged social constructivist (Section 1.2) I consider that both learning *and* research can be aided through social interaction between learners/researchers and more capable others/respondents (Vygotsky, 1978). In choosing to undertake research with students who knew me as a tutor at Hope University, there needed to be an exchange of traditionally perceived roles. I took steps to ensure the students were comfortable with this exchange of roles (Section 3.4.6).

I consider critical inquiry to be more relevant at the macro-level than at the micro-level where my research is mainly positioned. At the macro-level, for example, assessment and feedback in HEIs has been affected by the outcomes of the NSS (HEFCE, 2015). Its focus on 'satisfaction' appears to place students as consumers of an education product rather than as collaborators, working with their tutors 'around the production of knowledge and meaning' (Neary *et al.*, 2014). Coupled with concerns that, in a fee-paying environment (Browne, 2010), students may abandon HEIs that have lower NSS outcomes may have served to fan the flames of 'conflict and oppression' (Crotty, 2003: 113) and 'issues of power and justice' (Kincheloe and McLaren, 2003: 436).

While I acknowledge the potential for groups of students, tutors and others to be affected by these matters, I reassert that the main element of my research is focused at the micro-level as I consider the NSS has also served to highlight the importance of feedback and assessment for individual students. It is this that I wish to explore in greater depth. However, to contextualise the experiences of individual students, it will be necessary on my research journey to 'visit' some of the macro-issues of the NSS at a meso-level (Blackstone, 2015) of Hope University (Section 3.3).

Within the interpretive paradigm, my intention is not to categorise or find a discrete 'truth' as a positivist/post-positivist, nor do I seek to challenge the *status quo* directly through my exploration as a critical inquirer. Crotty (2003: 67) maintained that the

interpretive approach 'looks for culturally derived and historically situated interpretations of the social life-world'. His statement provides a concise summary of my approach to this study.

3.1.3 Theoretical perspective

- What *theoretical perspective* lies behind the methodology in question? (Crotty, 2003: 2)

My journey within the interpretive paradigm concentrated on searching for understanding at the micro-level through sociological and psychological approaches (Wallace and Wolf, 2006). A range of major theoretical perspectives developed to explore Weber's *Verstehen* or understanding (Crotty, 2003; Denzin and Lincoln, 2003; Ritzer and Smart, 2001; Wallace and Wolf, 2006). Of these, I identified Symbolic Interactionism (SI) as the perspective most aligned to my research, in particular the work of its major proponents Mead (1934) and Blumer (1969) (Section 2.0.1). However, my journey towards this realisation provided me with insight into the interpretive paradigm where SI is 'one perspective in dialogue with others' (Sandstrom *et al.*, 2001: 24) (Section 5.0).

Both Mead and Blumer operated from what became known as 'The Chicago School' of sociology. Their interests were in the micro-issues of 'self' and 'social interaction'. Where Mead's (1934) study of 'self' (Section 2.0.1) provided SI's bedrock, Blumer's (1969) explored the modification of meaning through 'social interaction'. Blumer's three premises (Figure 1.1) acted as a synthesis of SI (Wallace and Wolf, 2006) and went on to 'serve as cornerstones of the interactionist perspective' (Sandstrom *et al.*, 2001: 5). He was credited by Wallace and Wolf (2006: 205) as having 'enthusiastically transmitted Mead's ideas'. McPhail and Rexroat (1979) and Wood and Wardell (1983) were more sceptical and called into question the consistency of beliefs and practices between the two proponents. Blumer (1980: 409), however, argued that McPhail and Rexroat's (1979) work carried 'serious misrepresentations'.

Coining the phrase 'Symbolic Interactionism', Blumer (1969) asserted that interaction went beyond instinctive actions, such as body language, to the intentional use of 'symbols' to represent and communicate meaning through 'words, objects and acts' (Charon, 2007: 52). These were necessarily predicated on 'the biographies and lived

experiences of interacting individuals' (Denzin, 1992: 24). Charon (2007) pointed out that while successful communication took place when both the giver and the receiver took the same meaning from the symbols used, the opportunity for misinterpretation was ever present.

The SI perspective developed across nearly a century through the exploration of varied contexts (Denzin, 1992; Fine, 1993) to the concerns of modern society (e.g Davis, 2014 [social media]; Denzin, 1985; 2007 [understanding emotion]; Robinson, 2007 [cyberself]). A research community, named the *Society for the Study of Symbolic Interaction* (SSSI), formed in 1974, maintains the *Symbolic Interaction* journal and holds conferences in North America and Europe. Its website (SSSI, 2015) claims that:

Many sub-disciplines within the social sciences have been influenced by symbolic interactionism, including the sociology of emotions, deviance/criminology, collective behavior [sic]/social movements, feminist studies, sociological versions of social psychology, communications theory, semiotics, education, nursing, mass media, organizations, and the study of social problems.

While the perspective has been criticised for its focus on micro-issues (Fine, 1993; Sandstrom *et al*, 2001) there is evidence that the macro-micro divide in SI has been bridged. For example, Fine (1993: 68) cited instances of SI being used to investigate organizations 'from the bottom up; that is, macro-structures...understood from a micro-analytic foundation'. Similarly, Dennis and Martin (2005) discussed studies in deviance and education that had investigated the macro-issue of power. Crossley (2010) and Salvini (2010) more recently identified the importance of tackling the complexities of interactions within organisations. They suggested that *Social Network Analysis* could be used to support SI investigations (Section 3.4.2). This would, Crossley (2010: 357) argued, allow SI researchers 'to think of national and perhaps even international societies as networks of interaction that, irrespective of population size, nevertheless have a small diameter'.

Blumer's (1969) three premises have continued to both encapsulate the SI perspective (Crotty, 2003; Wallace and Wolf, 2006) and serve as 'the conceptual Rosetta stone of symbolic interactionism' (Snow, 2001: 368). Succinctly, they identify the centrality of the actor's interpretation of a situation and that interaction with others has the potential to alter the actor's prior interpretations through a reflective process.

These three premises provide the framework for my research and are discussed further in the next two sections.

3.2 My research questions¹¹

3.2.1 Main research question

The main research question encapsulates my study of students' perceptions and experiences of *feedback*:

Main question:

In what ways do undergraduate primary student teachers gather, understand and interpret feedback through their personal and professional networks and to what extent does feedback influence their reflective practices?

I am aware that student teachers *gather* feedback through their *personal and professional networks*. As an HEI tutor, I noticed that many students sought feedback on their academic work through peers, friends and family members. For example, it was not unusual for final year (i.e. capstone) research projects to acknowledge the support of students' personal networks. Similarly, within professional contexts of primary schools and early years' settings, I witnessed students nurturing relationships with teaching and support staff as well as parents and children. The informal 360° feedback provided by these sources served to complement the formal feedback provided by link tutors and school-based mentors¹². However, while some students appeared adept at gathering purposeful feedback from a range of sources, others appeared reticent or unable to gather feedback that supported their learning and development. If feedback means different things to different people on different occasions, the outcomes of the National Student Survey statements on assessment and feedback (HEFCE, 2015) may be thrown into sharp relief (Section 2.1.3).

Additionally, the gathering of feedback cannot be seen as an end in itself. The meaning attributed by the giver, needs to be *understood* by the receiver through dialogues that use words as socially defined symbols. The feedback can then be *interpreted* by the self through, in SI terms, an internalised 'conversation of gestures' (Mead, 1934: 167).

¹¹ The main research question and the four sub-questions of the thesis are repeated in text boxes at several points throughout the thesis for ease of reference.

¹² See Glossary of Terms A

It is the outcome of this ‘interpretative [sic] process’ (Blumer, 1969: 2) within future contexts which might expose the *extent* to which feedback has *influenced* the individual. In this study, I explore the influence of feedback in the context of ‘*reflective practice*’, which I identified as a threshold concept (Land *et al.*, 2005; Meyer *et al.*, 2010; Meyer and Land, 2003; 2006a; 2006b) in ITE (Section 2.3.5).

Four sub-questions delve more deeply into the issues raised within the main question. Each is framed by Blumer’s (1969: 2) three premises of SI.

3.2.2 Subsidiary question 1

<p>Premise 1:</p> <p><i>Human beings act towards things on the basis of the meanings that things have for them.</i></p> <p>Blumer (1969: 2)</p>	<p>Thesis sub-question:</p> <p>1. What do ‘feedback’ and reflective practice’ mean to students?</p>
--	--

Blumer’s (1969: 2) definition of ‘things’ was eclectic:

...everything that the human being may note in his [sic] world – physical objects, such as trees or chairs; other human beings, such as a mother or a store clerk; categories of human beings, such as friends or enemies; institutions, as a school or a government; guiding ideals, such as individual independence or honesty; activities of others, such as their commands or requests; and such situations as an individual encounters in his [sic] daily life.

He proposed that, in SI, the meaning ascribed to ‘things’ is pivotal to how individuals act towards them. For example, while at home I might use a table as a support for a laptop computer when writing or as a focal point for food when entertaining, but within a teaching situation I might use it as a seat, to raise myself above the level of my students in an informal manner. A table remains a table, but I act towards it in different ways according to the meaning it has for me.

Rather than defining ‘feedback’ and ‘reflective practice’, I wish to explore the meanings these have for students and how individuals act towards these meanings. To do this, I will be guided by my own interpretation which draws upon autobiography that includes relevant literature and personal experience. While this has the potential to provide insight, it may also prove to be a limitation to the study if I fail to

comprehend the meanings assigned to ‘things’ by the students in my sample. Careful consideration of research methods would be necessary (Section 3.4.3).

3.2.3 Subsidiary questions 2 and 3

<p>Premise 2:</p> <p><i>The meaning of such things is derived from, or arises out of, the social interaction one has with one’s fellows</i></p> <p>Blumer (1969: 2)</p>	<p>Thesis sub-questions:</p> <ol style="list-style-type: none"> 2. In what ways does social interaction through personal and professional networks enable student teachers to gather feedback? 3. In what ways do student teachers make meaning from the feedback they gather through social interaction?
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Blumer’s (1969: 5) discussion of SI sees meanings as ‘social products...creations that are formed in and through the defining activities of people as they interact’. Therefore my second and third sub-questions explore who students interact with and the ways in which their social interaction makes meaning from ‘feedback’.

Technology has moved on apace since the three premises of SI were conceived. Student teachers may now have regular contact, via mobile devices and Web 2.0 technology, with a far larger network than I experienced at the same stage of my journey. How students form and use their ‘networked individualism’ (Wellman, 2001) and ‘personal communities’ (Chua *et al.*, 2011:102), might determine the nature, frequency and quality of the feedback they gather. Students’ willingness and ability to make meaning from the feedback provided through their networks might raise issues around social interaction such as trust, reciprocity and empathy that transcend the dialogue identified as pivotal to creating a ‘social product’ (Blumer, 1969; Molloy *et al.*, 2013; Nicol, 2010).

The ability to capture the ever-changing nature of individuals’ social networks is a potential limitation of my study. Similarly it may prove problematic to capture the cumulative effects of ephemeral interactions and the extent to which these are used by individuals.

3.2.4 Subsidiary question 4

Premise 3: <i>These meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things [she/]he encounters</i> Blumer (1969: 2)	Thesis sub-question: 4. In what ways do students interpret and use the feedback they encounter?
--	---

Echoing Mead's (1934) two phases of the self, the creative 'I' and acted upon 'me' (Section 2.0.1), Blumer's third premise focuses on the interpretive processes used by an individual to make sense of the meaning derived through social interaction. Blumer (1969: 5) identified these processes as formative and comprising two steps. With the first step, the individual 'has to point out to himself [sic] the things that have meaning'. With the second step, the individual 'selects, checks, suspends, regroups, and transforms the meanings in light of the situation in which he [sic] is placed and the direction of his [sic] action'.

Accessing internal processes presents a methodological challenge with potential limitations to the study. It necessitates students' willingness and ability to identify and express their thoughts about 'feedback' and to relate these to prior understanding. Capturing evidence of such formative processes will require access to the students' thoughts as soon as feedback is gathered. It will involve a high level of trust in the researcher and the application of high ethical standards which will include sensitivity, informed consent, confidentiality, anonymity and the right to withdraw (BERA, 2011). My steps towards capturing these data are now discussed.

3.3 My methodology

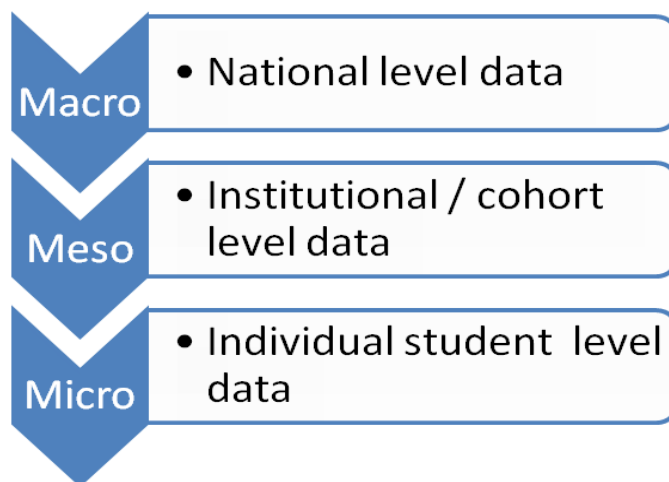
- What *methodology* governs our choice and use of methods? (Crotty, 2003: 2)

3.3.1 Research design

My study seeks 'to catch and represent the voices, emotions, and actions of those studied' (Denzin 2001: 1) and present a narrative collage using thick description

(Denzin and Lincoln, 2003; Kostera, 2006). It drills down to the biographies and networks of seven students taking a three-year BA QTS in Primary Education programme at Hope University.

Figure 3.1: Levels of research



To contextualize the students' experiences, my research design operates at three levels to consider research questions derived from Blumer's (1969) three premises of SI (Figure 1.1). I identify these levels as macro, meso and micro (Figure 3.1). At the macro level, I consider, through the literature, students' experiences of feedback through the statistical, secondary data sources of the NSS, for the HEI sector in England in general and ITE in particular (Section 2.1.3). At the meso level, I examine the NSS data for Hope University in general and the university's BA QTS in Primary Education programme in particular (Section 3.4.1). I then employ primary data collection methods (Section 3.4) to investigate, through surveys and questionnaires (Sections 3.4.1; 3.4.2), the views and relationships within the 2011-12 entry cohort on the identified programme. At the micro level, I use the primary data collection methods of interviews and diaries (Sections 3.4.3; 3.4.4) to ascertain the 'voices, emotions and actions' (Denzin 2001: 1) of seven students within this cohort. Fine (1993: 68) cited instances of SI being used to investigate organizations 'from the bottom up; that is, macro-structures...understood from a micro-analytic foundation'. Similarly, my study seeks to gain a better understanding of each level by closer examination of those below it, using the structure of Blumer's three premises.

Figure 3.2: Research design

Year	Year 1		Year 2						Year 3		
Terms	Summer 2012		Autumn 2012		Spring 2013		Summer 2013		Autumn 2013	Spring 2014	Summer 2014
Programme	School experience 1	Academic assessment	Taught sessions	School experience 2	Taught sessions & academic assessment	Taught sessions & academic assessment	Enrichment experience	Academic assessment	Taught sessions	School experience 3	Academic assessment
Pilot studies	Surveys & Questionnaires	Interview questions	Summer vacation			Diaries		Interview questions	Summer vacation		
Surveys & Questionnaires		SNA 1			NSS 1						
Volunteer sample recruitment			A		B						
Interviews			A1		A2 & B1			A3 & B2			
Diaries					A and B						

3.3.1 Timeframe

Research methods literature identifies the need for pilot studies to refine and develop the research design (e.g. Cohen *et al.*, 2011; Lankshear and Knobel, 2004). I would argue that pilot studies expose and develop the researcher's 'self' (Mead, 1934). The pilot study is a crucial part of the research journey that moves beyond the instinctive 'I' to the reflective and questioning 'me' through identifying and resolving issues in preparation for final data collection. Piloting does not simply develop the quality of the study, but demonstrates the commitment and professionalism of the researcher. For this reason, I developed an undergraduate course at Hope University to give non-ITE students experience of the research environment through the piloting of surveys, observations and interviews. The naivety of the students' 'I' exposed for me the complexity of the research methods and how the students' approaches could remain at a superficial level unless challenged. Through experience of piloting within a safe, ethical environment, the students were awoken to the differences between, for example, a conversation and the research interview as a conversation that has structure and purpose (Brinkman and Kvale, 2015). This challenge developed their 'me' and exposed their differing levels of critique.

I piloted research methods throughout my studies (Section 4.0.1; 5.0.1). This built my confidence and skills in research techniques and gave me the opportunity to refine and retest my practice. The pilot studies also gave me a greater understanding of the research population and sample and how to work with students as a researcher rather than a tutor.

The structure of my research design is provided at Figure 3.2. A longitudinal approach was chosen to enable the ways in which student teachers gather, understand and interpret feedback to be researched across a range of academic, professional, informal and formal contexts. These included the use of formative feedback during taught sessions, feedback from summative academic assessments and formative and summative feedback during *School Experience* and *Enrichment Experience* placements. The approach also afforded the opportunity to explore changes to cohort (whole/complete) networks and individual (ego) networks (Prell, 2012) as students' approaches to feedback developed between Summer Term 2012 and Summer Term 2014.

The collection of individual student data was carried out during 2012-13, which was the second year of study for the BA QTS students in my sample. This was chosen for two reasons. Firstly, my professional experience suggested the second year was a 'transitional' year between entry to higher education and exiting into the teaching profession. It offered the potential to provide developmental evidence of students' approaches to feedback. Secondly, I considered this to be an under-researched year group in relation to the feedback literature, where research through first year experience and final year graduate attributes featured more dominantly.

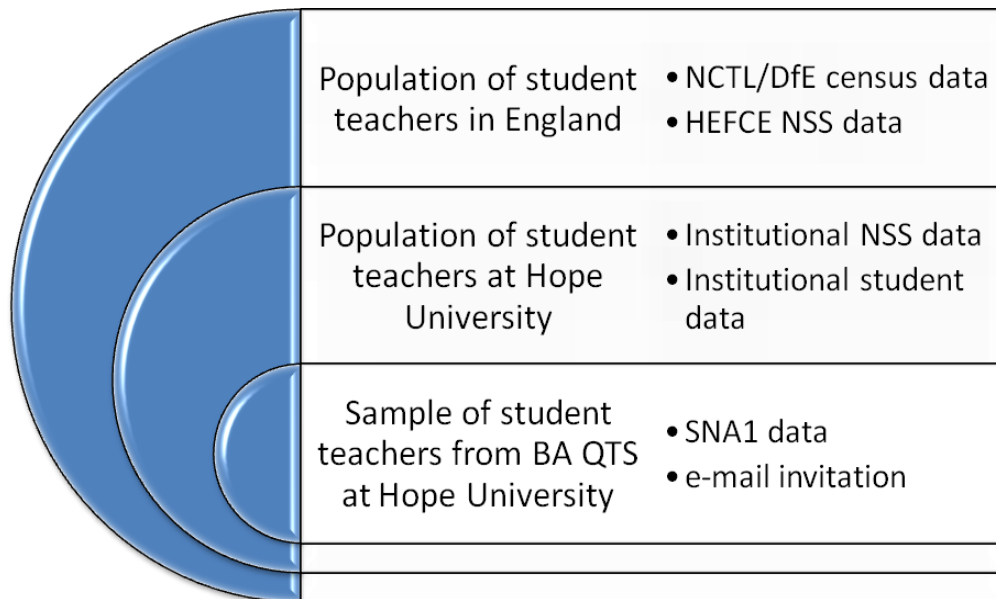
The period of research also coincided with the *Independent Review of Higher Education Funding and Student Finance's* (Browne, 2010) implementation. Along with the political costs of the review, commissioned under a Labour government and reporting to the newly formed Conservative-Liberal Democrat Coalition government (e.g. Wintour and Mulholland, 2012), it became a significant milestone for undergraduate students, leading to wide-scale protest and condemnation (Coughlan, 2010; Mansigani *et al.*, 2010). Nevertheless, a narrow House of Commons vote of 323 for and 302 against (HC Deb, 2010), resulted in increased capped tuition fees from just over £3,000 to £9,000 for those starting higher education programmes from 2012-13. The 2011-12 entry cohort students at the heart of my research were to be in the final year of the lower fees.

3.3.2 Population and sample

I planned to undertake my research of student teachers' experiences and perceptions of feedback at two levels, which I defined as cohort level and individual student level (Sections 3.4.1; 3.4.2). Consequently, I first explored the population of student teachers in England, before focusing specifically on those within a single cohort of Hope University's BA QTS programme, from which I aimed to derive a sample of 12 students. Both levels were subsets of previous populations (Figure 3.3). Cohen *et al.* (2011) state that sampling from a total population can provide knowledge that is representative of the population. This was applicable at cohort level where quantitative data was used (Section 3.4.1), but representativeness was not appropriate at individual student level. This part of my study focused on qualitative, biographical accounts and the perceptions of individuals within the interpretive paradigm (Basit, 2010; Punch, 2009). The size of the student sample was, however, determined in relation to population and non-probability approaches.

It was based on purposive and volunteer sampling (Basit, 2010; Cohen *et al.*, 2011, Lankshear and Knobel, 2004; Punch, 2009).

Figure 3.3: Deriving the sample



My initial intention was to determine the primary ITE entry population for 2011-12 using the *National College for Teaching and Leadership's* (NCTL) census data (DfE/NCTL, 2015) before identifying the same population's NSS data on exit in 2013-14 in relation to the survey's assessment and feedback statements (HEFCE, 2016). I then planned to taper my exploration of the research population by focusing on secondary data from Hope University, the BA QTS programme and its 2011-12 entry cohort. However, several aspects of this approach proved far from straightforward.

The executive agency of the DfE, *The National College for Teaching and Leadership*, publishes annual census data on teacher trainee numbers (DfE/NCTL, 2015). During the 2011-12 academic year, 19,440 of 35,750 first year students on ITE programmes were training to teach in primary schools. This represented nearly 55% of trainees across the school sector.

Exit data from the NSS was more elusive. HEFCE's online NSS search facility (HEFCE, 2015) catered only for the years 2005-2013. It did not allow primary student teachers to be identified, although more detailed levels of data were collected in relation to teacher training (Bowers, 2015). Some 7,000 training teachers completed the NSS in 2012 [n = 7,011] and 2013 [n = 7,262] (HEFCE, 2015). These

were X100 'Training Teachers' on the Joint Academic Coding System (JACS) (Appendix B) and represented a wider range of ITE experiences than primary alone.

Although it did not address the data I had initially aimed to identify, Hope University's NSS data from 2012-2014 proved more transparent. This source established populations for the HEI sector as a whole and for all eligible programmes at Hope University, drawn from across the disciplines. It also provided population data specific to the university's BA QTS in Primary Education (Table 3.1).

Table 3.1: NSS 2012-2014 populations for BA QTS Primary Education at Hope University

Academic Year	2012	2013	2014
Population of HEI sector	395883	412033	422085
Population of Hope University	3777	4037	3731
Population of BA QTS Primary Education at Hope University	113	110	100

Table 3.2: Number of active students in 2011-12 entry cohort of BA QTS in Primary Education at Hope University

Academic Year	2011-12	2012-13	2013-14
Number of 'active students' in Course A	115	101	99

I then focused upon the 2011-12 entry cohort of the BA QTS in Primary Education. Having sought permissions from the programme leader and head of department, I used Hope University's student database to determine any variations to the cohort's 'active student' population across the three years of study (Table 3.2). My findings are discussed in more detail at Section 4.1.1. Statistics for Course A, taken at each year of the programme by all students, showed that the population of the 2011-12 entry cohort decreased with each of the three years of the programme. The

inconsistency between NSS eligibility and Course A study in 2014 was accounted for by one student returning to complete the year having previously passed Course A.

Drawing upon this population, I used purposive sampling to identify students within dyadic and triadic relationships based on the outcomes of the first Social Network Analysis (SNA) survey of the cohort SNA1 (Section 3.4.2). Purposive sampling enables researchers to 'hand-pick the cases to be included in the sample on the basis of their judgement of their typicality or possession of the particular characteristics being sought' (Cohen *et al.*, 2011: 156). I chose to use students who appeared to provide mutual support for feedback in order to research the nature of the support. At approximately 10% of the cohort population, I considered 12 students appropriate as it allowed for potential 'drop out' during the longitudinal period of research. I aimed to employ volunteer sampling to recruit by invitation until a sample of 12 students was reached, contacting those I had identified by email. However, while advantageous as an approach to non-probability sampling, a purposive sample may influence research outcomes as it is based on researcher choice. This serves to emphasize that the study is relatable rather than generalizable as a different sample may have identified a different range of issues.

3.4 Primary research methods

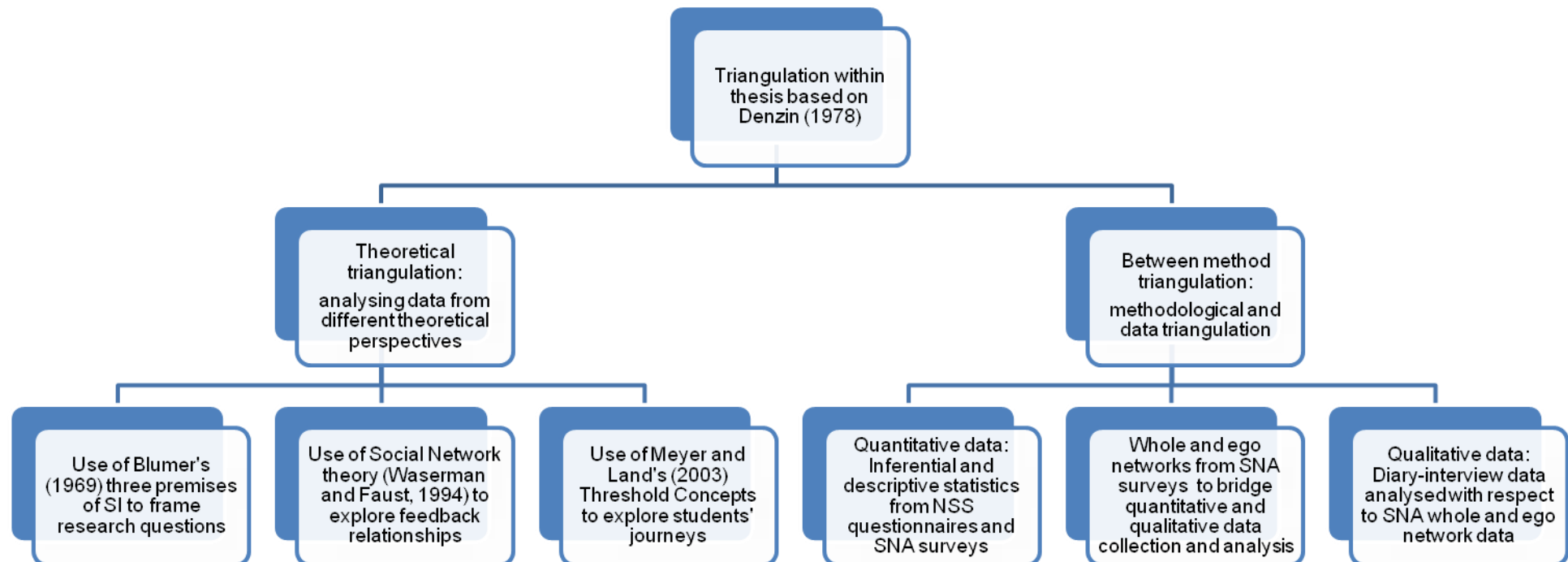
- What *methods* do we propose to use? (Crotty, 2003: 2)

3.4.0 Triangulation

My primary research methods fell into the two categories of quantitative and qualitative data collection, based on exploration at cohort and student levels (Section 3.3.3). They combined with secondary data from sources such as DfE/NCTL (2015), HEFCE (2015) and Hope University.

While quantitative data collection sought to provide an holistic backdrop to the study, qualitative approaches enabled a longitudinal study of individuals' feedback experiences. Each of the four primary research methods used aimed to provide a unique insight, but the mixed methods combination supported the validity of the study through triangulation. Indeed, Cohen *et al.* (2011: 195) stated that:

Figure 3.4: Triangulation within my study



...triangulation techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and, in doing so, by making use of both qualitative and quantitative data.

Denzin (1978: 340) considered that triangulation went further than the use of multiple methods of inquiry, introducing the notions of theoretical triangulation, data triangulation and investigator triangulation. Where the first analyses data from different theoretical perspectives, the second draws upon 'multiple sampling strategies' to extend coverage and the third seeks to reduce researcher bias by using 'multiple observers'. Denzin identified methodological triangulation as either 'within-method' or 'between-method' and stated that the combination of several approaches to triangulation is termed 'multiple triangulation'.

Using Denzin's (1978) terminology, my research is triangulated at two levels (Figure 3.4). Firstly, it employs theoretical triangulation by fusing together several distinct theoretical ideas through the exploration of students' perspectives of feedback. These include SI, SNA and threshold concepts. While there is evidence in the literature of some bridges being made between SI and SNA (Crossley, 2010; Salvini, 2010) this study appears unique in connecting both of these areas with threshold concepts. Secondly, it employs 'between-method' methodological triangulation and data triangulation. This is based on a variety of data collection and analysis methods across the quantitative/qualitative divide, to gain an overview of the student population's perspectives on feedback before exploring the lived experiences of a sample of students. The data collection results in descriptive and inferential statistics that are used in combination with narrative accounts of students' experiences and perceptions.

3.4.1 Questionnaire: T-test at cohort level

In research, the terms 'questionnaire' and 'survey' are often used together (Punch, 2009) or in relation to one another (Cohen *et al.*, 2011) and both are considered to afford scale and the production of 'factoids' (Lankshear and Knobel, 2004: 167) over depth of enquiry (Basit, 2010). However, within this study I use the terms to distinguish between two forms of data collection. I use 'questionnaire' to refer to data collection that replicates the National Student Survey (NSS) assessment and

feedback statement responses (Section 3.4.1). I use 'survey' to refer to data collection for the social network analysis element of my study (Section 3.4.2).

The NSS includes five statements on assessment and feedback (Section 2.1.2). Final year undergraduate students in HEIs are asked to respond to these using an ordinal, 1-5 Likert scale to ascertain their satisfaction with the statements from 'definitely agree' through to 'definitely disagree'. They are also given the opportunity to add free-flow comments (NSS, 2015). The NSS data collection occurs each spring, with the twelfth annual survey taking place between 11 January and 30 April 2016.

At the meso level, NSS data from Hope University (Figure 3.5) and the BA QTS (Figure 3.6) demonstrate similar national trends in relation to the feedback statements. With greater respondent numbers (c. 10,000) across a range of disciplines, the institution shows a level of stability from year to year which is less evident in the BA outcomes. With lower respondent numbers (c. 75), the latter is more susceptible to variations in responses based on programme issues, such as changes to the mode of summative feedback from physical to online, assessment approaches and staffing. Students who formed the population for my study completed the NSS in 2014 (Section 3.4.1).

Figure 3.5: Hope University NNS outcomes 2010-15

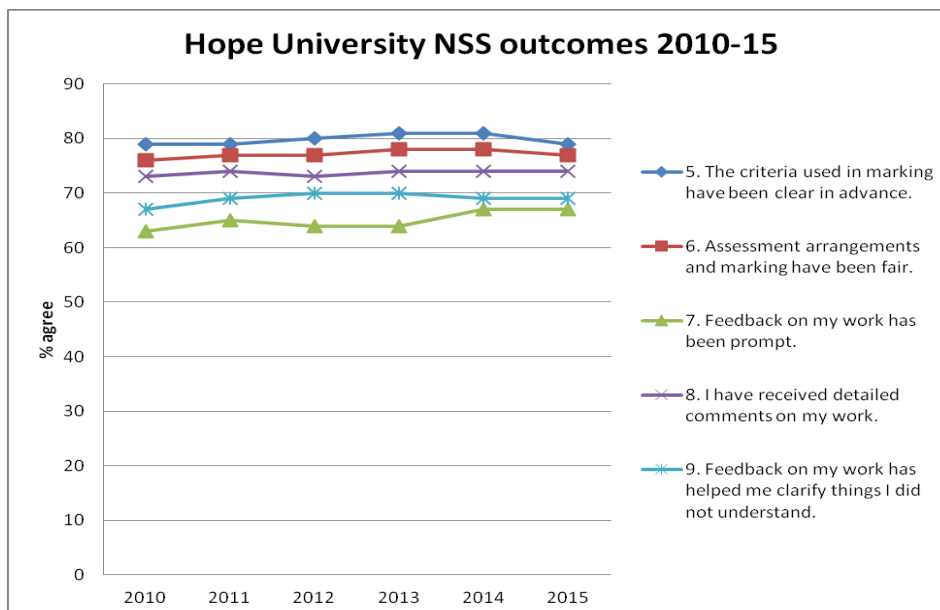
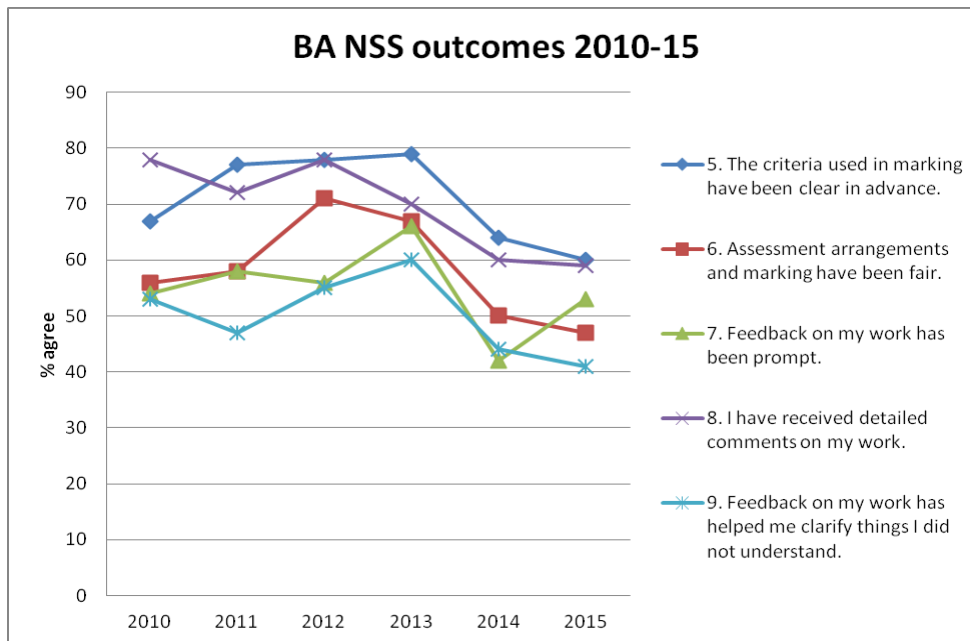


Figure 3.6: BA NSS outcomes 2010-15



Year-on-year outcomes in assessment and feedback on the BA QTS caused concern (Figure 3.6), with suggestions that the five statements steered students towards academic rather than professional elements of the programme. NSS data collection coincided with students' final school experience placement and commensurate absence from academic study. Internal data collection sources cited by the programme leader, suggested students valued the frequent, dialogic feedback of professional contexts that were more reminiscent of the high levels of teacher-child interaction advocated by the programme. Students may have responded less favourably to the more formal and infrequent, written feedback within the BA QTS's academic elements.

With NSS data collection taking place part way through the third year, the second year of the degree appeared highly influential in building levels of understanding and satisfaction in assessment and feedback as students gained familiarity in their application to professional and academic contexts. To provide a greater foundation to the qualitative investigations that formed the heart of my longitudinal study, I decided to use inferential statistics to investigate whether changes in student satisfaction took place across the second year of study.

Where descriptive statistics describe data and 'simply report what has been found' (Cohen *et al.*, 2011: 606), inferential statistics go beyond this 'to make inferences and predictions based on the data gathered'. The inferential statistics of the T-test are

used to determine whether statistically significant differences exist between the group means of a pre-test and a post-test (Cohen *et al.*, 2011). Where the paired T-test is used for data collected from the same group at different points in time, the independent T-test is used for two different groups. Of these two options, the paired T-test enabled exploration of the same cohort's satisfaction with the five NSS statements on assessment and feedback across their second year of study.

Drawing upon NSS data collection approaches of statements and an ordinal scale, I developed a T-test based on the null hypothesis that:

There is no significant change in student satisfaction in assessment and feedback across the second year of the BA QTS in Primary Education.

I labelled the first data collection point as 'NSS1' and the second as 'NSS2' (Figure 3.2). Both were timed to take place at the end of the first cohort lectures of the students' second and third years of study, at the start of the 2012-13 and 2013-14 academic years respectively. This decision was based on three key factors: firstly, to maximise the number of students reached; secondly, to enable prompt delivery and completion of the questionnaire; thirdly, to ensure that data collection took place across the second year of the BA QTS in Primary Education while remaining distanced from the students' completion of the NSS in Spring 2014.

I chose to replicate the wording of the five NSS statements and Likert scale as they existed in 2012. This enabled me to use statements that had already undergone extensive scrutiny (Section 2.1.3). I did not ask for free-flow comments to support decision making as the questionnaire was for quantitative hypothesis testing only.

To ensure that students' responses could be paired, it was necessary to devise a method of matching the responses of individual students across the two tests while maintaining students' anonymity for ethical purposes (BERA, 2011). I devised a combination of unique identifiers that I believed students would find straightforward to recall while allowing students to be distinguished from one another. My purpose was to ensure students of my commitment to their anonymity by avoiding the use of university identifiers and personal attribute data (see Appendix C).

While replication of the NSS statements and Likert scale may have provided some level of authority to my data collection, I was also cognisant of the potential

limitations of the NSS statements (e.g. Bennett and Kane, 2014; Callender *et al.*, 2014) and the limitations of questionnaire/survey methods generally.

As discussed previously (Section 2.1.3), the NSS statements on assessment and feedback have been identified as problematic. Additionally, the satisfaction levels which form the variables of the T-test may be given in response to different views or circumstances although the rationale for responses was not apparent. For example, although two students accessed assessment criteria on the same day, the prior knowledge of one may have given greater insight to its meaning than to the other and respond differently to Statement 5 (The criteria used in marking have been clear in advance). Similarly, two students with prompt professional feedback and delayed academic feedback may respond differently to Statement 7 (Feedback on my work has been prompt) based on personal tolerance levels. Response rates to questionnaires/surveys can be low (Bell, 2005; Burton *et al.*, 2008). Where marketing organisations often use incentives to encourage completion, this might come at the cost of superficiality (Lankshear and Knobel, 2004; Simmons and Wilmot, 2008; Singer and Couper, 2008). Such opportunities to increase response rates were not considered appropriate to the ethics of my study. As an online survey, the NSS increases response rates by using a range of strategies including postal or telephone completion with reminders of deadlines using email and text. I felt the limited replication of these NSS approaches would be appropriate within my study (Section 4.1.4).

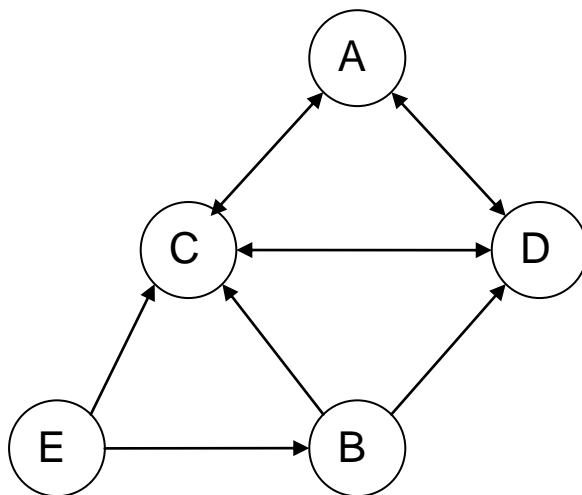
3.4.2 Survey: Social Network Analysis at cohort and individual student levels

Social Network Analysis (SNA) goes beyond attribute data to explore relational data and social structure, by asking individuals to identify relationships with others in response to one or more questions (Hawe *et al.*, 2004; Scott, 2013; Wasserman and Faust, 1994). As a quantitative method, SNA serves to highlight these relationships within a network. Analysis of the network can then expose issues such as power relationships, access to knowledge, position, prestige and expansiveness. The nature and extent of these relationships may then be subjected to deeper levels of interrogation using qualitative methods such as interviews.

Drawing upon terminology from sociology¹³ all individuals within a network are ‘actors’. The focal individual of study is identified as an ‘ego’ and those who have ties with the ego through a defined relationship are identified as ‘alters’ (de Nooy *et al.*, 2005; Howe *et al.*, 2004; Prell, 2012). SNA may identify the relationships between actors within a defined boundary, or may explore ties beyond this within an undefined boundary.

Figure 3.7: Sociomatrix and corresponding sociogram

	A	B	C	D	E
A		0	1	1	0
B	0		1	1	0
C	1	0		1	0
D	1	0	1		0
E	0	1	1	0	



Sociometric data are presented through a relationship grid called a sociomatrix, or a diagram called a sociogram (Figure 3.7). The latter provides a visual representation of a network which is described and analysed using terminology from graph theory, such as nodes, ties, arcs, dyads, triads, cliques, brokers and centrality. While small

¹³ See Glossary of Terms B

datasets can be presented and analysed 'by hand', software packages such as UCINET and PAJEK have been developed to enable interrogation of large, complex datasets (Borgatti *et al.*, 2002; de Nooy *et al.*, 2005). Whether the dataset is small or large, SNA explores 'the structure of relations and the implication this structure has on individual or group behaviour and attitudes' (Carolan, 2014: 7).

Sociometric data can highlight key issues regarding social relationships (Carolan, 2014). I was introduced to sociometry as a student teacher and, being familiar with the data collection technique, employed it during my first year of teaching to identify and analyse children's relationships (Appendix D).

Carolan (2014) identified four levels of analysis based on egocentric, dyadic, triadic and whole, or complete, networks. Egocentric networks are based upon interrogation of the immediate ties between the focal actor (ego) and other actors (alters) and the ties that might exist between these alters. Such analysis enables consideration of the strength and diversity the ties bring to the ego's subset of the whole network (Chua *et al.*, 2011; Wasserman and Faust, 1994). The egocentric networks in this study (Chapter 5) were extracted from the whole networks of the SNA1, SNA2 and SNA3 surveys (Chapter 4).

Dyadic and triadic ties form the basis of whole networks. Simmel (1950) noted that the strength of dyadic relationships, such as a marriage/partnership, could be brought into sharp focus when a third relationship was introduced. He considered the birth of a firstborn to be a testing point for the dyadic relationship but noted the potential for dyadic relationships within triads to strengthen the group overall. His ideas identified the positive aspects of cliques, groups where all members are tied by dyadic relationships. However, taking a negative approach, Krackhardt (1998; 1999) described such 'Simmelian ties' as both 'super strong and sticky' and 'ties that torture'. He viewed them as potentially constraining, with the ability to restrict members to group standards. Similarly, drawing on the metaphor that 'birds of a feather stick together', McPherson *et al.*, (2001) noted the existence of homophily, where similarities between group members breed connections. While this appeared to provide strength in the shared understanding of information, McPherson *et al.*, (2001) indicated that actors in groups could become introspective by ignoring or failing to identify information from other sources that would challenge and develop their entrenched views.

At the level of whole network analysis, Granovetter's (1973) much cited work on the strength of weak ties placed importance on information flow. He moved away from studies focused on groups formed of strong dyadic connections to consider how weak ties provided diversity of information that and may serve to challenge and expand actors' perspectives. Resonating with theories of legitimate peripheral participation and social constructivism (Lave and Wenger, 1991; Vygotsky, 1978), actors would benefit from a multiplicity of connections from paths across the network. Tortoriello and Krackhardt's (2010: 167) article on cross-boundary knowledge served to emphasise how 'bridging ties' aided information flow and were 'conducive to the generation of innovation'. In some cases, bridges also served as brokers, providing or denying information flow around 'structural holes', an aspect of SNA defined by Burt (1992: 18) as 'the separation between non-redundant contacts'.

It appeared that close ties, coupled with opportunities to gather information from a range of network sources, might offer a balance of confidence building, challenge and innovation for the student teachers within my study. I determined to access sociometric data from the 2011-12 cohort to explore the whole network. This would allow me to investigate egocentric networks of the student sample, examine dyadic and triadic relationships and consider how information flow across the network might affect students' approaches to feedback.

Although software packages now enhance the manageability of SNA data presentation and analysis, Wasserman and Faust (1994) note that the question(s) asked and response(s) made remain pivotal to SNA data collection as these determine validity and reliability. They cite questionnaires as the most common form of SNA data collection which, as noted early (Section 3.4.1), are not without their problems. Questionnaires are noted for their low return rates (Cohen *et al.*, 2011) but high return rates are necessary for SNA data to be considered reliable, with Cronin (2014) recommending a 70%+ return rate. SNA questionnaires also need to include the name of the respondent and result in the names of others, posing ethical issues as anonymity cannot be maintained (BERA, 2011). Although it is essential to follow ethical principles of informed voluntary consent, respondents' refusal to provide data also reduces the return rate and reliability of the data. A further issue of SNA reliability comes with the nature of social networks and the ebbs and flows of ever-changing relationships. Wasserman and Faust (1994) noted that while that the stability of variables over time identified in 'test-retest' approaches may raise issues

with sociometric data, the literature provides no definitive solutions. Nevertheless, Wasserman and Faust, (1994) noted that valued data, including questions about intimate relationships and aggregate measures such as popularity, have been shown to provide greater reliability. On the other hand, fixed choice approaches, including questions about less intimate relationships and the choices of individual actors, have appeared more problematic.

Although I planned to repeat the same data collection exercise at three points across the longitudinal study, this was to provide insight rather than to test reliability. Each dataset would represent a moment in the students' lives. The longitudinal SNA data may demonstrate stability or variance in relationships within the egocentric networks of the student sample and would be complemented by qualitative data collection (Sections 3.4.4; 3.4.5). It would offer research into feedback across a period of time which Evans (2013) had identified as lacking (Section 2.1.4).

To give access to valid relational data, the questions posed needed to indicate with clarity the nature of the relationship being investigated. Pilot studies (Sections 4.0.1 and 5.0.1) enable questions to be tested and amended but they cannot alleviate the range of interpretations based on respondents' experiences of the subject matter or understanding of the language used.

Similarly, respondents may be provided with a list, or roster, of names from which to choose or be asked to undertake free recall of those within a defined boundary. However, the latter poses issues in relation to the questioner's description and the respondent's knowledge of the stated boundary and the former may result in a superficial level of response with little regard for the quality of data to be provided. For some respondents, the boundary parameters may be restrictive. The questioner needs to determine whether or not to use a defined or an undefined network boundary and anticipate the effect this may have on the presentation and analysis of data.

In view of these issues, I devised an SNA survey to collect binary, relational data based on those who had 'provided feedback or helped [the respondent] to interpret the feedback [they had] received' (Appendix E) throughout a year of study, I asked students to use recall to identify a constrained choice of three other students within the defined boundary of the 2011-12 entry cohort to the BA QTS in Primary Education at Hope University.

Additionally, I used the survey to elicit relational data that could be considered through descriptive statistics and which could be explored at an individual level through diary-interview methods (Section 3.4.3). This data went beyond the defined boundary of the cohort and, recognising its potential diversity and to support all respondents in identifying relationships, I provided a combination of roster and free recall, with the opportunity for free or unconstrained choice. My exploration of students' feedback networks was directed at academic, professional and personal levels. The survey itemised a range of academic and professional roles encountered by BA QTS students at Hope University (i.e. university tutors, link tutors, school placement mentors, school placement teachers and other practising teachers who were not associated with school placements). It also itemised a range of possible personal feedback networks with peers (i.e. student teachers studying at a different institution, students studying for a different degree at Hope University and friends not studying for a degree) before asking respondents to identify by role any family members who provided or supported feedback (Section 4.1.3).

3.4.3 Diary-interviews and symbolic interactionism

Denzin (2001: 65) stated that 'interpretive interactionists attempt to live their way into the world of those they investigate', a goal he considered to be shared by participant observers. Similarly, Woods (1992: 369) identified ethnographic approaches, such as participant observation, as 'most appropriate' for symbolic interactionists. More recently, Crossley (2010: 353) commented on the use of methods spanning SNA and SI with SNA 'sandwiched between two slices of more conventional, interactionist-type observation and analysis'. However, I considered that the 'conventional' participant observation approach would be inappropriate to my study for two reasons. Firstly, from an ethical standpoint it was important to recognise my relationships with the student teachers who formed my research sample. They knew me as a tutor from the first year of their Course A studies. Although I had distanced myself from any such relationships with the students after this, my role as an inconspicuous participant-observer would have been compromised. Secondly, such a role would have been logistically impractical for me to maintain without taking a longitudinal period of leave from my professional duties. In Woods' (1992: 375) words, I needed to find research method that would enable 'involvement, immersion and empathy on the one hand and distance and scientific appraisal and objectivity on the other'.

I was drawn to Zimmerman and Weider's (1977: 484) suggestion that the diary-interview approach casts 'subjects as both performers and informants' and offered parallels with participant observation and life history methods. It provided an insider's perspective through key informants (Cohen *et al.*, 2011; Lankshear and Knobel, 2004; Punch, 2009). It seemed that this approach would enable me to carry out research within acceptable ethical and logistical parameters, to gain access to research data while cultivating 'social distance' (Woods, 1992: 375-6). Where Alaszewski (2006) identified diaries as regular, personal, contemporaneous records that are created by an individual, Corti (1993: 1) suggested that in combination with 'detailed questions about the diary entries', interviews can become 'one of the most reliable methods of obtaining information'. Both offered access to students' narratives and perceptions (Labov, 1972; Linde, 2001; Riessman, 1993). The combined approach offered triangulation that would strengthen validity (Basit, 2010; Denzin, 2006; Pitman and Maxwell, 1992; Punch, 2009) but this alone would not alleviate my need to recognise that, as a researcher, I have a 'self' – an impulsive 'I' and socialized 'me' (Mead, 1934) - that interacts with others, interprets symbols and instils meaning (Woods, 1992). Additionally, I was cognisant of Wolcott's (1992: 21) warning that although interviewing offered peoples' views on what '*should be*', observation was 'more likely to reveal how things *are*'. I would need to recognise and balance these potential limitations within my analysis (Section 5.6).

3.4.4 Diaries at student level

When used in research, diaries may provide secondary or primary data, falling into the two categories which Lankshear and Knobel (2004: 246) refer to as 'extant texts or documents' that exist independently of the study taking place and those generated for the purpose of research.

Extant diaries are often employed within the genre of personal narrative or biography (Creswell 1998). They provide a chronology of events of particular relevance to the author, often demonstrating the interconnection between events of wider importance and those of the individual's everyday life (Corti, 1993; Massobs, 2015; Roberts, 1998) and highlighting 'epiphanies', the problematic experiences in a person's life (Denzin, 1989). As a source of documentary evidence (Punch, 2009), diaries can offer a unique insight into the lives of individuals at two levels. While providing an

outer world of events as they have been experienced, they can also offer the individuals' reactions and interpretations through inner worlds of thought built on personal beliefs and previous encounters (Bochner, 2001; Denzin, 1989). This combination of recorded events and personal commentary is unlikely to be achieved as effectively with the use of any other research tool, as diaries are usually completed shortly after the event (Cohen *et al.*, 2011). Similarly, diarists as diverse as Samuel Pepys (Pepys, 2015), Tony Benn (Benn, 1995) and Michael Palin (Palin, 2006) have provided longitudinal sources which demonstrate developments in ideas and relationships while capturing ever-changing situations (Bailey, 1987).

As a secondary data source, extant diaries provide a static text to explore and analyse. However, beyond the need to determine authenticity, the content of the diaries may lack direct relevance to the research (Alaszewski, 2006; Basit, 2010). Additionally, the reliability of diaries may be questionable without access to other data sources. For example, diaries are seldom used alone in historical research as triangulation offers the opportunity to compare evidence of experiences and interpretations (Massobs, 2015; Tosh, 2006). As the use of extant diaries for research purposes is likely to be influenced by the researcher's selection and interpretation of the data (Creswell 1998), when diarists are no longer available to be questioned, the researcher needs to tread with caution to avoid inferred or unascribed meaning.

Diaries generated for the purpose of research, also referred to as commissioned diaries (Burton *et al.*, 2008), participant journals (Lankshear and Knobel, 2004) or solicited documents (Basit, 2010; Burgess, 1984), afford the opportunity to ensure authenticity and focus content. Although Bell (2005: 173) claimed that 'research diaries are not personal records of engagements or *journals of thoughts and activities*, but records or logs of professional activities' [my emphasis] this view is thrown into question by others. Basit (2010: 146), for example, considered this was a traditional approach but that solicited diaries were increasingly used for research participants to note down 'their perceptions and experiences'. Similarly, while distinguishing them from the reflective journals used by practising teachers, Lankshear and Knobel (2004: 255) indicated that participant journals 'can offer helpful insights into his or her thoughts [and] signal changes over time in thinking or self-perceived mastery of something'.

My choice of research diaries aimed to build upon their positive features, while acknowledging and endeavouring to alleviate as many as possible of their negative issues. Within my study, diaries provided the opportunity to gain access to the students' perceptions and experiences across a period of six to eight months. While I hoped that each of the 12 students in my sample would provide a minimum of four entries during this time, I was also aware that this required ease of execution and a level of commitment to the research process. Following the advice of Basit (2010), I offered a choice of diary formats to encourage diary completion and provided prompts.

Although diaries are still considered as a written medium, Basit (2010) notes that this method does not suit all participants, suggesting that personal comfort with the medium is important while avoiding their production becoming burdensome (BERA, 2011; Lankshear and Knobel, 2004). The use of audio, video and weblogs has increased with the ease of access to media, highlighting their value for research purposes (e.g. ELESIG, 2015; Headington and Ptashko, 2011). The *Communications Market Report for 2014* (Mobile Operators' Association, 2015; Ofcom, 2015) reported that 93% of the UK population had mobile phones, with 26% of 16-24 year olds and 28% of 25-34 year olds using mobile phones as their sole form of telephony. The increased use of mobile devices has led to 57% of adults using phones and 35% using tablets for internet access. As many of the student sample used mobile devices that featured high quality audio and video recording, email facilities and access to weblogs, I felt it appropriate to encourage them to pilot and use the format(s) with which they felt most comfortable and confident. This provided the opportunity for students to complete diary entries shortly after any event they deemed of value and forward them to me directly. I would then be able to keep the files securely on a personal computer (BERA, 2011: 26).

I aimed to provide prompts for diary completion (Appendix F) via emails. This had a dual purpose. Firstly it reminded students to complete diary entries across the period of the study, whilst still ensuring they were completed voluntarily (Bell, 2005; BERA, 2011; Lankshear and Knobel, 2004). Secondly, it allowed me to steer the diary entries to issues of relevance to my research, particularly the interactions with their personal networks and the meanings they derived from feedback. However, such prompts could also be detrimental, putting undue pressure on participants to respond, creating greater engagement with research issues than may have been the

case or curtailing the individuality of their responses by being too prescriptive (Basit, 2010; Lankshear and Knobel, 2004). I endeavoured to design the prompts to be as open as possible, referring to the programme's timeline and the academic and the professional feedback situations students may have encountered. Additionally, I asked students to personalise their responses, bringing in other forms of feedback they considered relevant, including events, epiphanies and interactions with others. I determined not to define 'feedback' or 'reflective practice' to allow students, particularly for those using the spoken word, to interpret the terms as they chose using a 'think-aloud' approach (Lankshear and Knobel, 2004; van Someren *et al.*, 1994).

3.4.5 Interviews at student level

Brinkman and Kvale (2015: 5) state that 'an interview is a conversation that has a structure and purpose'. With their focus on questioning and listening with the aim of gathering knowledge, research interviews have been considered by Brinkman and Kvale as *InterViews*. This term identifies the dialogic exchanges of views between interviewer and interviewee that would lead to the dynamic and 'social construction of knowledge' (Kvale, 2006: 480). Kvale's definition appears to sit well within the SI perspective and Woods' (1992) view that interviews are examples of Blumer's (1969) 'joint action'. Beyond being a vehicle for the interviewer to gather research data, both parties 'are continually making indications to each other, attributing meanings, and interpreting symbols' (Woods, 1992: 374). Both interviewer and interviewee use the impulsive 'I' and socialized 'me' of their 'self' (Mead, 1934). As Cohen *et al.* (2011: 409) remark, an interview 'is part of life itself, its human embeddedness is inescapable'.

From a social anthropological standpoint, Burgess (1984: 106) stated that interviews could be used to complement participant observation or informant diaries to 'help the researcher to gain access to situations that through time, place, or situation are 'closed''. He suggested they offered researchers a gateway to an interviewee's biography and to situations they did not witness or where their presence would be considered inappropriate.

However, although they have been likened to 'conversations' (Brinkman and Kvale, 2015; Burgess, 1984; Currivan, 2008), research interviews are not held between

equal partners. Although the interviewee has knowledge that the interviewer wishes to ascertain, the interviewer must be sufficiently knowledgeable about the subject matter of the interview in order to progress the conversation (Basit, 2010; Brinkman and Kvale, 2015; Burgess, 1984; Gibbs, 2013). Ideally, an interview is a situation where power see-saws from one to the other as asymmetries are reduced while 'objectivity and ethicality' are maintained (Kvale, 2006: 480). The responsibility of the interviewer is to set a scene where this can occur by allaying any concerns and building trust and rapport with the interviewee. Beyond ensuring a conducive and undisturbed physical environment, this includes providing the appropriate level of structure for the interview and ensuring the experience is pleasant and productive for both parties (Basit, 2010; Brinkman and Kvale, 2015; Cohen *et al.*, 2011; Lankshear and Knobel, 2004; Silverman, 2014).

In setting the scene and allaying interviewee's concerns, it was important to negotiate a time and venue for the research interview. As finding a space convenient for both parties, where no disturbances would occur and where privacy and confidentiality could be maintained, was problematic, particularly when using audio/video equipment (Section 3.4.6), I used an office at Hope University. This necessitated a 'do not disturb – interviews in progress' sign on the door, the switching off of phones and computers and a slight rearrangement of furniture. Beyond being comfortable in terms of lighting and heating and with access to all materials required, seats of the same height were positioned a comfortable distance apart to help alleviate students' preconceptions of the research interview being equivalent to a tutorial. I was mindful of Woods' (1992: 375) example of a teacher-researcher interview where pupils who might construe the situation as 'counselling' or 'spying'. I considered that some student-interviewees might have limited experience of research interviews and were unlikely to have been interviewed by someone who had previously taught them. It was essential that I built a relationship of trust that would facilitate 'joint action' (Blumer, 1969) on the subject of feedback by using opportunities to reduce any perceived power relationships.

Although Burgess (1984) suggested that gender, personal experience, age, social status, ethnicity might affect the interviewer/interviewee's relationship, I was also aware that students knew me as a tutor. I determined to be candid about my research role and interests and was able to assure students that I had distanced myself from the roles of tutor and assessor (Section 3.4.7). However, as Cohen *et al.*

(2011: 409) stated, 'interviews enable participants – be they interviewers or interviewees – to discuss their interpretations of the world in which they live, and to express how they regard situations from their own point of view'. I was mindful that, having known me as a tutor, the interviewees might perceive any 'interpretations of the world' that I made as authoritative. In this regard, I needed to ensure that the 'purpose of the conversation' outweighed the dialogic exchanges of views identified by Brinkman and Kvale's (2015) term *InterView*, by using a pre-defined but flexible structure. Therefore, I chose to use an approach that focused on the interviewees' experiences and perceptions and allowed them to define the terms 'feedback' and 'reflective practice'. My decision to use a semi-structured approach (Basit, 2010: Brinkman and Kvale, 2015) was a deliberate attempt to provide structure while 'stepping back' to allow the interviewees to express themselves as openly as possible. The approach, described by Basit (2010: 103) as 'the most favoured type of interview in educational research', afforded a balance on the continuum between structured and unstructured interviews (Lankshear and Knobel, 2004) and aimed to create an atmosphere that was conversational yet productive. I provided in writing common areas for discussion at the beginning of interviews and asked interviewees to address these areas in any order they chose (Appendix G). These areas related to students' academic and professional experiences and perceptions of feedback from descriptive and reflective standpoints and enabled further questioning on matters raised within individual's diary entries. This approach enabled both interviewer and interviewee to extend the discussion or delve into matters more deeply as appropriate. Providing all interviewees with the same written areas for discussion served to aid reliability by reducing bias in the language I used at the beginning of the interview although, as Lankshear and Knobel (2004: 205) recognised, 'it is impossible to construct completely bias-free interview questions [as] language is not neutral [but] influenced by particular theories, worldviews and assumptions'. Additionally, the same encoded questions and prompts of the interview might be decoded differently according to the students' unique histories. Nevertheless, each set of interviews, identified as A1, A2, A3, B1 and B2 (Figure 3.2), began with common areas for discussion before focusing on issues that were of most relevance to individual interviewees.

Although I did not give incentives at any point of the study, at the end of each interview the interviewees were given the opportunity to ask questions about any

aspect of my research design and methods. This *quid pro quo* was designed to aid a pleasant and productive experience by furthering a relationship of trust and providing insights that might prove useful for the students' final year research projects.

Validity is described Brinkman and Kvale (2015) as an essential craft of the interviewer who must both elicit and validate the interviewee's knowledge to determine whether it is trustworthy. These authors present a conundrum by suggesting that 'verification of information and interpretations is a normal activity in the interactions of everyday life' but warning that 'a pervasive attention to validation can be counterproductive and perhaps lead to a general invalidation' (Brinkman and Kvale, 2015: 294). However, I would argue that, whereas some matters may be verifiable through a range of questioning that provides a form of triangulation, others are less clear cut. For example, the perceptions of the students interviewed in this study are their perceptions at a given point in time. A variety of interview questions or scenarios can seek to elicit these perceptions by encouraging explanations through language, examples and metaphor. An interview cannot verify these perceptions but can confirm the accuracy of their articulation through reviewing and restating to seek clarification.

Similarly, in relation to my study, I consider Brinkman and Kvale's (2015: 281) statement that reliability 'concerns whether the interview subjects will change their answers during an interview and whether they will give different replies to different interviewers' to be problematic. My experience in teaching and engagement with social constructivist theory (Vygotsky, 1978; Wood *et al.*, 1976) has led me to believe that perceptions can change. These changes can occur through the relationships formed with one person rather than another. They can also change through dialogue that encourages a deeper level of engagement with subject matter.

One limitation of my study is the potential of a *Hawthorne Effect* (Section 3.4.6), the essence of which Machol (1975: 31) summarized by saying, 'you cannot measure people without affecting the people you measure'. Within this study, this was considered as an ethical issue as, while students may have become more focused upon and critical of feedback, conversely, it may have encouraged them to become more analytical with their professional practice. A further limitation is that asking students to define 'feedback' and 'reflective practice' may infer a connection between

the two areas. However, as the definitions will be requested within the final interview, other data will not be influenced.

3.4.6 Ethical issues

While ethical issues must be identified, addressed and validated by a research ethics committee at the beginning of a study, Punch (2009) highlighted the need for vigilance through the research process, as other issues may arise. My approach to research adhered to the *British Educational Research Association's* ethical guidelines (BERA, 2011) which are used extensively across all phases of education and identify responsibilities towards participants, the sponsors of the research, the community of educational researchers and to educational professionals, policy makers and the general public. The key issues I identified in relation to my study were at the participant level in respect of tutor-student relationships, confidentiality and the *Hawthorne Effect* (Machol, 1975).

As a tutor at Hope University aware of my relationship with students, it was necessary for me to ensure that participation in research did not cause detriment to the students and that openness and disclosure, voluntary informed consent and the right to withdraw were highlighted at all stages (BERA, 2011). This was achieved in five ways. Firstly, all forms of data collection included a statement of ethics which outlined the nature and purpose of the study, the participants' rights, my responsibilities and sources of further information (e.g. Appendix H). Secondly, I negotiated with managers to eradicate my immediate professional involvement in tutoring or assessing second year students through the period of research. Although I was committed to one whole cohort lecture, I did not engage with individual students or discuss my study at this point. The 'diary-interview' sample did not include my personal tutees and, to ensure the relationships I had formed with these participants did not influence the final year of their degree, I did not supervise their final year research projects. Thirdly, I took the precaution of asking other tutors to deliver the surveys and questionnaires to students. Although this distanced me from the students, it came with unforeseen costs to the study (Section 4.2). Fourthly, video-recording and discussion of interview techniques at the pilot stage (Section 5.0.1) facilitated the reduction of bias by identifying and eliminating issues relating to teacher-researcher relationships. Fifthly, all other pilot studies (Section 4.0.1) were undertaken with students from different cohorts.

It was essential that I considered issues of confidentiality and the effect that participation might have on individuals. This ensured the integrity of the study and enabled participants to build trust in me as a researcher. Throughout the study I ensured anonymity by using coding and pseudonyms, with original details being known only to myself and available on my personal computer. I sought permissions from appropriate managers at Hope University, indicated participants' right to withdraw from any aspect of data collection at any time and asked 'diary-interview' participants to sign consent forms (Appendix I). I was aware that the right to withdraw might reduce the number of participants involved at this qualitative and personal stage of the longitudinal study. Consequently I chose to over-recruit, allowing natural wastage to occur without detriment. I chose not to provide incentives beyond offering information regarding the research process that would potentially provide insight for students' final year research projects (Section 3.4.5).

I was aware that participation in the study had the potential to influence students' views and expectations of feedback. The *Hawthorne Effect*, considered to be an outcome of 1930's study at the Hawthorne Works in Illinois, has remained a matter of debate (e.g. Bornmann, 2012; Jones, 1992; Levitt and List, 2011; McCambridge *et al.*, 2014; Merrett, 2006), with the term encapsulating changes that may occur to research participants as a result of being studied. My research does not seek to challenge the existence of the *Hawthorne Effect* but to acknowledge that, if it exists, 'diary-interview' participants might have considered the term feedback in greater detail and developed their understanding in ways that other students had not. It was possible that this experience could influence their completion of the NSS in 2014. In light of this, I determined to write diary and interview prompts to ensure my language use avoided 'coaching' and to use the final interviews to explore changes of approach that participants may have experienced during the period of study.

3.5 Conclusion to Chapter 3

Using Crotty's (2003: 2) four questions as a framework, this chapter moved from consideration of my approach to educational research through to the specificity of the mixed research methods used within this study. From the theoretical perspective of SI, it uses Blumer's (1969:2) three premises to structure the research questions and explore appropriate methods of data collection which afforded exploration at macro, meso and micro levels. Where the longitudinal use of questionnaires and surveys

enabled collection of quantitative data which included social network analysis, this was complemented and triangulated by the use of qualitative diary-interview approaches across students' second year of study. Ethical considerations proved paramount to the study, undertaken with a population of students from Hope University's BA QTS programme.

The following two chapters address pragmatic data collection issues before presenting and exploring the study's data at cohort level (Chapter 4) and student level (Chapter 5).

CHAPTER 4: The cohort's feedback journey

Main research question:

In what ways do undergraduate primary student teachers gather, understand and interpret feedback through their personal and professional networks and to what extent does feedback influence their reflective practices?

Thesis sub-question 1: *What do the terms 'feedback' and 'reflective practice' mean to students?*

Thesis sub-question 2: *In what ways does social interaction through personal and professional networks enable student teachers to gather feedback?*

Thesis sub-question 3: *In what ways do students make meaning from the feedback they gather through social interaction?*

Thesis sub-question 4: *In what ways do students interpret and use the feedback they encounter?*

4.0 Introduction to Chapter 4

In response to the main research question, this chapter considers the ways in which students gather feedback through their personal and professional networks. It focuses on questionnaire and survey data at the cohort level. The former are used to provide context in relation to the national picture (Figures 2.7; 2.8). The latter is used to identify the students' networks.

I begin the chapter by discussing the pilot studies used in support of my quantitative data collection. I move on to consider the elusive nature of populations before presenting data from my study. Using data from questionnaires based on the NSS statements on assessment and feedback, I build upon the macro- and meso-level data that provided national (Section 2.1.3) and institutional (Section 3.4.1) contexts for the study. I explore 'satisfaction levels' of the 2011-12 cohort of BA QTS students at Hope University across the second year of study through inferential statistics. The data afford comparison with the NSS data at national and institutional

levels (Sections 2.1.3 and 3.4.1) while providing 'broad-brush' insights to students' interpretation of feedback (sub-question 4) at cohort level.

The SNA survey data then provide three end-of-year snap-shots of the cohort's social interactions in respect of feedback (sub-question 3) and students' personal and professional networks (sub-question 2).

4.0.1 Pilot studies: Quantitative data collection

Piloting the components of my chosen research methods provided a vehicle to enhance my study's validity and reliability and address technical matters (Basit, 2010). With respect to quantitative data collection, my questionnaire (T-test) and survey (SNA) (Appendices C and E) were piloted several times with third year students before the final, redrafted versions were used. Although the questionnaire replicated the NSS, the coding feature, designed to identify students without asking for their names or university identification details, proved problematic. It required the layout and language to be altered several times before a consistent response was obtained across the pilot sample of eight students. Similarly, the language used in the survey underwent several revisions to achieve a consistent response when piloted with a different group of eight third year students. In both instances I asked the students independently to read and complete the questionnaire or survey and then asked them to verbalise their interpretations.

Piloting of qualitative data collection methods is discussed in Section 5.0.1.

4.1 Gathering feedback through personal and professional networks

4.1.1 The elusive nature of populations: the lives behind the statistics

My journey through the quantitative data collected by national agencies (i.e. NCTL, HEFCE) of the primary ITE entry population and the final year NSS demonstrated discrepancies between populations (Section 3.3.3). This was not surprising. Data were collected on different dates and for different purposes. A student counted at one point may not appear at another. Statistical data are also not beyond the ebbs and flows of individual journeys, nor do they avoid the vagaries of human error. My experiences of family history (Section 1.1) demonstrated that even census returns, completion of which on a give date has been a legal requirement of all households in

England since 1841 (National Archives, 2015), are open to many layers of inaccuracy.

Within HEIs, students appearing in the primary ITE entry population census data (DfE/NCTL, 2015) may have withdrawn, interrupted or be placed in a different category when the same cohort completes the NSS (HEFCE, 2015). The two sources do not provide a consistent population. Human issues such as health, finances, academic outcomes or a change of career aspiration, have a cumulative effect on the data held by national agencies. Human errors such as missed questions or a typographical error may have similar outcomes, despite efforts to avert these through the use of technology. Beyond these issues are the individual interpretations of questions being asked and the accuracy of responses. The saying that 'there are lies, damned lies and statistics', ironically attributed to Mark Twain, Benjamin Disraeli and several others (Lee, 2012), supports the need for caution.

Determining the population proved equally elusive at Hope University. The student numbers within the 2011-12 entry BA QTS cohort varied across the study as did the final population eligible to return the NSS. The ebbs and flows of individual students' lives attested to the fluidity of the population. Discussions with the programme leader revealed the complexities of individual students' lives that shaped statistical returns and the manner in which academic regulations supported students through personal and academic adversity. While the majority of students moved smoothly through the three years of the programme, others' journeys were marred by failed assignments and resubmissions, interruptions to studies due to a variety of personal and health issues. In some cases, academic and personal issues required students to retake the whole year. The second year of the programme included 'direct entry' from other degrees and, at various points through the three years, students chose to withdraw or were 'counselled off' to pursue alternative directions. I chose to use the population of 'active students' listed each September for one course taken by students each year (Course A).

In consequence of this exploration of populations and the lived experiences of the individual students represented by the statistics, I acknowledge that both the T-test and SNA outcomes, at cohort and individual 'ego' levels, provide snapshots of a situation at a given time, on a given date. They provide signposts and directions that warrant deeper exploration to identify individuals' stories. In this study, I have

employed diary-interview methods for this deeper exploration (Chapter 5). However, all research methods, data collection and analysis come with limitations and those encountered but not predicted in Section 3.2 are discussed within this and the following chapter. Discussion now turns to the presentation, analysis and discussion of quantitative data.

4.1.2 Assessment and feedback satisfaction levels within the cohort

To consider descriptive and inferential statistics based on students' responses to the NSS assessment and feedback statements across the second year of the BA QTS at Hope University, an identical questionnaire was distributed at the end of the first cohort lectures of the 2012-13 and 2013-14 academic years (Section 3.4.1; Appendix C). These were identified as NSS1 and NSS2 respectively. Having taught the students in their first year of study, I chose not to be present to avoid undue influence or 'duress' (BERA, 2011; 10). Instead, both questionnaires were presented by the tutors who were leading the lectures. I had previously briefed the tutors on the purpose and nature of the questionnaires. Piloting of the questionnaire with students from a different cohort (Section 4.0.1) had suggested that the preamble and questions would 'stand alone' without detailed explanations. It was essential that the unique identifiers would enable a high percentage of matched responses from NSS1 and NSS2 to fulfil the requirements of the T-test. Issues arising from the unique identifiers used are discussed in Section 4.3.1.

Table 4.1: Response rates for NSS1 and NSS2 questionnaires

Questionnaire identifier and date	NSS1: 5 October 2012	NSS2: 25 September 2013
Cohort population (From Table 3.2)	101	99
Number of responses	79	92
% response rate	78%	93%
Number of matched responses	66	66
% matched responses	83.54%	71.74%
Number of unmatched responses	13	26
% unmatched responses	16.46%	28.26%

The response rates are given in Table 4.1. The two questionnaires provided 66 matched responses, representing 83.54% of NSS1 and 71.74% of NSS2. Issues that may have affected the return rates and the number of ‘unmatched’ responses are discussed in Section 4.1.4.

Using SPSS, descriptive statistics for both NSS1 (Table 4.2) and NSS2 (Table 4.3) demonstrated the lowest means were for two ‘feedback’ statements (iii. and v.) This echoed national and institutional trends (Sections 2.1.3 and 3.4.1). At NSS1, the students had experienced a single academic year. Their satisfaction levels had shown marginal improvement by the end of the second academic year in relation to the promptness of feedback (iii. 3.33→3.55) but its ability to clarify understanding had reduced (v. 3.61→3.38). With this sample, it appeared that a divide between student satisfaction in ‘assessment’ and ‘feedback’ (Section 2.1.3) was evident from an early stage. Inferential statistics would be necessary to determine whether this was statistically significant.

Table 4.2: Descriptive statistics for NSS1

NSS1: Descriptive Statistics					
NSS Statements	N	Minimum	Maximum	Mean	Std. Deviation
i. The criteria used in marking have been clear in advance	79	2	5	3.89	.768
ii. Assessment arrangements and marking have been fair	79	1	5	3.84	.839
iii. Feedback on my work has been prompt	79	1	5	3.33	.828
iv. I have received detailed comments on my work	79	2	5	3.94	.837
v. Feedback on my work has helped me clarify things I did not understand	79	2	5	3.61	.854

Table 4.3: Descriptive statistics for NSS2

NSS2: Descriptive Statistics					
NSS Statements	N	Minimum	Maximum	Mean	Std. Deviation
i. The criteria used in marking have been clear in advance	92	2	5	3.97	.670
ii. Assessment arrangements and marking have been fair	92	1	5	3.39	.913
iii. Feedback on my work has been prompt	92	2	5	3.55	.717
iv. I have received detailed comments on my work	92	1	5	3.48	.870
v. Feedback on my work has helped me clarify things I did not understand	92	2	5	3.38	.850

Employing inferential statistics based on the null hypothesis:

There was no change in student satisfaction in assessment and feedback across the second year of the degree programme,

I conducted a paired-samples T-Test to compare the students' responses to the five NNS statements on assessment and feedback at beginning of Year 2 (NSS1) and the beginning of Year 3 (NSS2). There were 66 matched responses. The test (Table 4.4¹⁴) showed a significant difference (i.e. less than 0.05 significance) between NSS1 and NSS2 in respect of two statements only.

For statement ii., 'Assessment arrangements and marking have been fair', there was a significant difference in the scores in NSS1 (M=3.79, SD=0.886) and NSS2 (M=3.42, SD=0.878); $t(65)=2.64$, $p=0.010$.

¹⁴ The paired sample statistics are provided for reference at Appendix J

For statement iv., 'I have received detailed comments on my work', there was a significant difference in the scores in NSS1 (M=3.89, SD=0.844) and NSS2 (M=3.56, SD=0.726) conditions; $t(65)=3.196$, $p = 0.002$.

Table 4.4: SPSS Paired samples test

Paired Samples Test								
	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 NSS1i - NSS2i	-.121	.795	.098	-.317	.074	-1.239	65	.220
Pair 2 NSS1ii - NSS2ii	.364	1.118	.138	.089	.639	2.642	65	.010
Pair 3 NSS1iii - NSS2iii	-.212	.969	.119	-.450	.026	-1.778	65	.080
Pair 4 NSS1iv - NSS2iv	.333	.847	.104	.125	.542	3.196	65	.002
Pair 5 NSS1v - NSS2v	.152	.916	.113	-.074	.377	1.344	65	.183

These results indicate that the null hypothesis can be rejected in both cases. There was a significant decrease in student satisfaction regarding their perceptions of the fairness of assessment arrangements and marking and receiving detailed comments on their work across the second year of study. However, on the basis of these statistics, no such claim can be made for the other three statements, which include two statements relating to feedback.

Replication of the NSS questionnaire with student teachers who were mid-way through their studies brought about similar results to those at national and institutional levels, featuring students across the disciplines and in the final year of their studies. Descriptive statistics suggested that, a year before completing the NSS, this cohort had lower levels of satisfaction with the 'feedback' statements than

the 'assessment' statements. The researched cohorts' response to the NSS in 2014 (Figure 3.6) mirrored the outcomes of NSS1 and NSS2 by identifying the promptness (S7) and ability of feedback to clarify understanding (S9) as being the most problematic of the five statements. As discussed earlier (Section 2.1.3), the statements are open to subjective interpretation and are provided without context. Whether student teachers consider them to refer to formative or summative assessments within academic or professional contexts cannot be ascertained from statistical data alone. Further investigation of the meanings students ascribe to the statements prior to their completion of the NSS in their final year of study, would present an ethical dilemma (Section 3.4.6).

However, assuming each student maintains the meaning they ascribe to the statement across a year, the paired T-test sought to determine whether students' responses to the statements at a year's interval would reveal changes in their levels of satisfaction. The T-test demonstrated that changes were significant regarding the fairness of assessment arrangements and marking (S6) and the detailed level of comments (S8) across the second year of study, but no such claim could be made for the other statements (S5, S7 and S9). Whether this was due to the complex nature of the statements (Section 2.1.3) and their 'disparate meanings (Bennett and Kane, 2014: 150), combined with, or separate from, the students' interpretations of their nature and context, remains an unanswered question. As student teachers who were learning about the role of assessment and feedback in the primary school, it may be hoped that these respondents had greater insight into their meaning than that held by students from other disciplines. Further exploration of the meanings that students ascribe to the term 'feedback' is necessary and builds on the work of Blumer (1969). However, it is unlikely that students' interpretations of the NSS statements in assessment and feedback will be ascertained unless they are asked to elaborate on these at the point of completing the NSS. This form of 'exit poll' would be complex and ethically demanding in a climate where NSS outcomes form part of the Key Information Set (KIS) (UNISTATS, 2016) (Section 2.1.2).

4.1.3 Academic, professional and personal feedback networks of the cohort

Descriptive statistics provided insight into students' perceptions of sources of feedback through their three years of study. More than 78% of the cohort population responded to the study's survey at end of each academic year (Table 4.5). Within it,

they were provided with seven academic and professional roles and asked to identify:

...all the other people who have supported you during the [given] year by providing feedback, or helping you to interpret the feedback you've received on your assignments or school experience placement (Appendix E).

Table 4.5: SNA1, 2 and 3 response rates

Survey identifier and date	SNA1: 14 June 2012	SNA2: 3 June 2013	SNA3: 15 May 2014
Cohort population (From Table 3.2)	115	101	99
Number of responses	92	79	89
% response rate (to 2dp)	80.00%	78.22%	89.90%
Number of unnamed responses	6	3	2
% unnamed responses (to 2dp)	5.22%	2.97%	2.00%

While the construction of the statement was not without issue (Section 4.3), the data it revealed proved enlightening. In Figure 4.1 for example, students' selections demonstrated that although university tutors were not considered such a strong source of feedback in the second year of study, they became the most highly valued source in the third year. Similarly, link tutors' feedback became more valued in the final year of the students' degrees. The students' perceptions of feedback from school placement mentors remained lower than that of other teachers within the same context, although mentors receive training from the university in this regard. Practising teachers in non-placement schools, for example, where students volunteered their services, played their part in providing feedback away from 'assessed' environments.

The exploration of personal feedback networks (Figure 4.2) revealed a very high use of family members for feedback. Mothers were dominant in providing a consistent source of support throughout the three years of study. Greater use appeared to be made of peer networks beyond the cohort boundary in the final year of study. This

included students who were studying for different degrees, friends who were not studying for a degree, siblings and partners.

Figure 4.1: Academic and professional feedback networks

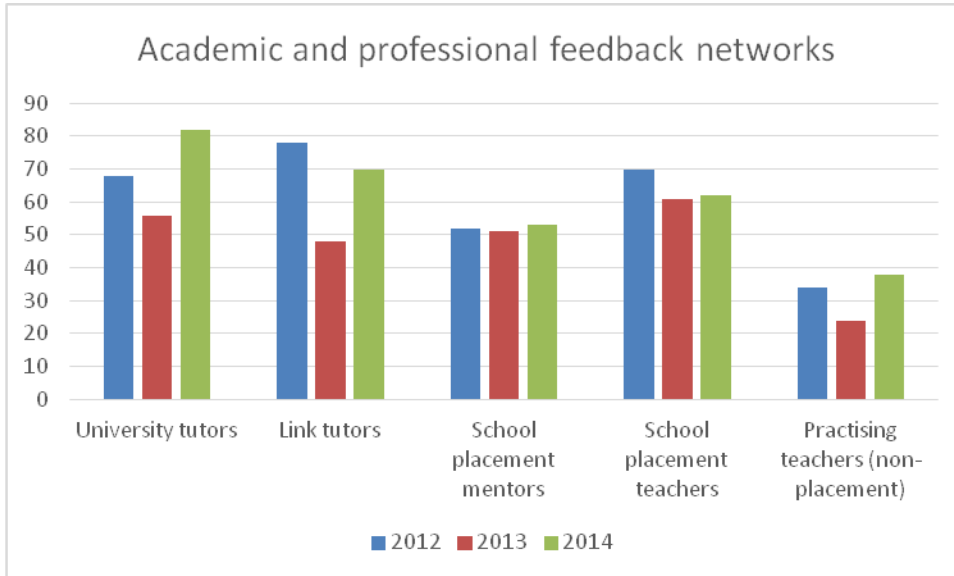
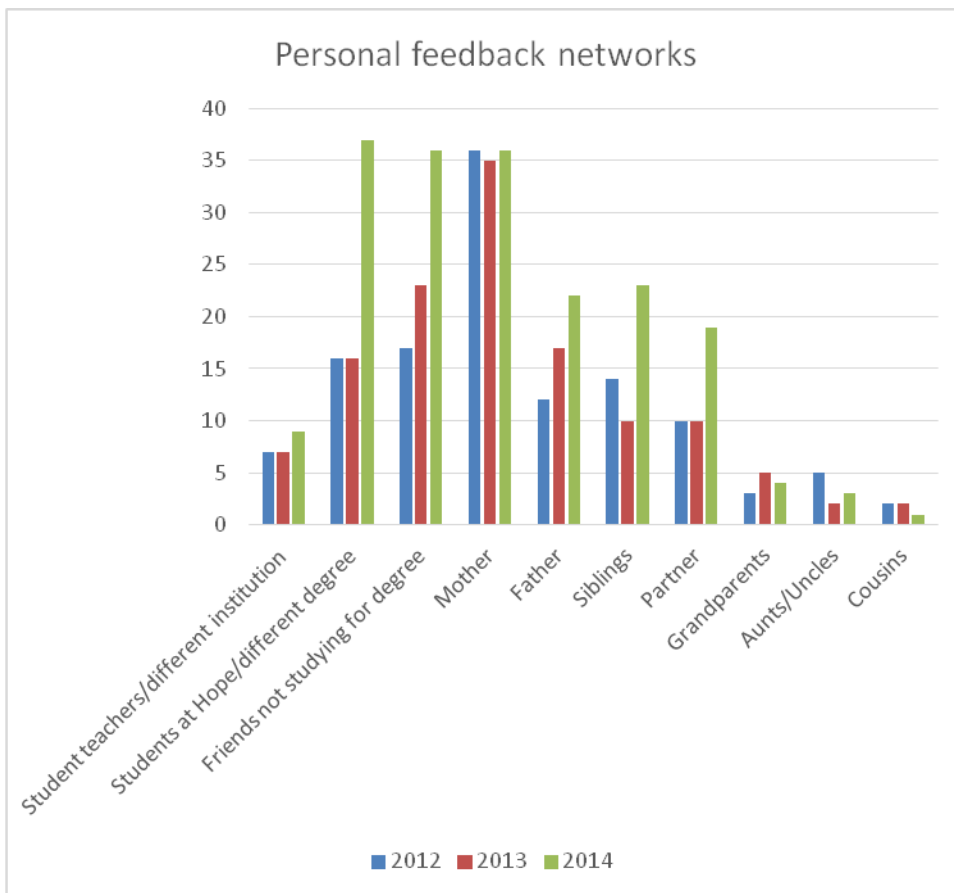


Figure 4.2: Personal feedback networks



It is possible to speculate why changes took place in relation to students' uses of academic, professional and personal networks through the degree. For example, the BA QTS students at Hope University receive one-to-one formative feedback from university tutors in the third year when undertaking their final year research project. Additionally, they have discussions with personal tutors regarding academic and professional development as they move towards completing their degrees and applying for teaching posts. Similarly, the feedback from those outside of the professional context (i.e. students studying for a different degree and those not studying for a degree) may be considered to provide neutral perspectives. Such speculation is beyond the scope of this study although it does raise areas for further research (Section 7.4.2). However, the range and intensity of feedback provision beyond the cohort boundary is of interest. It suggests that the need for trust and continuity in feedback interactions with family members, particularly mothers (Section 2.2.3), was highly influential. The nature of the feedback provided (e.g. academic, emotional) and whether this was due to proximity (i.e. students living in the family home) or social capital (i.e. family members with particular knowledge of the area of study) raised issues to be explored through interrogation of the diary-interview data (Chapter 5).

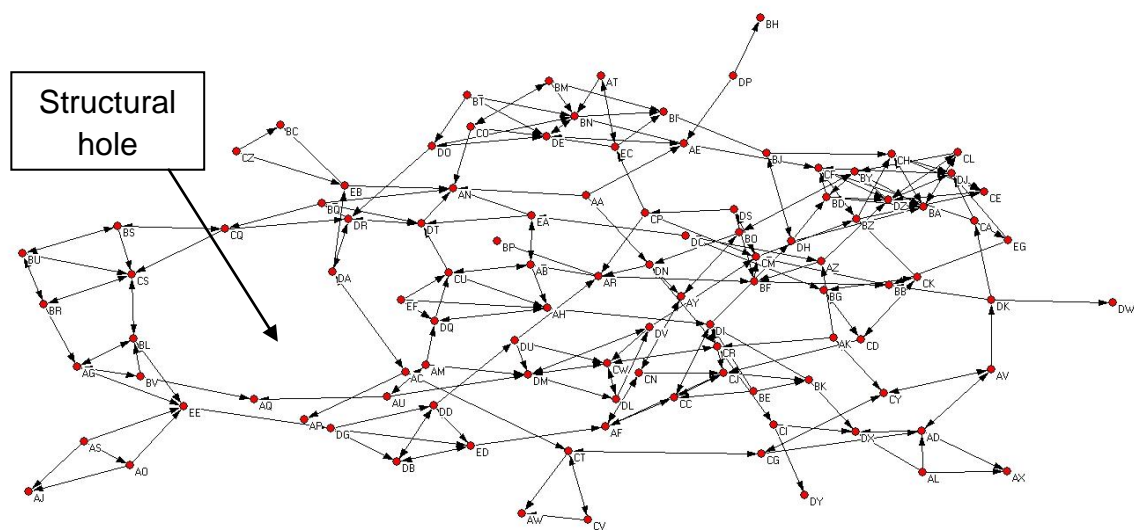
4.1.4 Feedback networks between cohort members

Investigation of students' feedback networks within the cohort through the use of SNA required decisions to be made (Section 3.4.2). These included the use of free recall of names with a constrained choice within a defined boundary to provide binary, relational data. Possible issues in data collection included maximising the number of responses and handling the mass of data that would emerge from some 100 respondents.

I distanced myself from the data collection process for ethical reasons (Section 3.4.6). As with the questionnaires (Section 4.1.2), I asked lead tutors to deliver the surveys during the final end of year lectures in students' first, second and third years of study and briefed them accordingly. Responses (Table 4.5) were above the 70% confidence rate required for SNA (Cronin, 2014). However, although a captive sample, students' responses appeared to be determined by their understanding of the task and willingness to participate in the survey, not just students' presence in the lecture theatre at that point. Additionally, as the survey asked for the student's own

name as well as those of others, respondents needed sufficient trust in me as the researcher and my assurance that the ethical principles (Appendix H), as outlined on the data collection form, would be maintained. The data from 5.22% of the SNA1 responses could not be used as the respondents' names were not given. In light of this, I asked the tutor who delivered SNA2 to stress the importance of giving this information. This reduced the unnamed return rate to 2.97%, however, the overall number of responses was lower for this survey as fewer students were present in the lecture theatre. Due to personal health issues, the SNA3 survey did not take place within a lecture on the anticipated date. To counter this, I chose to transfer the same information to an online survey (i.e. Survey Monkey) and sent a link to all students via email. Using the approach of other online surveys such as the NSS (Section 3.4.1), I followed up with reminder emails each week for a month. This gained the highest response rate of the three surveys and lowest rate of unnamed responses.

Figure 4.3: SNA1 showing structural hole



With three data sets totalling nearly 300 responses, each providing up to three names, I decided to use PAJEK software to interrogate the data and draw sociograms of the complete networks. Where PAJEK was capable of providing visualisation using a standard drawing algorithm, my task was then to make cognitive sense of the visual networks. For the layout of all sociograms¹⁵ (Figures 4.3; 4.4; 4.5) I employed the same standard drawing algorithm of Energy →Kamada-

¹⁵ At this point in the thesis, I have provided reduced versions of the sociograms to consider their overall structures. I later provide larger versions for more detailed examination.

SNA2. The latter appears to have been caused by the reduced response rate despite meeting the 70%+ required. SNA3, which had the highest response rate, suggested a far tighter network.

Table 4.6: SNA1 triadic, dyadic and in-degree analysis

Further analysis through PAJEK of SNA1 identified 11 students with in-degree results of five or six within the cohort (Table 4.6). These were ‘star’ sources of support for

SNA1	No of students	Group W	Group X	Group Y	Group Z
Stars (i.e. In-degrees of 5 or 6)	11				
Dyads	51				
Cliques (all triadic)	7				
<i>Male</i>	1	<i>CE-CH-DJ</i>			
<i>Female</i>	3	<i>BG-CD-CK</i>	<i>AG-BL-EE DB-DD-ED</i>		
<i>Male/female</i>	3		<i>CC-CJ-DI</i>	<i>BR-BU-CS</i>	<i>CW-DL-DM</i>

others during the 2011-12 academic year. The data revealed that more than half the population had formed a dyadic relationship for feedback purposes with another student in the cohort. Simmelian relationships were in evidence, with students appearing in dyadic links within triads. Further analysis identified seven triadic cliques which had formed within, but not across, the four groups (identified as W, X, Y, Z in Table 4.6) that were used to divide the cohort into manageable teaching numbers. These triadic cliques comprised three all female, one all male and one male/female group. The dyad of BL-CS formed a bridge, co-joining the cliques AG-BL-EE and BR-BU-CS and, as a result, between groups X and Y. The positions of the cliques within the whole network were identified using PAJEK and highlighted in

yellow in Figure 4.6.¹⁶ It revealed that these co-joined cliques were distanced from the denser part of the network, across the area formed by a structural hole (Burt, 1992).

I used this analysis of SNA1 to frame my volunteer student sample recruitment which took place via email at two points during the research period (Figure 3.2). Having contacted members of four cliques, five students (Sample A) showed their willingness to take part in the study from Autumn Term 2012. Following the students' School Experience 2 placement, I re-sent emails to those who had not responded and contacted the remaining cliques' members. Students appeared far more willing to consider volunteering for the research study when they were focusing on academic rather than professional aspects of their studies and a further 11 students (Sample B) volunteered to participate from Spring Term 2013. This provided a total of 16 students from which I anticipated a natural level of reduction would occur during the longitudinal study. I therefore refer to them as 'the speculative sixteen' (Table 4.7).

4.1.5 Feedback relationships across the cohort

Analysis of centrality measures at whole network level provided understanding of the 'speculative sixteen's' relationships with the rest of the cohort at SNA1, SNA2 and SNA3 (Table 4.7). Using PAJEK, I determined to use three key centrality measures¹⁷. Firstly, the students' 'in-degree' (or star) measure showed how many others had identified the individual as a source of feedback support. Secondly, I explored 'closeness' measures to determine, as a reciprocal, the shortest path between the student and others within the network. The higher scores denote each individual's level of connectedness to all others in the network and therefore the student's potential ability to benefit from feedback by being part of the network. Thirdly, I sought each student's overall measures of 'authority' to determine their influence across the network. Based on connections between highly connected individuals within the network, higher numbers denote higher levels of influence.

¹⁶ PAJEK changes the orientation of the visualisation when it draws. Wherever possible, I endeavoured to reduce this anomaly within my study.

¹⁷ See Glossary of Terms B

Figure 4.6: SNA1 showing seven cliques (in yellow)

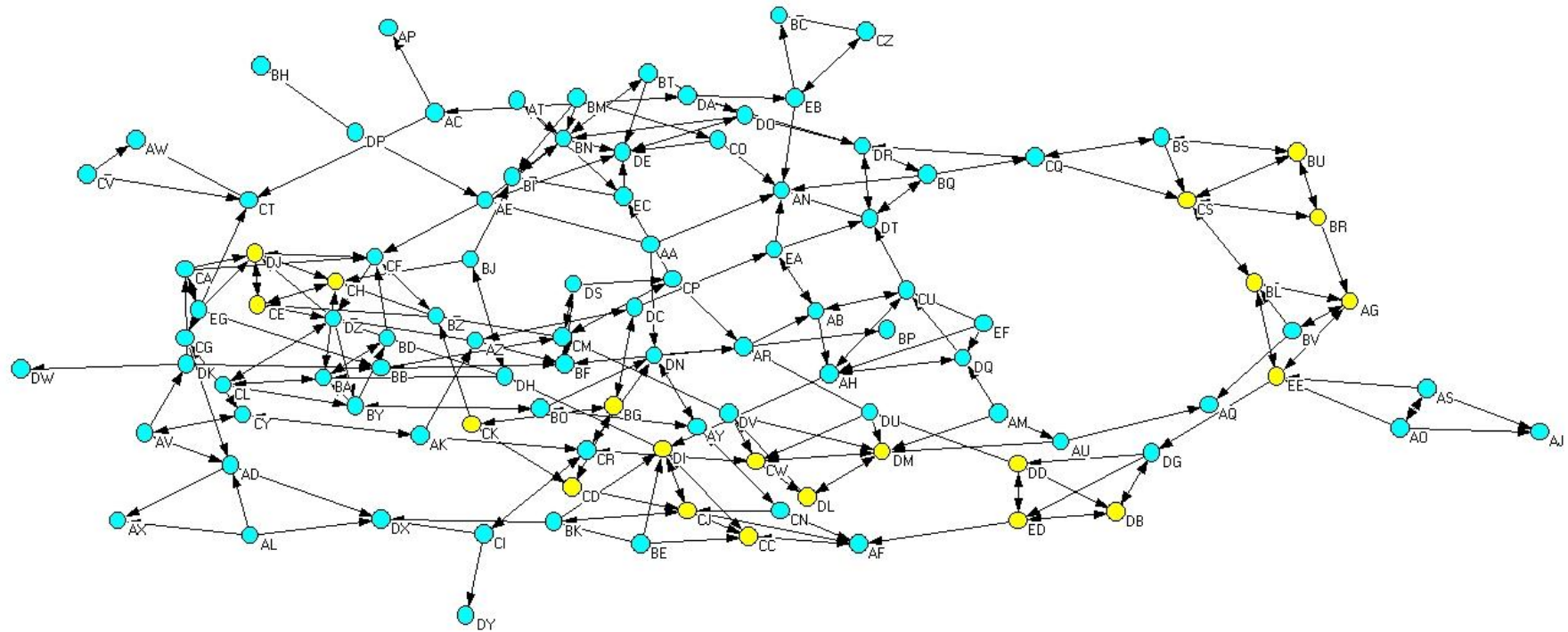
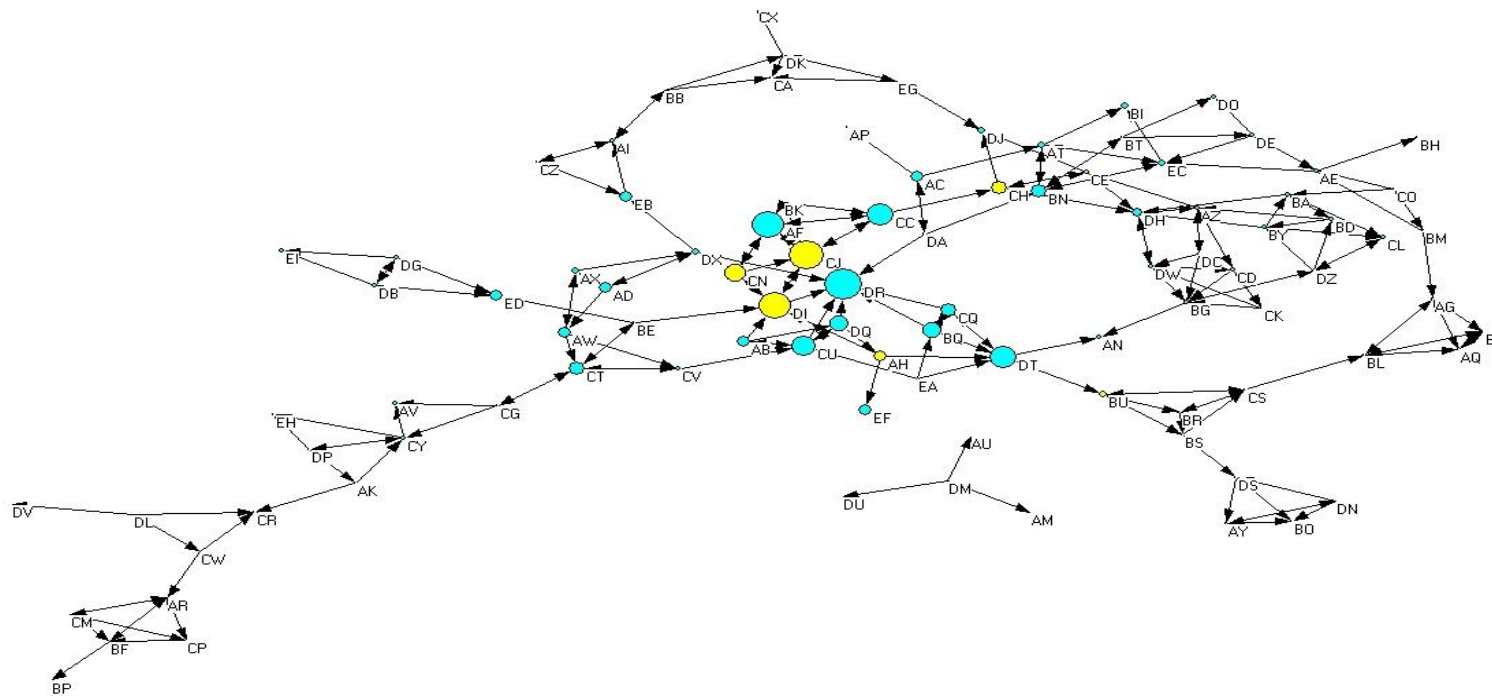


Table 4.7: Whole network centrality measures using PAJEK (speculative sixteen)

Student Code	Volunteer sample A or B	Centrality measure: In-degree			Centrality measure: Closeness (to 6dp)			Centrality measure: Authority (to 6dp)		
		SNA1	SNA2	SNA3	SNA1	SNA2	SNA3	SNA1	SNA2	SNA3
AH	B	4	1	4	0.242424	0.205680	0.217090	0.018712	0.066479	0.075666
BR	A	2	2	3	0.166667	0.156568	0.267806	0.006783	0.003346	0.011541
BS	B	2	3	4	0.179931	0.157700	0.251337	0.017732	0.003918	0.015412
BU	B	3	4	2	0.159021	0.179441	0.264045	0.012290	0.016381	0.009227
CD	B	2	3	4	0.218029	0.154078	0.248677	0.014131	0.010397	0.041932
CE	A	3	3	4	0.209256	0.163311	0.022162	0.213890	0.010902	0.043556
CG	B	2	1	0	0.198095	0.162702	n/a	0.000221	0.001403	0.000000
CH	A	5	2	3	0.214876	0.176178	0.276471	0.310884	0.093216	0.060149
CJ	B	6	5	8	0.231626	0.198652	0.288344	0.053438	0.453490	0.485541
CK	B	2	1	1	0.219873	0.151403	0.230392	0.012017	0.002466	0.008327
CN	B	2	2	2	0.219409	0.189172	0.246719	0.018450	0.175524	0.098593
CR	B	4	3	1	0.253041	0.116901	0.246719	0.022260	0.002368	0.003053
CS	A	5	3	3	0.187726	0.160901	0.270115	0.032099	0.005561	0.023637
DI	B	5	5	6	0.246445	0.223039	0.288344	0.036980	0.353572	0.318877
DR	B	4	7	3	0.235828	0.219116	0.290123	0.111841	0.477168	0.016224
ED	A	3	3	2	0.203523	0.168031	0.188377	0.001792	0.059378	0.005728
Notes		Blue: In degree ≥ 5 Pink: In degree ≤ 1			Blue: Closeness ≥ 0.200000 Pink: Closeness ≤ 0.100000			Blue: Authority ≥ 0.100000 Pink: Authority ≤ 0.010000		

Figure 4.7: SNA2 showing authorities (size of node denotes value; sample members shown in yellow)



These are shown as larger nodes through PAJEK's visualisation of SNA authority measures (Figures 4.7 and 4.8)

The in-degree measure demonstrated that both CJ and DI maintained their roles as stars across the three data collection points. At SNA1, CH was identified in this role by five other students and, at SNA2, DR assumed this role, being identified by seven others. Conversely, CG and CK were, across the three data collection points, seldom identified as being sources of feedback support. In CG's case, absence at the survey might have contributed to the lack of recall. However, CK was present for all surveys but few students identified her as a source of feedback support.

Three students, AH, DR and DI, showed high levels of closeness across the three surveys. In DR's case, his closeness was high in SNA2 despite his absence from the survey and the three out-degree choices that would have increased the number of connections between vertices. However, while DR's closeness appears to be based on his high in-degree level within SNA2, this cannot be the case for AH, whose in-degree was one. The lower number of returns for SNA2, which led to a sociogram that appeared more elongated than SNA1 and SNA3, appear to have influenced students' closeness measures. Only three students achieved a measure of ≥ 0.200000 although the majority of students' closeness measures were greater than this in SNA1 and SNA3. Both of these surveys were visually more compact, demonstrating the opportunities for students to work in a connected fashion with regard to feedback. Interestingly, the two cliques formed by BR, BS, BU and CS, demonstrated lower levels of closeness within SNA1 and SNA2. Visual examination revealed these four students on the outer edge of the sociogram, beyond the structural hole. This reduced their closeness with others in the cohort and may have resulted in increased closeness with each other.

Measures of authority identified CJ, DI and DR as the three students from the volunteer sample who maintained sway across the network in respect of feedback in SNA2 and SNA3. Both of these surveys focused on the two years when assessment grades determined degree classification. This suggests that the connections between the three students had the potential to be highly influential to the cohort as a whole.

In addition to students' centrality measures at whole network level, I explored the individual level by calculating the density of the students' egocentric networks (Table

4.8). Higher density suggests stronger bonds between members of the ego-network but this may be at the cost of challenge from other students. BU (in SNA1), BR and CN (in SNA2) and CK (in SNA3) all had high density measures. Conversely, the lowest density measures were those of CJ, DI and DR whose authority measures had surpassed others in the cohort.

Table 4.8: Density of ego-centric networks

Student Code	Volunteer sample A or B	Centrality measure: Density of ego-centric networks (to 2dp)		
		SNA1	SNA2	SNA3
AH	B	0.40	n/a	0.55
BR	A	0.58	0.92	0.45
BS	B	0.67	0.60	0.4
BU	B	0.75	0.55	0.45
CD	B	0.58	0.50	0.43
CE	A	0.50	n/a	0.37
CG	B	0.42	n/a	n/a
CH	A	0.36	n/a	0.27
CJ	B	0.38	0.53	0.21
CK	B	0.58	0.67	0.75
CN	B	0.50	0.75	0.67
CR	B	0.35	n/a	0.33
CS	A	0.47	0.55	0.30
DI	B	0.31	0.21	0.23
DR	B	0.30	n/a	0.20
ED	A	0.55	n/a	0.67
Notes		Blue: Density ≥ 0.75 Pink: Density ≤ 0.25		

The interrogation of whole cohort SNA data proved insightful. It highlighted relationships and social structures within the cohort and identified how knowledge had the potential to flow or be constrained (Section 3.4.2), showing how students gathered feedback from cohort members through direct and indirect sources. While students were aware of their direct connections, all connections across the cohort played their part.

The data identified that several individuals within the speculative sixteen were influential (e.g. CJ, DI and DR), holding positions of authority across the whole

cohort, with star status suggesting high levels of trust in the information they provided. The feedback that they gave to others with their ego-networks had the potential to flow across many parts of the whole network. Similarly, these individuals had the potential to gain from the closeness of the networks that formed around them. Conversely, others appeared more isolated, with restrictive rather than expansive information flow and dense ego-centric networks (e.g. CK) and cliques (e.g. BR-BU-CS).

The SNA data, coupled with information regarding each of these student's personal and professional networks (Section 4.1.3) provided a further layer of understanding and supported the analysis of qualitative data (Chapter 5).

4.2 Critique of methods: Questionnaires and surveys

Although I had followed Crotty's (2003) approach by determining the epistemology, theoretical perspective, methodology and research methods for this study, and by identifying potential limitations and piloting problematic areas, I was aware that other factors emerged in relation to the data collection process. These are now discussed in relation to the questionnaires and surveys I employed.

4.2.1 Questionnaires

I identified three areas of concern in relation to the questionnaires, namely the use of coding, assumptions made with regard to the T-test and the *Hawthorne Effect* (Machol, 1975).

Piloting of the questionnaires (Section 4.0.1) alerted me to issues regarding the coding system which was adjusted until consistency was achieved across the eight students who formed the pilot sample. However, inconsistencies were evident in its completion, particularly within NSS2. This may have been due to several factors, including the complexity of the coding system itself, the instructions provided for its completion or the mis-interpretation of these instructions.

It was evident that NSS2 was more problematic than NSS1. Although I had briefed and given the same written instructions to the lead tutors who delivered the questionnaires, comments from students after NSS2 suggested a level of confusion in the instructions they had received. It transpired that two tutors were present in the

lecture theatre, but only one (i.e. the lead tutor) had been briefed. The issue occurred with item ii:

*The first four letters of the first primary school you attended (e.g. DELC)**

Rather than the first school they attended as a child, some students used the first school they attended as a student teacher. Consequently, I was unable to match a number of NSS2 to NSS1 questionnaires. This reduced the percentage of matched pairs available for the T-test (Table 4.1).

If repeating this exercise, I would consider changing the identifier and requesting that only the tutor who had been briefed undertook the delivery of the questionnaire and any questions arising from it (Section 7.4.1).

The T-test assumed that individual students ascribed the same meaning to the NSS statements across a year (Section 4.1.2). However, while the research period was underway, I questioned the veracity of this assumption. During the year, I became increasingly aware that the students had, through social interactions, feedback encounters and their academic and professional activities, engaged with ideas which may have developed or challenged their understandings of the NSS statements between the two questionnaires. The meanings ascribed at the time of the questionnaire, or the NSS itself, may not be those applied at any other point. This poses a research dilemma.

If this exercise were to be repeated in future research (Section 7.4.2), asking students to define the statements in their own terms might be a way to determine whether the meanings ascribed are similar at the two research points. However, this would also raise issues of students' abilities individually to define their understanding using the written word and the researcher's ability to determine whether similar definitions have been given. The number of matched returns required for the T-test may be reduced if the definitions differ.

In respect of this study, however, I acknowledge the potential limitations of my approach.

When discussing ethical issues (Section 3.4.6) I noted the potential for the *Hawthorne Effect* (Machol, 1975) to influence the students' completion of the NSS in 2014. I proposed the steps I would take to avoid 'coaching' during the qualitative

aspects of my research but had not considered whether encountering the NSS statements earlier in their studies might affect final outcomes, either positively or negatively. I was aware that Hope University ran end of year student surveys that replicated the NSS statements and felt that a similar replication would be acceptable for research purposes.

I was concerned that the NSS outcomes of the cohort I studied appeared more negative than those of previous cohorts (Figure 3.6). However, this trend continued into the following year, suggesting that factors resulting in lower outcomes during 2014-15, in comparison with those of 2010-13, were not solely attributable to my research of the cohort's experiences of assessment and feedback.

4.2.2 Surveys

Students' interpretations of the survey question may have affected the reliability of data. By allowing students to ascribe their own meaning to the term 'feedback', rather than defining an area may have led to variations in response. For example, where some may only have considered academic feedback, others may have considered emotional feedback.

The unanticipated use of an online survey in SNA3 provided a higher response rate. It also provided greater reliability in respect of the information given to respondents, particularly in comparison with NSS2 (Section 4.2.1). I had not, at the research design stage (Section 3.3.1), considered the use of an online approach, preferring the traditional face-to-face method to aid return rates. These had not always been achieved through my experience of online surveys for course evaluations. The higher online return rates may at SNA3 have been due to the students' understanding of the importance of survey returns and an individual request from me as a teacher-researcher, since students had by then undertaken their final year research projects. Given similar circumstances, I would consider using a combination of both face-to-face and online survey approaches.

Some respondents appeared reluctant to provide their names within SNA1. This had been anticipated (Section 3.4.2). However, it also raised my awareness of the need for respondents to understand how data is used. Most students at this point will have experienced descriptive statistics. Few would have come across social network analysis although they may have had an understanding, through online social

networks (e.g. Facebook, Twitter), of its basic premises. Unlike my own ITE introduction to sociograms in sociology of education modules and teaching (Section 1.3; Appendix D), these students' degrees had focused on curriculum and pedagogy. Whether an overview of how I intended to use the SNA1 data would have alleviated concerns and increased return rates remains an open question and may be an area to consider when conducting future SNA research (Section 7.4.1).

4.3 Key findings from Chapter 4

- Students gathered feedback from personal and professional networks.
- Family members, particularly mothers, were identified as sources of feedback.
- Sources of feedback focused on tutors and external sources towards the end of the degree.
- Individuals in the cohort played a central role in aiding the flow of feedback.
- Most students formed dyadic feedback relationships with others in the cohort.
- Some students formed triadic cliques with others in the cohort.
- Changes in student satisfaction in assessment and feedback across the second year of the degree programme were only significant in relation to the NSS statements on assessment and marking arrangements (S6) and the detailed level of comments (S8).

4.4 Conclusion to Chapter 4

This chapter considered the ways in which students gathered feedback through personal and professional networks, while providing 'broad-brush' insights into their interpretations of feedback at cohort level. It aimed to achieve this by investigating students' satisfaction with assessment and feedback across the second year of study and by exploring students' social interactions in relation to feedback.

Blumer (1969: 2) asserted that meaning 'is derived from social interaction'. The survey outcomes, through descriptive statistics and SNA data, captured evidence at the meso-level of 'who' students interacted with in respect of feedback. In the second year of study, data analysis indicated limited changes in student satisfaction

levels in relation to the NSS statements. These findings provide a backdrop for the study of individual students in Chapter 5.

As anticipated, the quantitative data collection methods employed did not allow respondents to identify the meanings they ascribed to the term 'feedback'. Consequently, whether the same connotation applied to family members and university tutors was unclear and students' responses to the NSS statements rested on their interpretations of the language used. Yet, just as Blumer's (1969:2) first premise was that 'human beings act towards things on the basis of the meanings that things have for them', so my study, influenced by Blumer, is designed to explore the meanings students ascribed to the term 'feedback' through their interactions with others in their personal and professional networks. The research study seeks to move beyond the quantitative data used by the NSS by focusing on the lived experiences of individual students.

Building upon the key findings so far, Chapter 5 interrogates qualitative data from diaries and interviews. It puts 'meat on the bones' by identifying the content of seven student teachers' interactions with those in their networks regarding feedback. It also does this by exploring their understanding and interpretations of 'feedback' and 'reflective practice', through their 'feedback journeys'.

CHAPTER 5: Seven students' feedback journeys

Main research question:

In what ways do undergraduate primary student teachers gather, understand and interpret feedback through their personal and professional networks and to what extent does feedback influence their reflective practices?

Thesis sub-question 1: *What do the terms 'feedback' and 'reflective practice' mean to students?*

Thesis sub-question 2: *In what ways does social interaction through personal and professional networks enable student teachers to gather feedback?*

Thesis sub-question 3: *In what ways do students make meaning from the feedback they gather through social interaction?*

Thesis sub-question 4: *In what ways do students interpret and use the feedback they encounter?*

5.0 Introduction to Chapter 5

In response to the main research question, this chapter considers the ways in which students understand and interpret feedback derived from their personal and professional networks. Through the diary-interview approach it explores seven students' ego-networks and their other sources of feedback support, as identified in Chapter 4. The 'feedback journeys' of these seven students combine the study's qualitative and quantitative data sources, to provide 'between methods' triangulation (Figure 3.4). In this chapter, the analysis of these journeys examines how individuals use their personal and professional feedback networks to gather, interpret and make meaning from feedback (sub-questions 2 and 4) and how the feedback is then used (sub-question 3). From this analysis, the definitions the seven students' ascribe to the terms 'feedback' and 'reflective practice' are considered (sub-question 1).

The chapter employs a biographical genre to exemplify and analyse defining moments and the individuality of the seven students' journeys across their second year of study. It uses biographical data provided by the students and Hope

University, drawing upon data from the SNA surveys and that of students' diaries and interviews.

The diary and interview data for the 'secure seven' students (Section 5.0.2) totalled 4 hours, 5 minutes and 25 seconds of audio/video material (Appendix K). All data were transcribed verbatim before being thematically coded and analysed using Nvivo 9. Following Sandstrom *et al.*'s (2001: 24) observation that SI is 'one perspective in dialogue with others' (Section 3.1.3), my approach to the data analysis was developed from a hybrid of three techniques, each of which has been applied to symbolic interactionist studies although they are more customarily found within other theoretical perspectives. These techniques are thematic coding, narrative analysis and interpretive biography. Of the first, Charmaz (2014: 277) suggested that the thematic coding of interviews within the SI perspective (e.g. Davies, 2014; MacKinnon, 2005) demonstrated how 'symbolic interactionism and grounded theory methods fit, complement, and can advance each other'. I sought to use 'codes as analytic categories' (Silverman, 2014: 135) to explore and identify themes deemed significant to individuals and between students. Of the second, Riessman (1993: 5) considered narrative analysis to be 'well suited to symbolic interactionism', where personal narratives were 'rooted in time, place and personal experience'. I applied Labov's (1972) structural approach (Figure 5.1) to explore when and how respondents used the narrative form to convey meaning (Cortazzi, 1993; Linde, 2001; Riesman, 1993). Of the third, Woods (1992: 365) stated that 'a focus on the self [i.e. Mead's (1934) 'I' and 'me'] also demands a consideration of the person's interests and biography'. I therefore sought to represent students' lives through consideration of individuals' life histories and epiphanies, by reflecting upon the meanings they drew from them as they interpreted and evaluated their experiences in an autobiographical manner (Creswell, 1998; Denzin, 1989).

In the following sections, I explore the feedback journeys of seven students across their second year of study on the BA QTS degree at Hope University. Using their language and stories (narrative), I present and analyse their feedback relationships (characters), the situations that occurred (plots) and how the students dealt with and felt about these (outcomes). As interpretive biographies (Denzin, 1989), they are necessarily my interpretations of the students' interpretations. I have not included all aspects of the data provided but have drawn upon the issues which appeared to be of greatest significance for each individual.

Figure 5.1: Labov's structural approach¹⁸

A: Abstract	'What was this about?' (Labov,1972: 363) Summary of the substance of the narrative. (Riessman, 1993)
O: Orientation	'Who, when, what, where?' (Labov,1972: 363) Time, place, situation, participants. (Riessman, 1993)
CA: Complicating action	'Then what happened?' (Labov,1972: 363) Sequence of events. (Riessman, 1993)
E: Evaluation	'So what?' (Labov,1972: 363) Significance and meaning of the action, attitude of the narrator. (Riessman, 1993)
R: Resolution	'What finally happened?' (Labov,1972: 363) Result or resolution. (Riessman, 1993)
C: Coda	Signal that the narrative is finished and returns to the present time. (Riessman, 1993)

5.0.1 Pilot studies: Qualitative data collection

The two qualitative research methods used were diaries and interviews (Section 3.4.4).

The diaries were piloted in several ways with students from cohorts other than those within my study. Firstly, during a small-scale study undertaken whilst I was studying on the EdD, I maintained a written diary for a week to reflect on my studies in parallel with four student volunteers. The experience and outcomes of the pilot demonstrated to me how powerful a tool the diary could be if completed as soon as possible after the event. However, it raised issues regarding the use of written diaries in an age where technology is used increasingly and led me to consider the use of audio recording. Secondly, I asked another group of student volunteers to audio record their spontaneous reactions to the feedback provided when collecting written assignments. This identified the students' familiarity with technology while confirming their focus on the grade rather than written feedback (Black and Wiliam, 1998a; 1998b). Interestingly, I found that the students used the audio files as if

¹⁸ Students' narratives are identified through the use of Labov's codes in Sections 5.1.2; 5.1.4; 5.3.2.

'leaving a message' on an answer-phone; they appeared to be talking directly to me about their experiences. While the portability of the audio device was successful in providing *in situ* data, considerable background noise came from its use in a public place. Thirdly, I worked with Hope University's Students' Union on a *vox pop* pilot study by providing written prompts for 'video booth' technology that recorded students' views of the feedback across the disciplines (Headington and Ptashko, 2011). Students responded comfortably to the video approach and the prompts provided to structure their comments. They demonstrated the ability to voice issues in an unreserved manner when talking to camera. The booth offered privacy and a high quality of recording for data collection due to the technology and its positioning away from noise and distractions. From these pilots, I determined to use diaries with prompts and suggested the use of hand/online written diaries or blogs, audio or video diaries. I also recommended that the latter took place in a private area to ensure confidentiality and enhance the quality of the recording. The initial diary entry from the final sample then served as a pilot for each student's preferred vehicle, in terms of diary content and the use of technology, with the majority choosing to use their smart phones to record and then email audio diaries to me from the privacy of their homes.

The interviews were also piloted during my EdD studies and included exploration of the research method, questioning techniques and the practicalities of using video-recording. These were essential as each interview provided a unique opportunity to investigate the interviewees' experiences and perceptions in relation to the areas for discussion. My piloting of audio/video recording for the diaries supported my choice of video recording for the interviews. I had previously piloted a semi-structured interview with a member of staff to hone my skills as an interviewer. For this I used an audio recorder and contemporaneous notes. I found the latter distracting and the former far more useful for analysis. Experience of the *vox pop* study (Headington and Ptashko, 2011) persuaded me of the value of video in capturing ephemeral remarks and nuances and assured me that students were comfortable with the medium.

I used two early student interviews to pilot my preparation of the environment and use of video recording for this study. One recording was used to critique and review my interviewing technique with a group of fellow researchers from varied disciplines before I embarked upon further interviews. My style was considered to be

'conversational' (Currivan, 2008; Punch, 2009) with use of 'overt encouragement' (Trochim *et al.*, 2014: 198) to probe the interviewee, through phrases such as 'uh-huh'. Fellow teacher-researchers recognised this as a teaching trait, where such non-committal sounds are used to demonstrate active listening and encourage pupils to continue with their train of thought. Of Trochim *et al.*'s (2014) five categories of probing (Figure 5.2), I employed elaboration, clarification and repetition to ensure I had elicited the correct meaning. However, I used the 'silent probe' less frequently, as I felt it had the potential to change the interview dynamic to become that of a tutorial. This critique of probing techniques enabled me to consider how best to use my skills as a teacher and tutor within the interview context to explore the interviewees' biographies and lived experiences (Denzin, 1992) while, from the SI perspective, delving into meanings and interpretations (Blumer, 1969).

Figure 5.2: Five categories of probing (Trochim *et al.*, 2014: 198)

<p>The Probe</p> <ul style="list-style-type: none">• The silent probe : pause and wait...works because the respondent is uncomfortable with pauses or silence• Overt encouragement: interviewers can encourage the respondent directly [but] should do so in a way that does not imply approval or disapproval of what the respondent has said• Elaboration: encourage more information by asking for elaboration• Ask for clarification: elicit greater detail by asking respondent to clarify something that was said• Repetition: say something without saying anything new
--

5.0.2 Identifying the final sample of seven students

To identify the final student sample, I considered the research data sets (Table 5.1) that emerged from analysis of the whole cohort using SNA (Section 4.1.4) and data returns from the 16 students who volunteered to take part in the qualitative data collection stage (Section 4.1.5). As anticipated, several students did not participate fully in the diary-interview process and used their right to withdraw (BERA, 2011). This reduced the student sample from 'the speculative sixteen' to a 'determined dozen' of students who, by the end of the data collection period (Summer Term 2013), had undertaken a minimum of two interviews and returned at least three diary

entries. Of these, four students had incomplete data at SNA2 and a fifth student had needed to interrupt her studies for personal reasons. These filtering processes led to the identification of a 'secure seven' data sets.

It is these seven students who feature within the qualitative level of analysis within this chapter. For ease of reading, I have, from this point, used pseudonyms for these students and employed indented italics when using or paraphrasing their words. The seven students' feedback journeys are discussed in three sections (Sections 5.1; 5.3; 5.4), emphasising the roles they assumed within the cohort. Discussion within two summaries (Sections 5.2; 5.5) leads into the critique of qualitative methods, the key findings and the conclusion of the chapter.

5.1 Abby, Beth, Craig and Dawn's feedback journeys

In this section, I consider the journeys of Abby (BR), Beth (BS), Craig (BU) and Dawn (CS), whose feedback relationships demonstrated tight bonds. At SNA1 (Figure 4.6), Abby, Craig and Dawn had formed a triadic clique. Beth was connected to the clique through Craig and Dawn. However, the flow of information from the majority of the cohort to these four students was impeded by a structural hole (Burt, 1992). The bonds between the four students continued in SNA2 (Figure 4.7) with a triadic clique formed by Abby, Craig and Dawn. Beth was at this point connected to all members of the clique through differing levels of reciprocity. The four students demonstrated limited centrality within the cohort (Table 4.7). By SNA3, the clique had dissipated, although a level of connection was maintained between individuals. The positions of the four students within the whole cohort had also changed, demonstrating their increased levels of centrality.

5.1.1 Abby (BR)

Abby wanted to learn about education and become the best teacher possible when she joined Hope University's BA QTS degree. She'd achieved three good A-level grades in the sixth form and considered herself to be conscientious in all she did. To arrive in time for 9am lectures, Abby sometimes got to the university at 7.30am. She preferred to leave the family home, where she lived with her parents and younger brother, as early as possible, to drive in ahead of the traffic rather than risk any delays.

Table 5.1: Identification of the final sample (secure seven)

Student Code	Volunteer sample A or B	Number of interviews	Number of diary entries	Data 'filtering' process stage 1: The determined dozen	Data 'filtering' process stage 2: The secure seven	Pseudonyms employed within the study
AH	B	2	5		<i>Incomplete data for SNA2</i>	
BR	A	3	5			Abby
BS	B	2	3			Beth
BU	B	2	3			Craig
CD	B	1	0	<i>Insufficient diary/interview data</i>		
CE	A	3	3		<i>Incomplete data for SNA2</i>	
CG	B	1	0	<i>Insufficient diary/interview data</i>	<i>Incomplete data for SNA2 and SNA3</i>	
CH	A	3	4		<i>Incomplete data for SNA2</i>	
CJ	B	2	4			Ella
CK	B	2	4			Gail
CN	B	2	3		<i>Interrupted degree studies</i>	
CR	B	1	0	<i>Insufficient diary/interview data</i>		
CS	A	3	6			Dawn
DI	B	2	4			Finn
DR	B	2	3		<i>Incomplete data for SNA2</i>	
ED	A	1	1	<i>Insufficient diary/interview data</i>		
Notes		Pink: Interview/diary \leq 1				

Similarly with her academic work, she took every step she could think of to get the best grades. Abby read the assignment briefs and assessment criteria carefully and compared her interpretations with her peers ahead of writing. Before she submitted her work, she asked her parents to proof read it with her and, when the marked work was returned from tutors, she looked closely at every comment. Despite this, Abby felt it wasn't really possible to know how well she'd done until the tutors had read her work and given it a mark. She saw the tutors as far more knowledgeable and valued their opinions as their comments often extended her thinking.

As a young child, Abby was aware that she'd been given additional support with written work at primary school. At secondary school she was diagnosed with dyslexia. She didn't receive a formal assessment for dyslexia until half way through her first year at Hope University. Instead, she continued to rely on her parents to help her with the grammar and structuring of her assignments. They'd done this through school and knew how to help her. She knew the content of the work and had the ability but just found it difficult to put her ideas onto paper; she always said far more than was necessary and needed to be concise. Abby was delighted when a brief conversation in a seminar led to a tutor offering her a spare hour to go over some of her work, sentence by sentence. It gave her a better understanding of assignment writing at university and she valued the tutor's reassurances.

Abby appeared acutely aware of her learning needs and the strategies she could employ, possibly due to the levels of diagnosis and individualised support she had received for dyslexia in the school sector. She invested time and effort in seeking out, scrutinising and using feedback from sources that were available, trustworthy and provided continuity. Abby relied on the continuity of feedback provided by her parents. It offered her a scaffold (Vygotsky, 1978; Wood *et al.*, 1976) as she became familiar with the requirements and opportunities available for feedback within the university context. As commonly identified in social constructivist models (e.g. ZDP), her reliance reduced as the second year progressed and Abby said she felt more confident in her completion of academic and professional tasks, as usually she received high grades and positive feedback.

Continuity was also evident within Abby's ego network. In the first year of study, Abby formed a triadic clique with Craig (BU) and Dawn (CS) (Figure 5.3). In the second year, she was central to two triadic cliques (Figure 5.4). The quadratic relationship formed through the joining of the two cliques remained into the third year (Figure 5.5), although with a reduced number of mutual ties. While Abby played a central role in the group formed with Beth (BS), Craig and Dawn, she used occasional opportunities to develop feedback relationships beyond it. For example, within the initial interview Abby identified that AG had been part of a reciprocal feedback relationship within the professional context in which both students were placed. In accordance with the findings of McPherson *et al.* (2001), residential proximity and shared personal experiences aided the preservation of her relationship with AG after the school placement.

Figure 5.3: Abby's SNA1 ego network

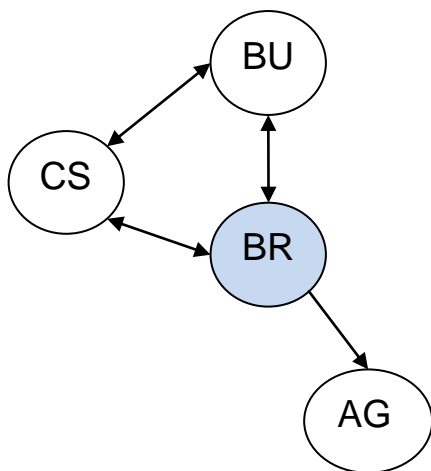


Figure 5.4: Abby's SNA2 ego network

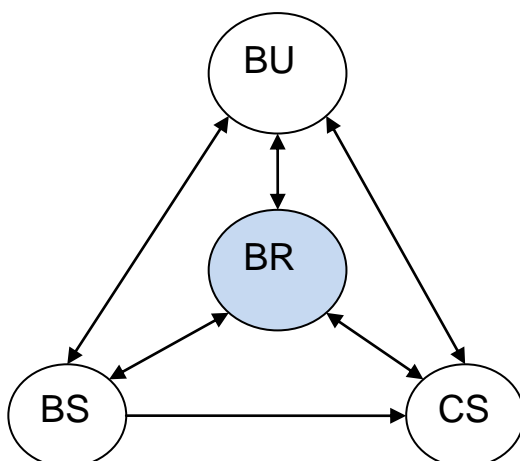
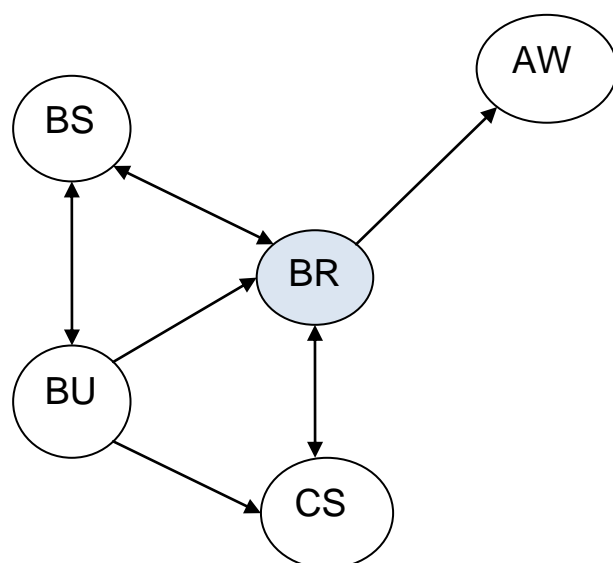


Figure 5.5: Abby's SNA3 ego network



Abby did not use narrative within her diaries and interviews. She did, however, demonstrate understanding of assessment and feedback processes and the roles played by assessors and feedback givers. In her view, assignments were vehicles for learning that gave her an opportunity to express her views and ideas. As such, she advocated face-to-face assignment feedback that was 'less formal and more informative' through which 'the quality of [the feedback] would be greater'. But she also accepted that 'it's probably not manageable' (BR Diary 3:1). Abby saw feedback as a dialogue between the writer's ideas and the marker's more informed viewpoint:

...it's not about the grade, it's about your knowledge and how you're learning and I feel this [feedback] has helped me to do so because [the marker's] comments at the side are like a conversation you would have in a lecture, so she's taught me more through marking this essay; having the comments that she agrees with this point that I've made and why she feels that (BR Diary 4b:1).

In identifying the written feedback as a 'conversation', Abby did not at this point note its dialogic limitations (Nicol, 2010). It was through her tutorial with the marking tutor that the 'conversation' became more fruitful. Abby recognised that generic feedback on assignments and tutor and peer feedback on group presentations afforded the opportunity to gain greater levels of feedback than would be available from individual

assignments. She viewed the use of assessment criteria grids and rubrics as beneficial in showing her how to improve her work and achieve higher grades.

However, Abby was also aware that feedback was subject to human error and the imperfections of systems. She provided evidence of contradictory feedback given by two tutors and suggested that markers could miss vital points due to the quantity of marking under pressure of time. Her experiences of formalised peer feedback (Section 2.1.4) had shown a tendency for some assessors, apparently in an effort 'to boost their marks', to be 'too picky', too emotionally involved and lacking in 'objectivity' (BR Interview 2: 1). Abby was particularly critical of feedback that, in her view, served little purpose. She described summative reports of school placements as 'paperwork' exercises where 'targets...were made almost as they should've been, not because [they were] fully needed' (BR Interview 2: 1). In the professional context, the immediacy of feedback and the opportunity to put targets into action were of greater importance to her than items developed for future placements. Consequently, Abby appeared far more positive about the formative feedback provided on a frequent basis by class teachers and mentors than the statements provided by link tutors in summative reports. She was proactive in seeking feedback dialogues with placement teachers if these were not forthcoming. Within the enhancement placement in a special school, for example, Abby deliberately 'kept asking questions' that would provoke feedback responses, increase her understanding and aid her transition into its community of practice (Section 2.2.1):

...you have to be flexible and be willing to learn - so the feedback that you were given or I initiated was so important and it's the only way you managed to learn - you learn what the school do [sic] - so you can become part of that (BR Diary, 4a: 4)

While Abby's definition of feedback focused on another person's 'reaction to your work or an action that you've had control over... how to improve it in their mind or it's praise' (BR Interview 3: 13). Highlighting the notion of self-regulation (Section 2.1.5), she commented that the student should take responsibility for seeking out and using feedback 'because that's the only way to improve' (BR Interview 1: 1). Abby made use of ipsative assessment and showed an increased, if hesitant, level of self-regulation and a reduction in the scaffolding she required across the period of research. At one point she stated:

...I've kind of seen the progress...I don't need as much help,

but in the same interview countered this with,

...there's always a self-doubt that's like - have you done this bit? - or you never know what the marker truly evidently wants until you hand it in and I've had that reassurance. (BR Interview 3: 2)

Abby showed no hesitation in defining reflective practice (Section 2.3.1) as an ongoing approach to self-improvement. She summarised her understanding of the term by saying:

...so you're constantly aware of what you need to do and how you can get there, so you're reflecting...if you didn't reflect then you wouldn't really improve, you'd be quite ignorant of what you're doing. (BR Interview 3: 14)

In her view, the purpose of reflective practice was to progress her learning. The cyclical approach she described required self-assessment of her current position and progressed through the identification and critique of the positive and negative features of her learning to determine future approaches. Abby considered reflective practice to be central to her studies and her life, commenting 'we're always reacting to something to see how to make it better' (BR Interview 3: 14).

5.1.2 Beth (BS)

Beth preferred to be dropped off at Hope University by car after a 20 minute drive rather than still having to travel in by public transport. That took hours with several changes. Going to university cost money, so Beth lived with her boyfriend in the family home, along with her parents and younger brother. She found employment to help with funds while she trained to teach children in the early years. It was the career she'd always wanted.

The first sessions at university were daunting and quite different from her experience of doing A-levels at school the year before, but with her sociable

nature, Beth soon found herself making friends with Craig (BU). This friendship would last throughout the three years. They were in the same seminar group and shared a similar sense of humour. They worked together when groups were formed for activities and presentations and soon made time to meet outside of university every week, even though this meant travelling a distance to each other's homes. Beth found this really useful. Even when Craig was too ill to visit her, they used Skype to work through their ideas. They were both working to fund themselves through the programme, so pooling resources also saved time. Beth and Craig swapped readings, talked through the assessment criteria for assignments that were due and discussed their different experiences of teaching. They also shared the feedback they'd received on assignments and, at the beginning of the second year, decided to bring together and discuss all their first year assignment feedback to help prepare for what was to come.

Beth was the first of her family to attend university. With her boyfriend, family members offered her emotional support and were interested in reading summative reports of her progress. She identified some opportunities for discussion about education with her mother, who was training to be a teaching assistant. While Beth's professional feedback came through placement teachers and tutors and her academic feedback came through tutors and peers, she saw peers as integral to her feedback experience, stating:

...At the end of the day, it's not competition to get the degree, so that's why we kind of...we've looked at each other's feedback and things and just tried to help each other with it really. 'Cause it is hard, especially when you've got a life and job as well, you know. (BS Interview 1:7)

Her reciprocal feedback relationship with Craig (Figures 5.6; 5.7; 5.8) developed in the first year and grew through a range of shared situations, mutual trust and the investment of time. Beth identified herself and Craig as part of a larger peer group of 4-6 students which formed a community of practice (Section 2.2.1) that ebbed and flowed according to friendship patterns and personal circumstances during their studies. She returned to Craig as her main source of peer feedback while referring to other peers. For example, Beth formed a feedback relationship with CQ in the first

year. She was acquainted with CQ at secondary school and found they were travelling into the university on the same public transport. Following the processes advocated by the secondary school they had attended, Beth and CQ discussed assessment criteria and offered each other formative feedback on assignments prior to submission. Similarly, within the quadratic relationship of BR-BS-BU-CS identified at SNA2 (Figure 5.7), Beth formed a triadic clique with Dawn (CS) and Craig (BU). Her tie with Abby (BR) was not reciprocated (Figures 5.6; 5.7) until SNA 3 (Figure 5.8). Differences between their approaches to study may have influenced this, particularly Abby's need to plan ahead. Beth remarked:

She [Abby] was thinking about the science essay about three or four months ago when everything else is due in first. It was just like – no! (BS Interview 1: 19)

At SNA2 and SNA3 (Figures 5.7; 5.8), a mutual tie existed between Beth and DS, but she did not discuss this in her interviews or diary entries.

Figure 5.6: Beth's SNA1 ego network

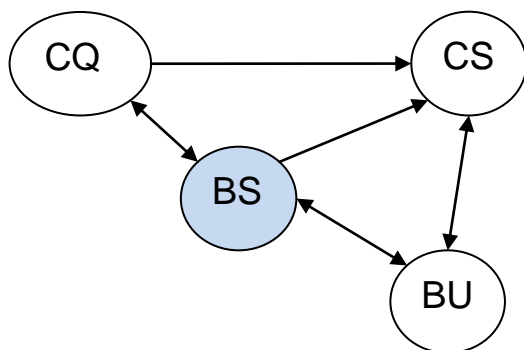


Figure 5.7: Beth's SNA2 ego network

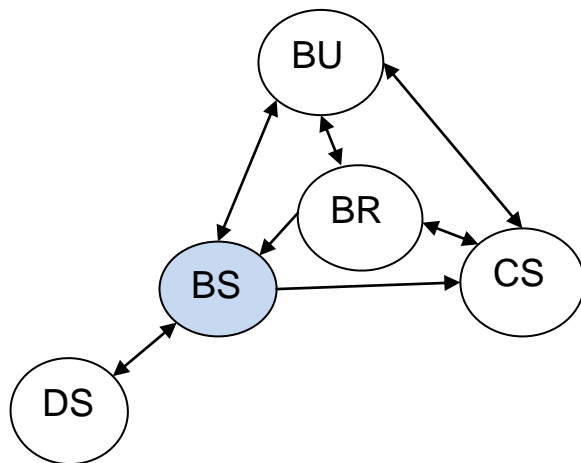
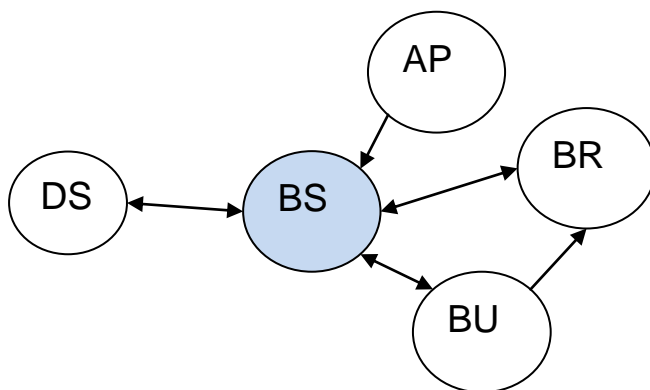


Figure 5.8: Beth's SNA3 ego network



Beth's view that feedback should act as a 'really good confidence booster' (BS Diary 1b:1) was sometimes at odds with her experiences within professional and academic contexts. She sought 'constructive criticism: that feels really good because you know that you're doing things right but that also there are still things for you to do to improve on' (BS Diary 1b: 1). Through her interviews and diary entries, Beth gave three polemic examples of her feedback experiences and the choices she made in light of these.

Firstly, through narrative¹⁹ she identified her hesitancy in approaching Tutor A to ask for further guidance regarding assessment criteria. Discussions with other students had led her to believe that Tutor A was not providing information of clarity. She referred to Tutor A as 'scary' and, with Craig, decided instead to seek advice from

¹⁹ Within this chapter, the students' narrative accounts are identified by the use of Labov's codes (Figure 5.1)

Tutor B. This tutor provided examples that bridged the gap between their tacit and explicit knowledge. She responded favourably and felt his feedback had given her direction, as this first narrative reveals:

(A) It was just...we [Beth and Craig] were saying we weren't sure exactly what way to do about it [sic].

(O) You know, we said we're not supposed to talk about the scientific point of view

(CA) but other people were saying that they were doing about all the causes of it and like medication and things for it.

(CA) I mean, you know we weren't supposed to do that

(CA) and [Tutor B] was like, 'it's not really about that, it's about how you've seen it and how you can deal with it as a teacher'

(CA) and then he just sort of gave us some examples of things that you could just include in the essay, like he was saying about you could do resources, you could do about strategies and approaches, it was just things like that.

(E) I mean I can't really remember it now, but I'd just studied about it obviously, the resources used and the strategies for helping [the children] which was a lot of things about [the subject], we were saying about obviously...he suggested a couple of books for [the subject] that were really good ones.

(E) And we were saying about the [method] which was you know, we still use now which is what I'd seen at school but that never you know, it never really clicked for me to do that kind of thing.

(R) I knew what I needed to do but I just couldn't get it in my head 'cause everyone was saying so many different things and... I never done [sic] anything like that before.

(BS Interview 1: 23)

In a second example, Beth gravitated away from one source of feedback and sought advice from others who she considered to have greater credibility. During her first school placement, Beth's link tutor was an early years' specialist who communicated fully with the school staff to offer a consistency of approach. This stood in contrast with her second placement. She concluded this was due to the feedback giver's lack

of knowledge and experience, saying: 'I don't think [Tutor C] has taught reception' (BS Interview 1: 23). Beth did not discuss the feedback with the link tutor concerned but asked for additional feedback from teachers whose knowledge she trusted, saying:

... what he was expecting to see obviously wasn't applicable for a reception class. It wasn't applicable for my class at all, you know, what he was saying that he needed to see. My teachers were like, 'don't worry about it', you know, and obviously they observed me and I got a 'good' with sort of 'outstanding features' and stuff, whereas with him I just got 'satisfactory'. (BS Interview 1: 24)

Her experience demonstrated Beth's need to trust in her assessor's ability to provide feedback that was appropriate within the context. She expected link tutors to show accurate knowledge of the context and to moderate their judgements with teachers in the placement school to provide suitable feedback and enable holistic assessment.

However, Beth's third example identified that the quality of effective feedback was not a matter of knowledge and experience alone but that 'depending on the way it's said it makes such a difference' (BS Interview 1: 27). She provided an illustration of a teacher on her first placement who was a highly effective and skilled practitioner who set high expectations. Beth found her to be 'very intimidating; she was very dismissive of me and the other students' (BS Interview 1: 25). Describing her emotional response, Beth described this as an 'epiphany' which had left a mark on her life (Denzin, 1989) by saying:

I had my first lesson and it was my very first lesson I'd done and it was the reading the story and she was like, 'right that's fine but you asked way too many questions' and it was just really... it was no positives [sic], it was just all negative, negative, negative. And I was absolutely like, 'oh, okay', I remember I went home at night and I just cried. (BS Interview 1: 26)

This experience stood in stark contrast to Beth's second placement feedback. She described the latter as 'constructive' and 'relevant' (BS Interview 2: 2). It was couched in positive tones, referred to successes and provided the opportunity to work with the feedback giver to discuss and develop future teaching plans. Beth appreciated the teachers' investment in time to scaffold her learning. She remarked

upon the supportive nature of teachers who made her feel 'included in their team' (BS Interview 2: 5) and the feedback which raised her confidence levels and motivated her to attempt more creative approaches to teaching.

Beth's view that reflective practice was 'just looking back on what I had done to improve for next time' (BS Interview 2: 28) appeared not to tackle its analytical features (Section 2.3.1). Instead, she drew upon three explicit examples from practice to evidence her tacit understanding. These comprised the reviewing and restructuring of teaching and learning evident in lesson evaluations, identifying solutions to problems when working with children to make clay lamps for Diwali and reflecting upon tutor feedback when writing an assignment for resubmission. Rather than focusing on internal dialogue (Hughes, 2009; Mead, 1934), her examples centred on dialogue with others. They were focused on physical and immediate change rather than changes to understanding that might be evidenced through future action.

5.1.3 Craig (BU)

Craig lived with his mum, dad and younger brother in the family home. It took about an hour for him to drive into Hope University and he felt he had much in common with other students who lived off-campus.

He saw his journey into teaching as full of obstacles. On advice, Craig had taken a BTEC in Childcare rather than A-Levels but wasn't happy that this had appeared to restrict his university choices. At Hope University, the feedback he'd been given in the first year was extremely picky. Tutors who marked assignments seemed to contradict each other over referencing and didn't offer help. His first placement teacher was very hard and negative in her feedback. There was even a sense of competition rather than support between students in the cohort. All in all, it hadn't been a pleasant experience.

Craig's interviews and diaries indicated that he was often at odds with the feedback he received from academic tutors and professional placement staff. Defining feedback as 'someone's opinion' (BU Interview 2: 18), he was critical of any feedback that he deemed to be incorrect, insufficient or lacking direction. He raised issue with feedback providers' lack of knowledge, inconsistencies between assessors and their identification of errors without indicating ways forward. He favoured handwritten

comments over online feedback and verbal comments that could lead to discussion over written feedback with no opportunities to 'fight your case' (BU Interview 2: 17). However, Craig identified only two points at which he would seek verbal feedback; firstly, when reassurance or further explanation of a task was needed and, secondly, if written work was due for resubmission.

Although Craig did not use narrative within his diaries and interviews, he voiced angst through categorical statements of pre-university experiences, such as 'B-Tech. I hated it, didn't like it all' and 'in Year 10, you do work experience, I hated it. I didn't want my life to be the same every day - I wanted it to be different, I wanted to make a difference' (BU Interview 1; 2; 3). His comments appeared as emotional responses which masked internal struggles. These struggles emerged further through several dichotomies as he came to terms with the nature and complexity of the feedback and guidance provided at degree level. For example, at several points Craig stated his preference for verbal feedback while also acknowledging how useful it was to refer back to written tutor feedback which indicated issues and ways forward. Similarly, although he sometimes found it difficult to interpret written assignment feedback, Craig planned to ask his 'mum and dad to look through it with me' (BU Diary 3: 1) rather than seeking support from the feedback providers who he acknowledged to be readily available. Interestingly, Craig identified himself as having been a 'lazy' schoolchild, whose parents continually 'pushed' him towards study strategies that encouraged him to 'be proactive' and 'find out for myself, instead of being given it on a plate' (BU Interview 1: 12; 13). They appeared to offer continuity in the scaffolding of his learning from school to university.

When reviewing his progress, Craig acknowledged that the academic and professional feedback he had received at Hope University had been intended to provide him with insights that supported his development. This scaffolding was often through annotations that highlighted issues and exemplified ways forward, reducing tacit knowledge by making it explicit (Section 2.3.3). By engaging with and addressing the feedback provided, Craig found his grades improved during the second year of study. During the final interview, the positive effects of the grades on his self-esteem and confidence levels appeared to present themselves as an 'epiphany' (Denzin, 1989). Craig said:

...[the feedback comments were] much more positive this year. I think because I'm not doing silly mistakes, and I've read what they've said in the past, and I've tried not to do that...But I think, I've read it differently, because I don't know...I think it's both.. I think it's been what they've said, and also my opinion. Because I now know that it's helping me, so I can digest it a bit more, if you know what I mean...the way they've written it has got better because I haven't been doing the things that I did in the first year, so they haven't been bringing that up, and it's been less of the negative and more of the positive. More of the juicy bits, the bits that you're meant to learn, rather than the picky bits like referencing, and stuff like that, which I found a pain. (BU Interview 2: 5)

The manner in which he had approached the academic and professional feedback appeared to have been influenced by the scaffolding provided within the close-knit ego network that Craig maintained over the three years of study (Figures 5.8; 5.9; 5.10). Four peers [BR-BS-BU-CS] formed a quadratic feedback relationship; a small community of practice (Section 2.2.1). They were members of the same seminar group. Through shared workshop activities and discussions, Craig felt they shared similar approaches, putting support and honesty above competition. Within this group, Craig formed a clique with Abby (BR) and Dawn (CS) at SNA1 and SNA2 (Figures 5.9: 5.10). Beyond this clique, he considered himself to be 'on the same wavelength' as Beth (BS) (BU Interview 1: 6). This led to a sustained, reciprocal feedback relationship. The two peers invested time to meet regularly in each other's homes throughout the degree to provide formative feedback and support (Section 5.1.2). Craig felt they were comfortable in sharing views and seemed to work at a similar academic level. He understood that Abby and Dawn worked in a similar fashion and gained from the strength of their mutual tie by meeting with them at university whenever possible.

Although strong, Craig and Beth's dyadic relationship was not within a clique so could not be defined as a Simmelian tie (Section 3.4.2). One-directional ties between BS-CS at SNA1 (Figure 5.9) and BR-BS at SNA2 (Figure 5.10) negated this possibility. However, the restricted number of choices within the methodology may have played their part in obscuring an existing Simmelian tie (Section 5.4).

Figure 5.9: Craig's SNA1 ego network

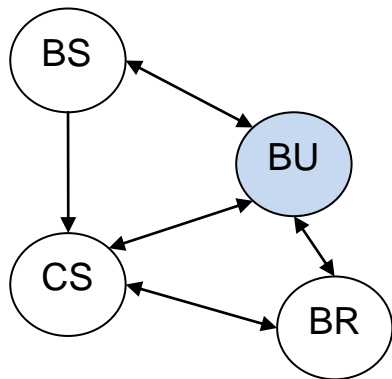


Figure 5.10: Craig's SNA2 ego network

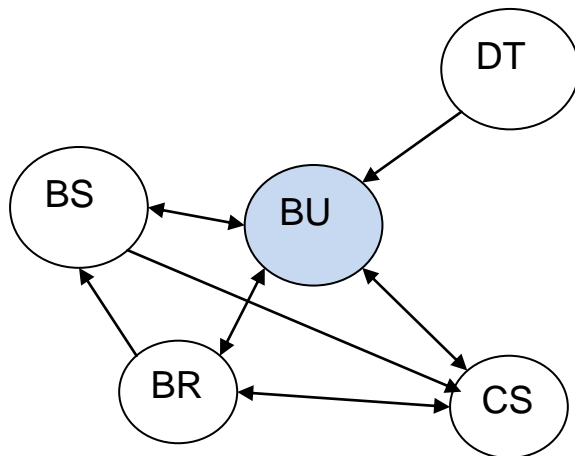
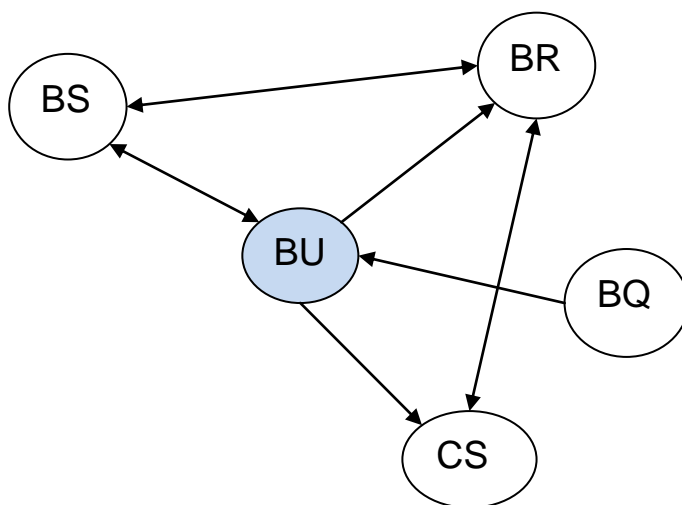


Figure 5.11: Craig's SNA3 ego network



One aspect of his dyadic relationship with Beth which appeared to be a highly influential 'epiphany' for Craig was their joint decision to review and share academic feedback from the previous year of study. Within the first interview, Craig had identified minimal engagement with marked assignments but within the second, he noted with pleasure the progress that had been made across the two years. Applying ipsative assessment (Section 2.1.5), he analysed improvements to his feedback and attributed these to his use of reading to engage with content and to act as models of academic writing styles. Shared analysis and actions were also in evidence within Craig's diary when he said:

...from looking at both our essays [Beth and I] have used a lot of reading within our bibliography, but still we get the same [feedback] comments - so I think we, from reading that, it has interested both of us to go and enquire about it and find out what they mean by this. (Diary 3: 5)

This new level of interrogation of past assignments and feedback continued as Craig stated his intention to use the summer break as an opportunity:

...to meet up with other colleagues in my [seminar] group to look over each other's essays and start - I will personally start - looking at my spelling and tenses and punctuation to make sure it is improving and start reading around the topics and getting books out and reading over the holidays, so I am prepared for the essays to come, but I think the [feedback] comments have helped me a lot...they are very useful. (Diary 3: 6)

Social interaction within a small, trusted group of peers aided motivation and the growth of techniques. Craig's remarks demonstrated a significant change through the period of research, having initially dismissed the value of feedback unless a formal resubmission was required:

We don't really look at each other's [feedback]. We might, when we go and collect it, we might say, oh he suggested this, blah, blah, blah. And we'll just talk about it, that's really all it goes. Because I haven't really, I haven't resubmitted anything. (BU Interview 1:8)

The sharing of approaches and individual feedback resources during the second year of study appeared to provoke dialogue and provide the peers with greater insight into the use of feedback that moved away from the need for specific examples towards

more generalized approaches. This confirmed and provided focus for his early view that 'I think you work better in a two, but you can obviously benefit from working in a big group' (BU Interview 1: 9). While logistically demanding, the investment of time with others in a similar situation appeared to aid Craig's academic development and raise his self-esteem. Meaning was, for Craig, being derived from social interaction (Blumer, 1969).

Craig was hesitant in defining reflective practice, taking long pauses to consider his response. He associated it with the individual's consideration of other people's views, giving an example of ascertaining what was meant by written feedback on an assignment. In this regard, Craig appeared to place an onus on others to provoke reflection. He went on to acknowledge the role of internal dialogue (Hughes, 2009; Mead, 1934), referring to 'thinking' about current understanding and determining 'where you've gone wrong and what you could do to improve' (BU Interview 2: 20).

Craig concluded by speculating on the purpose of reflective practice, saying:

I suppose it's just thinking about the whole picture, and trying to make sure that you're always improving, instead of going back or staying in the same place. (BU Interview 2: 20)

Through this he acknowledged the need for constant improvement and the role of the individual in ensuring progress through an holistic overview.

5.1.4 Dawn (CS)

Dawn had a good support network outside university. She lived at home, about 15 miles from Hope University, with her parents and two much younger sisters. Although Dawn's mum hadn't been to university she gave her lots practical, emotional support and praise when it was needed. Dawn and her cousin were the first in the family to go into higher education. They were often on the phone to each other and, being the same age, had shared the experiences of GCSEs, A-levels and university, with all its extra demands and stresses. Her boyfriend was at a different university and knew what it was like too. He was also knowledgeable about subjects like maths and science, where Dawn really welcomed extra insight. She even found support through

her work at a local primary school. One of the teachers she'd known since her childhood offered Dawn the benefit of her expertise in primary education.

At Hope University, Dawn had feedback support from students in the same seminar group. Group presentations and paired assignments meant they had to spend a lot of time discussing ideas. Dawn found she had similar working approaches to Abby (BR) and that Craig (BU) was able to see things from a different direction. Although they were in different seminar groups, Dawn got on well with BL. They were on placement together and decided also to meet up outside of university to work on assignments. Dawn felt it was always good to get someone else's view.

Dawn developed a feedback network that catered to a range of her needs and which enabled her academic and professional development. While some members of the network were well placed to offer Dawn emotional feedback and support based on their relationships with her across time and varied circumstances, others offered experience and expertise in areas she valued. Dawn appeared actively to have encouraged others to provide emotional and practical support. For example, by placing a timetable on the kitchen door, she ensured her family were fully informed of her assignment and placement dates. At other times, she used serendipitous opportunities to garner further feedback, for example, through entering into dialogue with a former teacher whose child attended Dawn's place of employment.

During her first year at university, Dawn developed her ego network through shared experiences with her peers. School placements and seminar group work offered occasions for Dawn, through proximity with others, to identify similar and complementary approaches and build reciprocal relationships (McPherson *et al.*, 2001). However, the situational allegiance formed with BL during their first school placement was not as strong as that formed with others who she encountered regularly in the same seminar group. Through the strength of their mutual ties, Dawn formed a clique at SNA1 (Figure 5.12) with two seminar group members, Abby (BR) and Craig (BU). This was maintained at SNA2 (Figure 5.13). These Simmelian relationships were not continued into SNA3 (Figure 5:14) although Dawn's relationship with Abby [BR] throughout the three years of the study remained dyadic and reciprocal.

Figure 5.12: Dawn's SNA1 ego network

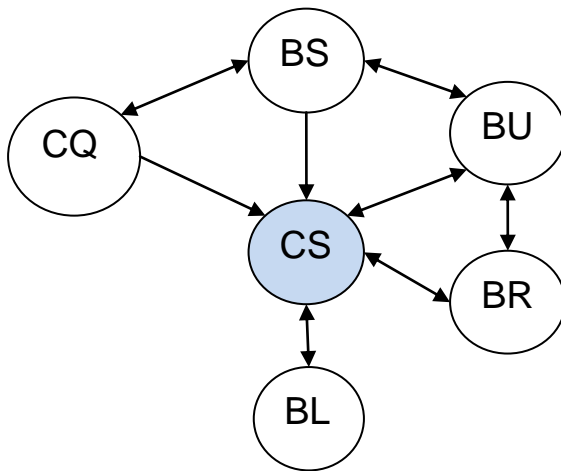


Figure 5.13: Dawn's SNA2 ego network

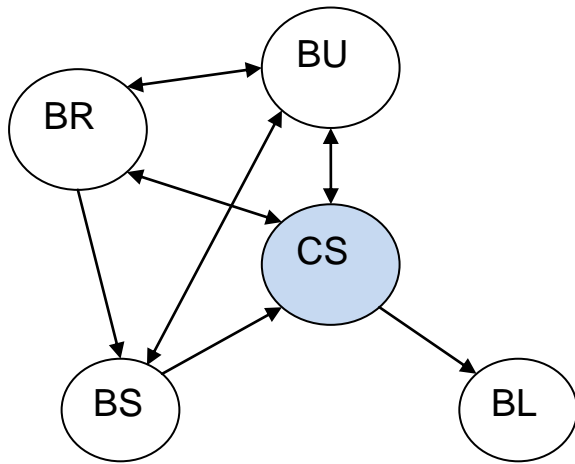
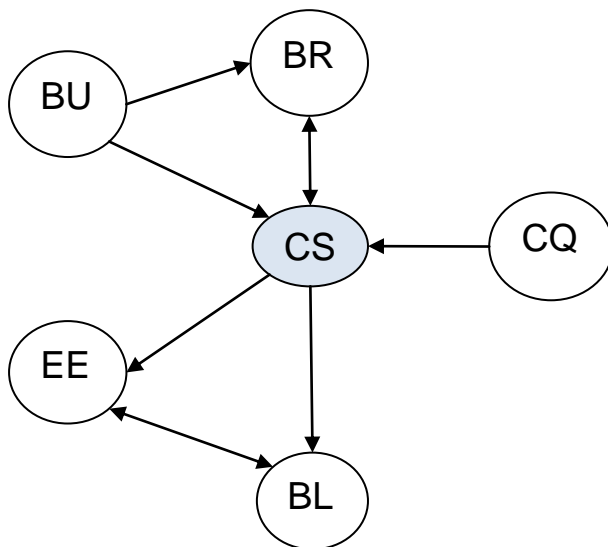


Figure 5.14: Dawn's SNA3 ego network



Dawn described her relationship with Abby as being equal in outlook, with a willingness to give and receive support for mutual benefit. She gave two examples of this, firstly when discussing their approaches to writing a joint assignment:

...we sort of work at the same pace, same similar ideas, that I quite like, rather than other people who seem a bit more laid back and relaxed and I can't really work like that, I need to know what I'm doing and when I'm doing it.

...and the first time that sat down we just...I'd type, because she's a bit slow on the typing, but yeah, we just thought, 'what do I need to get across' and 'how do I need to do it' and we sort of have the same, like wanting to go back and put detail into it and not skip over it all. So we found that works...like we both were equal. (CS Interview 1: 8)

Secondly, Dawn discussed the receipt of a marked assignment:

...I read and shared this feedback with Abby. She was there when I collected it and she also collected hers so we discussed what each other had done to get better marks, what we could both do next time to improve. (CS Diary 5:2)

Dawn's preference for immediate, face-to-face feedback was voiced several times through her interviews and diaries. She considered it an opportunity to enter into dialogue (Nicol, 2010) and gain more from the feedback experience, giving an example of receiving feedback with BL during the school experience placement. Their request for further clarification led to the link tutor providing a deeper level of feedback. Through this social interaction, she clarified her understanding of the *Teachers' Standards*. At the request of the students, the tutor made the tacit statements explicit (Section 2.3.3) through the use of reasoning and by giving examples within the students' experiences.

Although Dawn valued tutors' written feedback on assignments and in placement reports she accepted that the quality of feedback varied, indicating such acceptance by remarking that 'some people, I think, deliver it in a clearer and better way than others' (CS Interview 3: 11). Citing feedback from peers and tutors in group presentations and the use of audio feedback in Course A (Figure 1.2) during her first year of study, Dawn commented on the significance of facial expressions and vocal nuances that complemented written feedback within the programme, saying:

[of presentation feedback] ...you're actually getting a reaction from people rather than what's just written down. (CS Interview 2: 13)

[of audio feedback] ... you could listen to it rather than [reading it]...I do like having it like a hard copy, but sometimes when you're reading and reading you don't always take 100% in. So if they've recorded feedback, I've found that really useful. (CS Interview 1: 10)

She placed value on the tempered approach of her peers (Section 2.1.4) who, while lacking expertise, used a shared language that placed her at ease and provided balance, not unlike the 'two stars and a wish' she had encountered during school placements:

...I think sometimes, although obviously the tutors have got their experience and they know, hearing it from a peer as well, you feel a little bit more less - not intimidated but, 'Oh okay, yes, I can see where you're coming from', rather than someone with authority like, 'You should have done this, you should have done that', sort of thing. (CS Interview 2: 13)

Dawn likened the immediacy of presentation feedback to that received from teachers, teaching assistants and children during school placements. Rather than being distanced by several weeks from the submission date, this feedback, although part of the summative grading system, could be used formatively to develop future assignments. She felt it also reduced the negativity that came from dwelling on formal written feedback. In Dawn's view:

...once you're annoyed [with written feedback] then you do, like, resist a little bit, and I know it's for my own benefit to do well and I want to do well but once you get a bit like, 'For God's sake', it then affects you and it puts you in a negative mood rather than sitting down with a positive mood to write the [next] assignment. (CS Interview 2: 8)

Dawn considered the role of feedback was to provide 'a fresh pair of eyes' (CS Interview 3: 24) while giving the reassurance to:

...know you're on the right track, [to] know you're doing okay, so it sort of gives you that push for encouragement to complete [your work] and to finish it to a good high standard. (CS Diary 4: 2)

She also acknowledged that 'everyone should be open to feedback' but that the experience was 'quite a personal thing really' which required a need for feedback providers to 'be willing to be kind about it' (CS Interview 3: 26).

Unlike the other students in this study, Dawn experienced a failed assignment and was coming to terms with this during the final interview. The event was an 'epiphany' (Denzin, 1989). It left Dawn shocked, confused and in a state of panic. She spoke of her experience and reactions through narrative:

Dawn: (A) I was quite positive up until that and we only found that out...

(O) Well, when we were on enrichment [placement] so it wasn't even as if you could do anything about it at the time. I couldn't come and collect [a hard copy of the marked assignment]. [The grade] was on [Hope University's online system] - it just had the number 35 in red. No other feedback or anything.

(CA) I emailed [subject tutor A] but she's not here, is she?

RH: That's right, she's off ill at the moment.

Dawn: (CA) She said that she would help but you'd need to come and collect it, but I wasn't finishing enrichment until 5 o'clock so it meant I couldn't come and get it until last week.

(CA) And when I went to see [subject tutor B] about it I think I must have caught her in an off mood. She sort of like snapped at me and said, 'I can't deal with you now, you'll have to email me', and I don't know, I felt, because I was shocked that I'd failed in a way because I hadn't failed anything and it was like almost the last one [of the academic year] which was so annoying.

(CA) And also I didn't know where I'd gone wrong. Like even when I picked it up, the comments - there were question marks around areas but it wasn't saying exactly what I had done wrong so I still wasn't 100% sure.

(R) But I read through it again and I found some more quotes, got some more books from the library and then when I see her next week I'm going to suggest to her what I think I could do different and is there anything maybe [subject tutor B] can tell me.

(CA) But I've never met her before, so I'm a bit nervy ringing her for something like that. If you don't know them you may feel a bit uncomfortable.

(R) But I think, just going forward, like now I've been to them. Like when I first found out I was panicking like, 'Oh no, I've failed', but then [subject tutor A] did email me saying, 'Don't worry about it, it's not the end of the world', sort of thing and obviously when you read it through it didn't seem as bad as the initial like 35 mark.

(C) So if it happens again don't go into panic because that's what I did and got myself in a state about it, try and be calm about it. (CS Interview 3: 3)

Dawn's emotional response to this situation was palpable. A series of incidents had added to the distress she felt in failing the assignment. The grade was not explained. The written feedback, when received, was minimal. Tutors were not immediately available to provide feedback and guidance. Dawn had to come to terms with the situation, having resolved to make the most of her resubmission tutorial with subject tutor B with whom she had had no previous encounters. In doing so, she acknowledged her immediate emotional response to the feedback and her need to draw upon study skills to resolve the situation. Interestingly, her narrative did not refer to members of her feedback network, other than the two subject tutors. Through the negative elements of the epiphany, Dawn realised she had the skills and determination to move forward. However, this was tempered with scars from the experience which left her cautious about future assignments within the subject area. She distinguished between these rational and emotional responses by saying, 'I know I shouldn't be, but you kind of feel differently don't you?' (CS Interview 3: 4).

Without alluding to this experience, Dawn considered reflective practice to be looking 'back on what I've done...taking the positives and the negatives again really, out of that and analysing it to then prepare yourself' (CS Interview 3: 27) for future situations. She instead made immediate reference to the professional aspects of her work, citing the role of the 'Professional Development Planning' document used within the programme. This required placement schools to identify three areas the student would need to improve upon in a future placement. Although these areas were derived externally, Dawn viewed reflective practice as individually focused and requiring internal dialogue, saying:

[Reflective practice is] thinking about what you've done as an individual rather than what everyone else has done. (CS Interview 3: 27)

5.2 Summary: Abby, Beth, Craig and Dawn

The close ties between Abby, Beth, Craig and Dawn were evidenced by SNA and confirmed through their diaries and interviews. They were, in McPherson *et al.*'s (2001) terms, 'birds of a feather' who demonstrated *homophily* in terms of both status and value. All lived in their parental homes and travelled into university, having joined the ITE programme from school settings. All highlighted shared values and approaches, particularly with regard to the dyadic relationships forged between Abby-Dawn and Beth-Craig. While Abby and Craig raised concerns that other students in the cohort were competitive, the four peers endeavoured to offer reciprocal feedback that would support and develop their learning, by using language and strategies at a pace that was suited to all their needs. The continuity of their encounters within the same seminar group (Group Y), coupled with the preparedness to set time aside to meet away from the university, forged a high level of trust between the four students who together built a small community of practice (Section 2.2.1).

The four students initially appeared distanced from the majority of the cohort due to their positions away from the majority of the cohort, across the structural hole of SNA1 (Figure 4.3). However, the data demonstrated that each student also benefited from feedback through personal and professional networks (Section 2.2.2) comprising of family, friends, professional and academic sources (Sections 4.1.3; 4.1.4). These encounters, although limited in nature, brought greater levels of social capital (Section 2.2.2) when shared within the small community of practice. The

dyadic and quadratic feedback relationships, in Beth's words, 'pooled resources [to] save time', but these also enabled the whole to become greater than the sum of its parts.

Each student relied on the continuity of the feedback supplied by their families who were 'specialised ties' (Chua *et al.*, 2011:108). In addition to the provision of emotional support, family members offered financial support and stability. Their academic feedback and support was based on their knowledge of the student rather than their knowledge of the programme. Abby gained maternal feedback that helped her apply strategies for managing her dyslexia within the academic context. Beth gained feedback on classroom activities from her mother who was training to be a teaching assistant. Craig sought parental feedback to combat his work ethic. Dawn used her cousin's shared experience of the HEI context to gain feedback on her progress. Similarly, within professional environments each of the students gained feedback as peripheral members of primary school communities of practice which, in turn, aided the flow of information within the group they had formed.

Each of the four students commented on the positive features of feedback practice they had encountered in professional and academic contexts, including availability and willingness to be honest and provide constructive criticism. For example, Dawn had noted the value of oral feedback which offered nuances that were not available from written feedback alone. Abby had recognised the value of generic feedback as it supplemented individual feedback, giving insight into areas that may not have been present in a piece of work she had undertaken. Beth noted how working with the feedback giver during professional placements helped her to develop future plans, while Craig recognised that discussion about marker feedback gave him the opportunity to fight his case. Cumulatively, these experiences were identified as beneficial working practices and then applied to the group. Through dyadic and quadratic relationships, the students provided and received formative feedback that supported their understanding and interpretation of assessment briefs and criteria *during* assignment completion and as they *reviewed* feedback from all marked assignments at an agreed point, in preparation for the year ahead. While the ties they formed within the cohort were 'super strong and sticky' they did not appear to constrain or 'torture' (Krackhardt, 1998; 1999) students' development, as feedback was available from other sources.

By SNA3, the four individuals were more loosely connected but each demonstrated greater levels of centrality within the cohort (Table 4.7; Figure 4.8). The birds of a feather had found their wings and were seeking and providing feedback for peers beyond the nest they shared. As the programme progressed, the students appeared to develop their approaches to feedback by reflecting upon the value of each feedback encounter. Their increased abilities to determine the source and quality of the feedback provided also came through personal 'epiphanies' that changed their ways of thinking. Beth, for example, was brought to tears by the negative nature of the feedback received from a mentor and, from this, made a conscious decision to seek constructive feedback from those she could work alongside. Dawn's epiphany came through a failed assignment and the resilience she brought to bear in seeking feedback from tutors. In both cases, this stage of the journey was an emotional one, resting not just on their ability to gather feedback that they could understand and use, but on the students' tenacity and ability to put emotions aside to deal with the situation.

Comments on the purposive nature of feedback were made by each of the four students. Abby's remark that some feedback appeared to be a form filling exercise was in stark contrast to Dawn's experience of presentation feedback. Where the former appeared to focus on a distant goal that lacked current interest, the latter offered the opportunity to apply and test understanding and interpretation of the feedback within weeks. Similarly, Beth noted that feedback in the professional context could be tested within hours or days. Beyond the promptness or timeliness of feedback (Section 2.1.3), the immediacy of opportunities to apply it encouraged students to engage with what Craig called 'the juicy bits' of feedback. It provoked learning through internal dialogue, while promoting a cyclical, reflective approach that evidenced the students' progression and built their self-esteem.

5.3 Ella and Finn's feedback journeys

In this section, I explore the feedback journeys of Ella (CJ) and Finn (DI), whose SNA data stand in contrast to those of Abby, Beth, Craig and Dawn. Ella and Finn maintained a reciprocal feedback relationship throughout the three years of study. Both also maintained 'star' status within the cohort, with high in-degree centrality and high levels of authority (Table 4.7). With these characteristics, they were very well

positioned to receive and influence the flow of feedback information across the cohort.

5.3.1 Ella (CJ)

Ella was the youngest in her family and the first to go to university. She didn't expect her parents, older brother or anyone else to understand what she was doing, so didn't ask for their help with university work, even though she had stayed living at home. The family lived only five minutes drive from Hope University so she'd been able to keep the weekend job she'd had since she was 16. Ella had just passed three A-levels at a local grammar school and completed a sign language course there, before starting the BA QTS degree.

After more than a year on the programme, she was still puzzled by the results she was getting. Her grades were good but she didn't know why. She put it down to luck. Ella used the success criteria she'd been given on the courses when she was writing assignments but found that she and her friends interpreted them in different ways. But as she couldn't see any difference between her written assignments and those of her friends, Ella assumed she'd just been lucky in who'd marked them. 'I can't complain', she said as she shrugged off differences between markers' approaches and grading.

But these differences had affected Ella and changed what she felt about feedback. She wanted to be able to make use of the feedback from assignments. If tutors didn't provide her with areas to improve then what was the point? She really didn't want 'airy fairy' comments about proof-reading without having things pointed out on the assignments. A comment like 'make sure you proof-read' didn't give her anything useful to work on – it was far too broad and the difference between 72% and 100% couldn't simply be down to proof reading. Ella felt that feedback should build confidence and show her how to improve her work so she could get better grades.

Ella noted considerable variability in the nature and content of feedback provided on academic assignments and within school placements. She cited scripts with no annotation, other than a grade and broad-brush comment, comparing these with others where the feedback had built her confidence, shown appreciation for her

efforts and guided her into new ways of thinking (CJ Diary 2: 2; 4). Her placement link tutor appeared only to provide ‘...generic areas to improve [that] were quite vague and [gave] no real clear targets [so] there wasn't much guidance on how I could possibly progress’ (CJ Diary 1: 4). Conversely, Ella felt that as one academic marker appeared ‘sincere’ in her offer of additional tutorial support, she would be comfortable in following through on this, having built a good relationship with the tutor through the academic year.

Ella appeared to seek honest and direct feedback that provided a consistency of approach. During her professional placement, she had found this in her feedback from the class teacher and teaching assistant. She considered that both gave balanced, direct and frequent feedback, indicating how Ella’s work could improve. Unlike her feedback from academic assignments, the placement situation allowed her to put their feedback into action. She could see its results and the way in which this could build ‘confidence’; a word she used on several occasions:

The feedback that I received from the teacher was extremely useful as although it was like small little hints and tips - this allowed me to put this into practice straight away in the next lesson and this like explained - as though I was almost improving quicker - like it built up my confidence - allowed me to increase in confidence.

The classroom assistant also gave me verbal feedback ...tips and areas to improve on and positive praise for future lessons. (CJ Diary 1: 1).

Within the academic environment, Ella worked closely with other students to ‘proof-read’ and provide formative feedback for each other’s assignments prior to submission. Although the SNA surveys were limited to three choices, Ella identified that an unconstrained choice would have reached beyond her choice of Finn (DI), BK and CC in SNA1 to include AF and CN (CJ Interview 1: 2) who together formed a ‘proof-reading group’. Ella’s SNA1 ego network (Figure 5.15) confirmed that she was part of a triadic clique with Finn and CC and that she was part of other three other triadic relationships that were not cliques [BK, CJ, DI; AF, CJ, CN; AF, CC, CJ]. While there was some variation between her ego network membership at SNA2 (Figure 5.16) and SNA3 (Figure 5.17), Ella remained closely connected with others in

the cohort for the purpose of feedback. She maintained a dyadic connection with Finn (DI) throughout the three years of study.

Figure 5.15: Ella's SNA1 ego network

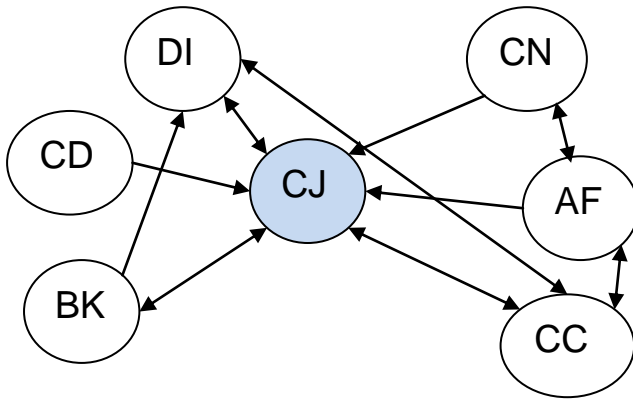


Figure 5.16: Ella's SNA2 ego network

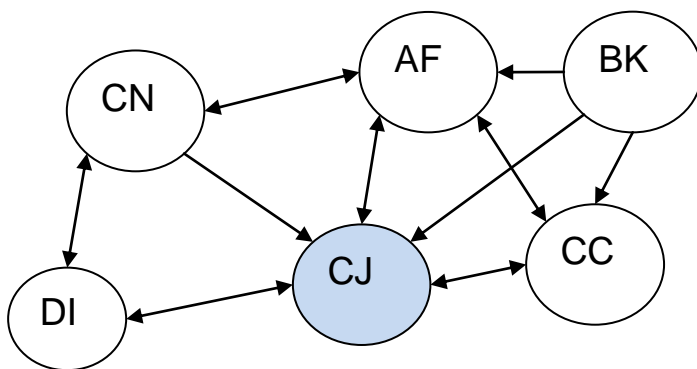
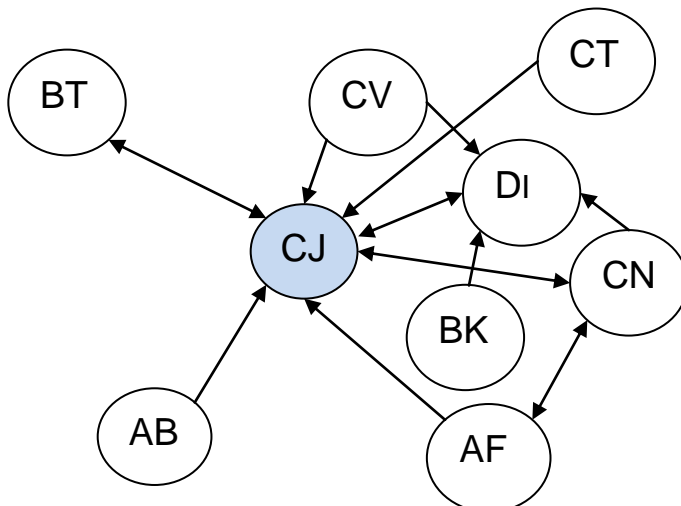


Figure 5.17: Ella's SNA3 ego network



The 'proof-reading group' of Ella, Finn, BK, CC, AF and CN formed a community of practice (Section 2.2.1) that appeared to set its own support agenda from the first term of the programme. The following interview extract provided insight into its demands and benefits:

Ella: And, obviously, it's not fair if someone really... 'cause we spend hours proof-reading each other's work. Sometimes a coupla hours. Then obviously, we then meet to talk through it.

RH: What? In pairs, or in a group? Or...?

Ella: Well, it depends whose you've proof-read really. It's just in pairs normally rather than a group...

RH: Yeah.

Ella: ...and that can take hours [laughter] 'cause, obviously, you're rephrasing it for them and stuff.

RH: How do you feel about that kind of experience?

Ella: I think it's quite good 'cause you do think, 'Oh yeah', and then you go, 'Why didn't I notice that?'. But because, obviously, when you read your own work, you read what you wanna read rather than what's really on the page. Yes, we've all agreed to be ruthless and there haven't been any arguments yet. (CJ Interview 1: 6)

While the investment of time and reciprocity appeared to reap social capital by trading on the experiences and expertise of group members working in different pairs, the joint decision to be 'ruthless' demonstrated considerable levels of mutual trust. Each student had the opportunity to take the roles of 'teacher' and 'learner', ensuring a balance of power existed within the dialogic relationships. This contrasted with the asymmetrical power relationships of students with the tutors who marked and graded assignments and whose written feedback was perceived as monological unless furthered through the discussion of these ideas within tutorials. The group's focus on draft assignments provided opportunities for social construction through a scaffolding process that was dialogical, readily available, frequent and consistent in its level of support. The opportunity to put ideas into action gave purpose and direction for the group's feedback discussions.

Ella appeared to differentiate between feedback as a 'thing' (Blumer, 1969: 2) provided externally by another and reflection as a 'thing' undertaken internally by the self. She saw the latter as problematic and appeared uncomfortable with its introspective and self-critical dimensions (CJ Interview 2: 14). Ella suggested that the programme's emphasis on reflection was too great and that 'sometimes it takes away from the actual learning' (CJ Interview 2: 12), particularly when assignments incorporated a reflective element. She appeared more comfortable with reflection in a professional context, particularly 'reflection-on-action' (Schön, 1991), suggesting that 'looking back at what you've done' was necessary because 'school experience goes by in such a haze' (CJ Interview 2:12). However, Ella was scathing of some approaches to reflection she had been asked to employ during her professional placement. She revealed an instrumental approach to her completion of paperwork when it was not, in her view, beneficial or feasible:

The constant lesson evaluations, I don't often find them as that beneficial 'cause I can just drum out the same generic sentences without really reflecting. I mean, the weekly evaluations I find more beneficial because you're looking at a whole period of time and you can kind of, 'Monday, went bad because of this', yet throughout the week I had corrected it, whereas the lesson evaluations...every lesson is, although it's completely different...I dunno, I find it really difficult to evaluate a lesson 'cause it always seems to go well and go bad, in every single lesson. (CJ Interview 2: 12)

Her comments appeared to reveal conceptual difficulty (Meyer and Land, 2006a) with the requirement to externalize as a product a process that she had identified as internal. The insular nature of reflection appeared to contrast with her experience of feedback as collegial and developmental.

5.3.2 Finn (DI)

Finn was a little older than his peers when he started university in his 20s. At school he had been intent on following his dad's career path and taken a BTEC to gain entry, but Finn then changed his mind. He enjoyed working with children, so Finn found employment as a teaching assistant in a special needs school. Then he realised he wanted to teach. To do this he had to get the necessary qualifications. He completed an Access to Higher Education

course and a year later secured a place on the BA QTS at Hope University. Finn moved to the area and lived a short distance away with his partner, who was studying on a post-graduate ITE programme at Hope.

At university, Finn was comfortable asking for help from his tutors. He felt he'd built good relationships with several of them. If he had a question, such as the difference between 'learned' and 'learnt', or whether to use older texts in an assignment, he knew who to approach. He approached mentors on placement too and appeared to his peers to be confident in new situations, although he didn't feel confident inside and was surprised but pleased when this was said.

Finn liked people to be direct in their feedback and appreciated their efforts to help him but he also wanted them to be sensitive. He appreciated the genuine concern for his well-being shown by teachers when, during school placement, his mum was diagnosed with a potentially life threatening condition. He felt that university tutors seemed to avoid saying anything negative in their feedback so was taken aback by the harshness of one tutor's written feedback on an essay that said that Finn was '[throwing] in dates and names like confetti which actually is a bit wearing'. After some reflection, Finn decided that he preferred this level of directness, as it told him what wasn't working and what needed to be done. He wanted feedback that would explain where he had gone wrong, help him to put things right and build his confidence and self-esteem. He also wanted clear directions that would extend his thinking and help him to move forward independently.

Finn presented as a self-regulated learner who was able to reflect and build upon points raised by others whose experiences were greater and who could 'scaffold' (Wood *et al.*, 1976) his learning. He was proactive in seeking feedback and ready to challenge points he did not understand or agree with. He engaged readily in feedback dialogues with university tutors, school placement teachers and mentors, although he recognised it was not always feasible to learn through direct social interaction with these 'more able others' (Vygotsky, 1978).

Yet Finn also became frustrated when clarity was lacking in written feedback, saying:

...it would be easier to identify targets if they were short and sharp...feedback

shouldn't be something that you analyse [that you] have to sit there and think about it - you want it there and then, out in front of you, so you can clearly see it in your assignment - so you can use it the next time you write an assignment. (DI Diary 2: 1)

He found contradictory feedback to be similarly frustrating and exemplified this through two separate diary narratives. The first related to school placement outcomes:

(A) One aspect of feedback which I was rather confused and concerned with was the interim report and the final school report.

(O) Looking at my grades - I did this together with the mentor and class teacher during a meeting after school - and...well let's go to the beginning of when I started SE when my mentor told me the expectations they had of me - which were exceptionally high - but I didn't mind that because I set myself high expectations, and although I was worried to begin with - over time I did feel as I was meeting and at times exceeding these expectations - and I was led to believe this through my feedback as well.

(CA) But when it came to doing these reports, the mentor and class teacher would often say 'although we know you're 'outstanding' and - in this part of school experience in the teaching standards, we do - we're only going to put you down as 'good' because then you won't have anything to improve upon.' And at first I was really frustrated about this because I thought 'why am I not getting what I deserve - why have they only given me 'good' when they say I'm 'outstanding'?'. And when I asked - I had a comfortable relationship with him - and when I asked why this was, except for the building upon, you know, you can't really build upon 'outstanding' so they'd given me 'good', he said that when you come to your last school experience and the school see that you got 'outstanding' everywhere they're probably not going to feel like they're going to support you as much as they will in the big jump from school experience two to the final school experience.

(E) And although I did understand this and it was very logical, I was left quite annoyed because I've worked so hard to get 'outstanding' and I weren't [sic] getting it even though I deserved it and they knew I was at the level of 'outstanding'.

(R) And it took me a while to accept it but I do understand that in the long term it's probably for the best

(C) - but I still do wonder whether it was the right thing to do or not - but you know, it's done now, what can you do? (DI Diary 1:1)

The second related to the use of 'old' texts when writing assignments:

(A) One thing which I was slightly confused with - well it is feedback but it's a bit contradicting what I understood -

(O) because with the writing process there's a lot of authors from like - old authors - old texts - like the 80s or the 90s - and when I saw these texts come up in my reading I went to actually speak to [tutor] specifically since she's my [subject] tutor

(CA) and I said like that we're always encouraged to use more modern texts but it seems as though these writers are the ones that keep coming up and that their texts are old - and she said yeah, that they're influential writers within the writing process so they need to be included - and I said, 'so in an essay I won't be marked down for having these old references?' and she said what I need to do is to say that they are seminal authors in the field of the writing process and say that - like their perspectives are highly relevant to children's writing today - so I've actually written in the essay 'a seminal author in the field of the writing process is Grey (1983) whose perspectives of writing are highly relevant to children today' - having put that in the essay after advice from her she's actually crossed it out and said 'you do not need this'

(E) so I was slightly confused with that

(R/C) but I suppose that's something I can ask her as well. (DI Diary 3:1)

In both cases, structured analysis showed Finn's ambivalent resolution/coda (R/C). He was uneasy in his acceptance of the *status quo* having identified the apparently contradictory actions of his assessors. They appeared to change the 'rules of the game' (Bloxham and West, 2004) from one feedback point to the next.

Personal peer feedback networks, on the other hand, appeared to offer consistency, with the opportunity to engage in frequent social interactions to support learning. Finn's three SNA ego networks (Figures 5.18; 5.19; 5.20) demonstrated his active engagement with others in the cohort. This was also voiced through Finn's diaries

and interviews and those of Ella (CJ). He met Ella at an early stage of the programme and built a relationship based on proximity and reciprocity. They lived close to each other and Ella offered to drive Finn into university. They proof-read each other's work before submission and worked together to determine how to tackle forthcoming assignments.

Figure 5.18: Finn's SNA1 ego network

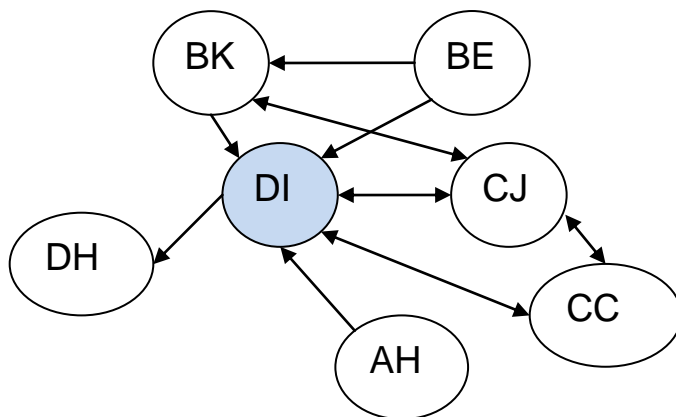


Figure 5.19: Finn's SNA2 ego network

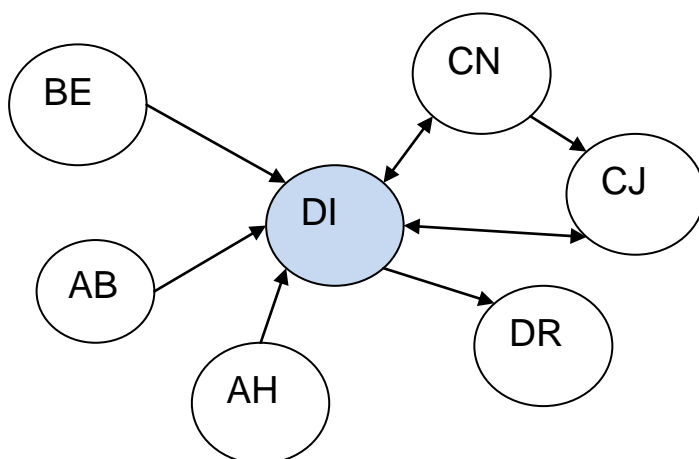
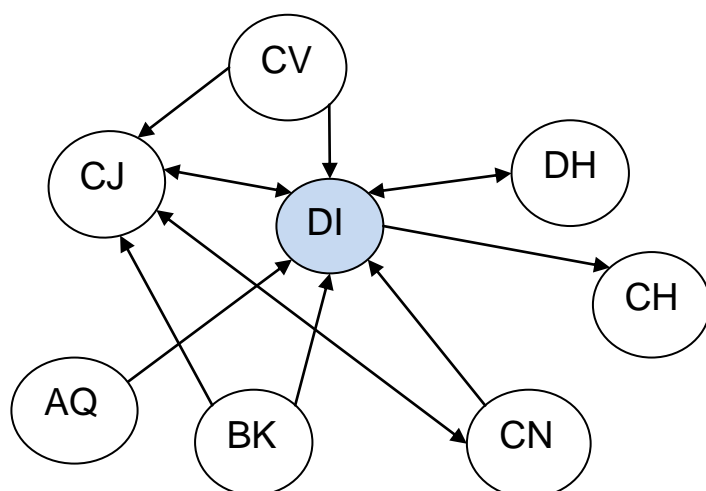


Figure 5.20: Finn's SNA3 ego network



Finn's willingness to provide peer feedback on draft assignments to several others in the cohort afforded him the position of a 'star' with high in-degree centrality throughout the three years of study (Table 4.7). Closeness and authority centrality measures demonstrated his high level of influence with regard to information flow across the cohort.

His central position within the community of practice (Section 2.2.1) that formed gave Finn the opportunity to learn from engagement with a range of sources and gain from the flow of information. The feedback he provided for others appeared to mirror the scaffolded relationship with tutors and mentors that he valued. Finn recognised that social interaction of this kind also had the potential to improve his assignment writing. However, the support he offered others came at a personal cost. Finn found their constant demands 'a bit tiresome, because it was expected a bit too much...and it didn't seem to be appreciated' (DI Interview 2:1). He noticed some asymmetrical relationships, where others were more willing to receive feedback than to reciprocate by providing him with feedback. Rather than turning away peers who requested feedback, he made a conscious decision to reduce the time he gave to others, saying:

...if I'm reading someone's essay and proof-reading it, last year I would've spent like a couple of hours on it and then sit down and talk them through

everything and, you know, I was spending more time doing that than I was proof-reading my own work (DI Interview 2:1).

He justified this saying that his change of approach had not affected his grades but:

...I probably would've benefited more if I did go to [my peers]. That's sort of how I've changed: mostly by doing things more independently but maybe I shouldn't have really 'cause the teaching profession isn't about independence as such (DI Interview 2:1).

His remarks, made at the end of the second year of study, recognised the importance of professional collegiality while acknowledging the levels of independence and self-regulation needed for successful outcomes within the academic and professional elements of the programme. In his view, others still needed high levels of tutor and peer support to tackle the obstacles on their learning journeys. Conversely, Finn appeared to be looking towards and beyond the gate at the end of the tunnel (Section 2.3.5), having considered the roles that he would need to assume as a teacher.

Finn saw reflective practice as a skill and commented, 'I don't think it's something that comes easily to people' (DI Interview 2: 11). However, he considered there was a detrimental over-emphasis on what he perceived to be the minutia of reflection within the BA QTS programme, and felt that this had the potential to reduce 'the enjoyment side of it'. He said:

...yes I do think that [reflective practice is] beneficial in developing yourself, you know, in teaching practice or however you wanna develop yourself, but at the same time it can become a bit...you just start reflecting on everything that you're doing. You think, 'oh I moved to that part of the classroom, was that the right thing to do?'. You can just get bogged down with reflecting when really at the end of the day the most important thing is using that reflection to aid the learning of the children and it doesn't always end up being like that because you're just reflecting on everything. Do you see what I'm saying? (DI Interview 2: 12)

Building upon these concerns, Finn offered an holistic definition of reflective practice that stood in contrast to that of other students in the study. He identified it as 'a consideration of your professionalism and teaching ability within the classroom that

aids the learner and children' (DI Interview 2: 12). Rather than viewing reflective practice in academic and professional contexts as solely for the benefit of the individual student teacher, he suggested its ultimate purpose was to benefit children. This example of Finn's 'double loop learning' (Argyris and Schön, 1978) demonstrated that, rather than considering applications and techniques alone, he was willing to engage with the 'governing variables' of reflective practice (Figure 2.12).

5.4 Gail's feedback journey

In this section, I explore Gail's (CK) feedback journey which differed considerably from those of the other six students. In common with others, Gail's ego networks (Figures 5.21; 5.22; 5.23) demonstrated continuity and reciprocity across the three years of study. Unlike Abby, Craig and Dawn, she was not a member of a clique throughout the three years of study. Unlike Ella and Finn, her in-degree centrality was low and with each year her authority levels reduced (Table 4.7). By SNA3 (Figure 4.8), she was positioned at the edge of the sociogram.

5.4.1 Gail (CK)

Gail was very anxious when she started university. As one of the youngest in her year group, she was later than many of her friends in learning to drive and now she faced driving over 30 miles and through traffic each day to attend Hope University. She was concerned about being late for lectures. Gail had decided, for financial reasons, to stay living at home with her mum, dad, younger brother and sister. Achieving four good A-Level grades and being the first in her family to attend university came with its pressures. She wanted to do her best but soon realised that the combination of travel and workload would reduce the time she had available to relax at home and spend time with her family.

Recognising her own lack of confidence, Gail was pleased to meet CD. CD had started university later than others and, seeing her sitting alone in a seminar, Gail had sat down next to her. She soon found that CD's personality complemented her own. Where Gail worried about things, CD seemed to be far easier going and was able to just deal with things as they happened. This

seemed to help them to share feedback experiences and support each other whenever necessary. BG, on the other hand, was far more like Gail, which could sometimes be a bit of a challenge. Gail helped both CD and BG with grammar when proof-reading each other's draft assignments, but she seemed to help BG more than CD helped her. Despite this Gail found it good to be able to talk to BG. They often phoned each other to panic backwards and forwards and to offer each other peer feedback. BG was quite thorough and helped Gail to see what she'd done wrong and where she could improve her assignments. Her relationship with BZ was different again. They weren't the closest of friends but formed a relationship at the beginning of the first year. Gail found that, along with being supportive and easy going, BZ was a good writer with an amazing vocabulary. She used words Gail had never thought of using before.

As the year progressed, Gail found there were two other girls from the programme living around the corner from her family home and she met with them to develop presentations. Other university friends would email assignments to her and ask her to read them through before submission. Gail often felt that there was little she could add apart from the odd comma but thought that peer support was at its most useful before assignments were submitted. The group she was in would meet to share their areas for improvement from one assignment to the next, so they were well placed to help each other.

Although self-deprecating, Gail developed trusting relationships and became part of a triadic clique with BG and CD (Figure 5.21) which reduced (Figure 5.22) and re-emerged (Figure 5.23). She was aware that some students' personalities that were complementary (CD and BZ) or similar (BG) to her own. This afforded different levels of reciprocity. Gail recognised how her social capital investment provided peer feedback that brought new dimensions. For example, BZ helped to develop her vocabulary and skills in writing, while CD and BZ modelled levels of confidence to which she aspired and BG reflected and worked with Gail's more hesitant but detailed approach.

Figure 5.21: Gail's SNA1 ego network

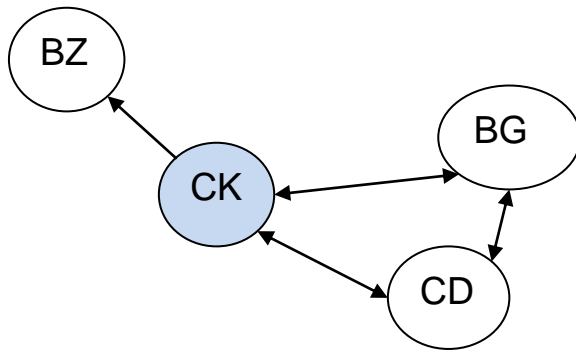


Figure 5.22: Gail's SNA3 ego network

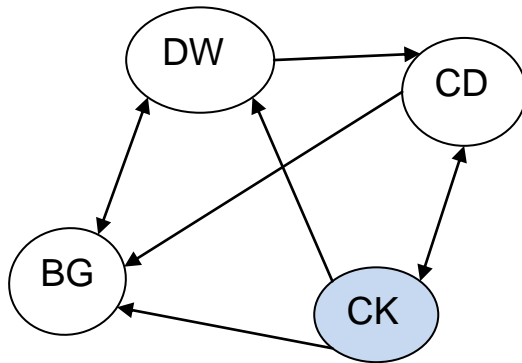
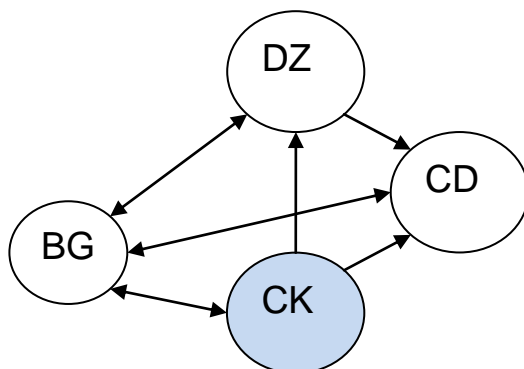


Figure 5.23: Gail's SNA 2 ego network



The group's commitment to supporting each other at the formative stage of assignment development was evident in Gail's diary-interview data. But the group also identified the potential to share the feedback they had received from marking tutors to aid the development of all members. Their discussions at this point became opportunities for contextualized interpretations of the assignment briefs and

assessment criteria to make meaning that would be of benefit as they each worked individually towards the next assignment. Despite her initial concerns, Gail found that geographical proximity to her peers was not an issue, as face-to-face social interactions were continued as necessary by phone, particularly between those who needed greater levels of reassurance such as Gail and BG. From this, new levels of trust and understanding emerged.

Gail accepted that her parents had not received the level of education that would support her learning at university. Living at home, she tried to involve them both but felt their feedback wasn't always helpful. Gail shared her assignment feedback with her mum who, rather than boosting her abilities, focused on negative areas. Similarly Gail asked for her dad's problem-solving support when faced with making a mechanical toy. Although she appreciated his help, she felt he sometimes laughed at her ideas, as she lacked his practical skills.

Her granddad lived within walking distance. He hadn't been to university but had taken technical qualifications and always had time to read through Gail's assignments before submission and talk to her about them when she visited. She sent the assignments to him by email. He didn't understand their content but he could tell whether or not they made sense and gave her feedback on what he thought could be improved. He asked questions rather than just giving answers and asked her to explain ideas. Doing this helped Gail to improve her essay writing. Gail's granddad was also direct with her. He told her to stop going over and over her assignments so many times. He noticed when her emails were sent after midnight. And he reminded her leave her studies for a while to spend time with her sister.

The contrast between Gail's parents' feedback and that of her grandfather demonstrated her need for balance in the feedback provided. In addition to providing this, he challenged Gail's ideas and encouraged her to articulate her understanding of ideas, which in turn aided her written expression. She commented that this 'is what feedback should be' (CK Diary 5.3). He offered a combination of proximity, time and supportive dialogue that was focused on the development of her learning. Beyond this, he also provided consistent emotional support through a trusting, empathetic relationship. When speaking of her grandfather, Gail's voice and

expressions demonstrated the respect she had for the range of feedback he provided. This was an asymmetrical relationship but one with the common goal of helping Gail to be successful in her academic and professional studies.

Gail's view of 'feedback' developed through an audio recorded diary narrative of an enrichment placement experience (below). Application of Labov's (1972) structured analysis (Figure 5.1) demonstrated how Gail's view of feedback changed as she presented the narrative and evaluated its characters' comments and actions:

(A) I also - again it's not necessarily feedback - but I found out something quite interesting which I hadn't necessarily thought about but it's definitely something that's going to stick in my mind

(O) - it was when I was booking in - I booked in a school for a future school trip when doing the education officer's tasks with the education officer [N.B. This event took place while Gail was undertaking a two week enrichment placement at a farm museum, shadowing and supporting the education officer.]

(CA) - and when I came off the phone after having booked them in and everything, the education officer said to me that the school's booked in for a Monday and she said it's not always the best idea - and I was quite intrigued to know why - and she told me that over the course of the weekend parents often tend to forget that there's going to be a school trip on Monday - and therefore don't send their children in prepared - so even with the best will in the world - the teachers may give out a letter on the Friday but the parents still may forget over the weekend and send their children in unprepared

(E) so I learned from that feedback for my future teaching that it's best where possible - if allowed with the head-teacher of course - not to book a school trip on a Monday- coz it could be at a bit of a disadvantage - so quite a useful bit of feedback

(R)- so I then rung up and re-contacted the school with regards to that new piece of information and they did indeed change the date that they had booked

(C) which was quite nice - to see the feedback I'd received did help that school as well. (CK Diary 3: booking)

Although Gail stated at the outset of the narrative that 'it's not necessarily feedback', she had interpreted the event as one worthy of inclusion in her feedback diary. Her abstract (A) identified the event as interesting and something that would 'stick in my mind'; a phrase she used several times through the diary-interview data when referring to feedback. When evaluating (E) the situation she immediately used the term 'feedback'. This was repeated within the evaluation and used again in the coda (C).

The feedback provided by the education officer was in response to Gail's action. Its purpose was explored through a dialogue in which Gail played an active role. She learned from the interaction and was able to act upon it to resolve the situation by phoning the school and recommending a change of days. Gail felt her new learning would also benefit her future role as a teacher. The coda demonstrated Gail's level of satisfaction for all characters within the narrative.

Gail identified reflective practice as an ongoing process and she gravitated initially towards her experiences in the classroom, where she distinguished between reflection-on-action and reflection-in-action. In respect of the former, she viewed reflective practice as 'looking on what you've done...and trying to improve upon it' and likened it to 'feedback, but for yourself' (CK Interview 3: 36). In respect of the latter, she noted the importance of responding rapidly to children's learning needs in the classroom, commenting that if:

...the children are all looking at you puzzled...you're going to have to think, right 'that obviously didn't come out very clear', or 'how can I improve that?' I think that's something [on school placement] that you do all the time. (CK Interview 3: 36)

Gail raised the need for maintaining a balanced perspective by 'trying to look at the good points as well, so you're not constantly putting yourself down' (CK Interview 3: 36). When discussing academic work, Gail suggested this was gained through the incorporation of a range of perspectives that enabled individuals to 'see if it influences what you think yourself' (CK Interview 3: 36). Such openness to the views of others, coupled with the willingness to analyse and adapt her understanding appeared to exemplify Pollard's (2008) characteristics of reflective teaching (Figure 2.14).

5.5 Summary: Ella, Finn and Gail

A lack of feedback dialogue with family members, a commitment to peer feedback through a range of sources and high centrality with the whole cohort network were commonalities between Ella and Finn. These stood in contrast to Gail's experiences of feedback. She readily and frequently sought feedback from her grandfather and, through her limited feedback with peers, demonstrated low levels of network centrality.

Ella and Finn were aware that the 'rules of the game', identified through assignment briefs and assessment criteria, were subject to interpretation by tutors as well as students. They provided examples of tutors' feedback that showed a lack of consistent interpretation at *inter-rater* and *intra-rater* levels. In some cases Ella and Finn were willing to challenge the feedback that was given, but at other times they demonstrated a sense of resignation and seemed to gain little from the tutor/mentor feedback that was provided within the programme. This conflicted with their understanding of feedback as purposeful and developmental.

Due to these two students' authority in relation to feedback (Table 4.7), such levels of disillusionment in relation to specific markers or courses had the potential to flow across a high proportion of the whole network. However, rather than disengaging with feedback they chose to be pro-active, developing what Ella referred to as 'proof-reading groups'. This positive approach demonstrated their levels of self-regulation (Section 2.1.5) and may have acted to counter potential negativity across the network with positive actions. The communities of practice (Section 2.2.1) that grew through the guise of 'proof-reading' appeared to offer timely and reciprocal formative peer feedback.

Ella and Finn's approach to feedback through the detailed analysis of work in progress required the investment of time, the development of feedback skills and the nurturing of network connections. The two students' centrality within the cohort suggests that many students beyond their ego networks benefitted from their feedback interactions. Ella and Finn were also aware that they benefitted. Both appeared to value feedback from sources that enabled dialogue and where the teacher-learner relationship see-sawed between peers according to their knowledge, understanding and experience. This collegial approach enabled meaning to be

derived through social interaction (Blumer, 1969). It stood in contrast to the defined, and frequently monological, power relationship between the tutor as marker and the student as receiver which both Ella and Finn had found problematic.

While Ella and Finn promoted the interpretation of assignment briefs and assessment criteria through engagement with other students' writing and ideas, their developmental approach had the potential to support the exchange of ideas and improve participants' quality of expression. The notion of trust was central to this, along with agreed parameters such as the need for 'ruthlessness' and the willingness to give, as well as receive, feedback with specific feedforward actions. These became the rules of *their* game, with Finn deliberately reducing his engagement with the writing of students who were unwilling to adhere to these rules.

Gail was aware of, and valued, the varied skills and experiences of her peers, some of whom provided contrasting viewpoints, while others appeared to share her way of thinking. Beyond offering formative support prior to assignment submission, Gail commented on the usefulness of her peer group's post-assignment analysis of tutor feedback. By sharing this feedback, the students revisited the assignment briefs and assessment criteria to determine the tutors' interpretations in relation to each student's assignment. Where Ella and Finn had been dismissive of tutor feedback that was 'airy fairy' (CJ Interview 2: 9) or lacking in specificity (DI Diary 2:1), Gail worked with her peers to unravel the nuances in their feedback across a range of contexts. She considered that the investment of time and social interaction on this activity, which afforded resonance with the moderation exercises undertaken by markers (Section 2.1.3), provided greater insight when tackling future assignments. Despite variations between the criteria of individual assignments and courses, the students appeared to appreciate how these were the developmental threads from which the inter-related programme criteria were woven (Section 2.1.1).

In common with Ella, Gail identified that her parents' involvement with her learning at degree level was problematic but, rather than separating her family life from her studies, she sought the support of her grandfather whose feedback she trusted and valued. She recognised the limitations of his involvement, instead nurturing his support in relation to the clarity of her expression and her work ethic. In order to convey her understanding to this lay audience of one, Gail created a personal challenge. She needed to understand concepts in depth and express her ideas

clearly and fully, without relying upon educational jargon. Gail's trust in her grandfather enabled her to undertake this task although she described herself, and presented at interview, as nervous, lacking in confidence and self-deprecating. Her grandfather's knowledge of Gail's personal attributes enabled him to adopt an appropriate tone and measure to his feedback. He did not hold back from criticality but was alert to the emotional impact of his comments. His questioning opened a feedback dialogue which provoked Gail to delve more deeply into her conceptual understanding and, where necessary, to modify her interpretations. Cognisant of her grandfather's lay position, Gail maintained phone and email contact with her peers from home as a means of complementing his feedback with those who had a shared experience of the programme.

Although Ella and Gail's professional experiences varied in context and outcome, they each identified points at which their understanding had been modified through the feedback process and this new understanding had been put to the test. Ella used the teacher's 'hints and tips' (CJ Diary 1:1) in the following lesson and Gail responded immediately to the education officer's remark by changing the day of a school visit. In both cases, the actions they took helped to consolidate their understanding, build their confidence and reaffirm their trust in the feedback providers.

Of the seven students, Finn had the greatest amount of prior experience in the classroom and was more assertive in seeking feedback clarification through dialogue with tutors and mentors. Rather than focusing in his interviews and diaries on day-to-day feedback, his interest was in the holistic feedback of professional practice, the interim and final placement reports. This contrasted with his interest in obtaining detailed and specific tutor feedback in academic areas, where he identified his lack of experience. While Gail showed a level of tenacity in her approach to analysing written feedback from tutors, palpable within his diaries and interviews was Finn's frustration with the need to interpret ideas. His preference was for dialogue; for ideas to be modified through social interaction (Blumer, 1969; Mead, 1934) and for a scaffolding process (Vygotsky, 1978) which allowed his ideas to be tested and validated without delay to reach what Denzin (1992: 5) referred to as the 'consummation phase' (Section 2.0.1).

5.6 Critique of methods: Diaries and interviews

5.6.1 Diaries

The use of diaries to gain students' 'perceptions and experiences' (Basit, 2010: 146) of feedback across the second year of study was not without its limitations. For example, four students were filtered out from the study as they provided insufficient data (Table 5.1), despite being prompted. Some diaries were retrospective rather than immediate (Appendix K), offering more selective and measured accounts of situations. This resulted in an inconsistency across the students' data. However, as my main purpose was to explore the lives of individuals, I considered this to be acceptable. More problematic was that some repetition ensued between diaries and interviews. Although I had requested that diaries were completed at intervals through the year, some were completed so close to the point of interview that I was afforded little time to consider their content and develop the interview accordingly (see BR and DI in Appendix K).

Despite these issues, the data that emanated from this method provided considerable insight into the lives of the individual students and 'changes over time' (Lankshear and Knobel, 2004: 255). The seven students discussed within this chapter chose to use audio diaries, using their mobile phones to record and email the files, with each completing between 3-6 entries of varied length (Appendix K) according to the nature of the diary. When the phones restricted the length of recording, students sent multiple files. The prompts I had provided ensured a common focus on feedback but each student discussed the area in relation to their own experiences and contexts. While initial diary entries appeared to be direct responses to the prompt questions, later versions were more fluent. This appeared to demonstrate greater ease with the nature and purpose of the data collection method and my role as a researcher; points that were explored as necessary with individuals prior to the recorded interviews.

5.6.2 Interviews

The interviews were advantageous in providing the opportunity to delve more deeply into matters raised within the diary entries. The facial expressions and body language captured on video recordings enabled greater insight into students' emotional responses to feedback than was possible through audio diaries alone.

The students appeared comfortable with the presence of a flip video recorder; a device that was considerably less intrusive than the video camera used at the pilot stage.

The negotiation of interview dates and times enabled a considerable amount of interview data to be collected (Appendix K). My awareness of individual circumstances enabled me to hold interviews to suit the students' timetables and availability. Several of the students were interested in the interview as a possible method to be used within their capstone research projects and my willingness to answer their questions was well received.

My concern that the students would respond to me as an authoritative tutor rather than a researcher (Section 3.4.5) appeared to be reduced by the semi-structured interview prompts. These allowed students to respond to points in the order they chose, which enabled them to have a sense of control over the interview process while maintaining the conversation's 'structure and purpose' (Brinkman and Kvale, 2015: 5). I was able to ask for clarifications and additional information as I sought to understand the 'meanings' (Mead, 1934) ascribed by the students but, as the prompts explored their perceptions and experiences, the students became the authority figures within the interviews, growing in confidence and candour. This proved advantageous as, when asking them to define the terms 'feedback' and 'reflective practice' at the end of the final interview the students were more at ease giving their own views. I did, however, reiterate my role as researcher rather than tutor before introducing this question.

Although I avoided asking for definitions until the end of the final interview, I was aware that the juxtaposition of the two terms may have influenced students' responses (Section 3.4.5). This is discussed further in the next chapter (Section 6.1).

5.7 Key Findings from Chapter 5

- Students identified feedback as academic, professional and emotional.
- Social interactions/dialogue provided opportunities for students to engage with feedback and modify their understanding.
- Trust in its provider aided students' engagement with feedback.

- Feedback from family members was based on knowledge of the individual and their needs.
- Feedback from peers required adherence to their agreed 'rules of the game'.
- Small communities of practice (CoPs) developed from the first year of study and operated across the cohort, with directed feedback relationships aiding information flow.
- CoPs provided peer feedback during assignment completion and at the review stage.
- Peer and family feedback offered continuity.
- Students expected feedback from tutors to be clear cut, provide steps forward and provoke thinking.
- Inconsistencies and contradictions caused disdain and reduced trust in feedback providers.
- Negative emotional responses and harsh criticisms had the potential to reduce students' engagement with the content of their feedback.
- Students needed persistence to overcome the conceptual difficulties that emerged from feedback.
- Immediacy of opportunity to test modified understandings aided students' engagement with feedback.
- Students saw feedback as an external process and reflective practice as an internal process.

5.8 Conclusion to Chapter 5

This chapter considered the ways in which students understood and interpreted feedback derived from their personal and professional networks. Building on the quantitative data backdrop of Chapter 4, it aimed to provide data at the micro-level by exploring seven students' 'feedback journeys' using diaries and interviews across the second year of the BA QTS programme.

Blumer (1969: 2) asserted that 'human beings act towards things on the basis of the meanings that things have for them', that meaning 'is derived from social interaction' and is 'modified through an interpretative process used by the person'. These students valued social interaction, using their personal and professional feedback networks to gather, interpret and make meaning from feedback (sub-questions 2 and

4). The feedback they referred to encompassed academic, professional and emotional support (sub-question 1). It was socially derived through a source external to the student but was provoked by an action. Conversely, they saw reflective practice as an ongoing, individual and internal process (sub-question 1) although, with feedback, it shared a cyclical approach.

Paramount to the students' willingness to engage with the feedback was their trust in its provider. As Carless (2015) noted, trust comes with risk. Where relationships existed, trust was greater, risk was reduced and 'specialised ties' (Chua *et al.*, 2011) enabled feedback to be tailored to the individual's needs. Where new relationships were being formed through students' personal and professional networks, 'rules of the game' (Bloxham and West, 2004) were required to increase trust and reduce risk. Forming small communities of practice (Lave and Wenger, 1991), the students negotiated these rules through symmetric relationships. Tutors, on the other hand, supplied their own rules. Students endeavoured to interpret these through asymmetric relationships, where tutors held assessment powers as well as greater knowledge and experience. Interpretation of the tutors' rules was a complex task and, in its completion, each of the seven students sought the support of fellow peers; those who were travelling on the same path, towards the same ends.

The seven students within this study identified that, to make meaning from the feedback (sub-question 3), they required reasons to engage with its content, to tackle issues of conceptual difficulties and liminality (Meyer and Land, 2003) and to put modified meanings to the test without delay. This was achieved more readily through dialogue with the feedback provider. However, it was impeded when no reason existed to engage with the feedback content, or when its content appeared to lack immediate relevance, or when feedback was provided in a tone that provoked a negative emotional response or, in some cases, when students were unwilling or unable to analyse the tacit complexity of its meaning.

The qualitative micro-level data of Chapter 5 has endeavoured to put 'meat on the bones' of the quantitative meso-level data of Chapter 4 by addressing the study's sub-questions. Chapter 6 integrates these findings to address the main research question.

CHAPTER 6: The Feedback Journey

Main research question:

In what ways do undergraduate primary student teachers gather, understand and interpret feedback through their personal and professional networks and to what extent does feedback influence their reflective practices?

Thesis sub-question 1: *What do the terms 'feedback' and 'reflective practice' mean to students?*

Thesis sub-question 2: *In what ways does social interaction through personal and professional networks enable student teachers to gather feedback?*

Thesis sub-question 3: *In what ways do students make meaning from the feedback they gather through social interaction?*

Thesis sub-question 4: *In what ways do students interpret and use the feedback they encounter?*

6.0 Introduction to Chapter 6

Drawing upon Blumer's (1969) three premises of symbolic interactionism (SI), this chapter addresses the main research question through the use of metaphors and models, by viewing student teachers 'as active constructors of their own conduct who interpret, evaluate, define, and map out their own action, rather than as passive beings who are impinged upon by outside forces' (Wallace and Wolf, 2006: 199). It builds upon the data findings of Chapters 4 and 5, which considered the ways in which the undergraduate student teachers in this study gathered, understood and interpreted feedback through their personal and professional networks, to determine the extent to which feedback influenced students' reflective practice (main question). The chapter begins by identifying the meanings that students gave to the terms 'feedback' and 'reflective practice' (sub-question 1) and continues by exploring the role played by social interaction in the students' interpretation and use of feedback and reflective practice (main question).

In Chapter 2 (Section 2.3.5), I identified 'reflective practice' as a threshold concept (Meyer and Land, 2003) in initial teacher education. Extending Meyer and Land's

(2003) portal metaphor, I introduced a tunnel and gate as metaphors for entry into the teaching profession (Figure 2.1.6). In this chapter, I further develop these metaphors by revisiting 'maps' of the journey (Section 2.1.1) versus the 'realities' revealed by the data (Section 6.2.1). I analyse the students' perspectives of their feedback journeys by introducing the metaphors of 'light and darkness' (Section 6.2.2) and obstacles (Section 6.2.3). From these, I develop two models of practice (Figures 6.4; 6.8) to consider the extent to which feedback influenced the student teachers' reflective practices.

6.1 Student teachers' definitions of 'feedback' and 'reflective practice'

6.1.1 The meanings student teachers ascribed to 'feedback'

Through their diaries and interviews, the seven students referred to three types of written and oral feedback; the academic, the professional and the emotional. Interestingly, they considered that 'feedback' was always provided by another (e.g. tutor, mentor, teacher, peer, family member or friend) rather than themselves. Even when reviewing personal progress and setting of goals, considered by Hughes (2014) as more conducive to ipsative approaches, students welcomed others' insights. The students formed collegial, non-competitive peer networks as a means of accessing new feedback, interpreting the tacit elements of feedback that had been provided by 'gatekeepers' to the degree programme and teaching profession (i.e. tutors, mentors, teachers) (Section 2.3.4) or filling voids created by a lack of feedback from these sources (Section 6.2.3). Armed with feedback from a range of sources, students were more ready to engage constructively in reflective processes (Section 6.1.2). As feedback provoked students' engagement with reflective practice, it needed to be modelled effectively by the gatekeepers, but this was not always the case (Sections 6.2.2; 6.2.3).

Abby's (BR Interview 3) view that 'feedback' was another person's reaction to an action taken by the individual, coupled with recommendations for its improvement, encapsulated the seven students' definitions of the term. While Beth (BS Diary 1b) felt the feedback provider should identify positive features and areas for improvement, Craig (BU Interview 2: 18) appeared wary and cast doubt on the value of academic assessment criteria, suggesting that feedback was 'someone's opinion'. For Craig, subjectivity outweighed objectivity despite the use of assessment criteria.

However, Dawn's (CS Diary 4: 2) more optimistic stance considered that feedback offered 'a fresh pair of eyes' and provided a welcome level of encouragement. Ella (CJ Diary 1) wanted feedback to build her confidence and, with Finn (DI Diary 2), believed it should explain how grades were derived while providing specific steps towards the improvement of future work. Gail (CK Diary 5) considered that, rather than simply being appreciative or informative, effective feedback should challenge her ideas. For this reason she felt its delivery needed to be balanced, with recognition of its emotional impact.

In consensus with authors in the field (e.g. Carless, 2015; Merry *et al.*, 2013; Nicol, 2010), all the students identified feedback through social interaction, where its provider scaffolded new understanding through dialogue, as highly beneficial to their learning. It allowed the provider to pitch the feedback according to the students' needs; taking cues from their verbal and non-verbal reactions. It also allowed the students to question the feedback provider as they worked through conceptual difficulties.

6.1.2 The meanings student teachers ascribed to 'reflective practice'

In contrast with the term 'feedback', the students appeared more hesitant in their definitions of 'reflective practice'. This was not surprising as the diaries and interviews had been focused on feedback and the term 'reflective practice' was introduced towards the end of the final interview. However, the seven students' definitions of reflective practice as an internal and cyclical process that served to enhance their understanding were in keeping with Argyris and Schön's (1978) single-loop learning (Figure 2.13). They considered that reflective practice had an ipsative focus, based on the review of personal progress through an individual and internal dialogue (Hughes, 2009).

Although the students were also aware of its emphasis within the BA QTS (Section 2.3.1), the definitions they gave demonstrated diversity in the meanings they ascribed to 'reflective practice'. Abby identified it as a process that was pertinent to all aspects of her life. For her, the elements of self-assessment and critique served to enhance her awareness and insights into the wide range of situations she might encounter (BR Interview 3). Beth's views on reflective practice were more pragmatic.

They centred on improvements that she could make to her professional practice by 'looking back...to improve for next time' (Beth Interview 2: 28;). Differing from Abby's self-assessment of the current state, Craig determined that reflective practice was an internal process that took an holistic account of the feedback he had received. Although the focus of reflective practice was on individual progress, he felt this was provoked by feedback from others. In her definition, Dawn (CS Interview 3) highlighted the cyclical processes of internal review and analysis. She saw reflective practice as a highly individual matter that drew upon her own understanding and experiences. This biographical view was distinct from 'what everyone else has done' (CS Interview 3: 27). Ella (CJ Interview 2) identified reflective practice as an internal process leading to self-improvement and, in common with Beth, acknowledged its pragmatic value in developing professional practices. Reminiscent of Tummons' (2011) findings, Ella and Finn were critical of the programme's attempts to make this internal process overt through the completion of placement reports and assignments, saying that these detracted from, rather than enhanced, their learning. Finn (DI Interview 2), however, took a more holistic overview. He moved away from reflective practice as a means of improving immediate issues, to define it as it as a vehicle for improving children's learning through the individual teacher's endeavours. Resonating with Abby's use of the term 'self-assessment', Gail's definition of reflective practice likened the process to 'feedback, but for yourself' (CK Interview 3: 36) through which she considered others' perspectives in relation to her personal experiences. Abby and Gail's approaches were painstaking. Finn's approach, on the other hand, moved beyond the problem-solving aspects of reflective practice identified by Beth, Dawn and Ella, to re-evaluate his learning. In doing so, he applied double-loop learning (Argyris and Schön, 1978) (Figure 2.13).

The students made some connections between feedback and reflective practice. For example, where Craig appeared content to use the feedback that others had provided, Abby and Gail identified the use of self-assessment approaches to determine a starting point for the reflective practice process. Gail aimed to maintain a balance between the positive and negative elements of her self-feedback, noting its emotional impact (Carless, 2015; Falchikov and Boud, 2007). Although Dawn commented on the importance of analysis in order to determine her next steps, Ella appeared less than comfortable with the levels of introspection that this required.

6.2 Student teachers' feedback journeys through metaphor

6.2.1 Maps versus reality

The 'maps' the students were given of their programme of study (Section 2.1.1) showed assessment points as milestones along the journey (Headington, 2014a). Tutors acted as 'guides' by providing feedback that was timely, comprehensible, beneficial, dialogical and based on explicit and pre-defined criteria. Akin to moving through a straight and well-lit tunnel (Figure 2.16), assessment and feedback would provide a direct and trouble-free route towards the students' end goals of becoming reflective practitioners ready to enter through the gate into the teaching profession.

Figure 6.1: The problematic, uncertain and contradictory tunnel



Source: Unsplash (2015)

However, the reality often appeared more problematic, uncertain and contradictory (Figure 6.1). This may have been reflected through meso-level descriptive and inferential statistics of the cohort's satisfaction in relation to the five NSS statements on assessment and feedback (Section 4.1.2). Despite issues relating to the collection of these data and the questions themselves (Sections 2.1.3; 4.2.1), little forward movement in these five areas was apparent through the cohort's second year of study. Extensive qualitative research into the experiences of all cohort members at the micro-level would have been necessary to reveal the full stories behind these statistics. As Denzin (1989) noted, the multiplicity of personal truths is influenced by individual biographies, perceptions and interpretations (Section 3.1.1).

While the diaries and interviews revealed how seven students drew upon their biographies and perceptions, they also uncovered how these individuals interpreted and acted towards the common experiences that occurred on their journeys.

In contrast to the apparently straightforward well-lit maps of an easy journey provided by their tutors, the seven students all appeared to move between light and darkness (Section 6.2.2), not just as they entered the tunnel but at numerous points along its length. Their experiences highlighted that the tunnel had obstacles to be overcome (Section 6.2.3). To find a way forward, the students found that they needed to traverse the ridges and hollows of its pathway and work their way through a confusing array of directions. While they could do this with the help of their personal and professional networks (Sections 6.2.2; 6.2.4), they recognised that the journey was ultimately their own, with its personal epiphanies to be faced (Section 6.2.5).

6.2.2 Light and darkness

Entering even an apparently well-lit straight tunnel, with an exit point visible in the distance (Figure 6.2), required a level of risk-taking. It was necessary to step from the light into the dark; to go from the certain into the uncertain. Meyer and Land (2006b, 22) referred to this kind of uncertainty as a 'liminal stage' (Section 2.3.5). However, going into uncertainty could also carry a sense of intrigue and challenge. In keeping with Meyer and Land's (2006a: 3) threshold concept, it promised to open up 'a new and previously inaccessible way of thinking about something...a transformed way of understanding'. However, the transformation was likely to create an intellectual distance between those who did and those who did not enter the tunnel, while bringing about a shared sense of purpose with those undertaking the same journey. The students moved from the support of their personal feedback network to that of their peer and professional networks.

Descriptive statistics revealed that, from their personal networks, students within the researched cohort used the specialised ties of kinship (Chua *et al.*, 2011), particularly their mothers, as sources of feedback (Figure 4.2). Diaries and interviews with seven students revealed that this went beyond long term emotional feedback and practical support across a range of circumstances. It included academic feedback.

Figure 6.2: Entering the tunnel, moving from light into darkness



Source: Masters (ND)

Of the six students who lived in their family's homes, Ella (CJ Interview 1) was very aware of intellectual distances that were being formed between herself and her family as she took steps towards her chosen career. She had been aware of a growing intellectual divide during secondary school. Ella considered that family members would not be able to provide the academic feedback that she needed during university. She stepped towards the tunnel independently.

Although anxious when starting university, Gail's (CK Interview 1) early experiences there led her to become increasingly selective when seeking support from her family. She trusted her grandfather's academic feedback over that of her parents and was keen to share her learning and discuss her ideas with him. While Gail was aware that future stages of the journey were hers alone, she encouraged her grandfather to walk with her on the path leading into the tunnel. Abby (BR Interview 1), on the other hand, appeared to move in and out of the tunnel as she accessed support from her parents and the university's dyslexia support services. This approach provided a scaffold for the particular needs she had identified as necessary for her individual journey. Although she felt able to enter the tunnel independently, Abby was concerned about what she would find there and whether the feedback provided would suit her particular needs. She sought reassurance and sometimes reinterpretation from her parents who were experts in her needs. Consequently, like Gail's grandfather, Abby's parents were encouraged to walk towards the tunnel and

engage with some ideas from the programme. There was an overlap between these students' personal and professional feedback networks.

Similarly, members of Beth, Craig and Dawn's families held knowledge and experience of their individual approaches to learning. Craig's family reminded him of the need to be proactive in his learning. Beth's family encouraged her organisational approach. Dawn's family helped her to develop ideas for classroom activities. These students appeared to seek emotional feedback and practical support rather than academic feedback from their families, only turning towards their personal networks to check personal interpretations of feedback provided by others (BU Diary 3). Taking a position between Ella's refusal to involve her family and Abby and Gail's overt encouragement for their involvement, Beth, Craig and Dawn maintained their own pathways between their families and the tunnel. They gravitated towards their peer networks for academic feedback (Section 5.2) but knew that their families' support was still available.

With the exception of Ella, these students wanted to find ways to involve their families. For the students, this family support provided a scaffold that reduced their risk of stumbling, as they moved from light to dark. It served to allay personal concerns and lessened intellectual distance. Finn, on the other hand, was a little older and already lived independently of his family. Relying on his life experiences, he moved more confidently into the tunnel. As a self-regulated learner, he was ready for the journey ahead. He carried his own torch into the tunnel as he went into its darkness.

Within the tunnel, the students' journeys continued to move between light and darkness. The programme's planned assessment structure and the feedback provided by more capable others, such as tutors, mentors and teachers, provided direction. These were the lights within the tunnel, set at deliberate intervals to reduce darkness by ensuring feedback throughout the programme rather than simply at an end point (Kerrigan *et al.*, 2011) (Figure 6.3). However, the lights did not guarantee clarity and, where expectations did not meet with reality, the students looked towards their ego networks for feedback (Sections 5.1; 5.3; 5.4; 6.2.4).

The diaries and interviews also provided examples of tunnel lights that were too faint. Beth and Craig, for example, identified difficulties with an assignment's assessment criteria (BS Interview 1). Rather than meeting their intended purpose (Bloxham and

Boyd, 2007; Gibbs and Simpson, 2004; Knight, 2000), the criteria failed to illuminate the way, leaving the two students in the twilight of uncertainty. The criteria were, in Sadler's (1989: 124) terms 'fuzzy' rather than 'sharp'.

Figure 6.3: The lights within the tunnel



Source: Storm (ND)

Students' examples also demonstrated how professionals had difficulty in providing tacit knowledge (Section 2.3.3) through their oral and written feedback. Echoing Collins' (2010) relational tacit knowledge (Section 2.3.3), accounts of professional difficulties ranged from knowledge that was 'concealed' due to perceived professional jealousy (BS Interview 1), through 'mismatched' knowledge that incorrectly assumed students' prior knowledge or did not 'recognise' that knowledge might be useful (BR Diary 4a), to professionals being unable to share 'logistically demanding knowledge' (DI Diary 2).

Conversely, having initially sought help from each other, Beth and Craig met with a tutor who provided them with immediate and 'ostensive' (Collins, 2010) examples and provided feedforward through dialogue. The examples provided light and the two students moved forward again with greater insight and confidence. The tutor's feedback came at a critical, formative point, as the students worked on their assignments. The requirement for immediate action forced Beth and Craig to identify

and confront issues that might otherwise have been neglected while closing the 'loops' of the feedback cycle (Hounsell *et al.*, 2008). However, there was also balance to be struck in the way that feedback was provided by the tutor. Sadler (2007: 387) had warned that the dangers of 'getting students through – [was] often at the expense of what it really means to learn'. Providing examples would get the students through by making the tacit more explicit; they could complete the assignment and move forward to the next one. Whether understanding was developed at a deeper level, aiding the illumination of their journeys beyond this critical point appeared to be left at the students' discretion. In Meyer and Land's (2006b: 377) terms, the students needed to find a way past 'epistemological obstacles' rather than resorting to mimicry.

In Beth's case, the assignment and the tutor's feedback were timely and shed light on other aspects of her work. She commented that the tutorial dialogue provided new insights into her professional practice experiences. Things 'clicked' (BS Interview 1:23) for her. At this point, she was prepared to challenge and extend her prior experience and understanding away from the specific examples of the assignment and towards conceptualizations that would serve her in more diverse contexts. Beth showed traits of reflective practice, namely 'resilience' (Reivich and Shatté, 2002) and 'openmindedness' (Pollard, 2008), as she ventured beyond single-loop learning to double-loop learning (Argyris and Schön, 1978). While the assessment criteria identified an area of need, the feedback dialogue provoked Beth into applying reflective practice. Similarly, Ella commented on the value of the professional feedback she received, saying that she could 'put this into practice straight away in the next lesson' (CJ Diary 1:1). The opportunity for its immediate use provided motivation. She saw the feedback as purposeful. When the use of the feedback improved practice, it built the students' confidence and, as Abby (BR Interview 2) noted, provoked more questions.

The lights overhead shone more brightly when feedback was readily available, pertinent, could be reflected upon, applied and reviewed without delay. This was far more common in relation to students' examples of professional feedback from teachers and mentors. Less common was tutors' formative feedback on academic work and only in Abby's case was this initiated by a tutor. Beth and Craig initiated formative feedback with regard to an assignment being completed, as did Dawn when faced with a failed assignment.

Rather than focusing on their immediate situations, the tutors' formal academic feedback appeared, to the students, to focus on illuminating lights behind them. Unless failed, these assignments would not be revisited. Where professional feedback appeared formative and always connected to future practice, academic feedback appeared summative with a lack of connection between current and future assignments. However, all of the students read, and appeared to scrutinize, the written feedback on their assignments. They hunted for any feedback that might provide feedforward through the identification and explanation of errors and accuracies, although Finn voiced his annoyance that this level of analysis was necessary (DI Diary 2: 1). Craig found that his grades improved and his self-esteem increased when he engaged with and acted upon such annotations within his future assignments. To him, annotations of this type moved beyond the 'picky bits like referencing' to what he called 'the juicy bits' (BU Interview 2: 5). The latter supported Craig through the liminal space (Meyer and Land 2003) by encouraging him to gain a deeper level of understanding that was distinct from 'purely mechanical processes' that he needed to address through 'imitation' (Vygotsky, 1978: 88). Through this 'juicy' feedback, Craig's trust in the feedback provider increased, as did his personal sense of growth and self-esteem (BU Interview 2). This, in turn, reduced his sense of risk when going further into the tunnel. Nevertheless, further obstacles existed within the tunnel.

6.2.3 Obstacles

The students' first year studies in pedagogy on the BA QTS had encouraged them to use and apply the social constructivist theories of Wood *et al.* (1976) and Vygotsky (1978) to scaffold children's learning through the Zone of Proximal Development. As Finn (DI Interview 2) indicated, within the professional context of the primary school, students were encouraged to engage as members of communities of practice (Lave and Wenger, 1991; Wenger *et al.*, 2002) and develop individual social capital through their personal and professional networks (Section 4.1.3). However, within the academic context, the resource-seeking and resource-giving of peer transactions carried elements of risk which could result in accusations of plagiarism and place students' degrees in jeopardy.

Similarly, the students were encouraged to value and use dialogic feedback (Nicol, 2010) within their 'academic learning community' (Evans, 2013) to aid the social

construction of learning. For example, one course within the BA QTS programme included opportunities for workshops, joint assignments, reading groups, presentations to peers and peer assessment activities (Figure 1.2) in addition to more traditional forms of assessment and student-tutor interaction through seminars and tutorials. However, to benefit from interactions with peers, the students needed to trust that 'groupist' approaches would not be exploited by 'individualists' (Borgatti *et al.*, 1998; Lee, 2010; Prell, 2003). This was not always achievable. Both Beth and Craig (Sections 5.1.2; 5.1.3) identified and then rejected peers who appeared competitive rather than collegial. Along with Abby and Dawn, they appeared to distance themselves from others in the cohort (Figure 4.6). Even Finn, who welcomed opportunities to learn from his fellow students, felt exploited when others did not give feedback in return (Section 5.3.2).

Feedback dilemmas continued within students' professional networks as they encountered individuals who varied in their need, desire and ability to aid the flow of information (Gladwell, 2000). For example, each of the seven participants benefitted from placement teachers, mentors and link tutors who were willing to give feedback that would support new entrants to the profession. These established members of the primary education community of practice welcomed the novices as legitimate peripheral participants (Lave and Wenger, 1991) and were willing to induct them into the community and share knowledge (Section 2.2.1). However, Beth, Ella and Finn also reported negative experiences, where dialogic feedback was either negligible or absent (Sections 5.12; 5.3.1; 5.3.2). The students concluded that the professionals in question lacked appropriate experience, time or commitment, identifying them as 'individualists' rather than 'groupists'. Instead, the students invested their trust in the teachers or teaching assistants who appeared willing and able to support them through the voids that were created.

An additional obstacle came with the content of the feedback provided by peers and professionals. Social constructivist theory and professional practice had identified the importance of feedback and feedforward, where the next steps in learning built upon current understanding (e.g. DES, 1987; Vygotsky, 1978). As learners, the students commented on their frustrations when they experienced practice that fell short of this model. For example, Abby and Craig referred to written targets that served instrumental rather than pragmatic purposes and Ella questioned the lack of specificity when told to improve her proof-reading.

The seven students expected to understand and make use of assignment briefs and assessment criteria when preparing for submission and reviewing marked assignments. They also expected *inter-rater* and *intra-rater* consistency (Bloxham *et al.*, 2015). Experiences that diverged from these expectations, such as tutors' varied interpretations of the criteria or contradictory feedback, challenged students' views of assessment and feedback in practice. However, these experiences fortuitously gave rise to the students becoming more resilient in their responses and more assertive in their approaches as they circumnavigated its perceived deficiencies. Paradoxically, as they accepted the uncertainties of feedback, these students developed their abilities as self-regulated learners.

6.3 Student teachers' feedback journeys through models

6.3.1 Shared journeys: Using networks to gather, understand and interpret feedback

Having left behind or reduced contact with their personal feedback networks the students shared their journeys through the tunnel with their peers, accessing informal feedback as they moved together between light and dark (Sections 6.2.2) and through the tunnel's obstacles (Section 6.2.3). Feedback relationships with fellow travellers within the same cohort were captured through SNA whole and ego networks (Sections 4.1.4; 5.1), but it was the students' diaries and interviews that attested to the ebbs and flows of these relationships. Changing circumstances or differences of opinion had, year on year, led to some relationships being maintained while others were discarded. Physical proximity, based on shared seminar groups, placements, transport arrangements and so on had, as McPherson *et al.* (2001) indicated, brought the students together and aided the development or continuation of their mutual bonds. The students learned of each other's approaches to feedback as they shared the experiences of taught sessions and participated in informal social gatherings. They gravitated towards others who shared similar perspectives, and nurtured mutual trust through reciprocal actions. The relationships they forged had the potential to help or hinder the progress of their journey.

With 51 dyadic and seven triadic peer feedback relationships identified at SNA1 (Table 4.6), it was evident that most students, by the end of the first year, had fostered relationships that supported them through the provision or interpretation of

feedback. These were based upon empathy and mutual trust and had developed through shared experiences that included, as outlined above, proximity (McPherson *et al.*, 2001) and engineered social interactions within the programme (Nonaka and Takeuchi, 1995). For example, noticing that CD was alone, Gail sat with her during a seminar. This fortuitous encounter grew into a three year feedback relationship (Section 5.4.1). The workshop activities and discussions led Craig to realise that he shared common values with Abby, Dawn and Beth (Sections 5.1.3; 5.2).

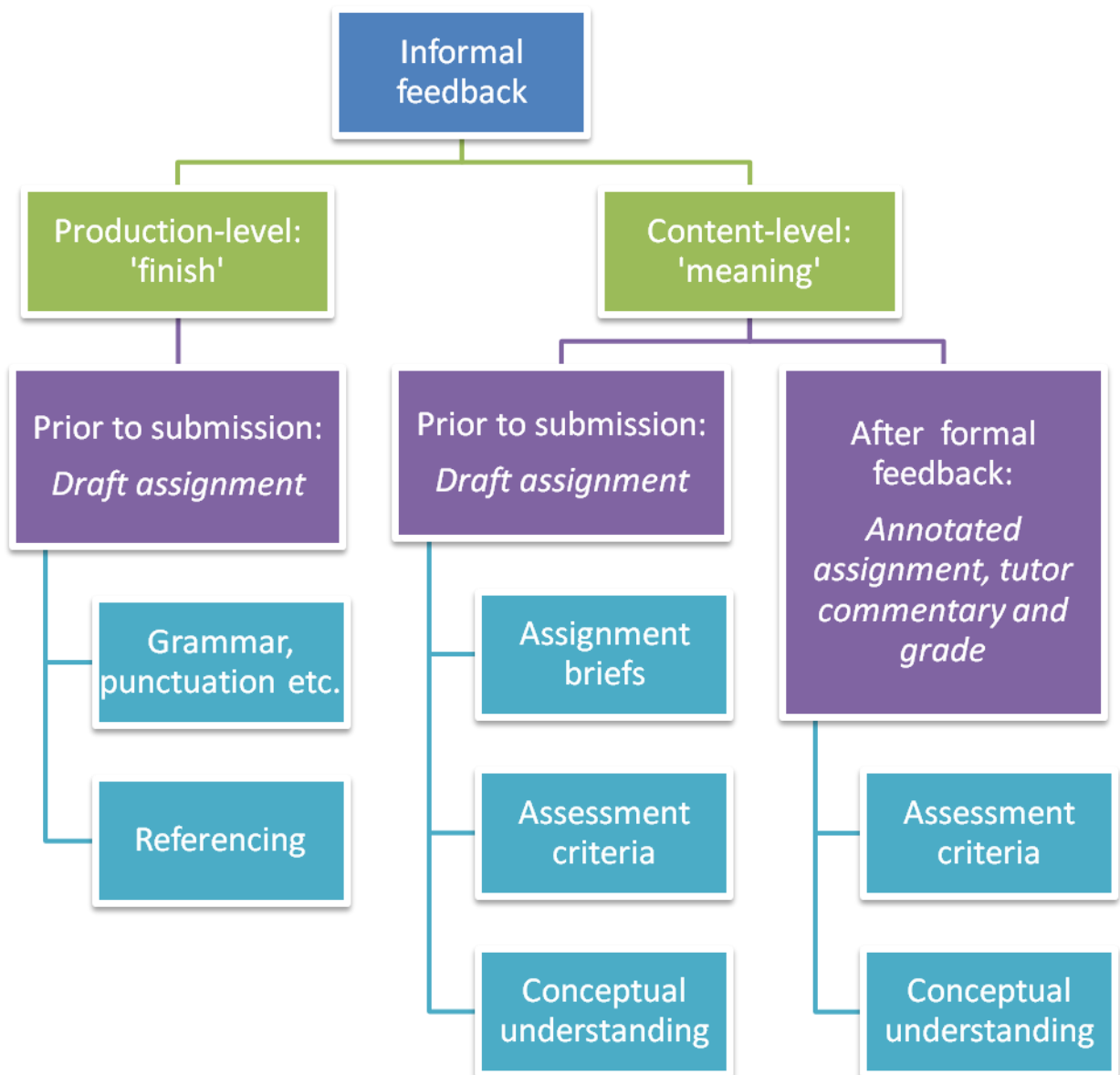
The groups that formed from these trusting relationships became small communities of practice (CoPs) (Section 2.2.1) that shared common concerns. Their members wished to 'deepen their knowledge and expertise...by interacting on an ongoing basis' (Wenger *et al.*, 2002: 4). The immediacy of feedback provided within the CoPs was coupled with immediate opportunities to test modified meanings without delay (Section 6.2.2), closing the 'loops' of the feedback cycle (Hounsell *et al.*, 2008). These CoP interactions were more akin to the students' experiences of feedback during professional placements than they were to formal tutor feedback on assignments.

Qualitative data showed that, functioning beyond the formal requirements of the BA QTS programme, informal feedback operated at two levels, production and content (Figure 6.4), and at two key points, prior to the submission of an assignment and after the formal tutor feedback had been received. At both levels, the students' small CoPs identified and agreed their own 'rules of the game' (Bloxham and West, 2004). Ella, Finn and the peers of their ego networks, for example, agreed to be 'ruthless' in the informal feedback they provided and they expected reciprocity in the giving and receiving of feedback. As Finn demonstrated (Section 5.3.2), the penalty for not adhering to the rules was to receive less informal feedback in the future.

Production-level feedback focused upon proof-reading, with the identification and correction of errors in grammar, punctuation and referencing to ensure the assignment was finished to the best possible standard prior to submission. As Dawn remarked, this informal feedback offered 'a fresh pair of eyes' (CS Interview 3.24). At the production-level, the feedback provider was not asked to engage with academic or professional content but instead needed to be willing to offer guidance, give time to scrutinize the draft assignment and bring to bear their knowledge of technical issues, such as the rules of grammar. The feedback receiver, on the other hand,

needed to trust the quality of the feedback provider’s technical knowledge and, having also entrusted the provider with his or her interpretations of the assignment brief and assessment criteria, the receiver needed to have confidence in the provider’s ability to give feedback in a sensitive manner.

Figure 6.4: Informal feedback



However, some students also returned to the ready-formed relationships of family members for production-level feedback; maintaining pathways between their personal and peer networks (Section 6.2.2). Abby asked her parents for feedback (Section 5.1.1), while Gail maintained a feedback dialogue with her grandfather

(Section 5.4.1). Whether undertaken by peers or family members, informal feedback at this level had the potential not just to develop the quality of the students' final submissions, but offered engagement in social interactions that enabled the receipt of emotional feedback through the encouragement and reassurance of others.

Content-level feedback focused upon social interaction to aid the interpretation of meaning (Blumer, 1969). It considered the assignment briefs and assessment criteria, not simply to improve the quality of assignment submissions, but also to glean transferable understanding. When content-level feedback occurred prior to submission it aimed to improve the quality of work in progress. However, when it occurred after tutors' formal feedback, students had the opportunity to enhance their conceptual understanding by reaffirming or challenging their current viewpoints. In Nonaka and Takeuchi's (1995: 85) terms, this was 'field building' to create knowledge by sharing 'emotions, feelings and mental models'. Feedback at this level endeavoured to make the tacit explicit (Section 2.3.3) and, although not guaranteed, it had the potential to provoke students' engagement with their conceptual understanding of educational theory and practice (Figure 6.4).

Content-level feedback required dialogue between the feedback provider and the feedback receiver (Nicol, 2010). Its social constructivist approach (Rust *et al*, 2005; Vygotsky, 1978) was based upon and required mutual trust, together with the time and willingness to share ideas and experiences. Content-level feedback also required an understanding of the students' academic and professional contexts. Therefore, providers and receivers were more likely to be members of the students' peer networks, who, in turn, were supported by feedback from professional networks that included tutors and teachers. Content-level feedback offered the reward of gaining new or improved insights by creating a synergy from the varied experiences and information flow across inter-related peer and professional networks. The social capital (Section 2.2.3) of individuals was used as a basis for shared analysis, with the development of new meaning being 'derived from social interaction' (Blumer, 1969: 2). Those with high levels of centrality within the cohort (Table 4.7), such as Ella and Finn, aided the flow of information across the whole network. Although their ego-networks (e.g. Figures 5.15; 5.18) revealed interactions with a limited number of students, their willingness to build and maintain feedback dialogues and to seek further information proved advantageous to others across the whole network. Finn, for example, was willing to question tutors and teachers to enhance his

understanding (Section 5.3.2) and this new insight was then filtered through his ego network into the whole network. Where social interaction between trusted peers aided the students' confidence and enabled the interpretation of meaning, the flow of information across the cohort increased students' access to new ideas.

Dealing with conceptual understanding required feedback providers and receivers to demonstrate 'thick trust' (Putnam, 2000: 136) and 'open mindedness' (Pollard, 2008: 14). In this study, the content-level feedback dialogue that encompassed tutor feedback (e.g. annotated assignment, feedback commentary, grade in relation to assessment criteria rubric) took place when peer feedback relationships had been tested, when those that had survived were secure and when the context was appropriate. For some, this was at an earlier stage than for others. Ella and Finn, for example, were both critical of feedback provided by some tutors and this provoked early content-level discussions around assessment criteria in particular. In Craig's case, however, the experience of sharing past assignments and tutor feedback with Beth within the second year of study was an epiphany; an interactional experience which left a mark on his life (Denzin, 1989). Rather than simply looking towards the next assignment, content-level feedback looked back and reviewed previous learning to identify and analyse progress before pinpointing the next steps to be taken to enable future progress. It resembled the process of reflective practice (Section 2.3.1), particularly 'reflection-on-action' (Schön, 1983). To operate at this level, Beth and Craig forged a trusting relationship that was sensitive to the emotional impact of feedback (Falchikov and Boud, 2007) as well as the challenges and transformations of the reflective process (Beauchamp, 2015; Waring and Evans, 2015). Similarly, Gail's trusting relationships with CD and BG moved from more superficial production-level to deeper content-level feedback as the second year progressed, through joint analysis of tutor feedback in relation to the students' completed assignments.

The students' diary and interview data distinguished between production-level and content-level feedback using terms such as 'proof-reading' for the former and 'being ruthless' for the latter, however, the two were necessarily connected. Although production-level feedback concentrated upon technical and stylistic 'finish', it inevitably affected students' engagement with assignment content and how best to express 'meaning'. For example, a misplaced comma might change the meaning of a sentence. Similarly, stylistic changes might be necessary to ensure that the writer's meaning was read as it was intended (Chandler, 2014). Through an iterative

process, content-level feedback enhanced production and production-level feedback enhanced content and, as trust increased, so did the students' willingness to give, receive and discuss these inter-connected features.

Figure 6.5: Exploring steps and passageways in the tunnel



Source: Camera on autopilot (ND)

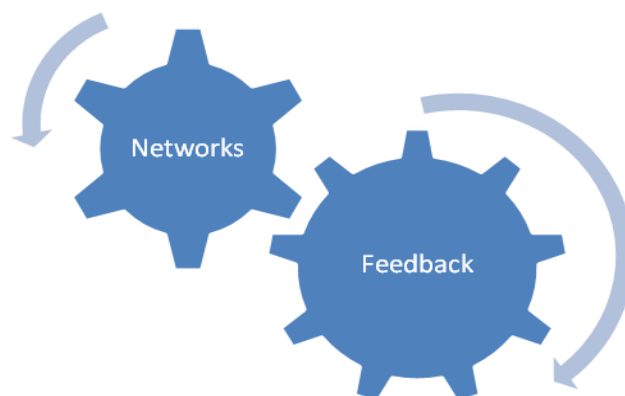
Tutors were perceived as being more knowledgeable than peers and the use of their feedback provided an additional dimension to students' interpretations of meaning at content-level. Beth and Craig, for example, contacted a tutor for further clarification (Section 5.1.2) and Abby (Section 5.1.1) valued tutors' opinions and felt that their comments often extended her thinking. However, even when students such as Ella and Finn were critical, the remarks they received from tutors provoked peer discussion and led to the exploration of their understanding. Rather than leading all students along an identical pathway, it appeared that the tutors' comments had the potential to expose different avenues of investigation for individuals. By sharing and discussing their individual tutor feedback, students were prompted to explore steps and passageways in the tunnel that may not otherwise have been revealed (Figure 6.5).

6.3.2 Personal journeys: Feedback and reflective practices

The students recognised the uniqueness and individuality of their journeys towards becoming 'reflective practitioners' (Section 6.1.2). However, rather than operating in

isolation, students' interactions with members of their personal and professional networks, particularly their ego-networks, added momentum to their engagement with feedback (Figure 6.6) and scaffolded the development of ipsative strategies. Within trusted feedback relationships, the students explored the 'meanings' of the things they encountered. Through engagement with the written and verbal interactions which they defined as 'feedback' (Section 6.1.1), they tried to make their tacit knowledge explicit. With echoes of Mead's stages of self (Figure 2.2), these interactions introduced the students to alternative as well as accepted viewpoints while acknowledging their distinct and autobiographical perspectives (Blumer, 1969; Charon, 2007; Denzin, 1989; Mead, 1934; Woods, 1992). The synergies facilitated the growth of self-regulation (Section 2.1.5) and reflective practice (Section 2.3.1). The growth in these areas was evidenced through students' diary and interview comments across the period of study but was most discernible within their 'epiphanies' (Denzin, 1989: 70).

Figure 6.6: Networks adding momentum to feedback

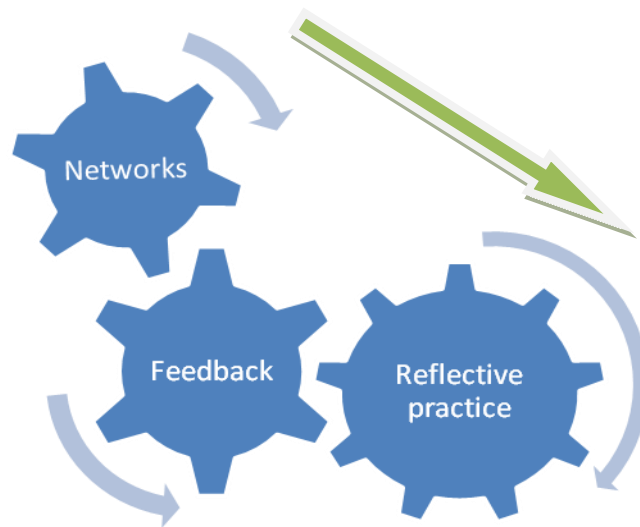


Finn's epiphany was the result of a personal issue. His mother's illness, during a professional placement (Section 5.3.2), heightened his awareness of the tone and emotional impact of feedback. This, in turn, added momentum. It increased his trust in his network of feedback providers and encouraged his interaction with them while lifting his spirits.

Dawn, Craig and Beth's epiphanies demonstrated how feedback had provoked their engagement with reflective practice. Craig and Beth experienced a 'felt difficulty' (Dewey, 1991: 72) which they went on to define, analyse and resolve. Where

Dawn's difficulty was a crisis that needed a single resolution within a timeframe defined by the university, Craig's was encountered fortuitously and he was able to reflect upon and revisit it at a pace he defined. Dawn's intention was to solve a single problem: a failed assignment. Craig's was to explore his feedback at a deeper level. Beth's epiphany, on the other hand, identified the emotional impact of negative feedback. This led to her taking greater control of her journey.

Figure 6.7: Engagement with reflective practice



Using feedback strategies rehearsed within her ego-network of Abby, Beth and Craig (Section 5.2), Dawn returned to the assessment criteria and assignment brief and analysed the tutor's written feedback. She reviewed her previous understanding and considered how to develop her work, with the aim of finding a solution to the problem by submitting an improved assignment. From this internal 'conversation of gestures' (Mead, 1934: 167), Dawn reaffirmed her perspectives. She then sought confirmation from her tutors, in their role as 'gatekeepers' (Section 2.3.4), that these were accepted viewpoints. Dawn was aware of her need to adhere to 'the rules of the game' (Bloxham and West, 2004) as defined by the programme. Through her response to the crisis, Dawn used the momentum of her network interactions to drive her use of feedback: these in turn provoked her engagement with the cyclical process of internal review and analysis that she had defined as 'reflective practice' (Section 6.1.2) (Figure 6.7).

Craig's epiphany was not at a point of crisis but achieved through an activity based on his social interaction with Beth, a key member of his ego-network. Together, they

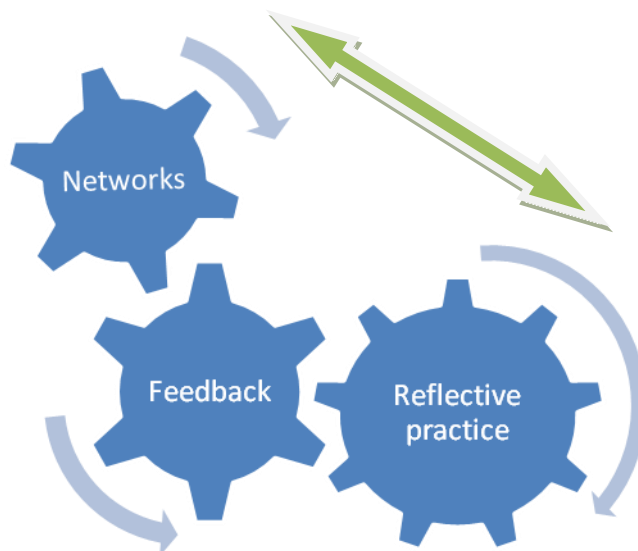
took a new passageway within the tunnel (Figure 6.5) as they analysed feedback from the previous year of study. Beth and Craig considered the points that had been raised through the formal assessment of their work, how they had addressed these points in the assignments that followed and identified the outcomes that had ensued. In Schön's (1983) terms, they reflected on the actions of feedback providers (tutors and peers) and receivers (themselves). For example, Craig noticed that by responding to the 'picky' comments of feedback providers his grades had shown gradual improvement and there were qualitative differences in the feedback he received. The realisation of the progress he had made raised Craig's self-esteem and he stated his intention to apply 'reflection-on-action' at future points. This level of analysis moved Craig away from comparisons with other students towards an ipsative approach that emphasized his progress and motivated Craig towards achieving his 'personal best' (Hughes, 2014).

In contrast to Craig's positive experience, Beth's feedback from an 'intimidating' professional (Section 5.1.2) shaped her approach. Although initially leaving her in tears and unable to move forward, it provoked reflection and resulted in Beth identifying the need for balance when reviewing her progress. Similarly, Finn (Section 5.3.2), who presented as a self-regulated learner at an early stage of the research process, called into question the feedback provided by the professionals he considered as authorities. This led him to reflect upon his experiences of study and classroom practice, to identify inconsistencies of approach and resolve to find a way to handle contradictions. Focusing on the goal of using reflective practice to enhance children's learning, Finn agreed to accept some feedback sources and challenge others, while working with Ella to make full use of dialogic and 'ruthless' peer feedback. Abby and Gail, on the other hand, appeared painstaking in seeking and reflecting upon alternative viewpoints in relation to their own experiences, using an ipsative process described by Gail as 'feedback, but for yourself' (CK Interview 3: 36).

Unlike the ITE students of Russell's (2005) study who, when left to their own devices, were unlikely to reflect (Section 2.3.1), the students in this study identified and resolved the challenges that they faced. The obstacles they encountered on their journeys (Section 6.2.3) had the affect of unintentionally enhancing their reflective practice, developing their ability 'to persevere and adapt when things go awry' (Reivich and Shatté; 2002: 1). Rather than accepting feedback from one source,

they sought alternative viewpoints. Rather than accepting tacit statements, they sought to make them explicit. Through analysis and the selective application of others' viewpoints, the students took greater responsibility for their learning. Feedback had acted to 'invisibly exercise' (p21) the students' reflective practices; it had provoked their thinking and behaviour.

Figure 6.8: Filtering back



Feedback also influenced the students' reflective practices by engaging them directly with a cycle of challenge and review. Students were able to rehearse feedback's cyclical yet dynamic model (Figure 2.3) within the safety of trusted relationships before applying it individually through reflective practice, using 'autobiographical internal dialogue' (Hughes, 2009: 451) to modify meaning through interpretative processes (Blumer, 1969: 2). Although 'reflective practice' was identified by theorists and students as an internal process (Sections 2.3.1; 6.1.2), the flow of feedback information through the cohort (Figures 4.3; 4.4; 4.5) showed that individual reflections, when shared through feedback, 'filtered back' and influenced other members of the students' networks (Figure 6.8). As individuals were influenced by their networks, so their networks were influenced by the individuals.

6.4 Critique of my research perspective

In Chapter 3, I identified that my approach to educational research (Sections 3.1.1; 3.1.2) rested in the interpretive paradigm and, in this study, identified Symbolic Interactionism (SI) as the perspective most aligned to my research (Section 3.1.3).

My research question and its sub-questions were developed from the three premises of the SI protagonist, Blumer (1969:2) (Section 3.2.1). My aim was to move through the macro and meso levels of research, to the micro level in order to gain insight into the students' experiences of feedback and reflective practice (Section 3.3.1). Analysis of the quantitative and qualitative data (Chapters 4 and 5), enabled the research questions to be discussed, through metaphor and models, in this Chapter 6.

While I have endeavoured to maintain objectivity, I acknowledge that the analysis of data, as well as the research design, is likely to have been influenced by my personal epistemology. Similarly, the responses I received from students were likely to have been influenced by their beliefs and values, their interpretations of the questions that I asked and their relationship with me as a researcher.

My application of SI theory alerted me to 'meaning', 'social interaction' and 'self' but may have distracted me from other matters evident to those approaching the same research from alternative perspectives. Awareness of my autobiographical experiences may have influenced my responses to the students' biographies. Accordingly, the strengths of the research methodology may also be considered as limitations. However, these points also serve to emphasise the complexities of social science research. As Cohen *et al.* (2011) note, there is no single 'truth'. Examination of the human world instead requires engagement with a multiplicity of truths and the recognition that personal biographies and biases may have an impact upon educational research.

6.5 Key Findings from Chapter 6

- Students defined feedback as being provided by another.
- Family members, particularly mothers, were experts in individual students' needs. They provided academic as well as emotional feedback.
- Feedback from students' personal networks scaffolded their transition to feedback from professional networks.
- Students saw feedback as purposeful and motivational when it was readily available and pertinent and could be reflected upon and used without delay. These features aided cognition and were more common to professional and peer feedback than to academic feedback from tutors.

- Students became more resilient in their responses and more assertive in their approaches as they circumnavigated perceived feedback deficiencies.
- Voids created by a perceived lack of effective feedback from tutors were filled by interactions with members of their networks.
- Informal feedback operated at production and content levels, prior to assignment submission and after formal feedback from tutors.
- Interactions with network members added momentum to students' engagement with feedback, scaffolding the development of ipsative strategies and reflective practice.
- Students' networks, through feedback, influenced reflective practice.
- Reflective practice, when 'filtered-back' through feedback, influenced students' networks.

6.6 Conclusion to Chapter 6

This chapter addressed the main research question to consider the ways in which student teachers gather, understand, and interpret feedback through their networks and the extent to which this feedback influences their reflective practices. It built upon the quantitative and qualitative data reported and analysed within the previous two chapters.

Using the meanings of 'feedback' and 'reflective practice' ascribed by the seven students at the heart of the study, this chapter extended Meyer and Land's (2003) threshold concept metaphor to explore the students' feedback journeys. Rather than being well illuminated and direct, these journeys were marked by darkness and numerous obstacles. The students sought support from personal and professional networks to overcome the difficulties they encountered and, when feedback from 'gatekeepers' was lacking or unclear, they drew upon feedback from other sources to fill the void.

The promptness of feedback receipt was critical as students' motivation increased when they had a reason to engage with the feedback without delay. This provided opportunities to consider and test the new meanings it brought. The informal feedback they engaged with at production and content levels, prior to submission or after tutor feedback, aided this process. While production-level feedback centred upon 'finish', the content-level focus on 'meaning' through analysis of tutor feedback

proved particularly advantageous in supporting a depth of analysis that aided individual reflective practice. Students' epiphanies offered discernible evidence of individual growth, often demonstrating learning through experiences that they perceived as negative.

Social interactions through their personal and professional networks provided feedback and added momentum to students' engagement with feedback, aiding understanding and interpretation. This, in turn, supported students' individual reflective practices. Rather than this being an end point, the new meanings acquired through reflective practice enabled the students to engage with feedback at a new level. Through social interaction, these new meanings were then available to other members of the students' networks.

The final chapter which follows considers how the findings of this study contribute to knowledge and the changes to professional practice that are recommended. It completes this research and looks towards the future.

CHAPTER 7: **The end of one journey and beginning of others**

7.0 Introduction to Chapter 7

The purpose of original research is to enable the growth of knowledge (Section 1.5). It builds upon what has gone before and points towards future research. As such, my research provided new insights to enhance the understanding of human action (p83) at a moment in time. It was developed in relation to the available literature at a particular point and analysed the experiences of a particular sample. In this final chapter, I acknowledge the moment in time by identifying the areas where my study contributes to knowledge (Section 7.1) while recognising its limitations (Section 7.2). In light of my research, I offer recommendations for professional practice (Section 7.3). Although the chapter denotes the end of this research journey, it recommends the exploration of other potential research journeys that have emerged during its completion (Section 7.4). Having explored the students' journeys, I close the chapter by returning to autobiographical reflections upon the journeys that I have taken (Sections 1.2 and 1.3). I review my experiences of feedback and research through the completion of the thesis and contemplate my future journeys (Section 7.5).

7.1 Contributions to knowledge

My research has led to eight points that I believe will contribute to the knowledge of feedback. They emanate from the originality of my data collection and analysis (Section 1.5). The first three points relate directly to my research data and the metaphors and models that I developed in their analysis. The remaining five points focus on the role played by students' informal networks, which I had previously identified as an under-researched area of the literature (p45).

1. The research design and sample provided unique insights into student teachers' perceptions of feedback. In particular, my use of longitudinal social network analysis of a cohort coupled with diary-interview data contributes new knowledge of the existence of personal and professional feedback networks and how these are used by students.

2. My metaphor of a journey through a tunnel built upon the work of Meyer and Land (2003) and contributes to knowledge by reconceptualising the students' experience of feedback as one of moving between light and darkness, encountering obstacles and exploring new steps and passageways. The roles of tutors, peers and family members are played out in relation to complexities of this journey.
3. The two models I developed from the data provide greater insight into students' informal feedback at production- and content-levels (Figure 6.4) and identify how, through the cohort's feedback network, the reflective practice of individuals has the potential to enable others (Figure 6.8).
4. The data revealed that, as students became increasingly aware of the nature and quality of feedback they required, they identified informal feedback providers who were trusted, available and who possessed an appropriate knowledge base or were willing to provide reciprocity. Two such sources were family members and peers.
5. My research provided evidence that some family members, particularly mothers, were involved in academic as well as emotional feedback. Feedback from family members was based on knowledge of the student and his or her individual needs and this scaffolded the students as they gained confidence in their developing professional and peer networks.
6. My study indicated that students developed small communities of practice (CoP) with peers to provide and receive informal feedback. The CoPs were based on dyadic trusting relationships formed with those who shared similar views or experiences. The CoP's members agreed and applied their own rules.
7. The data showed that individual students with high levels of SNA authority were well-positioned to influence the majority of the cohort; enabling or restricting feedback information flow across the whole network. The quality of authorities' understanding and interpretation of feedback was crucial to cohort members as it was disseminated through linked ego-networks.
8. Students experienced different styles and approaches to the completion of common tasks through reciprocal informal feedback between peers. My

research found that, prior to assignment submission, students' informal feedback focused largely on production-level issues. As trust increased, particularly within dyadic relationships, analysis and a greater depth of understanding came from the application of informal feedback at content level, following tutor feedback. The latter provided contextualized analysis in relation to the assignment brief and assessment criteria. It influenced students' reflective practices by engaging them directly with a cycle of challenge and review.

7.2 Limitations of my research

Limitations of my research methods were acknowledged within Chapters 3, 4 and 5, as I prepared for and then reviewed the data collection. For example, I was cognisant of the potential of a *Hawthorne Effect* (Machol, 1975) and how, by focusing on feedback, students' attitudes towards its provision might be affected (p115). I discussed how I aimed to counter this ethical issue (Section 3.4.6) and revisited the issue when critiquing the methods I had used (p141). I raised further limitations as they arose within critiques of methods and my research perspective (Sections 4.2; 5.6; 6.4). This included a lower than anticipated response rate that appeared to be caused by different interpretations of the NSS2 questionnaire's coding mechanism (p142).

However, I believe the main limitations of my study could be summarised in three ways: firstly, my relationships with the students; secondly, the students' abilities to convey meaning and my ability to interpret that meaning; thirdly, the sample size.

At the planning stage, I was particularly concerned that the students might see me as a former tutor rather than as a researcher. This posed issues which I addressed through, for example, a clear ethical statement (Appendix H), my communication with the students, the layout of the interview room (p113) and the building of a researcher-respondent relationship through a longitudinal research period (p113-4). The majority of students within the cohort responded to the questionnaires and surveys and those undertaking diaries and interviews were candid in their responses (Section 5.6). These outcomes suggested this limitation was reduced by my actions.

As identified earlier, the students' interpretations of feedback, based on their individual biographies, were central to this study (Section 3.2.2). Limitations in the

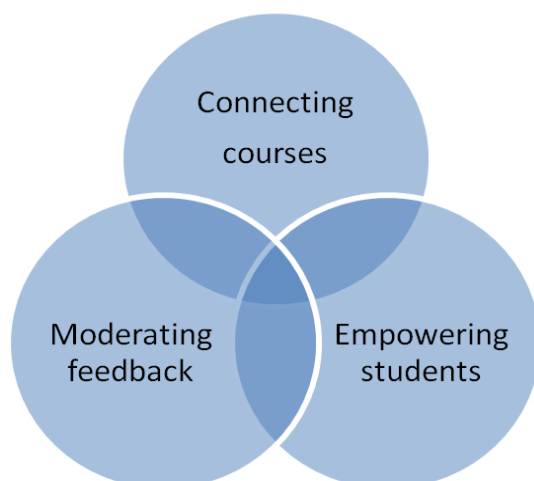
students' abilities to convey meaning and my ability to interpret that meaning were twofold. Firstly, by offering a range of media from which to choose, I felt confident that the students who volunteered for the diary-interview stage would be able to offer their thoughts more comfortably. However, I had not anticipated how delayed some diary entries would be and the effect this might have on the data (Section 5.6.1). Secondly, although through the interviews I was able to interrogate meaning (Section 3.4.5) I was unable to return to the students at the analysis stage to verify my final interpretations. Ideally, a further discussion would have taken place for this purpose. Instead, they remained as 'interpretive biographies' (Denzin, 1989) with my interpretations of the students' interpretations (p146).

Finally, I made the study manageable by narrowing the study to one university, one ITE programme, one cohort and seven volunteers from this cohort. While the small scale nature of the research aids qualitative insight, it could also be considered to be a limitation of the study. As stated earlier (p97), however, my study's findings are relatable not generalizable. Further studies would be required to determine their generalizability (Section 7.4).

7.3 My recommendations for professional practice

I have identified three inter-related recommendations for professional practice that emerge from this study (Figure 7.1), namely; connecting courses, moderating feedback and empowering students. Although I consider these within the undergraduate ITE context, they may bear relevance to other programmes or disciplines (Section 7.4). Each recommendation benefits from the other two and aims to build an improved feedback experience for students by tackling the 'problematic, uncertain and contradictory' (Figure 6.1) nature of the students' feedback journeys. Following analysis of the students' experiences at meso- and micro-levels (Chapters 4-6), the recommendations seek to develop the quality of provision at these levels through developments at programme, course and individual student levels. Focusing upon the students' feedback journeys within the academic element of the degree and the lessons learned from their experiences of professional placements, the three recommendations also draw upon the values and experiences inherent to my professional journey (Section 1.2).

Figure 7.1 Three inter-related recommendations



7.3.1 Connecting courses

My study suggested that, for students, the promptness of feedback provision is only part of the feedback experience. While the NSS focused on prompt feedback and the developments that followed to improve practice at programme level aided their experiences (Section 2.1.3), the need to test and apply feedback without delay aided students' cognition and increased their motivation (Sections 5.7; 6.5). If students are not provoked into using the feedback received from one academic assignment when undertaking the next, its value as a source of challenge and review may be lost. For the students in my study, this occurred when connections from one assignment to the next were not apparent.

Therefore, I recommend that identifying overt connections between courses becomes central to programme design and does not rest on the students' abilities to connect production or content-level feedback from contrasting courses. Overt connections between course assignments would enable students to be provided with holistic, programme level 'maps' of feedback that, cumulatively, lead towards the completion of the programme's capstone project.

Recommendation 1: Connecting courses

At the design stage, build overt connections between assignments at programme level, to ensure that feedback from one assignment can support completion of the next and lead towards completion of the capstone project.

7.3.2 Moderating feedback

Achieving the first recommendation would require academic tutors to consider feedback across courses and within them. However, students in my study reported a lack of consistency in the provision of feedback, between courses and between individual tutors (p213). These *inter-rater* reliability issues reduced students' trust in tutor feedback and, inadvertently, promoted the use of other feedback sources. They presented obstacles to progression rather than aiding its development.

Where common feedback reporting mechanisms identify the areas to be addressed by all tutors, professional discourse between feedback providers would enhance the quality of feedback and feedforward. I acknowledge that this would be logistically and professionally demanding. However, akin to the use of external examiners from other institutions at programme level (p37), initial inroads could be made at programme level. Opportunities for course leaders to moderate feedback within and across courses would enable the review and development of its practice, while aiding issues of inconsistency faced by students.

Recommendation 2: Moderating feedback

Course leaders to moderate the feedback provided on courses, using the insight gained to review and develop practice within and across courses.

7.3.3 Empowering students

The first two recommendations focus on the role of academic tutors with regard to course design and consistency. The third builds upon these to empower students' feedback practice. My study revealed that, in the absence of contact with academic tutors, students drew upon the support of their feedback networks (Figures 4.1; 4.2). However, interactions within these informal networks were often at a more superficial production level, prior to the submission of assignments (Figure 6.4). Only towards the end of the second year of the degree programme, on an *ad hoc* basis, did some of the students tackle analysis at content level; exploring the assignment briefs and assessment criteria in conjunction with tutor feedback.

I recommend the use of programme-level activities, based upon both production and content level analysis. This would empower the students by engaging them in the use of reflective practices, while building upon course connections and gaining experience of moderation processes. Their new insights could then be replicated, filtered back (Figure 6.8) and rehearsed within their informal networks, with far greater precision than was evident within this study. Modelling the value and use of feedback would help students to explore its complexities (Section 2.1) In parallel with students' school placement experiences, where feedback is explicitly modelled within teachers' communities of practice, it would enable students' growth as peripheral members of the academic tutors' communities of practice (Section 2.2.1) (Taras, 2006). This would enhance self-regulation as students make greater use of ipsative strategies benefitting ITE students during the degree programme and as future teaching professionals, beyond the metaphorical gate (Figure 2.16).

Recommendation 3: Empowering students

From the beginning of the degree programme, empower students' feedback practices at production and content levels in an ongoing interactive process by engaging them in the use of reflective practices in professional and academic contexts.

7.4 My recommendations for future research

As noted earlier (Section 7.0), research builds upon previous knowledge and points towards the future. As an original contribution to knowledge, my research has highlighted areas where further research may be advantageous. I have identified areas of potential further research at several points through the thesis. These have fallen in the two main areas of aiding the replication of my research methods (Section 7.4.1) and new areas of investigation that develop from my discussions or build upon the research outcomes from this study (Section 7.4.2). The following two sections highlight key areas for further study in these areas.

7.4.1 Aiding the replication of my research methods

Critiques of my research methods revealed that the T-test questionnaire (Section 4.2.2) and social network analysis survey (Section 4.2.2) would benefit from adjustments before replication in future research.

The identifiers used for the questionnaire (Appendix C) would benefit from greater clarity to increase the percentage of matched pairs available for the T-test. I would recommend that the tutor who presents the questionnaire is fully briefed both on the content of the questionnaire and on the identifiers. Supplementing this, brief and unambiguous written guidance and examples should also be provided for respondents.

I had recognised that there was minimal use of SNA in education in relation to other survey methods and that providing names was fundamental to the method (p106). However, I had not considered, before its use, whether a lack of knowledge about the method might reduce students' willingness to provide information.

In light of this, I would recommend that any replication of the method with ITE students is introduced through a simple example of the use of SNA in the classroom, such as that shown by the sociogram at Appendix D. This would provide insight and alleviate anxiety, enabling the respondents to understand why names are requested and emphasising the confidentiality of the data through coding mechanisms to maintain ethical standards (Section 3.4.6).

7.4.2 New areas of investigation

I have identified four areas of further investigation that develop from my discussions or build upon the research outcomes of this thesis, namely; students' interpretations of the NSS statements, the roles played by specific members of students' personal feedback networks, the nature of homophily in peer feedback networks and the use of SNA longitudinal cohort studies to explore feedback within other cohorts and programmes.

Firstly, within my critique of the questionnaire (Section 4.2.2), I posited that students' interpretations of the NSS assessment and feedback statements may vary from one year to the next. Research into the statements appears to have focused upon outcomes rather than interpretations (Section 2.1.3). Although my research was based in the interpretivist paradigm, I was reluctant to seek students' interpretations due to the *Hawthorne Effect* and any influence this might exert on the students' NSS completions in 2014 (p107). However, if this ethical issue were successfully reconciled, I would recommend ITE students' longitudinal interpretations of the NSS statements as an area for further research. This would help to reveal how the

development of their theoretical understanding and practical experiences of pedagogy, alongside personal engagement with assessment and feedback at degree level, may affect students' interpretation of the five statements.

Secondly, my research identified that mothers played a significant role in students' feedback (Figure 4.2). I was able, through diaries and interviews, to ascertain the nature of this feedback from seven students (Chapter 5) and considered the influences of proximity, capital, trust and the ties of kinship (Sections 2.2.1; 2.2.2; 2.2.3). However, I was not able to determine whether mothers provided mainly emotional or academic support to other students in the cohort. Nor was I able to explore the Coleman (1988) and Chevalier *et al.*'s (2010) notions of parents' educational levels as human, financial and cultural capital. I recommend this as an area for further investigation in light of my findings. As higher numbers of students now live in the parental home during their studies (p47), suggested future research might include investigations that build upon the studies of maternal influences prior to higher education.

Similarly, my survey findings identified that students' personal feedback networks included students who were taking different degrees and friends not studying for a degree. The increased use of these two sources in the final year (Figure 4.2) suggested a higher reliance upon their feedback at a critical point and I speculated that they might provide neutral perspectives (p129). However, I have provided limited discussion of these sources within my study. I would recommend further research is undertaken to explore these two sources and the nature of the feedback they provide.

Thirdly, the first SNA survey revealed the formation of seven cliques by the end of the students' first year of study (Figure 4.6). Abby, Beth, Craig and Dawn were recruited from a clique that remained close throughout the research and demonstrated 'value homophily' (McPherson *et al.*, 2001: 419) (p174). As stated earlier (p217), the choices of peer feedback support that students make may help or hinder their progress. The literature discusses positive and negative aspects of cliques. Members form close bonds which enable 'super strong and sticky ties' but the lack of information from other sources can reduce them to being 'ties that bind' (Krackhardt 1998; 1999). I would recommend further investigation of cliques within undergraduate cohorts, to determine whether they were formed between students

with similar grade profiles (i.e. status homophily) and, if the cliques remained in place across the programme, whether introspection affected students' grades through the programme.

Fourthly, this small scale research project gave insight into the informal networks used by students and, through social network analysis, how the feedback relationships between peers in the cohort developed through three years of university study. From its looser connections in the first year (Figure 4.3), the whole network had become more cohesive by the final year (Figure 4.5). Key individuals with high levels of authority were well positioned to influence the use of feedback across the network (Section 7.1).

If similar findings applied across other programmes, the identification and use of individuals with centrality measures that show high levels of authority within the cohort may prove highly beneficial. Not only would these individuals be able to act as 'more capable others' (Vygotsky, 1978) within their ego networks but, by working with tutors, they would be able to aid the flow and quality of feedback information across the cohort. I recommend further use of longitudinal social network analysis in the higher education sector to investigate the development of whole cohort networks.

7.5 My feedback and research journey

My feedback and research journey has, in many ways, echoed those of the students I studied. Like them, I found myself in a tunnel of study that proved both 'transformative' and 'troublesome' (Meyer and Land, 2003). Within it, I moved between light and darkness and dealt with the numerous obstacles that impeded my journey but which had not featured on my original map. Personal epiphanies and liminality delayed my journey considerably, but they also brought me a greater awareness of my character; testing my tenacity, resilience and motivation.

Like Finn, I took my own torch into the tunnel. My prior experience of study and a career in education had developed my skills as a reflective practitioner and self-regulated learner. My view of doctoral study differed considerably from that of my undergraduate self (Section 1.2). I did not anticipate or seek the 'most direct, strategic route to success' (p4). Instead, my experience of teaching, learning and assessment led me to recognise that, rather than simply passing assignments, the journey was about 'learning through the process of completing them' (p7).

In common with the students in this study, I knew the journey would be transformational and was wary of creating an intellectual distance between myself and others. Family and friends had, as Ella recognised, little understanding of the demands of the academic journey I was undertaking. However, in common with Abby, Beth, Craig and Dawn, those closest to me held years of expertise in my approaches to undertaking a range of projects. They recognised when to allow me to engross myself in study and when to intervene. They allowed me to vent my frustrations and celebrated with me as I reached milestones along the journey. Their feedback recognised my personal and emotional needs.

Although self-regulated, I also developed new personal and professional networks of fellow travellers who provided me with the academic feedback that supported my confidence and motivation. Some journeyed with me for part of the way while others had first-hand experience of the complete journey. Their feedback offered the reassurance I needed to move between the light and darkness within the tunnel and reduced the sense of isolation of the doctoral journey (Phillips and Pugh, 1987). Some networks developed from my peripheral membership of established communities of practice, particularly in relation to assessment and feedback (e.g. AHE; EARLI Assessment SIG). Others, with tutors and peers, emerged from the programme's structures and the intellectual proximity that evolved through its scholarly discussions based upon shared goals. Where tutors walked ahead of me in the tunnel and acted as more capable others (Vygotsky, 1978), peers walked close by my side. At some points of the journey my peers would lead and at others I would lead, as we ventured to take the role of the 'generalized other' (Mead, 1934: 154). Not unlike Gail, I was motivated by others and motivated others through reciprocal relationships. As the journey continued, I found myself walking more and more closely with my tutors and moving towards a sense of 'handover' (Bruner, 1983) as my expertise in the content of the research increased; a situation that should occur at the doctoral level.

A career in education gave me a considerable advantage over the undergraduate students who had to learn the 'rules of the game' (Bloxham and West, 2004) in order to make progress through assessment and feedback/feedforward (Figure 2.3). I knew the 'rules' and how to apply them. Where undergraduate students witnessed few examples of the standards required in their academic work, I had access to numerous examples of work at the doctoral level, through texts, journal articles,

theses and conferences. In common with the students, I used assignments to provide challenge and tutor feedback; to review my work at the content-level and ascertain the required standard. However, as a reflective practitioner and self-regulated learner I was able to tackle this independently, identifying progress by combining assignment brief, assessment criteria and tutor feedback through ipsative assessment.

Faced with what originally appeared to be a problematic, uncertain and contradictory tunnel (Figure 6.1), I enjoyed having the opportunity to explore the tunnel's steps and passageways (Figure 6.5). They led me to develop new skills, particularly in the use of research techniques and technology (e.g. SNA/PAJEK). They led me to ask and seek answers to new questions.

The irreversibility (Meyer and Land, 2003) of my journey is profound. I cannot go back to the self I once was: that self has gone. Instead, the experience of the journey has motivated me to move forward; to take new directions that build upon my previous career in teaching, by using my newfound research skills. My next steps will be to contribute to the knowledge by disseminating my findings at three different levels; to the educational research community, to teacher education professionals and to students. My aim is to enhance students' perceptions of feedback; reducing the obstacles they encounter and providing light, by acknowledging and encouraging students' use of their personal and professional networks through their journeys in assessment to become reflective practitioners.

REFERENCES

- Adonis, A. (2006, October 17). *30 years on, Callaghan's words resonate*. Retrieved August 26, 2015, from The Guardian: <http://www.theguardian.com/politics/2006/oct/17/education.schools>
- Alaszewski, A. (2006). *Using Diaries for Social Research*. London: Sage.
- Amazon. (2016). *Reflective Teaching in Schools: Product description reviews*. Retrieved March 2, 2016, from Amazon: http://www.amazon.co.uk/Reflective-Teaching-Schools-Andrew-Pollard/dp/1441191704/ref=sr_1_1?ie=UTF8&qid=1456927632&sr=8-1&keywords=andrew+pollard+reflective+teaching
- Argyris, C., & Schön, D. A. (1978). *Organizational Learning: A Theory of Action Perspective*. Reading: Addison-Wesley Publishing Company.
- Assessment Reform Group (ARG). (1999). *Assessment for Learning - Beyond the Black Box*. Retrieved February 10, 2015, from Association for Achievement & Improvement through Assessment: <http://www.aaia.org.uk/afl/assessment-reform-group/>
- Assessment Reform Group (ARG). (2002). *Assessment for Learning: 10 Principles*. Retrieved February 10, 2015, from Association for Achievement & Improvement through Assessment: <http://www.aaia.org.uk/content/uploads/2010/06/Assessment-for-Learning-10-principles.pdf>
- Assessment Standards Knowledge exchange (ASKe). (2009). *Assessment Standards Manifesto*. Retrieved August 20, 2015, from ASKe Pedagogy Research Centre: <http://www.brookes.ac.uk/aske/Manifesto/>
- Association for Achievement & Improvement through Assessment (AAIA). (2015). *Assessment Reform Group*. Retrieved August 20, 2015, from AAIA: <http://www.aaia.org.uk/afl/assessment-reform-group/>
- Attwood, R., & Gill, J. (2008, August 29). *Controversy continues as HEA director leaves post*. Retrieved February 19, 2015, from Times Higher Education (THE): <http://www.timeshighereducation.co.uk/402184.article>
- Bailey, K. (1987). *Methods of Social Research* (3rd ed.). New York, NY: The Free Press.
- Ball, S. (1981). *Beachside Comprehensive: A Case-Study of Secondary Schooling*. Cambridge: Cambridge University Press.
- Ball, S.; Bew, C.; Bloxham, S.; Brown, S.; Kleiman, P.; May, H.; McDowell, L.; Morris, E.; Orr, S.; Payne, E.; Price, M.; Rust, C.; Smith, B.; Waterfield, J. (2012). A

- Marked Improvement*. Retrieved January 16, 2016, from Higher Education Academy:
https://www.heacademy.ac.uk/sites/default/files/a_marked_improvement.pdf
- Barrie, S. (2006). Understanding What We Mean by the Generic Attributes of Graduates. *Higher Education, 51*(2), 215-241.
- Basit, T. N. (2010). *Conducting Research in Educational Contexts*. London: Continuum.
- Beauchamp, C. (2015). Reflection in teacher education: issues emerging from a review of current literature. *Reflective Practice, 16*(1), 123-141.
- Beauchamp, G., Clarke, L., Hulme, M., & Murray, J. (2015). Teacher education in the United Kingdom post devolution: convergences and divergences. *Oxford Review of Education, 41*(2), 154 -170.
- Bell, A., Kelton, J., McDonagh, N., Mladenovic, R., & Morrison, K. (2011). A critical evaluation of the usefulness of a coding scheme to categorise levels of reflective thinking. *Assessment & Evaluation in Higher Education, 36*(7), 797-815.
- Bell, J. (2005). *Doing Your Research Project: A guide for first-time researchers in education, health and social science* (4th ed.). Maidenhead: Open University Press.
- Benn, T. (1995). *The Benn Diaries*. London: Arrow Books .
- Bennett, R. (2011). Formative assessment: a critical review. *Assessment in Education: Principles, Policy & Practice, 18*(1), 5-25.
- Bennett, R., & Kane, S. (2014). Students' interpretations of the meanings of questionnaire items in the National Student Survey. *Quality in Higher Education, 20*(2), 129-164.
- Bennett, S., & Maton, K. (2010). Beyond the 'digital natives' debate: Towards a more nuanced understanding of students' technology experiences. *Journal of Computer Assisted Learning, 26*(5), 321–331.
- Bennett, S., Maton, K., & Kervin, L. (2008). The 'digital natives' debate: a critical review of the evidence. *British Journal of Educational Technology, 39*(5), 775-786.
- Berger, P., & Luckmann, T. (1966). *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. London: Penguin.
- Biggs, J. (2015). *Constructive alignment*. Retrieved March 9, 2015, from John Biggs: <http://www.johnbiggs.com.au/academic/constructive-alignment/>

- Biggs, J. B., & Tang, C. S. (2007). *Teaching for quality learning at university: what the student does* (3rd ed.). Maidenhead: McGraw-Hill/Society for Research into Higher Education & Open University Press.
- Black, P., & Wiliam, D. (1998a). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7-74.
- Black, P., & Wiliam, D. (1998b). Inside the black box - Raising standards through classroom assessment. *Phi Delta Kappan*, 8(2), 139-148.
- Blackstone, A. (2015). Micro, Meso and Macro Approaches. *Principles of Sociological Inquiry: Qualitative and Quantitative Methods*, v. 1.0. Retrieved June 1, 2015, from Flat World:
http://catalog.flatworldknowledge.com/bookhub/reader/3585?e=blackstone_1.0-ch02_s01
- Bloxham, S. (2009). Marking and moderation in the UK: false assumptions and wasted resources. *Assessment & Evaluation in Higher Education*, 34(2), 209-220.
- Bloxham, S. (2013). Building 'standards' frameworks: The role of guidance and feedback in supporting the achievement of learners. In S. Merry, M. Price, D. Carless, & M. Taras (Eds.), *Reconceptualising Feedback in Higher Education*. London: Routledge.
- Bloxham, S., & Boyd, P. (2007). *Developing Effective Assessment in Higher Education: A Practical Guide*. Maidenhead: Open University Press.
- Bloxham, S., & Campbell, L. (2010). Generating dialogue in assessment feedback: exploring the use of interactive cover sheets. *Assessment & Evaluation in Higher Education*, 35(3), 291-300.
- Bloxham, S., & West, A. (2004). Understanding the rules of the game: marking peer assessment as medium for developing students' conceptions of assessment. *Assessment and Evaluation in Higher Education*, 29(6), 721-733.
- Bloxham, S., & West, A. (2007). Learning to write in higher education: students' perceptions of an intervention in developing understanding of assessment criteria. *Teaching in Higher Education*, 12, 77-89.
- Bloxham, S., Boyd, P., & Orr, S. (2011). Mark my words: the role of assessment criteria in UK higher education grading. *Studies in Higher Education*, 36(6), 655-670.
- Bloxham, S., Den-Outer, B., Hudson, J., & Price, M. (2015). Let's stop the pretence of consistent marking: exploring the multiple limitations of assessment criteria. *Assessment & Evaluation in Higher Education*.
 doi:10.1080/02602938.2015.1024607

- Blumer, H. (1969). *Symbolic Interactionism: Perspective and Method*. Berkley CA: University of California Press.
- Blumer, H. (1980). Mead and Blumer: the Convergent Method and Perspectives of Social Behaviorism and Symbolic Interactionism. *American Sociological Review*, 45(3), 409-419.
- Bochner, A. (2001). Narrative's Virtues. *Qualitative Inquiry*, 7(2), 131-157.
- Bolton, P. (2014). Tuition fees statistics. *House of Commons Library Standard Note SN/SG/917*, 1 December 2014.
- Borgatta, E. (2007). Jacob L. Moreno and "Sociometry": A Mid Century Reminiscence. *Social Psychology Quarterly*, 70(4), 330-332.
- Borgatti, S., Everett, M., & Freeman, L. (2002). *Ucinet for Windows: Software for Social Network Analysis*. Harvard, MA: Analytic Technologies.
- Borgatti, S., Jones, C., & Everett, M. (1998). Network Measures of Social Capital. *Connections*, 21(2), 27-36.
- Bornmann, L. (2012). The Hawthorne Effect in Journal Peer Review. *Scientometrics*, 91, 857–862.
- Boud, D. (1995). *Enhancing Learning Through Self-assessment*. Abingdon: RoutledgeFalmer.
- Boud, D. (2000). Sustainable Assessment: rethinking assessment for the learning society. *Studies in Continuing Education*, 22(2), 151-167.
- Boud, D. (2015). Feedback: ensuring that it leads to enhanced learning. *The Clinical Teacher*(12), 3-7.
- Boud, D., & Falchikov, N. (Eds.). (2007). *Rethinking Assessment in Higher Education: Learning for the longer term*. Abingdon: Routledge.
- Boud, D., & Molloy, E. (2013). Rethinking models of feedback for learning: the challenge of design. *Assessment & Evaluation in Higher Education*, 38(6), 698-712.
- Boud, D., Keogh, R., & Walker, D. (1985). Promoting Reflection in Learning: a Model. In D. Boud, R. Keogh, & D. Walker, *Reflection: Turning Experience Into Learning*. London: Kogan Page.
- Boud, D., Lawson, R., & Thompson, D. (2015). The calibration of student judgement through self-assessment: disruptive effects of assessment patterns. *Higher Education Research & Development*, 34(1), 45-59.
- Bourdieu, P. (1986). The Forms of Capital. In J. E. Richardson (Ed.), *Handbook of Theory of Research for the Sociology of Education*. New York, NY: Greenwood Press.

- Bowers, G. (2015, July 13). Personal email correspondence: HEFCE/NSS data for education.
- Brinkman, S., & Kvale, S. (2015). *InterViews: Learning the Craft of Qualitative Research Interviewing* (3rd ed.). Thousand Oaks, CA: Sage.
- British Broadcasting Corporation (BBC). (2011). *Gove: tougher new teacher standards needed*. Retrieved March 25, 2015, from BBC: <http://www.bbc.co.uk/news/education-12717061>
- British Educational Research Association (BERA). (2011). *Ethical Guidelines for Educational Research*. London: British Educational Research Association.
- British Educational Research Association/The Royal Society for the Encouragement of the Arts, Manufacturing and Commerce (BERA/RSA). (2014). *Research and the Teaching Profession: Building the capacity for a self-improving education system*. London: BERA.
- Brown, M., & Precious, N. (1968). *The Integrated Day in the Primary School*. London: Ward Lock Educational.
- Brown, S. (2007). Feedback and feed-forward. *Centre for Bioscience Bulletin*, 22, 1.
- Browne, J. (2010). *The Browne Report: Securing a Sustainable Future for Higher Education*. Retrieved July 16, 2015, from DBIS: <https://www.gov.uk/government/publications/the-browne-report-higher-education-funding-and-student-finance>
- Bruner, J. (1983). *Child's Talk: Learning to Use Language*. New York, NY: Norton.
- Bruner, J. (1991). The Narrative Construction of Reality. *Critical Inquiry*, 18(1), 1-21.
- Bullough, R. (1991). Exploring Personal Teaching Metaphors in Pre-Service Teacher Education. *Journal of Teacher Education*, 42(1), 43-51.
- Burgess, H. (2000). What future for initial teacher education? New curriculum and new directions. *The Curriculum Journal*, 11(3), 405-417.
- Burgess, R. (1984). *In the Field: An Introduction to Field Research*. Abingdon: Routledge.
- Burr, V. (2003). *Social constructionism* (2nd ed.). Hove: Routledge.
- Burt, R. (1992). *Structural holes: the social structure of competition*. Cambridge, MA: Harvard University Press.
- Burton, N., Brundrett, M., & Jones, M. (2008). *Doing Your Education Research Project*. London: Sage.

- Callender, C. (2008). The impact of term-time employment on higher education students' academic attainment and achievement. *Journal of Education Policy*, 23(4), 359-377.
- Callender, C., Ramsden, P., & Griggs, J. (2014). *Review of the National Student Survey: Summary Report, July 2014*. Retrieved from Higher Education Funding Council for England (HEFCE): <http://www.hefce.ac.uk/pubs/rereports/year/2014/nssreview/>
- Carless, D. (2006). Differing perceptions in the feedback process. *Studies in Higher Education*, 31(2), 219-233.
- Carless, D. (2009). Trust, distrust and their impact on assessment reform. *Assessment and Evaluation in Higher Education*, 34(1), 79-89.
- Carless, D. (2013). Sustainable feedback and the development of student self-evaluative capabilities. In S. Merry, M. Price, D. Carless, & M. Taras (Eds.), *Reconceptualising Feedback in higher Education: Developing Dialogue with Students*. Abingdon: Routledge.
- Carless, D. (2015). *Excellence in University Assessment*. Abingdon: Routledge.
- Carless, D., Salter, D., Yang, M., & Lam, J. (2011). Developing sustainable feedback practices. *Studies in Higher Education*, 36(4), 395-407.
- Carolan, B. V. (2014). *Social Network Analysis and Education: Theory, Methods and Applications*. Thousand Oaks, CA: Sage.
- Carrington, P. J., & Scott, P. (2011). Introduction. In J. Scott, & P. J. Carrington (Eds.), *The Sage Handbook of Social Network Analysis*. London: Sage.
- Carter, A. (2015). *Carter review of initial teacher training (ITT)*. Retrieved August 26, 2015, from DfE: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/399957/Carter_Review.pdf
- Carter, S., & Pitcher, R. (2010). Extended metaphors for pedagogy: using sameness and difference. *Teaching in Higher Education*, 15(5), 579-589.
- Chalkface Project. (2015). *Product list*. Retrieved September 2, 2015, from The Chalkface Project: <https://www.chalkface.com/>
- Chalkface Recruitment. (2015). *Education*. Retrieved September 2, 2015, from Chalkface Recruitment: <http://www.chalkfacerecruitment.co.uk/#!/education/cscj>
- Chandler, D. (2014). *Encoding/Decoding*. Retrieved March 5, 2015, from Semiotics for Beginners: <http://visual-memory.co.uk/daniel/Documents/S4B/>

- Chanock, K. (2000). Comments on Essays: do students understand what tutors write? *Teaching in Higher Education*, 5(1), 95-105.
- Charmaz, K. (2014). *Constructing Grounded Theory* (2nd ed.). London: Sage.
- Charon, J. M. (2007). *Symbolic Interactionism: An Introduction, An Interpretation, An Integration* (9th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Cheng, J. H., & Marsh, H. W. (2010). National Student Survey: are differences between universities and courses reliable and meaningful? *Oxford Review of Education*, 36(6), 693-712.
- Chevalier, A., Harmon, C., O'Sullivan, V., & Walker, I. (2010). *The Impact of Parental Income and Education on the Schooling of their Children*. Retrieved Feb 8, 2015, from <http://eprints.lancs.ac.uk/49018/4/SchoolingChildren.pdf>
- Christie, H. (2007). Higher education and spatial (im)mobility: nonradiational students and living at home. *Environment and Planning*, 39, 2445-2463.
- Chua, V., Madej, J., & Wellman, B. (2011). Personal Communities: The World According to Me. In J. Scott, & P. J. Carrington (Eds.), *The SAGE Handbook of Social Network Analysis*. London: SAGE.
- Clarke, S. (1998). *Targeting assessment in the primary classroom : strategies for planning, assessment, pupil feedback and target setting*. London: Hodder & Stoughton Educational.
- Clarke, S. (2001). *Unlocking formative assessment : practical strategies for enhancing pupils' learning in the primary classroom*. London: Hodder & Stoughton Educational.
- Clarke, S. (2005). *Formative assessment in action : weaving the elements together*. London: Hodder Murray.
- Cohen, L., Manion, L., & Morrison, K. (2011). *Research Methods in Education* (7th ed.). Abingdon: Routledge.
- Coleman, J. S. (1988). Social Capital in the Creation of Human Capital. *American Journal of Sociology*, 94, S95-S120.
- Collins, H. (2010). *Tacit and Explicit Knowledge*. Chicago, IL: University of Chicago Press.
- Complete University Guide. (2016). *University Tuition Fees and Financial Support*. Retrieved January 23, 2016, from The Complete University Guide: <http://www.thecompleteuniversityguide.co.uk/university-tuition-fees/university-tuition-fees-and-financial-support/>
- Cortazzi, M. (1993). *Narrative Analysis*. London: Falmer Press.

- Corti, L. (1993). Using diaries in social research. *Social Research Update*(2). Guildford: University of Surrey, Department of Sociology.
- Coughlan, C. (2010). *Students stage day of protests over tuition fee rises*. Retrieved July 16, 2015, from British Broadcasting Corporation (BBC): <http://www.bbc.co.uk/news/education-11829102>
- Cowan, J. (2006). *On Becoming an Innovative University Teacher: Reflection in Action* (2nd ed.). Maidenhead: Open University Press.
- Cox, C., & Dyson, A. (1971). *The Black Papers on Education*. London: Davis-Poynter Ltd.
- Cremin, T., & Arthur, J. (Eds.). (2014). *Learning to Teach in the Primary School* (3rd ed.). Abingdon: Routledge.
- Creswell, J. (1998). *Qualitative Inquiry and Research Design: choosing among five traditions*. Thousand Oaks, CA: Sage.
- Cronin, B. (2014). Introduction to Social Network Analysis with PAJEK. *Faculty of Business workshop, 8 January 2014*. London, UK: University of Greenwich.
- Cronk, G. (2015). *George Herbert Mead (1863-1931)*. Retrieved August 13, 2015, from Internet Encyclopedia of Philosophy: <http://www.iep.utm.edu/mead/>
- Crossley, N. (2010). Networks and Complexity: Directions for Interactionist Research? *Symbolic Interaction*, 33(3), 341–363.
- Crossouard, B., & Pryor, J. (2012). How Theory Matters: Formative Assessment Theory and Practices and Their Different Relations to Education. *Studies in Philosophy and Education*, 31, 251-263.
- Crotty, M. (2003). *The Foundations of Social Research*. London: Sage.
- Csikszentmihalyi, M. (2004). *Flow, the secret to happiness*. Retrieved May 13, 2015, from TED: http://www.ted.com/talks/mihaly_csikszentmihalyi_on_flow?language=en
- Currivan, D. (2008). Conversational Interviewing. *Encyclopedia of Survey Research Methods*. (P. Lavrakas, Ed.) Retrieved August 22, 2015, from Sage Research Methods: <http://srmo.sagepub.com/view/encyclopedia-of-survey-research-methods/n107.xml>
- Davies, P. (2006). Threshold concepts: how can we recognise them? In J. Meyer, & R. Land (Eds.), *Overcoming Barriers to Student Understanding*. Abingdon: Routledge.
- Davis, J. (2014). Triangulating the Self: Identity Processes in a Connected Era. *Symbolic Interaction*, 37(4), 500–523.

- Dawson, S. (2011). 'Seeing' the learning community: An exploration of the development of a resource for monitoring online student networking. *British Journal of Educational Technology*, 41(5), 736–752.
- de Nooy, W., Mrvar, A., & Batagelj, V. (2005). *Exploratory Social Network Analysis with Pajek*. Cambridge: Cambridge University Press.
- Dennis, A., & Martin, P. (2005). Symbolic interactionism and the concept of power. *The British Journal of Sociology*, 57(2), 191-213.
- Denovan, A., & Macaskill, A. (2013). An interpretative phenomenological analysis of stress and coping in first year undergraduates. *British Educational Research Journal*, 39, 1002-1024.
- Denzin, N. (1978). *Sociological Methods: A Sourcebook*. New York, NY: McGraw-Hill.
- Denzin, N. (1985). Emotion as lived experience. *Symbolic Interaction*, 8(2), 223-240.
- Denzin, N. (1989). *Interpretive Biography*. Thousand Oaks, CA: Sage.
- Denzin, N. (1992). *Symbolic Interactionism and Cultural Studies: The Politics of Interpretation*. Cambridge, MA: Blackwell.
- Denzin, N. (2001). *Interpretive Interactionism* (2nd ed.). Thousand Oaks, CA: Sage.
- Denzin, N. (2007). *On understanding emotion*. New Brunswick, NJ: Transaction Publishers.
- Denzin, N., & Lincoln, Y. (2003). The Discipline and Practice of Qualitative Research. In N. Denzin, & Y. Lincoln (Eds.), *The Landscape of Qualitative Research* (2nd ed.). Thousand Oaks, CA: Sage.
- Department for Business, Innovation and Skills (DBIS). (2011). *Higher Education: Students at the Heart of the System, White Paper 2011*, [Online] CM 8122. London: The Stationery Office. Retrieved February 19, 2015, from DBIS: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/31384/11-944-higher-education-students-at-heart-of-system.pdf
- Department for Business, Innovation and Skills (DBIS). (2014). *Improving the Student Learning Experience – a national assessment, March 2014*. Retrieved from DBIS: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/311288/bis-14-700-improving-the-student-learning-experience.pdf
- Department for Education (DfE). (2010a). *The Importance of Teaching, White Paper 2010*, [Online] CM 7980. London: The Stationery Office. Retrieved January 19, 2016, from DfE: <https://www.gov.uk/government/publications/the-importance-of-teaching-the-schools-white-paper-2010>

- Department for Education (DfE). (2010b). *General Teaching Council for England to be scrapped*. Retrieved September 16, 2014, from DfE: <https://www.gov.uk/government/news/general-teaching-council-for-england-to-be-scrapped>
- Department for Education (DfE). (2011a). *Teachers' Standards*. Retrieved February 17, 2015, from DfE: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/301107/Teachers__Standards.pdf
- Department for Education (DfE). (2011b). *Training our next generation of outstanding teachers: An improvement strategy for discussion, June 2011*. Retrieved February 19, 2015, from DfE: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/175363/DFE-00054-2011.pdf
- Department for Education (DfE). (2014). *Expected levels of school and college performance (floor standards)*. Retrieved February 17, 2015, from DfE: http://www.education.gov.uk/schools/performance/fs_13/index.html
- Department for Education (DfE). (2016). *Get Into Teaching: Explore My Options*. Retrieved February 19, 2016, from DfE: <https://getintoteaching.education.gov.uk/explore-my-options>
- Department for Education and Employment (DfEE). (1997). *From Targets to Action*. London: DfEE.
- Department for Education and Employment (DfEE). (1998a). *Teaching: High Status, High Standards (Circular 4/98)*. London: DfEE.
- Department for Education and Employment (DfEE). (1998b). *National Numeracy Strategy: A framework for teaching*. London: DfEE.
- Department for Education and Employment (DfEE). (1999). *National Literacy Strategy: A framework for teaching*. London: DfEE.
- Department for Education and Science (DES). (1987). *Task Group for Assessment and Testing: A Report*. London: DES.
- Department for Education and Skills (DfES)/Teacher Training Agency (TTA). (2002). *Qualifying to Teach: Professional Standards for Qualified Teacher Status and Requirements for Initial Teacher Training*. London: TTA.
- Department for Education/National College of Teaching and Leadership (DfE/NCTL). (2015). *Initial Teacher Training (ITT) census information*. Retrieved July 16, 2015, from NCTL & DfE: <https://www.gov.uk/government/collections/statistics-teacher-training>
- Dewey, J. (1900). *The School and Society*. Chicago, IL: University of Chicago Press.

- Dewey, J. (1991). *How We Think*. Amherst, NY: Prometheus Books.
- Donaldson, M. (1986). *Children's Minds*. London: Fontana.
- Edwards, G., & Thomas, G. (2010). Can reflective practice be taught? *Educational Studies*, 36(4), 403-414.
- Ellison, N. B., Steinfield, C., & Lampe, C. (2007). The Benefits of Facebook "Friends": Social Capital and College Students' Use of Online Social Network Sites. *Journal of Computer-Mediated Communication*, 12, 1143-1168.
- Elmes, J. (2015). *Teacher training students removed from NSS*. Retrieved February 19, 2015, from Times Higher Education (THE): <https://secure.timeshighereducation.co.uk/news/teacher-training-students-removed-from-nss/2017776.article>
- Eraut, M. (1995). Schön Shock: a case for reframing reflection-in-action? *Teachers and Teaching: theory and practice*, 1(1), 9-22.
- Eraut, M. (2000). Non-formal learning and tacit knowledge in professional work. *British Journal of Educational Psychology*, 70, 113-136.
- Etzioni, A. (1969). *The Semi-Professions and Their Organization: Teachers, Nurses, Social Workers*. New York, NY: The Free Press.
- Evaluation of Learners' Experiences of e-learning Special Interest Group (ELESIG). (2015). *ELESIG: Learner Experience Research*. Retrieved August 20, 2015, from ELESIG: <http://elesig.ning.com/>
- Evans, C. (2013). Making Sense of Assessment Feedback in Higher Education. *Review of Educational Research*, 83(1), 70-120.
- Evidencenet. (2011). *CETL Dissemination Information*. Retrieved from Higher Education Academy EvidenceNet: <http://evidencenet.pbworks.com/w/page/36516570/CETL%20Dissemination%20Information>
- Falchikov, N. (2005). *Improving assessment through student involvement: practical solutions for aiding learning in higher and further education*. Abingdon: RoutledgeFalmer.
- Falchikov, N., & Boud, D. (2007). Assessment and emotion. In D. Boud, & N. Falchikov (Eds.), *Rethinking Assessment in Higher Education: Learning for the longer term*. Abingdon: Routledge.
- Falchikov, N., & Goldfinch, J. (2000). Student Peer Assessment in Higher Education: A Meta-Analysis Comparing Peer and Teacher Marks. *Review of Educational Research*, 70(3), 287-322.

- Ferguson, P. (2011). Student perceptions of quality feedback in teacher education. *Assessment & Evaluation in Higher Education*, 36(1), 51-62.
- Field, J. (2008). *Social Capital*. London: Routledge.
- Fine, G. A. (1993). The Sad Demise, Mysterious Disappearance, and Glorious Triumph of Symbolic Interactionism. *Annual Review of Sociology*, 19, 61-87.
- Foster, E., McNeil, J., & Lawther, S. (2012). Exploring new students' conceptions of engagement and feedback. In L. Clouder, C. Broughan, S. Jewell, & G. Steventon (Eds.), *Improving Student Engagement and Development Through Assessment: Theory and Practice in Higher Education*. Abingdon: Routledge.
- Furlong, J. (2013). *Education - An Anatomy of the Discipline*. Abingdon: Routledge.
- Gallant, A. (2014). Symbolic Interactions and the Development of Women Leaders in Higher Education. *Gender, Work and Organization*, 21(3), 203-216.
- General Teaching Council for England (GTCE). (2009). *Code of Conduct and Practice for Registered Teachers*. Retrieved January 19, 2016, from GTCE: http://webarchive.nationalarchives.gov.uk/20111213132132/http://www.gtce.org.uk/documents/publicationpdfs/code_of_conduct_1009.pdf
- General Teaching Council for England (GTCE). (2011). *General Teaching Council for England*. Retrieved January 19, 2016, from GTCE: <http://webarchive.nationalarchives.gov.uk/20111213132132/http://www.gtce.org.uk>
- Gewerc, A., Montero, L., & Lama, M. (2014). Collaboration and Social Networking in Higher Education. *Media Education Research Journal*, 42(XXI), 55-62.
- Gibbs, G. (1988). *Learning by Doing: A guide to teaching and learning methods*. Oxford: Oxford Polytechnic, Further Education Unit.
- Gibbs, G. (2010). *Dimensions of Quality*. Retrieved January 29, 2016, from HEA: <https://www.heacademy.ac.uk/resource/dimensions-quality>
- Gibbs, G. (2013). *How to do a research interview*. Retrieved February 1, 2015, from YouTube: https://www.youtube.com/watch?v=9t-_hYjAKww
- Gibbs, G., & Dunbar-Goddet, H. (2009). Characterising programme-level assessment environments that support learning. *Assessment & Evaluation in Higher Education*, 34(4), 481-489.
- Gibbs, G., & Simpson, C. (2004). Conditions Under Which Assessment Supports Students' Learning. *Learning and Teaching in Higher Education*,(1), 3-31.
- Gielen, S., Dochy, F., & Onghena, P. (2011). An inventory of peer assessment diversity. *Assessment and Evaluation in Higher Education*, 36(2), 137-155.

- Gillard, D. (2016). *A rationale debate based on the facts*. Retrieved January 25, 2016, from Education in England: The history of our schools: <http://www.educationengland.org.uk/documents/speeches/1976ruskin.html>
- Gladwell, M. (2000). *The Tipping Point: How Little Things Can Make A Big Difference*. London: Abacus.
- Goffman, E. (1959). *The Presentation of Self in Everyday Life*. London: Penguin.
- Gould, J., & Day, P. (2013). Hearing you loud and clear: student perspectives of audio feedback in higher education. *Assessment & Evaluation in Higher Education*, 38(5), 554-566.
- Gourlay, S. (2004). *The SECI model of knowledge creation: some empirical shortcomings*. Retrieved March 5, 2015, from COnnecting REpositories (CORE): <http://core.ac.uk/download/pdf/90222.pdf>
- Granovetter, M. (1973). The Strength of Weak Ties. *American Journal of Sociology*, 78(6), 1360-1380.
- Great Britain. (1988). *Education Reform Act 1988: Elizabeth II*, c.40. London: HMSO.
- Great Britain. (1998). *Teaching and Higher Education Act 1998: Elizabeth II*, c.30. London: HMSO.
- Greenwood, D., & Levin, M. (2003). Reconstructing the Relationships Between Universities and Society Through Action Research. In N. Denzin, & Y. Lincoln (Eds.), *The Landscape of Qualitative Research: Theories and Issues* (2nd ed.). London: Sage.
- Grunspan, D. Z., Wiggins, B. L., & Goodreau, S. M. (2014). *Understanding Classrooms through Social Network Analysis: A Primer for Social Network Analysis in Education Research*. Retrieved February 20, 2015, from Life Science Education: <http://www.lifescied.org/content/13/2/167.full>
- Hallett, F. (2010). Teaching in Higher Education. *Do we practice what we preach? An examination of the pedagogical beliefs of teacher educators*, 15(4), 435-448.
- Handley, K., & Williams, L. (2011). From copying to learning: using exemplars to engage students with assessment criteria and feedback. *Assessment & Evaluation in Higher Education*, 36(1), 95-108.
- Hargreaves, E. (2013). Inquiring into children's experiences of teacher feedback: reconceptualising Assessment for Learning. *Oxford Review of Education*, 39(2), 229-246.
- Harrison, J. (2006). An examination of the language and interpretations of 'Standard one' for initial teacher training in England: professional values and practice—outcomes or opportunities? *European Journal of Teacher Education*, 29(4), 431-454.

- Hart, C. (1998). *Doing a Literature Review: Releasing the Social Science Research Imagination*. London: Sage Publications.
- Harvey, L., Drew, S., & Smith, M. (2006). *The first-year experience: a review of literature for the Higher Education Academy*. York: Higher Education Academy.
- Hattie, J., & Timperley, H. (2007). The Power of Feedback. *Review of Educational Research*, 77(1), 81-112.
- Hatton, N., & Smith, D. (1995). Reflection in teacher education: Towards definition and implementation. *Teaching & Teacher Education*, 11(1), 33-49.
- Hawe, P., Webster, C., & Shiell, A. (2004). A glossary of terms for navigating the field of social network analysis. *Journal of Epidemiology & Community Health*, 58, 971-975.
- Hayes, D. (2011). Who will defend teacher education? *In Defence of Teacher Education*, 19-20. Retrieved February 24, 2015, from Standing Committee for the Education and Training of Teachers:
http://www.scett.org.uk/media/3583/in_defence_of__teacher_education_
- Headington, R. (2000). *Monitoring, Assessment, Recording, Reporting and Accountability: Meeting the Standards*. London: David Fulton.
- Headington, R. (2003). *Monitoring, Assessment, Recording, Reporting and Accountability: Meeting the Standards* (2nd ed.). London: David Fulton.
- Headington, R. (2009). The role of course design in building a supportive learning community for first year undergraduates. *European First-Year Experience Conference, 13-15 May 2009*. University of Groningen, The Netherlands: Unpublished.
- Headington, R. (2010). 'Clear in advance': a case study of first year undergraduates engagement with assessment criteria. *EARLI Assessment SIG conference, 1-3 September 2010*. Hexham, UK: Unpublished.
- Headington, R. (2011a). Holistic assessment design: Reality, Possibility or Elusive Ideal? *Assessment in Higher Education Conference, 6 July 2011*. Carlisle, UK: Unpublished.
- Headington, R. (2011b). Assessment and accountability. In J. Moyles, J. Georgeson, & J. Payler (Eds.), *Beginning Teaching: Beginning Learning* (4th ed.). Maidenhead: Open University Press.
- Headington, R. (2012). Exploring undergraduate students' informal, formative peer assessment networks. *EARLI Assessment SIG conference, 28-31 August 2012*. Brussels, Belgium: Unpublished.

- Headington, R. (2013). Reflections on feedback - feedback on reflection. *Assessment in Higher Education Conference, 26-27 June 2013*. Birmingham, UK: Unpublished.
- Headington, R. (2014a). The view from the other side of the marking pile. *Faculty of Education and Health conference, 26 June 2014*. London, UK: University of Greenwich.
- Headington, R. (2014b). Undergraduate initial teacher education students' peer assessment and feedback communities: a longitudinal study. *EARLI Assessment SIG Conference, 27-29 August, 2014*. Madrid, Spain: Unpublished.
- Headington, R., & Hales, A. (2010). 'Practicing what we preach': Social Constructivism and Course Design. *Compass: The Journal of Teaching and Learning at the University of Greenwich, 2*, 17-30.
- Headington, R., & Ptashko, P. (2011). Voxur: A new dimension on feedback? *4th Annual Learning and Teaching Conference, University of Greenwich, 5 July 2011*. London, UK: Unpublished.
- Headington, R., Barron, H., Callnon, D., & Smith, M. (2011). Food for thought: The students' perspective of assessment and feedback. *4th Annual Learning and Teaching Conference, University of Greenwich, 5 July 2011*. London, UK.
- Heilbronn, R. (2011). The reflective practitioner. In R. Heilbronn, & J. Yandell (Eds.), *Critical Practice in Teacher Education*. London: Institute of Education, University of London.
- Helsper, E., & Eynon, R. (2010). Digital natives: where is the evidence? *British Educational Research Journal, 36*(3), 503-520.
- Hendry, G. (2013). Integrating feedback with classroom teaching: Using exemplars to scaffold learning. In S. Merry, M. Price, D. Carless, & M. Tarras (Eds.), *Reconceptualising feedback in higher education*. London: Routledge.
- Hernandez, D., & Napierala, J. (2014). *Mother's Education and Children's Outcomes: How Dual-Generation Programs Offer Increased Opportunities for America's Families*. New York, NY: Foundation for Child Development.
- Higher Education Academy (HEA). (2014). *Assessment & Feedback - Student Views*. Retrieved August 22, 2015, from HEA: https://www.heacademy.ac.uk/resources/detail/resources/detail/resource_database/audioandvideo/assessment_and_feedback_student
- Higher Education Academy (HEA). (2015). *Framework for Transforming Assessment in Higher Education*. Retrieved February 26, 2016, from Higher Education Academy:

<https://www.heacademy.ac.uk/sites/default/files/downloads/transforming-assessment-in-he.pdf>

- Higher Education Funding Council for England (HEFCE). (2009). *Patterns in higher education: living at home*. Retrieved Feb 9, 2015, from HEFCE: <http://www.hefce.ac.uk/pubs/year/2009/200920/>
- Higher Education Funding Council for England (HEFCE). (2014). *UK review of the provision of information about higher education: National Student Survey results and trends analysis 2005-2013*. Retrieved July 16, 2015, from HEFCE: <http://www.hefce.ac.uk/pubs/year/2014/201413/>
- Higher Education Funding Council for England (HEFCE). (2015). *National Student Survey: Results*. Retrieved August 1, 2015, from HEFCE: <http://www.hefce.ac.uk/lt/nss/results/>
- Higher Education Funding Council for England (HEFCE). (2016). *National Student Survey*. Retrieved January 15, 2016, from HEFCE: <http://www.hefce.ac.uk/lt/nss/>
- Hilditch, F. (2016, February 8). Personal email correspondence: ITE/NSS funding.
- Hommel, J., Rienties, B., de Grave, W., Bos, G., Schwirth, L., & Scherpbier, A. (2012). Visualising the invisible: a network approach to reveal the informal side of student learning. *Advances in Health Science Education, 17*, 743-757.
- Hou, H. (2015). What makes an online community of practice work? A situated study of Chinese student teachers' perceptions of online professional learning. *Teaching and Teacher Education, 46*, 6-16.
- Hounsell, D., McCune, V., Hounsell, J., & Litjens, J. (2008). The quality of guidance and feedback to students. *Higher Education Research and Development, 27*(1), 55-67.
- House of Commons Debate (HC Deb). (2010). *HC Deb, 9 December 2010, cols 540-624*. Retrieved July 16, 2015, from Hansard: <http://www.parliament.uk/business/news/2010/12/debate-on-tuition-fees1/>
- Hughes, C., & Barrie, S. (2010). Influences on the assessment of graduate attributes in higher education. *Assessment & Evaluation in Higher Education, 35*(3), 325-334.
- Hughes, G. (2009). Talking to oneself: using autobiographical internal dialogue to critique everyday and professional practice. *Reflective Practice, 10*(4), 451-463.
- Hughes, G. (2011). Towards a personal best: a case for introducing ipsative assessment in higher education. *Studies in Higher Education, 36*(3), 353-367.

- Hughes, G. (2014). *Ipsative Assessment: Motivation through marking progress*. Basingstoke: Palgrave Macmillan.
- Hughes, G., Smith, H., & Creese, B. (2015). Not seeing the wood for the trees: developing a feedback analysis tool to explore feed forward in modularised programmes. *Assessment & Evaluation in Higher Education*, 40(8), 1079-1094.
- Hughes, G., Wood, E., & Kitagawa, K. (2014). Use of self-referential (ipsative) feedback to motivate and guide distance learners. *Open Learning: The Journal of Open, Distance and e-Learning*, 29(1), 31-44.
- IMDb. (2015). *Chalkface TV Series*. Retrieved September 2, 2015, from IMDb: <http://www.imdb.com/title/tt0140728/>
- Irvine, N., & Carmichael, P. (2009). Threshold concepts : A point of focus for practitioner research. *Active Learning in Higher Education*, 10(2), 103-119.
- Jackson, N., & Ward, R. (2004). A fresh perspective on progress files - a way of representing complex learning and achievement in higher education. *Assessment & Evaluation in Higher Education*, 29(4), 423 - 449.
- Jessop, T., El Hakima, Y., & Gibbs, G. (2014). The whole is greater than the sum of its parts: a large-scale study of students' learning in response to different programme assessment patterns. *Assessment & Evaluation in Higher Education*, 39(1), 73-88.
- Jewson, N. (2007). Cultivating network analysis: Rethinking the concept of 'community' within 'communities of practice'. In J. Hughes, N. Jewson, & L. Unwin (Eds.), *Communities of Practice: Critical Perspectives*. Abingdon: Routledge.
- JISC. (2007a). *In Their Own Words: exploring the learner's perspective on e-learning*. Retrieved January 15, 2016, from The Design Studio: <http://jiscdesignstudio.pbworks.com/w/page/12458445/In%20Their%20Own%20Words%20%282007%29>
- JISC. (2007b). *REAP: Re-engineering Assessment Practices in Scottish Higher Education*. Retrieved February 11, 2015, from <http://www.webarchive.org.uk/wayback/archive/20140614154010/http://www.jisc.ac.uk/media/documents/programmes/elearningsfc/sfcbookletreap.pdf>
- JISC. (2010). *Effecting Sustainable Change in Assessment Practice and Experience (ESCAPE) Project*. Retrieved August 13, 2015, from The Design Studio: <http://jiscdesignstudio.pbworks.com/w/page/12458419/ESCAPE%20Project>
- JISC. (2015a). *Using Audio Feedback for Assessment*. Retrieved August 14, 2015, from JISC Digital Media: <http://www.jiscdigitalmedia.ac.uk/guide/audio-feedback>

- JISC. (2015b). *Peer assessment and review*. Retrieved April 29, 2015, from JISC The Design Studio:
<http://jiscdesignstudio.pbworks.com/w/page/52947134/Peer%20assessment%20and%20review>
- Johnson, L., & Knoke, D. (2004). "Skonk works here": Activating network social capital in complex collaborations. In M. Beyerlein, D. Johnson, & S. Beyerlein (Eds.), *Advances in Interdisciplinary Studies of Work Teams* (Vol. 10). Emerald Group Publishing Limited.
- Jones, C., & Shao, B. (2011). *The Net Generation and Digital Natives - Implications for Higher Education*. Retrieved February 10, 2015, from HEA:
<https://www.heacademy.ac.uk/node/4011>
- Jones, S. (1992). Was there a Hawthorne Effect? *American Journal of Sociology*, 98(3), 451-468.
- Jordan, K., Tracy, F., & Johnstone, K. (2011). Threshold Concepts as Focal Points for Supporting Student Learning. *Bioscience Education e-journal*. Retrieved July 18, 2012, from www.bioscience.heacademy.ac.uk/journal/vol18/beej-18-2.pdf
- Kerrigan, M., Headington, R., & Walker, S. (2011). Visualising the holistic assessment experience – The use of Google tools to support effective design. *ALT-C, 6-8 September 2011*. Leeds, UK: Unpublished.
- Kezar, A. (2014). Higher Education Change and Social Networks: A Review of Research. *The Journal of Higher Education*, 85(1), 91-125.
- Kift, S. (2009). A holistic approach to the identification and support and engagement of first year students: a retention strategy. *European First Year Experience Conference, 13-15 May 2009*. Groningen, The Netherlands: EFYE.
- Kim, M., & Cavas, B. (2013). Legitimate peripheral participation of pre-service science teachers: Collaborative reflections in an online community of practice, Twitter. *Science Education International*, 24(3), 306-323.
- Kincheloe, J., & McLaren, P. (2003). Rethinking Critical Theory and Qualitative Research. In N. Denzin, & Y. Lincoln (Eds.), *The Landscape of Qualitative Research: Theories and Issues* (2nd ed.). London: Sage.
- Kleiner, S. (2009). Thinking with the Mind, Syncing with the Body: Ballet as Symbolic and Nonsymbolic Interaction. *Symbolic Interaction*, 32(3), 236-259.
- Knewstrubb, B., & Bond, C. (2009). What's he talking about? The communicative alignment between a teacher's intentions and students' understandings. *Higher Education Research & Development*, 28(2), 179-193.
- Knight, P. (2000). The Value of a Programme-wide Approach to Assessment. *Assessment & Evaluation in Higher Education*, 25(3), 237-251.

- Knight, P. (2002). The Achilles' Heel of Quality: The assessment of student learning. *Quality in Higher Education*, 8(1), 107-115.
- Knight, P. (2007). Grading, classifying and future learning. In D. Boud, & N. Falchikov (Eds.), *Rethinking Assessment in Higher Education: Learning for the longer term*. Abingdon: Routledge.
- Kolb, D. A., & Fry, R. (1975). Toward an applied theory of experiential learning. In C. L. Cooper, *Theories of Group Processes*. London: John Wiley.
- Koopman, B. L. (2011). From Socrates to Wikis: Using Online Forums to Deepen Discussions. *Phi Delta Kappan*, 92(4), 24-27.
- Kostera, M. (2006). The narrative collage as research method. *Storytelling, Self, Society*, 2, 5-27.
- Kovacs, S., Grant, L., & Hyland, L. (2010). *A study of the use of the National Student Survey to enhance the Student Experience in Education Departments, December 2010*. Bristol: ESCalate - The Higher Education Academy Centre for Education.
- Krackhardt. (1999). The Ties that Torture: Simmelian Tie Analysis in Organizations. *Research in the Sociology of Organizations*, 16, 183-201.
- Krackhardt, D. (1998). Simmelian Ties: Super Strong and Sticky. In R. Kramer, & M. Neale (Eds.), *Power and Influence in Organizations*. Thousand Oaks, CA: Sage.
- Kuper, A. (Ed.). (1977). *The Social Anthropology of Radcliffe-Brown*. London: Routledge & Kegan Paul.
- Kvale, S. (2006). Dominance Through Interviews and Dialogues. *Qualitative Inquiry*, 12(3), 480-500.
- Labov, W. (1972). The transformation of experience in narrative syntax. In W. Labov (Ed.), *Language in the inner city: Studies in the Black English vernacular*. Philadelphia: University of Philadelphia Press.
- Lanclos, D. (2016, February 23). *The death of the digital native: four provocations from Digifest speaker, Donna Lanclos*. Retrieved February 25, 2016, from JISC: <https://www.jisc.ac.uk/inform-feature/the-death-of-the-digital-native-23-feb-2016>
- Land, R. (2007). Threshold Concepts and Troublesome Knowledge. *15th Improving Student Learning Symposium, 3-5 September 2007*. Trinity College Dublin, Ireland: OCSLD.
- Land, R. (2011). *Threshold Concepts and Troublesome Knowledge*. Retrieved August 26, 2015, from YouTube: <https://www.youtube.com/watch?v=WR1cXIdWnNU>

- Land, R. (2012). *A closer look at liminality: incorrigibles and threshold capital*. Retrieved from NAIRTL: <http://www.nairtl.ie/index.php?pageID=632>
- Land, R., Cousin, G., Meyer, J., & Davies, P. (2005). Threshold concepts and troublesome knowledge (3): implications for course design and evaluation. In C. Rust (Ed.), *Improving Student Learning Diversity and Inclusivity*. Oxford: Oxford Centre for Staff Learning Development.
- Lankshear, C., & Knobel, M. (2004). *A Handbook for Teacher Research: From design to implementation*. Maidenhead: Open University Press.
- Larkin, H., & Richardson, B. (2013). Creating high challenge/high support academic environments through constructive alignment: student outcomes. *Teaching in Higher Education*, 18(2), 192-204.
- Lave, J., & Wenger, E. (1991). *Situated Learning: Legitimate Peripheral Participation*. Cambridge: University of Cambridge Press.
- Lee, M. (2010). Researching social capital in education: some conceptual considerations relating to the contribution of network analysis. *British Journal of Sociology of Education*, 31(6), 779-792.
- Lee, P. (2012). *Lies, Damned Lies and Statistics*. Retrieved March 4, 2016, from University of York, Department of Statistics: <http://www.york.ac.uk/depts/maths/histstat/lies.htm>
- Lester, C. (2015, January 8). Email correspondence: HEFCE to University Vice Chancellors.
- Levitt, S., & List, J. (2011). Was There Really a Hawthorne Effect at the Hawthorne Plant? An Analysis of the Original Illumination Experiments. *American Economic Journal: Applied Economics*, 3(1), 224-238.
- Lew, M., Alwis, W., & Schmidt, H. (2010). Accuracy of students' self-assessment and their beliefs about its utility. *Assessment & Evaluation in Higher Education*, 35(2), 135-156.
- Linde, C. (2001). Narrative and social tacit knowledge. *Journal of Knowledge Management*, 5(2), 160-170.
- Lindorff, M., & McKeown, T. (2013). An aid to transition? The perceived utility of online resources for on-campus first year management students. *Education and Training*, 55(4), 414-428.
- Liu, N., & Carless, D. (2006). Peer feedback: the learning element of peer assessment. *Teaching in Higher Education*, 11(3), 279-290.
- Lucas, U., & Mladnovic, R. (2007). The potential of threshold concepts: an emerging framework for educational research and practice. *London Review of Education*, 5(3), 237-248.

- Lunt, I. (2008). Ethical issues in professional life. In B. Cunningham (Ed.), *Exploring Professionalism*. London: Institute of Education, University of London.
- Lunt, T., & Curran, J. (2010). "Are you listening please?" The advantages of electronic audio feedback compared to written feedback. *Assessment & Evaluation in Higher Education*, 35(7), 759-769.
- Machol, R. (1975). The Hawthorne Effect. *Interfaces*, 5(2), 31-32.
- Mansigani, R., Barclay, D., Helming, M., McGowan, A., Wild, M., Peters-Harrison, S., . . . Lowe, D. (2010, October 14). *Oxford and Cambridge students oppose fee increase: Student Union leaders call on Nick Clegg to honour promises*. Retrieved July 16, 2015, from The Telegraph: <http://www.telegraph.co.uk/comment/letters/8062185/Oxford-and-Cambridge-students-oppose-fee-increase.html>
- Marin, A., & Wellman, B. (2011). Social Network Analysis: An Introduction. In J. Scott, & P. J. Carrington (Eds.), *The Sage Handbook of Social Network Analysis*. London: Sage.
- Mark, E. (2013). Students are not products. They are customers. *College Student Journal*, 47(3), 489-493.
- Mårtensonn, K., & Roxå, T. (2015). Academic development in a world of informal learning about teaching and student learning. *International Journal for Academic Development*, 20(2), 109-112.
- Martin, S., & Cloke, C. (2000). Standards for the Award of Qualified Teacher Status: reflections on assessment implications. *Assessment & Evaluation in Higher Education*, 25(2), 183-190.
- Massobs. (2015). *Mass Observation Archive*. Retrieved July 16, 2015, from Mass Observation: Recording everyday life in Britain: <http://www.massobs.org.uk/>
- McCambridge, J., Witton, J., & Elbourne, D. (2014). Systematic Review of the Hawthorne Effect: New concepts are needed to study research participation effects. *Journal of Clinical Epidemiology*, 67, 267-277.
- McDrury, J., & Alterio, M. (2003). *Learning through Storytelling in Higher Education: Using Reflection & Experience to Improve Learning*. London: Kogan Page.
- McLean, A., Bond, C., & Nicholson, H. (2015). An anatomy of feedback: a phenomenographic investigation of undergraduate students' conceptions of feedback. *Studies in Higher Education*, 40(5), 921-932.
- McNay, I. (2006). Delivering Mass Higher Education - The Reality of Policy in Practice. In I. McNay (Ed.), *Beyond Mass Higher Education*. Maidenhead: Open University Press.

- McPhail, C., & Rexroat, C. (1979). Mead vs. Blumer: The Divergent Methodological Perspectives of Social Behaviorism and Symbolic Interactionism. *American Sociological Review*, 44(3), 449-467.
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in Social Networks. *Annual Review of Sociology*, 27, 415-444.
- Mead, G. H. (1934). *Mind, Self and Society*. Chicago, IL: University of Chicago Press.
- Menter, I., Brisard, E., & Smith, I. (2006). Making Teachers in Britain: Professional knowledge for initial teacher education in England and Scotland. *Educational Philosophy and Theory*, 38(3), 269-286.
- Merrett, F. (2006). Reflections on the Hawthorne Effect. *Educational Psychology: An International Journal of Experimental Educational Psychology*, 26(1), 143-146.
- Merry, & Orsmond. (2008). Students' Attitudes to and Usage of Academic Feedback Provided Via Audio Files. *Bioscience Education e-journal*. Retrieved August 14, 2015, from <http://journals.heacademy.ac.uk/doi/full/10.3108/beej.11.3>
- Merry, S., Price, M., Carless, D., & Taras, M. (Eds.). (2013). *Reconceptualising Feedback in Higher Education: Developing Dialogue with Students*. Abingdon: Routledge.
- Meyer, J. H., & Land, R. (2003). *Threshold Concepts and Troublesome Knowledge: Linkages to Ways of Thinking and Practising within the Disciplines, Occasional Report 4, May 2003*. Edinburgh: Enhancing Teaching-Learning Environments in Undergraduate Courses (ETL) Project, University of Edinburgh.
- Meyer, J. H., & Land, R. (2005). Threshold concepts and troublesome knowledge (2): Epistemological considerations and a conceptual framework for teaching and learning. *Higher Education*, 49(3), 373-388.
- Meyer, J. H., & Land, R. (2006a). Threshold concepts and troublesome knowledge: an introduction. In J. H. Meyer, & R. Land (Eds.), *Overcoming Barriers to Student Understanding*. Abingdon: Routledge.
- Meyer, J. H., & Land, R. (2006b). Threshold concepts and troublesome knowledge: issues of liminality. In J. H. Meyer, & R. Land (Eds.), *Overcoming Barriers to Student Understanding*. Abingdon: Routledge.
- Meyer, J. H., Land, R., & Baillie, C. (Eds.). (2010). *Threshold concepts and transformational learning*. Rotterdam: Sense Publishers.
- Milgram, S. (1977). *The Individual in a Social World: Essays and Experiments*. Reading, MA: Addison-Wesley Publishing Company.

- Mobile Operators Association. (2015). *Stats and Facts: Customer Numbers*. Retrieved July 17, 2015, from Mobile Operators Association: <http://www.mobilemastinfo.com/stats-and-facts/>
- Molloy, E., Borrell-Carrió, F., & Epstein, R. (2013). The impact of emotions in feedback. In D. Boud, & E. Molloy (Eds.), *Feedback in Higher and Professional Education: Understanding it and doing it well*. Abingdon: Routledge.
- Moreno, J. (1953). *Who shall survive? : Foundations of Sociometry, Group Psychotherapy and Sociodrama* (2nd ed.). Beacon, NY: Beacon House.
- Mouraz, A., Pereira, V., & Monteiro, R. (2013). The Use of Metaphors in the Processes of Teaching and Learning in Higher Education. *International Online Journal of Educational Sciences*, 5(1), 99-110.
- Moyles, J., Georgeson, J., & Payler, J. (Eds.). (2011). *Beginning Teaching: Beginning Learning* (4th ed.). Maidenhead: Open University Press.
- Murray, R. (2011). *How to Write a Thesis*. Maidenhead: Open University Press.
- Musgrave, P. W. (1972). *The Sociology of Education* (2nd ed.). London: Methuen & Co Ltd.
- Mutch, A. (2003). Exploring the Practice of Feedback to Students. *Active Learning in Higher Education*, 4(1), 24–38.
- Naidoo, R., Shankar, A., & Veer, E. (2011). The consumerist turn in higher education: Policy aspirations and outcomes. *Journal of Marketing Management*, 27, 1142–1162.
- National Archives. (2015). *Census Records*. Retrieved September 6, 2015, from The National Archives: <http://www.nationalarchives.gov.uk/help-with-your-research/research-guides/census-records/>
- National College for Teaching and Leadership (NCTL). (2014). *School Direct: get involved in initial teacher training*. Retrieved January 26, 2016, from NCTL: <https://www.gov.uk/guidance/school-direct-get-involved-in-initial-teacher-training>
- National Committee of Inquiry into Higher Education (NCIHE). (1997). *Higher Education in the Learning Society*. Retrieved January 26, 2016, from University of Leeds: <http://www.leeds.ac.uk/educol/ncihe/>
- National Union of Students (NUS). (2010). *Charter on Assessment and Feedback*. Retrieved September 1, 2010, from NUS Connect: <http://www.nusconnect.org.uk/asset/news/6010/FeedbackCharter-toview.pdf>
- National Union of Students (NUS). (2012). *Mapping the evidence: A Review of the Literature: Student Financial Support in Further and Higher Education*.

- Retrieved April 29, 2015, from NUS: <http://www.nus.org.uk/en/news/research-publications/>
- National Union of Students/HSBC (NUS/HSBC). (2011). *Finance and Debt Report*. Retrieved January 26, 2016, from NUS: <http://www.nus.org.uk/en/news/research-publications/>
- Neary, M., Saunders, G., Hagyard, A., & Derricott, D. (2014). *Student as Producer: research-engaged teaching, an institutional strategy*. Retrieved January 16, 2016, from HEA: https://www.heacademy.ac.uk/sites/default/files/projects/lincoln_ntfs_2010_project_final_report_fv.pdf
- Nicol, D. (2007). Laying a foundation for lifelong learning: Case studies of e-assessment in large 1st-year classes. *British Journal of Educational Technology*, 38(4), 668-678.
- Nicol, D. (2009a). Assessment for learner self-regulation: enhancing achievement in the first year using learning technologies. *Assessment and Evaluation in Higher Education*, 34(3), 335-352.
- Nicol, D. (2009b). *Transforming assessment and feedback: Enhancing integration and empowerment in the first year*. Glasgow: The Quality Assurance Agency for Higher Education.
- Nicol, D. (2010). From monologue to dialogue: improving writing in mass higher education. *Assessment and Evaluation in Higher Education*, 35(5), 501-517.
- Nicol, D., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199-218.
- Nicol, D., Thomson, A., & Breslin, C. (2014). Rethinking feedback practices in higher education: a peer review perspective. *Assessment & Evaluation in Higher Education*, 39(1), 102-122.
- Nonaka, I., & Takeuchi, H. (1995). *The Knowledge-Creating Company*. Oxford: Oxford University Press.
- Nuttall, M. (2007). Moderation: towards greater consistency in marking. In S. Bloxham, & P. Boyd, *Developing Effective Assessment in Higher Education: A Practical Guide*. Maidenhead: Open University Press.
- Oblinger, D., & Oblinger, J. (2005). *Educating the Net Generation*. Retrieved August 22, 2015, from Educause: <http://www.educause.edu/educatingthenetgen>
- O'Donovan, B., Price, M., & Rust, C. (2008). Developing student understanding of assessment standards: a nested hierarchy of approaches. *Teaching in Higher Education*, 13(2), 205-217.

- Ofcom. (2015). *The Communications Market Report, United Kingdom: Techie teens are shaping how we communicate*. Retrieved July 17, 2015, from Ofcom: <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr14/uk/>
- Office for National Statistics (ONS). (2010). *Social Trends 41: e-Society*. Retrieved January 26, 2016, from ONS: <http://www.ons.gov.uk/ons/rel/social-trends-rd/social-trends/social-trends-41/index.html>
- Office for Standards in Education (OFSTED). (2014a). *The Report of Her Majesty's Chief Inspector of Education, Children's Services and Skills 2013/14: Schools*. Retrieved February 19, 2015, from OFSTED: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/384707/Ofsted_Annual_Report_201314_Schools.pdf
- Office for Standards in Education (OFSTED). (2014b). *Inspecting initial teacher education: guidance for inspectors*. Retrieved January 16, 2016, from OFSTED: <https://www.gov.uk/government/publications/initial-teacher-education-inspection-handbook>
- Orsmond, P., & Merry, S. (2013). The importance of self-assessment in students' use of tutors' feedback: a qualitative study of high and non-high achieving biology undergraduates,. *Assessment & Evaluation in Higher Education*, 38(6), 737-753.
- Orsmond, P., & Merry, S. (2015). Tutors' assessment practices and students' situated learning in higher education: chalk and cheese. *Assessment & Evaluation in Higher Education*. doi:10.1080/02602938.2015.1103366
- Palin, M. (2006). *The Python Years: Diaries 1969-1979*. London: Weidenfield & Nicolson.
- Pepys, S. (2015). *The Diary*. Retrieved January 26, 2016, from The Diary of Samuel Pepys: Daily entries from the 17th century London diary: <http://www.pepysdiary.com/>
- Pew. (2015). *Device Ownership*. Retrieved August 26, 2015, from Pew Research Center: <http://www.pewresearch.org/data-trend/media-and-technology/device-ownership/>
- Phillips, E., & Pugh, D. (1987). *How to get a Ph.D.* Buckingham: Open University Press.
- Phillips, J. L. (1975). *The Origins of Intellect: Piaget's Theory* (2nd ed.). W. H. Freeman and Co. Ltd.
- Pishghadam, R., & Zabihi, R. (2011). Social and Cultural Capital in Creativity. *Canadian Social Science*, 7(2), 32-38.

- Pitman, M., & Maxwell, J. (1992). Qualitative Approaches to Evaluation: Models and Methods. In M. LeCompte, W. Millroy, & J. Preissle (Eds.), *The Handbook of Qualitative Research in Education*. San Diego, CA: Academic Press.
- Pitt, E. (2014). *Feedback in Higher Education: Exploring students' appraisal, comprehension and utilisation*. Ph.D., University of Liverpool.
- Pitt, E., & Norton, L. (2016). 'Now that's the feedback I want!' Students' reactions to feedback on graded work and what they do with it. *Assessment & Evaluation in Higher Education*. doi:10.1080/02602938.2016.1142500
- Pocket Oxford Dictionary. (1969). *5th edn*. London: Oxford University Press.
- Polanyi, M. (1966). *The Tacit Dimension*. Chicago, IL: University of Chicago Press.
- Pollard, A. (2008). *Reflective Teaching* (3rd ed.). London: Continuum International Publishing Group.
- Pollard, A. (2014). *Reflective Teaching in Schools* (4th ed.). London: Bloomsbury.
- Pollard, A., & Tann, S. (1987). *Reflective Teaching in the Primary School*. London: Cassell.
- Powell, J. P. (1985). Autobiographical Learning. In D. Boud, R. Keogh, & D. Walker, *Reflection: Turning Experience Into Learning*. London: Kogan Page.
- Prell, C. (2003). Community Networking and Social Capital: Early Investigations. *Journal of Computer-Mediated Communication*, 8(3).
- Prell, C. (2006). Social Capital as Network Capital: Looking at the Role of Social Networks Among Not-For-Profits. *Sociological Research Online*, 11(4).
- Prell, C. (2012). *Social Network Analysis: history, theory and methodology*. London: Sage.
- Prensky, M. (2001). *Digital Natives, Digital Immigrants*. Retrieved August 20, 2015, from Mark Prensky: <http://www.marcprensky.com/writing/Prensky%20-%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf>
- Price, M. (2003). Is an assessment strategy essential? *Exchange*(4), 14-15.
- Price, M., Handley, K., Millar, J., & O'Donovan, B. (2010). Feedback: all that effort, but what is the effect? *Assessment & Evaluation in Higher Education*, 35(3), 277-289.
- Price, M., O'Donovan, B., den Outer, B., & Hudson, J. (2015). Domains influencing students' perceptions of feedback. *Fifth International Assessment in Higher Education Conference, 24-25 June 2015*. Birmingham, UK: Unpublished.
- Price, M., O'Donovan, B., Rust, C., & Carroll, J. (2008). *Assessment Standards: A Manifesto for Change*. Retrieved February 19, 2015, from Brookes e-journal of

Learning and Teaching:

http://bejlt.brookes.ac.uk/paper/assessment_standards_a_manifesto_for_change-2/

- Price, M., Rust, C., O'Donovan, B., Handley, K., & Bryant, R. (2012). *Assessment Literacy: The Foundation for Improving Student Learning*. Oxford: Oxford Centre for Staff and Learning Development.
- Prospects. (2015). *Teacher training: Routes into teaching*. Retrieved August 26, 2015, from Prospects: http://www.prospects.ac.uk/routes_into_teaching.htm
- Punch, K. F. (2009). *Introduction to Research Methods in Education*. London: Sage.
- Putman, R. (2000). *Bowling Alone: The collapse and revival of American community*. New York, NY: Simon & Schuster.
- Quality Assurance Agency (QAA). (2008). *The framework for higher education qualifications in England, Wales and Northern Ireland August 2008*. Retrieved February 20, 2015, from QAA: <http://www.qaa.ac.uk/en/Publications/Documents/Framework-Higher-Education-Qualifications-08.pdf>
- Quote Investigator. (2015). *Not Everything That Counts Can Be Counted*. Retrieved March 25, 2015, from Quote Investigator: Exploring the Origins of Quotations: <http://quoteinvestigator.com/2010/05/26/everything-counts-einstein/>
- Race, P. (2010). *Making Learning Happen* (2nd ed.). London: Sage Publications Ltd.
- Ramprasad, A. (1983). On the definition of feedback. *Systems research and behavioural science*, 28(1), 4-13.
- Ramsden, P., & Callender, C. (2014). *Appendix A: Literature Review, July 2014*. Retrieved February 19, 2015, from HEFCE: <http://www.hefce.ac.uk/pubs/rereports/year/2014/nssreview/>
- Reivich, K., & Shatté, A. (2002). *The Resilience Factor*. New York, NY: Three Rivers Press.
- Richardson, J. T., Slater, J. B., & Wilson, J. (2007). The National Student Survey: development, findings and implications. *Studies in Higher Education*, 32(5), 557-580.
- Rienties, B., Johan, N., & Jindal-Snape, D. (2015). A dynamic analysis of social capital-building of international and UK students. *British Journal of Sociology of Education*, 36(8), 1212-1235.
- Riessman, C. (1993). *Narrative Analysis*. Newbury Park, CA: Sage.
- Ritzer, G., & Smart, B. (Eds.). (2001). *Handbook of Social Theory*. London: Sage.

- Roberts, B. (1998). An Autobiographical Account of an Educational Experience. In M. Erben (Ed.), *Biography and Education*. London: Falmer.
- Robinson, L. (2007). The cyberself: the self-ing project goes online, symbolic interaction in the digital age. *New Media and Society*, 9(1), 93-110.
- Ross, W. (2009). *Translation of Metaphysics by Aristotle, Book VIII*. Retrieved November 9, 2015, from The Internet Classics Archive: <http://classics.mit.edu/Aristotle/metaphysics.8.viii.html>
- Rowbottom, D. P. (2007). Demystifying Threshold Concepts. *Journal of Philosophy of Education*, 41(2), 263-270.
- Rowe, A. (2011). The personal dimension in teaching: why students value feedback. *International Journal of Educational Management*, 25(4), 343-360.
- Rowntree, D. (1987). *Assessing students: how shall we know them?* London: Harper & Row.
- Russell, T. (2005). Can reflective practice be taught? *Reflective Practice*, 6(2), 199-204.
- Russell, T. (2007). How experience changed my values as a teacher educator. In T. Russell, & J. Loughran (Eds.), *Enacting a Pedagogy of Teacher Education: Values, relationships and practices*. Abingdon: Routledge.
- Russell, T. (2013). Has Reflective Practice Done More Harm than Good in Teacher Education? *Phronesis*, 2(1), 80-88.
- Rust, C., O'Donovan, B., & Price, M. (2005). A social constructivist assessment process model: how the research literature shows us this could be best practice. *Assessment & Evaluation in Higher Education*, 30(3), 231-240.
- Ryan, M., Cealey Harrison, W., & Headington, R. (2008). Experts on e-Learning: Insights Gained from Listening to the Student Voice. *7th European Conference on e-Learning, 6-7 November 2008*. Agia Napa, Cyprus: ECEL.
- Sadler, D. R. (1989). Formative assessment and the design of instructional systems. *Instructional Science*, 18, 119-144.
- Sadler, D. R. (2007). Perils in the meticulous specification of goals and assessment criteria. *Assessment in Education: Principles, Policy & Practice*, 14(3), 387-392.
- Sadler, D. R. (2009). Indeterminacy in the use of preset criteria for assessment and grading. *Assessment & Evaluation in Higher Education*, 34(2), 159-179.
- Sadler, D. R. (2010). Beyond feedback: Developing student capability in complex appraisal. *Assessment and Evaluation in Higher Education*, 35(5), 535-550.

- Salvini, A. (2010). Symbolic Interactionism and Social Network Analysis: An Uncertain Encounter. *Symbolic Interaction*, 33(3), 364–388.
- Sambell, K., McDowell, L., & Montgomery, C. (2013). *Assessment for Learning in Higher Education*. Abingdon: Routledge.
- Sandstrom, K., Martin, D., & Fine, G. (2001). Symbolic Interactionism at the end of the Century. In G. Ritzer, & B. Smart (Eds.), *Handbook of Social Theory*. London: SAGE Publications Ltd.
- Schön, D. (1983). *The Reflective Practitioner: How professionals think in action*. New York: Basic Books.
- Schön, D. (1991). *The Reflective Practitioner: How professionals think in action*. Aldershot: Avebury.
- Schön, D. A. (1987). *Educating the Reflective Practitioner: Towards a New Design for Teaching and Learning in the Professions*. San Francisco, CA.: Jossey-Bass.
- Schunk, D., & Zimmerman, B. (Eds.). (1994). *Self-Regulation of Learning and Performance: Issues and Educational Applications*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- Scott, J. (2013). *Social Network Analysis* (3rd ed.). London: Sage.
- Shepherd, J. (2010, June 2). *Gove to abolish General Teaching Council for England*. Retrieved February 17, 2015, from The Guardian: <http://www.theguardian.com/education/2010/jun/02/general-teaching-council-england-abolished>
- Shriki, A., & Movshovitz-Hadar, N. (2011). Nurturing a Community of Practice through a Collaborative Design of Lesson Plans on a Wiki System. *Interdisciplinary Journal of E-Learning and Learning Objects*, 7, 339-357.
- Shute, V. J. (2008). Focus on Formative Feedback. *Review of Educational Research*, 78(1), 153-189.
- Silverman, D. (2014). *Interpreting Qualitative Data* (5th ed.). London: Sage.
- Simmel, G. (1950). *The Sociology of Georg Simmel*. (K. Wolff, Trans.) New York, NY: The Free Press.
- Simmons, & Wilmot. (2008). *Review of Literature on Survey Incentive Payments*. Retrieved from Office for National Statistics (ONS): www.ons.gov.uk/.../incentive-payments-on-social-surveys.pdf · PDF file
- Singer, & Couper. (2008). *Do Incentives Exert Undue Influence on Survey Participation? Experimental Evidence*. Retrieved from National Center for Biotechnology Information (NCBI): <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2600442/>

- Snow, D. (2001). Extending and Broadening Blumer's Conceptualization of Symbolic Interactionism. *Symbolic Interaction*, 24(3), 367–377.
- Society for the Study of Symbolic Interactionism (SSSI). (2015). *Society for the Study of Symbolic Interactionism*. Retrieved July 15, 2015, from SSSI: <https://sites.google.com/site/sssinteraction/>
- Soilemetzidis, I., Bennett, P., Buckley, A., Hillman, N., & Stoakes, G. (2014). *The HEPI-HEA Student Academic Experience Survey 2014*. York: The Higher Education Academy.
- Studentroom. (2015). *The cost of student living throughout the UK*. Retrieved April 29, 2015, from The Student Room: http://www.thestudentroom.co.uk/wiki/The_cost_of_student_living_throughout_the_UK
- Sutton, A., & Taylor, D. (2011). Confusion about collusion: working together and academic integrity. *Assessment and Evaluation in Higher Education*, 36(7), 831-841.
- Tannehill, D., & McPhail, A. (2014). What examining teaching metaphors tells us about pre-service teachers' developing beliefs about teaching and learning. *Physical Education and Sport Pedagogy*, 19(2), 149-163.
- Taras, M. (2006). Do unto others or not: equity in feedback for undergraduates. *Assessment & Evaluation in Higher Education*, 31(3), 365 - 377.
- Taras, M. (2007a). Assessment for learning: understanding theory to improve practice. *Journal of Further and Higher Education*, 31(4), 363-371.
- Taras, M. (2007b). Machinations of assessment: metaphors, myths and realities. *Pedagogy, Culture & Society*, 15(1), 55-69.
- Taylor, C., & Burke da Silva, K. (2014). An analysis of the effectiveness of feedback to students on assessed work. *Higher Education Research & Development*, 33(4), 794-806.
- Teach Web. (2008). *CCK08-Connectivism: Networked Student...The Movie*. Retrieved August 13, 2015, from Teach Web: <http://www.webring.org/l/rd?ring=edtech;id=28;url=http%3A%2F%2Fteachweb2%2Eblogspot%2Eco%2Euk%2F2008%2F11%2Fcck08-connectivism-networked-studentthe%2Ehtml>
- Tenni, C., Smyth, A., & Boucher, C. (2003). The Researcher as Autobiographer: Analysing Data Written about Oneself. *The Qualitative Report*, 8(1).
- Tharp, T. L. (2010). "Wiki, Wiki, Wiki - WHAT?" Assessing Online Collaborative Writing. *English Journal*, 99(5), 40-46.

- The Training and Development Agency for Schools (TDA). (2007). *Professional Standards for Qualified Teacher Status*. Retrieved August 21, 2014, from TDA: <http://webarchive.nationalarchives.gov.uk/20111218081624/tda.gov.uk/teacher/developing-career/professional-standards-guidance.aspx>
- Times Higher Education (THE). (2010, September 16). *More, faster, face-to-face: NUS demands on feedback*. Retrieved August 1, 2015, from THE: <https://www.timeshighereducation.co.uk/news/more-faster-face-to-face-nus-demands-on-feedback/413486.article?sectioncode=26&storycode=413486&c=1>
- Times Higher Education (THE). (2014, August 12). *National Student Survey 2014 results show record levels of satisfaction*. Retrieved February 19, 2015, from THE: <http://www.timeshighereducation.co.uk/news/national-student-survey-2014-results-show-record-levels-of-satisfaction/2015108.article>
- Topping, K. (1998). Peer assessment between students in colleges and universities. *Review of Educational Research*, 68(3), 249-76.
- Torrance, H. (2007). Assessment as learning? How the use of explicit learning objectives, assessment criteria and feedback in post-secondary education and training can come to dominate learning. *Assessment in Education: Principles, Policy and Practice*, 14(3), 281-294.
- Torrance, H. (2012). Formative assessment at the crossroads: conformance, deformance and transformative assessment. *Oxford Review of Education*, 38(3), 323-342.
- Tortoriello, M., & Krackhardt, D. (2010). Activating cross-boundary knowledge: the role of Simmelian Ties in the generation of innovations. *Academy of Management Journal*, 53(1), 167-181.
- Tosh, J. (2006). *The Pursuit of History* (4th ed.). Harlow: Pearson.
- Transforming the Experience of Students through Assessment (TESTA). (2015). *About TESTA*. Retrieved August 1, 2015, from Transforming the Experience of Students through Assessment (TESTA): <http://www.testa.ac.uk/>
- Trigwell, K., & Prosser, M. (2013). Qualitative variation in constructive alignment in curriculum design. *Higher Education*, 67, 141–154.
- Trochim, W., Donnelly, J., & Arora, K. (2014). *Research Methods: The Essential Knowledge Base*. Boston, MA: Cengage.
- Truss, E. (2013). *Elizabeth Truss speaks on the national curriculum to the Fellowship Commission*. Retrieved August 26, 2015, from DfE: <https://www.gov.uk/government/speeches/elizabeth-truss-speaks-on-the-national-curriculum-to-the-fellowship-commission>

- Tuck, J. (2012). Feedback-giving as social practice: teachers' perspectives on feedback as institutional requirement, work and dialogue. *Teaching in Higher Education, 17*(2), 209-221.
- Tummons, J. (2011). 'It sort of feels uncomfortable': problematising the assessment of reflective practice. *Studies in Higher Education, 1*-13.
- UNISTATS. (2016). *About Unistats: Key Information Set (KIS)*. Retrieved January 16, 2016, from UNISTATS: <https://unistats.direct.gov.uk/find-out-more/key-information-set>
- Universities UK. (2013). *Where student fees go*. Retrieved February 24, 2015, from Universities UK: <http://www.universitiesuk.ac.uk/highereducation/Documents/2013/WhereStudentFeesGo.pdf>
- Universities UK. (2014). *The Impact of Initial Teacher Training Reforms on English Higher Education Institutions*. London: Universities UK.
- van de Pol, J., Volman, M., & Beishuizen, J. (2010). Scaffolding in Teacher–Student Interaction: A Decade of Research. *Educational Psychology Review, 22*, 271-296.
- van den Bergh, L., Ros, A., & Beijaard, D. (2013). Teacher feedback during active learning: Current practices in primary schools. *British Journal of Educational Psychology, 83*, 341-362.
- Van der Vlueten, C. (2014). Towards a future of programmatic assessment. *EARLI Assessment SIG Conference 2014, 27-29 August 2014*. Madrid, Spain: Unpublished.
- van Someren, M., Barnard, Y., & Sandberg, J. (1994). *The Think Aloud Method*. London: Academic Press.
- van Zundert, M., Sluijsmans, D., & van Merriënboer, J. (2010). Effective peer assessment processes: Research findings and future directions. *Learning and Instruction, 20*, 270-279.
- Värlander, S. (2008). The role of students' emotions in formal feedback situations. *Teaching in Higher Education, 13*(2), 145-156.
- Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Cambridge MA: Harvard University Press.
- Walker, M. (2009). An investigation into written comments on assignments: do students find them usable? *Assessment & Evaluation in Higher Education, 34*(1), 67-78.
- Wallace, R. A., & Wolf, A. (2006). *Contemporary Sociological Theory: Expanding the Classical Tradition* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

- Wang, X., Su, Y., Cheung, S., Wong, E., & Kwong, T. (2013). An exploration of Biggs' constructive alignment in course design and its impact on students' learning approaches. *Assessment & Evaluation in Higher Education*, 38(4), 477–491.
- Waring, M., & Evans, C. (2015). *Understanding Pedagogy: Developing a critical approach to teaching and learning*. London: Routledge.
- Wasserman, S., & Faust, K. (1994). *Social Network Analysis: Methods and Applications*. Cambridge: Cambridge University Press.
- Watkins, D., Dummer, P., Hawthorne, K., Cousins, J., Emmett, C., & Johnson, M. (2014). Healthcare Students' Perceptions of Electronic Feedback through GradeMark®. *Journal of Information Technology Education: Research*, 13, 27-47.
- Weaver, M. R. (2006). Do students value feedback? Student perceptions of tutors' written responses. *Assessment & Evaluation in Higher Education*, 31(3), 379 — 394.
- Weigert, A. J., & Gecas, V. (2003). Self. In L. T. Reynolds, & N. J. Herman-Kinney (Eds.), *Handbook of Symbolic Interactionism*. Walnut Creek, CA: AltiMira Press.
- Wellman, B. (2001). Physical Place and Cyberplace: The Rise of Personalized Networking. *International Journal of Urban and Regional Research*, 25(2), 227-252.
- Wenger, E. (1998). *Communities of Practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Wenger, E., McDermott, R., & Snyder, W. M. (2002). *Cultivating Communities of Practice*. Boston, MA: Harvard Business School Press.
- Wenger, E., White, N., & Smith, J. D. (2009). *Digital Habitats: stewarding technology for communities*. Portland, OR: CPsquare.
- Wesch, M. (2007). *A Vision of Students Today*. Retrieved August 22, 2015, from YouTube: <http://www.youtube.com/watch?v=dGCJ46vyR9o>
- Whatuni? (2016). *Teaching In Primary Schools degrees*. Retrieved January 16, 2016, from Whatuni?: http://www.whatuni.com/degrees/courses/degree-courses/teaching-in-primary-schools-degree-courses-united-kingdom/m/united+kingdom/r/9267/page.html?utm_source=hotcourses&utm_medium=redirect&utm_campaign=hcmigration
- Whitty, G. (2008). Changing models of teacher professionalism: traditional, managerial, collaborative and democratic. In B. Cunningham (Ed.), *Exploring Professionalism*. London: University of London, Institute of Education.

- William. (2011). *Embedded formative assessment*. Bloomington, IN: Solution Tree Press.
- Wilkin, M. (1996). *Initial Teacher Training: The Dialogue of Ideology and Culture*. London: Falmer Press.
- Wilson, M. J., Diao, M. M., & Huang, L. (2015). 'I'm not here to learn how to mark someone else's stuff': an investigation of an online peer-to-peer review workshop tool. *Assessment & Evaluation in Higher Education*, 40(1), 15-32.
- Winch, C., Oancea, A., & Orchard, J. (2015). The contribution of educational research to teachers' professional learning: philosophical understandings. *Oxford Review of Education*, 41(2), 202-216.
- Wintour, P., & Mulholland, H. (2012, September 20). *Nick Clegg apologises for tuition fees pledge*. Retrieved July 16, 2015, from The Guardian: <http://www.theguardian.com/politics/2012/sep/19/nick-clegg-apologies-tuition-fees-pledge>
- WisegEEK. (2015). *What is an academic mentor?* Retrieved September 1, 2015, from WisegEEK: <http://www.wisegEEK.com/what-is-an-academic-mentor.htm>
- Wood, D. (1988). *How Children Think and Learn: the social contexts of cognitive development*. Oxford: Blackwell.
- Wood, D. J., Bruner, J. S., & Ross, G. (1976). The role of tutoring in problem solving. *Journal of Child Psychiatry and Psychology*, 17(2), 89-100.
- Wood, M., & Wardell, M. (1983). G. H. Mead's social behaviorism vs. the astructural bias of symbolic interactionism. *Symbolic Interactionism*, 6(1), 85-96.
- Woods, P. (1992). Symbolic Interactionism: Theory and Method. In M. D. LeCompte, W. L. Millroy, & J. Preissle (Eds.), *The Handbook of Qualitative Research in Education*. San Diego, CA: Academic Press, Inc.
- Yorke, M. (2009). 'Student experience' surveys: some methodological considerations and an empirical investigation. *Assessment & Evaluation in Higher Education*, 34(6), 721-739.
- Yorke, M., & Longden, B. (2008). *The first-year experience of higher education in the UK*. York: Higher Education Academy .
- Zephoría. (2015). *The Top 20 Valuable Facebook Statistics*. Retrieved August 26, 2015, from Zephoría Digital Marketing: <https://zephoría.com/top-15-valuable-facebook-statistics/>
- Zimmerman, D., & Weider, D. (1977). The Diary: Diary-Interview Method. *Urban Life*, 5(4), 479-498.

ADDITIONAL INTERNET SOURCES

Figure		Internet sources with Creative Commons licences	Last accessed
2.12	Spider's web metaphor - 'Personal communities'	foxypar4 (ND) <i>Frosty morning web</i> http://www.everystockphoto.com/photo.php?imageId=2730394	6 May 2016
2.16	Tunnel and gate metaphors	tibi (ND) <i>The light at the end of the tunnel</i> http://www.everystockphoto.com/photo.php?imageId=16414578	6 May 2016
6.1	The problematic, uncertain and contradictory tunnel	Unsplash (2015) <i>Cave-rocks-underground-light</i> https://pixabay.com/en/cave-rocks-underground-light-690348/	6 May 2016
6.2	Entering the tunnel, moving from light into darkness	David Masters (ND) <i>Looking down an old tunnel</i> http://www.everystockphoto.com/photo.php?imageId=6369962	6 May 2016
6.3	The lights within the tunnel	C.P. Storm (ND) <i>Tunnel</i> http://www.everystockphoto.com/photo.php?imageId=79867	6 May 2016
6.5	Exploring steps and passageways in the tunnel	Camera on autopilot (ND) <i>Underground city</i> http://www.everystockphoto.com/photo.php?imageId=22944017	6 May 2016

APPENDICES

A	Assessment Reform Group (ARG) key factors
B	Joint Academic Coding System for Training Teachers (JACS)
C	Example of questionnaire with unique identifiers for T-test
D	Class 3 sociogram
E	Example of SNA survey
F	Examples of e-mails with diary prompts
G	Semi-structured interview prompts
H	Example of statement of purpose and ethics
I	Participant consent forms
J	Paired sample statistics and correlations
K	Diaries and interviews by student codes and duration

Appendix A: Assessment Reform Group (ARG) key factors

The research indicates that improving learning through assessment depends on five, deceptively simple, key factors:

- *the provision of effective feedback to pupils;*
- *the active involvement of pupils in their own learning;*
- *adjusting teaching to take account of the results of assessment;*
- *a recognition of the profound influence assessment has on the motivation and self-esteem of pupils, both of which are crucial influences on learning;*
- *the need for pupils to be able to assess themselves and understand how to improve.*

Assessment Reform Group (1999: 4-5)

Appendix B: Joint Academic Coding System for Training Teachers (JACS)

JACS	JACS name
X100	Training teachers
X110	Training teachers - nursery
X120	Training teachers - primary
X130	Training teachers - secondary
X140	Training teachers - tertiary
X141	Training teachers - further education
X142	Training teachers - higher education
X150	Training teachers - adult education
X151	Training teachers - coaching
X160	Training teachers - specialist
X161	Training teachers - special needs
X162	Teaching English as a Foreign Language (TEFL)
X190	Training teachers not elsewhere classified

Appendix C: Example of questionnaire with unique identifiers for T-test

[Statement of purpose and ethics here]

A: Your responses to this questionnaire will be completely anonymous but I wish to distinguish your responses from those of other students. To do this I will use coding based on some details that are individual to you. I will not be able to identify you from these details. The coding will help my research by enabling me to ask questions at a later point and match students' responses.

In the unshaded boxes below please write:

i.	<i>The date of your birthday (ie a number from 01-31)</i>					
ii.	<i>The first four letters of the <u>first</u> primary school you attended (e.g. DELC)*</i>					
iii.	<i>The first four letters of the town of your birth (e.g. ROCH)*</i>					

*Please ignore words/abbreviations such as Saint/St.

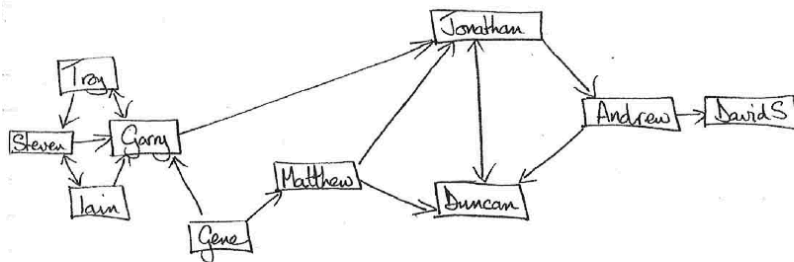
B: In this section please read the sentences labelled i-v. For each sentence, please identify with a tick ONE statement from the top row that best reflects your current view of Assessment and Feedback on the BA QTS:

	<i>Definitely agree</i>	<i>Mostly agree</i>	<i>Neither agree nor disagree</i>	<i>Mostly disagree</i>	<i>Definitely disagree</i>
i. The criteria used in marking have been clear in advance					
ii. Assessment arrangements and marking have been fair					
iii. Feedback on my work has been prompt					
iv. I have received detailed comments on my work					
v. Feedback on my work has helped me clarify things I did not understand					

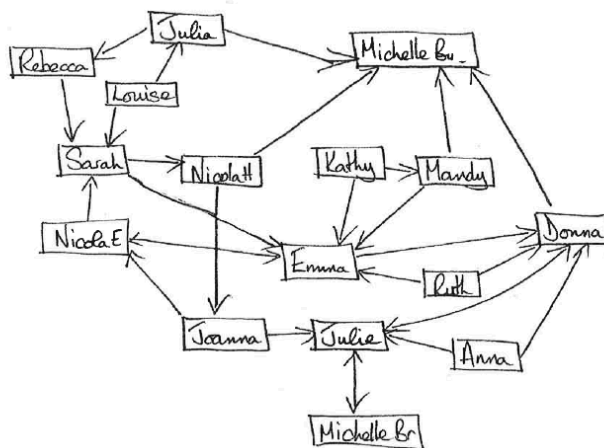
Appendix D: Class 3 sociogram

In December 1980, I asked the children of Class 3 (8-10 year olds) to identify two people from the class they wished to sit with during the following term:

Results of sociogram taken 18.12.80.
David E and David S absent.



Choice of 2 people
in Class 3



The results showed a 'structural hole' between girls and boys that may otherwise have been undetected, an aspect of SNA defined by Burt (1992: 18) as 'the separation between non-redundant contacts'. Information cannot flow across the complete network when such a hole exists. They also showed the central role of children such as Emma, who garnered prestige, and Gary, who appeared to act in a bridging role between different sub-groups. There was also evidence of dyadic and triadic relationships, although there were no cliques. The results of this sociogram informed my classroom organisation and the building of greater social integration through mixed gender group activities. I repeated the sociogram at the end of each term, to inform the next.

Appendix E: Example of SNA survey

[Statement of purpose and ethics here]

A. Please write <u>your full name</u> here:					
B. Please write <u>the names of three BA QTS students in your year group</u> who have supported you during the 1st year of the BA QTS by providing feedback, or helping you to interpret the feedback you've received from your assignments or school experience placement.					
	First name	Surname			
1.					
2.					
3.					
C. Please tick the shaded boxes below to identify all the other <u>people</u> who have supported you during the 1st year by providing feedback, or helping you to interpret the feedback you've received on your assignments or school experience placement.					
University tutors	<input type="checkbox"/>	2 nd year BA QTS students at UoG	<input type="checkbox"/>	Family members (please specify as mother, brother, etc)	<input type="checkbox"/>
Link tutors	<input type="checkbox"/>	3 rd year BA QTS students at UoG	<input type="checkbox"/>		<input type="checkbox"/>
School placement mentors	<input type="checkbox"/>	Students studying as teachers at a different institution	<input type="checkbox"/>	Others (please specify)	<input type="checkbox"/>
School placement teachers	<input type="checkbox"/>	Students studying for a different degree	<input type="checkbox"/>		
Practising teachers (other than placement teachers)	<input type="checkbox"/>	Friends who are not studying for a degree	<input type="checkbox"/>		

Reference: <http://www.bera.ac.uk/files/2011/08/BERA-Ethical-Guidelines-2011.pdf>

Appendix F: Examples of e-mails with diary prompts

Sent: 28 February 2013

To: [REDACTED]
emma.pratt@talk21.com steph.mardia@hotmail.com

Subject: ACTION: Rita's research Feb 13

Dear [REDACTED]

I hope the term is going well. Many thanks for the audio/emails supplied. I'm now working my way through them and would be grateful if you would spend some time over the next week to complete and send me the next entry of your 'feedback diary'.

I'd like you to identify and comment on the feedback you have received so far this term. Who did the feedback come from...whether it was in response to a request you'd made or an expected part of your studies...whether it was just given to you or formed part of a verbal or written dialogue. How did you feel about the feedback...how useful was it to you? Did the feedback change what you thought, what you did or what you plan to do?

Please give examples and expand upon these questions as appropriate.

Many thanks again!
Rita

Sent: 15 March 2013

To: [REDACTED]
Subject: Rita's research

Dear [REDACTED]

Thanks again for your support with my research!
As mentioned at the end of the interview I'd be grateful if you would be able to record a diary (video, audio or written) on the feedback you received on SE2 and email the file to me. Audio recorders on mobile phones seem to be useful for this. If you are able to do this I'd be grateful if you'd do a test run with me before Easter, to make sure the technology works. I'll then prompt you every three weeks or so across the summer term.

Here are some prompt questions to start you off:

What kind of feedback did you receive on SE2?
Who gave you feedback? Why?
How useful to you was the feedback? Why?
Did the feedback you received change what you thought, what you did or what you plan to do?

Please give examples and expand upon these questions as appropriate.

Many thanks!
Rita

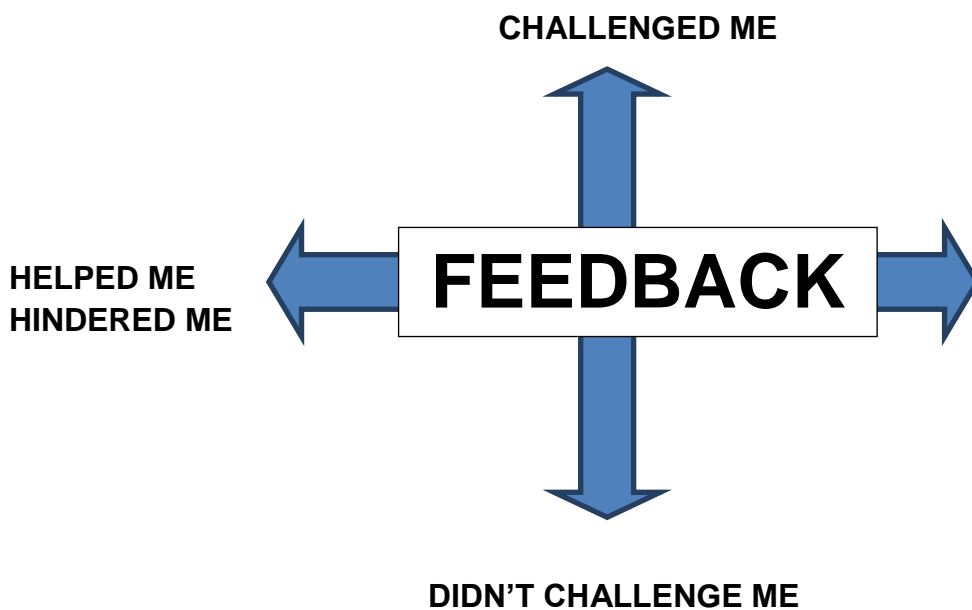
Appendix G: Semi-structured interview prompts

October 2012

Areas for discussion

- Your current situation and life before the BA QTS
 - How have the people you identified in the June survey provided feedback or helped you to interpret the feedback you've received from your assignments of school placements?
-

January 2013



June 2013

Areas for discussion

- Changes you've experienced in yourself through the year:
Changes in what you do
Changes in what you think
Changes in what you feel
...and how feedback may have influenced these changes
- What do these two terms mean to you?

Feedback

Reflective practice

Appendix H: Example of statement of purpose and ethics

Dear Student

I am undertaking research into students' experiences of feedback as part of my Doctorate in Education (EdD) at the University of Greenwich. I would be very grateful for your participation in the following questionnaire.

The research adheres fully to the BERA Ethical Guidelines (2011) and Data Protection Act (1998).

My assurances to you are that:

- i. Your responses will remain confidential and secure. They will ONLY be used by me and for this study. When the study is completed your responses will be destroyed.*
- ii. NO real names will be used in the study.*
- iii. Your responses to this survey will not influence your assessment grades in any way.*
- iv. You have the right not to participate in this questionnaire.*

I hope you will be willing to participate by responding to the questions in the grids below and returning the questionnaire to me.

Thank you for your contribution!

Rita Headington

Appendix I: Participant consent forms

[Statement of purpose and ethics here]

To be completed by the participant	
1. I have read the information above about this study	YES/NO
2. I have had an opportunity to ask questions and discuss this study with Rita Headington	YES/NO
3. I have received satisfactory answers to all my questions	YES/NO
4. I have received enough information about this study	YES/NO
5. I understand that I am free to withdraw from this study: At any time YES/NO Without giving a reason for withdrawing YES/NO Without affecting my future study at [REDACTED] YES/NO	YES/NO
6. I agree to take part in this study	
Signed (participant):	Date
Name in block letters:	
Signature of investigator:	Date
Name in block letters: RITA HEADINGTON	28 Sept 2012

This project is supervised by:
1: Prof Jill Jameson
2: Dr Jackie Farr
Contact details (including telephone number and e-mail address):
1: Prof Jill Jameson [REDACTED]
2: Dr Jackie Farr [REDACTED]

Appendix J: Paired sample statistics

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	NSS1 i.	3.94	66	.762	.094
	NSS2 i.	4.06	66	.605	.074
Pair 2	NSS1 ii.	3.79	66	.886	.109
	NSS2 ii.	3.42	66	.878	.108
Pair 3	NSS1 iii.	3.35	66	.850	.105
	NSS2 iii.	3.56	66	.682	.084
Pair 4	NSS1 iv.	3.89	66	.844	.104
	NSS2 iv.	3.56	66	.726	.089
Pair 5	NSS1 v.	3.58	66	.878	.108
	NSS2 v.	3.42	66	.766	.094

Appendix K: Diaries and interviews by student codes and duration

Student code	Interview 1		Interview 2		Interview 3		DURATION TOTAL MM:SS	Diary 1		Diary 2		Diary 3		Diary 4		Diary 5		Diary 6		DURATION TOTAL MM:SS
	Date	Duration	Date	Duration	Date	Duration		Date received	Duration	Date received	Duration	Date received	Duration	Date received	Duration	Date received	Duration	Date received	Duration	
BR	26 Nov	18:30	15 Apr	16:00	03 Jun	18:05	52:35	9 Jan	10:55	8 Mar	9:30	5 May	6:50	3 Jun	3:50	3 Jun	4:45			35:50
BS	13 Mar	33:25			05 Jun	33:00	66:25	27 Mar	4:10	27 Mar	2:40	2 May	6:15	23 May	4:30					17:35
BU	21 Feb	23:00			13 Jun	28:05	51:05	24 Mar	5:10	1 May	2:55	28 May	4:20							12:25
CS	26 Nov	19:00	15 Apr	15:20	05 Jun	35:05	69:25	9 Jan	4:00	15 Mar	3:40	26 Apr	2:10	26 Apr	4:10	8 May	1:50	2 Jun	1:25	17:15
CJ	13 Mar	16:35			06 Jun	25:35	42:10	26 Mar	3:50	20 Apr	7:40	6 May	2:30	3 Jun	7:00					21:00
DI	13 Mar	15:55			03 Jun	27:10	43:05	21 Mar	11:10	20 Apr	5:55	11 May	16:30	2 Jun	11:40					45:15
CK	13 Mar	20:25			03 Jun	24:50	45:15	25 Mar	5:00	25 Mar	4:15	2 May	5:00	2 May	2:50	28 May	4:00	28 May	5:00	26:05

Total interviews: 1 hr: 10 mm: 0ss

Total diaries: 2 hr: 55mm: 25s