We need to talk: an investigation of participant perspectives on features of effective dialogue in a Further Education-based initial teacher education programme.

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Abstract

Whilst there has been considerable research into the nature of dialogue in education, and increasing interest in the effectiveness of different forms of dialogue, its effectiveness in learning programmes for adults has received less attention. In the specific context of initial teacher education (ITE) in Further Education, dialogue is used extensively and the purpose of this thesis is to examine what is perceived as effective by three different participant groups: students, lecturers and mentors. The research was rooted in a sociocultural approach with an interpretivist epistemology. The methodology was a case study design, using observation, interviews and documentary evidence to explore talk-based activities and perceptions of participants (12 students, 3 lecturers, 6 mentors). Research was carried out in the researcher's institution so the insights and limitations of an insider position are acknowledged and evaluated. An analytical framework was designed, combining descriptive domains and components of dialogue (Calcagni and Lago, 2018) with concepts from Activity Theory (Sannino & Engeström, 2018) and Community of Practice (Wenger, 1998), and applied to the fieldwork data. Findings emphasised the significance of relationships, prior learning of adult learners and the range of learning aims of participants in shaping the nature of dialogue. Students, like lecturers and mentors, had stories to share and were able to be agentive in and through dialogue. But the precise nature and features of dialogue which were effective depended on what each participant was seeking to achieve. The range of objects meant there were times when dialogue could reinforce peer support and engagement in a community of practice through storytelling, but other times when dialogue involved challenge of a view to enable critical engagement with literature or practice. The thesis contributes both an analytical framework for research in ITE and considerations for practice in the field.

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List of Acronyms

BERA	British Educational Research Association
CertEd	Certificate in Education (Level 5)
CPD	Continuing Professional Development (or Continuous Professional Learning: CPL)
ETF	Education and Training Foundation
FE	Further Education
HE	Higher Education
ITE	Initial Teacher Education (in some literature is called Initial Teacher Training: ITT)
PGCE	Professional Graduate Certificate in Education (Level 6)
PS	Professional Standards
QTLS	Qualified Teacher Learning and Skills
SEND	Special educational needs or disability
SET	Society for Education and Training

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Chapter 1 Introduction

Over many years as a trainer and teacher, I have lost count of the number of times that a student has said to me: “Now it makes sense”. This has almost always followed a dialogue, a conversation where questions and responses flowed between us, either directly or in discussion with a group of students. It was often in the context of the student not having understood something in their workplace, or in the reading matter, or the assignment work set. The act of talking it over seemed to make the difference.

Since I started teaching, I have made efforts to try to understand how adults learn, through reflective musings with colleagues, and with formal periods of study such as a Master’s degree. Throughout this time there appeared to be a clear thread of the importance of dialogue in the learning process. This was the impetus for the doctoral proposal and, although the fine details of the inquiry changed, the motivation continues to be curiosity about how talk helps learners to learn. This thesis represents my findings, with a review of literature on the theme and my own case study research in an initial teacher education (ITE) programme. It represents answers to my persistent wonderings about what kind of dialogue is effective, but it also represents a contribution to the study and practice of dialogue in teacher education for other practitioners and academics in this field.

This chapter sets out the context of the study, including my own professional background and the research setting. This is followed by an explanation of some of the key terms used and an outline of the thesis structure.

1.1 Personal and Professional Context

My professional life has been based in the fields of health, social care and education, always with some responsibility for teaching adults. In the last decade I have been based in a Further Education (FE) college, delivering learning programmes on site and in the workplaces of my students. I gained trainer qualifications early on in my career, then the Professional Graduate Certificate in Education in 2013. I have worked with some brilliant colleagues who have brought insights from a range of educational settings, as well as with some wonderful students who both challenged and encouraged my practice. Questions about “what works” have persisted, whether in the form of my own reflections, staffroom conversations, local and national directives, or published research. The doctoral research programme was an opportunity to systematically explore one specific aspect of teaching and learning (dialogue), in one particular setting (ITE).

1.2 Sector Context

The setting for the research was a FE College in the East of England. The College operates in diverse education sectors, delivering to FE students aged 16-18, but also with Higher Education (HE) provision, work-based learning (such as apprenticeships) and 14-16 programmes. The ITE programme comprises HE teaching delivery and workplace learning through a placement. Most teacher education students do their placement in FE classes, although some have opportunities for placement teaching in HE or specialist educational settings. For the students in this study, the dominant agenda was that of FE, both as the college context in which their programme was delivered, and because most would be working in FE settings once they qualified.

The FE sector in England has had a turbulent history, subject to frequent changes of government policy; these are described well by Fulford et al. (2019). Much FE provision was associated with vocational education, offering the prospect of social mobility to those who learned technical skills for a trade. There was not the same requirement for FE teachers to hold a teaching qualification, as compared with schoolteachers, the emphasis being on expertise in their vocational subject. Competence-based teaching qualifications were available but it was not until 2007 that regulations regarding qualified teaching status were introduced to FE colleges (later extended to other parts of the sector, associated with contractual funding obligations; Thompson, 2014). A national curriculum in the form of teaching standards was created and the status of Qualified Teacher Learning and Skills (QTLS) was introduced, achieved through a process called professional formation. To retain QTLS, teachers had to demonstrate that they were doing a given number of hours of professional development each year. New competence-based qualifications were introduced at Levels 3, 4 and 5, designed for specific roles within FE teaching and mainly offered by awarding organisations, with the Level 5 accepted as an equivalent to the university-based Professional Graduate Certificate in Education/Certificate in Education (PGCE/CertEd). New teachers were expected to hold or be working towards one of these qualifications, but it was not mandatory for existing staff. In 2012, the regulations were revoked, removing the requirement for professional development, for qualification and for QTLS status. The employing organisation became responsible for determining what qualification (if any) a teacher should hold and what they should do to maintain standards. In 2013, an employer-led guild, the Education and Training Foundation (ETF), was set up to develop and enhance professionalism in the FE workforce. In 2014 it issued 'Professional Standards for Teachers and Trainers in Education and Training – England', a statement of 20 areas of skills, knowledge and values expected of teachers. These have been integrated into teacher education programmes and used as development tools in FE settings, but it is still not mandatory to hold a teaching qualification nor to join the ETF's professional membership body, the Society for Education and Training. The

current situation is one of inconsistency: teachers in FE might have no teaching qualification, or might hold one of the competence-based qualifications at Levels 3, 4 or 5, or might hold a PGCE/CertEd; these teaching qualifications can be studied full-time or part-time, in-service or pre-service. Despite deregulation, the same body which inspects other education provision in England (the Office for Standards in Education, Children's Services and Skills: Ofsted) inspects ITE providers and issues an inspection handbook (Ofsted, 2020) which includes expectations about multiple aspects of the programmes, including feedback and discussion and pastoral support, which are relevant to my study.

The workforce profile of FE is monitored by the ETF and helps to understand the context of teacher education programmes. In 2018-19, the median age of teachers in the FE workforce was 47, 53% were female, 85% white British, and 46% work part-time (Education and Training Foundation, 2020). Powell (2020) helpfully sets out ways in which FE-based teacher education is different from most school-based ITE, including the prevalence of part-time, in-service provision, the vocational rather than academic specialism of most entrants, the delivery of the programme by FE-based lecturers, the lack of subject-based pedagogy, and the dual identity of the students as simultaneously teacher and student. At the time of writing, there are various government proposals regarding reforms to initial teacher education and the early careers framework, intended to produce standardised approaches to ITE and create a "world-class teacher development system" (Department for Education, 2021a). This links with proposed training and development for FE teachers to support the Skills for Jobs agenda set out in an earlier White Paper (Department for Education, 2021b). In this context of ongoing change, the thesis contributes a discussion about one small aspect of teacher education which is central to its delivery.

Historically, research in the FE sector was limited by a number of barriers, including personnel having more limited experience of research, use of short-term contracts, conceptualisation of FE as vocational rather than academic, poor resources for research and development, and a competitive culture between colleges (Elliott, 1996). In recent years there has been a growing research culture, perhaps due to increased collaboration between FE and HE institutions, and practitioner support from the ETF. But Jones and Powell (2019), in an open letter to FE-based practitioners, managers, policy makers and the ETF, argued that FE-based research remains small scale and mostly invisible. They suggest that to change this, research needs to be "brave" (p.10), that is, to provide an insider perspective and prepared to be critical. This accords with Wegerif's (2020a) advocacy of a methodology for educational dialogue research which looks not only from the outside, but understands empathetically from the inside, insider perspectives illuminating what is observed by the outsider. Hordern (2020) likewise suggests that educational research needs more than a broad understanding of, or closeness to, practice; rather it requires an educational lens that comes from

immersion in the practices of an educational setting and I explain the details of the particular programme setting below. However, to have impact, research also needs to be disseminated in a way that takes it beyond the individual FE college and its local networks.

1.3 Programme Context

The programme studied was the PGCE (Level 6) and Cert Ed (Level 5) for teaching in Lifelong Learning. It offers training and qualification for people who want to work in FE, HE and other educational settings such as prisons and workplace learning. The programme has historically been delivered in two formats: a full-time course for pre-service students with a placement arranged in FE, and a part-time route for in-service teaching staff, many of whom are relatively new to teaching, but whose 'placement' is the job in which they are already employed. In an unexpected development, these two formats were combined in the year that the research was undertaken, so the student cohort comprised in-service and pre-service students. Although unintended, this offered additional insights as the experiences of the different groups could be compared, and because most previous research focuses on one or other group, not the two combined.

1.4 Key Terms

There are detailed discussions in later chapters of the implications of the terminology used in the study, but some of the key terms are explained here, including the way they have been operationalised.

The first and perhaps most problematic is the central notion of dialogue. In Chapter 2 different definitions are discussed; some approaches include all types of conversation, whilst others are narrower, such as Howe et al. who limit it to usage where the talk is "theoretically productive" (2019, p.4). In this study the former, broader approach was selected, partly because the research sought to identify the views of participants, so their way of understanding what dialogue meant was important, with all possible options kept open.

Decisions were also made about naming key aspects of the study context and its participants. In the study, the sector is referred as Lifelong Learning because this is the sub-title of the PGCE/CertEd qualification. Alternatives used in the field include the Education and Training sector and post-compulsory education: these various names reflect the ambiguity it represents and the range of providers and types of provision that it encompasses, both within and beyond formal education institutions. Each label has limitations, so the subtitle of the qualification was selected: it specifies the broad sector for which student teachers are being educated or trained. This last point raises the issue of whether to refer to initial teacher education or training. ITE and ITT are both used within the sector and within documents of the specific programme studied, but ITE was chosen because it is the term

used by Ofsted and is becoming the preferred term across different providers. The work-based learning aspect of the programme is perhaps one reason why the terms training and trainees were prevalent in the past, but the choice to use the term teacher education in this study shaped the choice of other terminology, such as to use the term student rather than trainee to describe the person learning to be a teacher. These terms accorded with my own view of the programme as the holistic preparation of teachers for their role, including their identity and wellbeing, rather than simply training in a specified skill set.

Naming each participant group was challenging as there were potential areas for confusion: for example, the students were students in the ITE classroom but teachers in their placement classrooms. In observations and interviews, students often referred to the individuals and groups that they taught as 'students' which complicated the study's terminology. Unlike school-based research, the term 'pupil' was not appropriate as these individuals were mainly aged 16 plus, many of them mature adults. It was eventually decided to refer to the students of the student teachers as 'learners': it is acknowledged that every participant in the study was learning in some way, but there did not appear to be any other term which accurately described these individuals and groups and which distinguished them from other groups in the study. The teacher educators on the programme, who taught classroom sessions and acted as personal tutors to the students, were designated as 'lecturers', this being their formal role name in the college. Teacher education students, whether in-service or pre-service, were referred to as 'students' and they were supported in their placement by a qualified teacher who was referred to as the (subject specialist) 'mentor'.

1.5 Thesis Structure

Chapter 2 sets out a review of literature around the subject of dialogue in education. This is a vast field and the review focuses on the conceptualisation of the form and function of dialogue, then considers key issues related to dialogue, such as participation and effectiveness. Much of the literature around dialogue refers to school-based research and consideration is given to how findings might translate to the ITE context where adults are learners and come with skills, knowledge and discourse of their subject or vocation. Chapter 3 moves to an examination of theoretical lenses that have been used in the literature to explore the nature of educational dialogue. Two sociocultural theories are selected: Activity Theory (AT) and Community of Practice (CoP). They are examined in terms of how they have been applied in existing research, in particular in the context of ITE. The chapter concludes with the final iteration of the research question.

Chapter 4 sets out the methodology of the thesis, explaining the rationale for a case study methodology and the associated data collection techniques of observation, interviews and

documentary data. Issues of validity and reliability are considered as well as the ethical implications of the methodological choices, not least of being an insider in the research institution. The data analysis approach is explained, including the creation of a conceptual framework which combined my own knowledge of the field with work by Calcagni and Lago (2018) and concepts from AT and CoP.

Chapter 5 sets out the initial findings from each of the participant groups, and from each of the data collection methods. It concludes with a summary of areas of interest which arose from the data, which could answer the question about the nature of effective dialogue in ITE. Of these areas of interest, three themes which seemed of particular significance are discussed in more detail in Chapter 6, themes reflecting features which recurred in the data and which resonated with my experience, other research and wider literature.

Chapter 7 concludes the thesis with a statement of the contribution that the study makes to knowledge in the field, in terms of practical considerations for educators on ITE programmes, and the conceptual framework and its potential for others' research. It also suggests limitations of the study, and further research which could be carried out, to develop, clarify and test the findings from this very specific context.

The thesis seeks to bring an insider view, with insights at the local level, but offering findings and discussion that contribute to wider debate in the field of teacher education, in FE and beyond, about the nature of dialogue in teacher education and what features of it are most effective from the perspective of the programme participants. It also offers an analytical framework which could be adopted or adapted for further research.

Chapter 2 Literature Review: Form and Function of Dialogue

In their book, *Better than Best Practice: Developing teaching and learning through dialogue*, Lefstein and Snell (2014) ask why another book on dialogue could possibly be needed. There are, after all, thousands of books, articles, even whole journals devoted to the theme. They argue that their approach, grounded in classroom practice, multidimensional and exploring dialogue as a problem, rather than as a solution to classroom problems, provides researchers and practitioners with productive questions which will allow them to develop their own best practice. In a similar way, as I review literature around dialogue, my aim is to explain and justify why further research can add anything to this literature, with my interest in a particular educational setting: initial teacher education (ITE). It is a partial review of what has been written, not exhaustive, but reflecting my own history, drawing on experience as a social worker then teacher, as well as my preferred theoretical lenses and affiliations. As part of a Masters' programme, I examined the use of portfolios in competence-based vocational programmes and teacher education. A key finding was that it was not the portfolio format that was most significant to learners, nor the teaching approach, but the nature of the conversation they had around the portfolio, either with peers or a tutor (Horrex, 2009). My own teaching experience accorded with this finding and my interest grew in what it is about dialogue that makes it so important in the learning process. The literature review sharpens the focus of this research theme, highlighting key findings but also gaps in what is known and what could be of use for future research and educational practice.

The chapter begins with a review of literature concerning how dialogue is conceptualised, including issues of definition, the unit of analysis and the form and function of dialogue. I then review some of the themes identified in the literature, focusing on patterns of dialogue, identity and participation, and effectiveness in terms of learning outcomes. Whilst I sought to consider this in the light of ITE, it was also necessary to look at broader literature and extrapolate material of relevance to or contrasting with teacher education. Chapter 3 moves on to theories used in the literature. For my study, I selected two particular theoretical approaches, examining how they have been applied in teacher education research. The two chapters conclude with a statement of how I operationalised the term 'dialogue' for this study, the research question to be investigated, and the theoretical lenses which framed the analysis.

2.1 Issues of Definition

The starting point of the literature review was to examine the function of dialogue in education settings and the forms that it takes. There is a vast set of literature on these two themes and it was necessary at an early stage to identify some key texts within the area and to explore how dialogue has been defined. One of the most difficult issues in selecting and analysing the literature is the range of ways in which the term 'dialogue' is used. The way an author operationalises this commonly used term shapes the nature of the study, including the unit of analysis used to analyse its form and function. Howe and Abedin (2013), in a systematic review of research into classroom dialogue, stated that the way the term is used, and especially in education settings, "still encompasses a wide range of social practices" (p. 325). They justified a broad, everyday conceptualisation of the term to search out literature produced over the period that they were examining (1972 – 2011), acknowledging that many researchers do not accept such a definition, defining it instead as a subset of conversations which have specific characteristics relevant to educational purposes. Their broad definition of dialogue included both oral interaction and textual exchanges such as those mediated by technology. More recently, Howe and Mercer (2017), introducing four papers in a special issue of an educational journal, returned to this theme. They noted that, whilst there are not necessarily shared conceptualisations of dialogic methods in classrooms, there is more similarity than difference in how the authors characterise dialogue. But they concluded there is still no "universally agreed definition amongst classroom researchers" (p. 90). The Cambridge Educational Dialogue Research (CEDiR) Group (2018) produced a discussion paper in which they devoted three sections to the issue of defining dialogue, including whether definitions should refer to what is or what should be conceived of as dialogue, how it is defined in relation to other processes and whether the definition should be understood philosophically or pedagogically. Such discussion is necessary in order to examine dialogue, ways in which it can be supported and its effectiveness maximised. The literature reflects many different labels applied to dialogue and which derive from a variety of teaching approaches. Gillies (2014) provides an overview of some of these approaches, naming, for example, Exploratory Talk, Philosophy for Children, Dialogic Teaching and Accountable Talk. This diversity matters because the nature of the definition or label applied within the research indicates something about the researcher's interests, preferences, research context and theoretical positioning. Dialogue as a term is often used to set apart the educationally beneficial aspects of verbal interaction from the other aspects, indicated by language such as 'accountable' or 'productive'. Resnick et al. (2015) set out some of the characteristics of academic dialogue that they identified in the literature, such as thinking out loud, articulating, explaining and reflecting, in a form of talk that "is orchestrated by a teacher" (p. 3), where "the key component is the learning power generated by two or more minds working on the same problem

together" (p. 4). In seeking to measure student outcomes associated with patterns of dialogue that previous research indicates are beneficial, Howe et al. (2019) use the term "*theoretically productive (classroom) dialogue"* (p. 4) because this "permits ready comparison with supposedly nonproductive forms" (p. 4). 'Productive' is used here in relation to the educational outcomes of dialogue, an issue I will return to later.

Littleton and Howe's (2010) collection of chapters on educational dialogues likewise reflect the way different authors define dialogue and they do not prioritise one definition over another: each is operationalised in relation to the research question under study and justified in that context. Lefstein and Snell (2014) suggest that there are broadly six different approaches to educational dialogue, "each emphasizing different dimensions of communication and aimed towards the realization of different purposes" (p.48). They distinguish the approaches as characterising dialogue as an interactional form, as an interplay of voices, as critique, as thinking together, as relationship or as empowerment. This framework helps to delineate the literature as each approach pays particular attention to aspects of dialogue which are considered to be significant. These characterisations have philosophical and theoretical roots, and implications for the teaching practice advocated.

There are potential benefits from this diversity of terms and definitions as it generates a variety of research findings that open up educational settings to the interested observer. But drawing firm conclusions, challenging or building on existing research is difficult if we cannot be confident that we are talking about the same thing (Park et al., 2017). The nature of the definition impacts the choices of research approach, context and the instruments suitable for the research. Howe (2017) commented: "no single instrument can possibly cover everything. Nevertheless, it would, I feel, help the field move forward if researchers address the options explicitly and argue the case for the choices they make" (p. 62). Whether it is the setting of the research, the instrument used or the definition of dialogue which includes or excludes particular patterns of interaction, researchers need to state the rationale for their choices and I set out my own position in the conclusion of this literature review.

Two authors whose work has been particularly influential in this field are Alexander and Burbules. Alexander (2008) stated that "Dialogic teaching is not just 'speaking and listening' but a distinctive pedagogical approach" (p.9). He argued that it is not as well researched as other aspects of teaching due to its transitory nature, meaning practitioners are less reflective about it than aspects which are captured in text. Likewise, he argued that speaking holds less status than being able to write. He sought to answer the questions: "do we provide and promote the right kind of talk; and how can we strengthen its power to help children think and learn even more effectively than they do?" (p. 10). He used the term 'dialogic teaching' to highlight the nature of talk in terms of its quality, rather than its

setting or organisation. Reviewing a wide range of literature, he concluded that dialogic teaching is characterised by specific principles, namely: collective, reciprocal, supportive, cumulative, purposeful and deliberative (in the original publication, five principles were identified, but a sixth was added in the 2020 revision). Talk in the classroom needs to meet these conditions to be considered dialogic. He set out what he believed to be the contexts and conditions which support dialogic teaching as well as the indicators of it in the classroom. His work has been particularly significant as those principles have been used by other researchers as the basis for coding interactive exchanges to measure whether teaching is genuinely dialogic. It has also been developed for teacher professional development, in the form of a framework for dialogic teaching, so has continuing influence. Alexander (2020) defined dialogue as "the oral exchange and deliberative handling of information, ideas and opinions" (p. 128); he acknowledged that any definition will be shaped by the culture and history in which the meaning of the word has developed and stated that his own is a stipulative definition, created for a particular context and purpose, both descriptive and prescriptive.

Burbules (1993) characterised dialogue in teaching as a game because it involves specific players, rules and moves and should be enjoyable. He defined dialogue as "a conversational interaction directed intentionally toward teaching and learning" (p. x) with core functions which are pedagogical, communicative and relational. He concluded with a typology of dialogue, in which dialogue could be characterised as conversation, inquiry, debate or instruction, each of which represent different positions on the inclusive/critical and convergent/divergent continuums. His later work emphasised the relational nature of dialogue. Burbules & Bruce (2001) stated that "a dialogue is a pedagogical relation characterized by an ongoing discursive involvement of participants, constituted in a relation of reciprocity and reflexivity" (p. 18). It is not simply a speech act, or a series of utterances, but situated in a particular context and taking various forms, each of which can serve educational purposes. Burbules' work was central to Teo's (2013) research into opening dialogic space in the classroom to promote effective teaching and learning. Teo suggested that Burbules' taxonomy and Alexander's model are helpful ways to examine classroom talk because they differentiate on the basis of function, rather than form. This takes account, for example, of the relationship between teacher questions and student responses; rather than simply analysing techniques, there is scrutiny of the relationships which are fostered in the classroom. Burbules' work was not without its critics: Dillon (2000) criticised Burbules' lack of a grounded evidence base and suggested that his conclusions had little value for practice, better conceived as a taxonomy to facilitate analysis and present questions to appraise classroom dialogue. Similarly, Sedova et al. (2014) suggested that whilst dialogic teaching in the form he described might have been identified in some empirical studies, it was apparently rare in teaching practice. They examined the gap between theory and practice, concluding that Alexander's principles

were difficult to achieve and difficult to sustain, so research was needed to identify conditions in which the principles could be realised in real classroom settings. Lefstein (2010) discussed further Burbules' own concerns about the reality of teaching in a dialogic way within the current school systems and structure, but suggested that creative negotiation of teacher roles and contexts could bring some resolution to the inherent conflicts between an idealised and situated model of dialogue.

A recurring issue concerns the intention or purpose of the individuals involved in the dialogic exchange. Burbules stressed that whilst certain types of dialogue (such as debate or instruction) are prioritised in education settings, all types can be beneficial if used well by the teacher. This is similar to Alexander's (2020) eight repertoires of talk, different ones utilised by teachers and students as appropriate to specific contexts and purposes. Choices about the appropriate type will depend on multiple factors and research into features of dialogue which are effective must consider different types and their value at different times, for different participants and for different purposes.

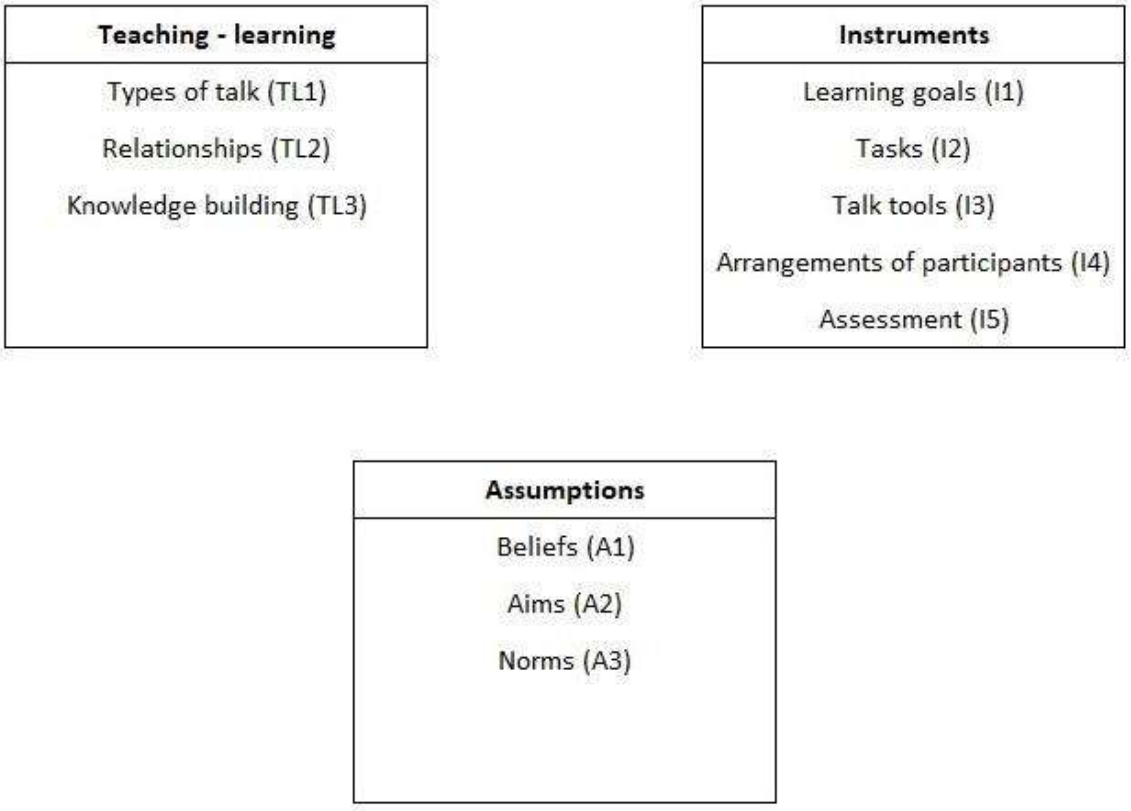
Linked to these issues of definition and characterisation of dialogue is the unit of analysis for classroom dialogue. This question arises when reviewing the literature and is also explored in Chapter 4 where selection of the unit of analysis for this research is explained. In the literature there are differing approaches to an appropriate unit of analysis. The unit selected is often the utterance (Park et al., 2017), which allows attention to be paid to each turn within an exchange. However, this can be difficult to code due to the different functions and relationships associated with a single utterance or even set of utterances. Consideration must therefore be given to the function as well as the form of that utterance. O'Connor and Michaels (2019) drew on the work of Gumperz (sociolinguistics) and Goffman (sociology), combining them in an approach which investigated the form and function of interaction in the classroom. They identified 'talk moves', units which take account of both form and function. Recognising the complexity of classroom discourse, they identified "roughly utterance-sized units of talk, intended (as a 'move' in a game) to get the other player(s) to respond in some way, to bring something particular to the table" (p. 168). This attention to both the social and the linguistic allowed the researchers to explore the participant framework, concluding that talk moves such as revoicing can position the student in particular ways. Academically productive talk, they argued, contains talk moves which support dialogue between teacher and student. Sohmer et al. (2009) identified how moves position the speaker in terms of their role and that, although there may only be small linguistic differences in individual utterances, they have very different potential for socialising, so using talk moves as the unit of analysis captured both the linguistic and the social features of interaction.

This lack of shared vocabulary and ways of conceptualising dialogue can make the statement of comprehensive conclusions difficult. Calcagni and Lago (2018) argued for a comprehensive conceptual

structure which can integrate all aspects of classroom interactions in different disciplines and settings. They distinguished between talk, which can include any verbal exchange, and dialogue, which specifically refers to an exchange with particular features and purposes related to education. They identified terms and phenomena in the literature which were recurring and categorised them into three domains for dialogue: “teaching-learning”, “instruments” and “assumptions” (Figure 1).

Figure 1

Domains and Components (adapted from Calcagni & Lago, 2018, p.4)



Each domain comprised a number of components, specific aspects used to analyse dialogue in the classroom. The “teaching-learning” domain comprised types of talk, relationships and knowledge building. “Instruments” were the physical and symbolic tools to structure teaching and learning, specifically learning goals, tasks, talk tools, arrangement of participants and assessment. “Assumptions” comprised beliefs, aims and norms which reflect the cultural and historic practices shaping the context and dialogue.

They applied this structure to two dialogic educational approaches (Thinking Together and Accountable Talk) to identify differences and similarities between them, both at the level of their

theoretical underpinnings and empirical evidence arising from their use. They argued that the framework enables greater clarity, by disentangling different aspects for clearer understanding of the separate features, a tool for teachers' reflection on practice and to enable easier classroom application. It is a structure which I integrated into a conceptual framework to analyse data arising from my own study (described further in chapter 4) and it highlights many of the themes in literature, to which I now turn.

2.2 Themes within the Literature

This section examines some themes in the literature which have a bearing on my research question, including patterns of dialogue, identity and participation, and effectiveness of dialogue for learning. Although separated here for ease of reading, these themes overlap and are central to an exploration of effective features of dialogue in a teacher education setting.

2.2.1 Patterns of Dialogue

One particular pattern of dialogue widely investigated due to its apparent prevalence in the classroom was initiation – response – evaluation (or feedback, abbreviated to IRE or IRF). In Howe and Abedin's review of research into classroom dialogue they claimed that "Classroom dialogue revolves around teacher-student IRF, which is embellished in varying ways and to varying degrees through student-student interaction" (2013, p. 344). They also claimed that 70% of the 225 studies meeting the criteria for their review focused on examining dialogue as it occurred, rather than exploring its implications, concluding that although much is known about the patterns and features of dialogue, little is known about its relative benefits. More recent studies address this, but for decades there was considerable research around the social organisation of classroom dialogue. Sinclair and Coulthard used Discourse Analysis in their ground-breaking study of classroom interaction, leading to the identification of clear structures and patterns (Skidmore and Murakami, 2012). The increased availability of technology, at the same time as development of methods through interdisciplinary work (such as with anthropology and linguistics), enabled analysis of classroom talk in new ways, including Conversation Analysis. Paying attention to, and using detailed transcription and notation of features of speech (for example, pauses, emphasis, pace, intonation, volume) allowed more systematic investigation which revealed the dynamics of student-teacher interaction. Mehan's (1979) research was pivotal in this. His work represented a shift in the nature of dialogue research, taking a constitutive ethnomethodological approach to identify the interactive processes that were the lived experience of those in the classroom. He considered the appropriate unit of analysis to be the event, because although an individual produces a verbal statement, this takes place in the context of a social event and verbal

statements are characterised by other markers (such as posture, tone, speed of speech) which shape interactions. He suggested that it would not be possible to understand input factors, such as class or ethnicity or teaching approach, without in-depth understanding of the mechanisms of interaction. Mehan stated that classroom lessons have both a sequential and hierarchical organisation which determines how the lesson flows and what makes up its constituent parts. Specifically, he identified the prevalence of an instructional sequence in teacher-student dialogue: initiation – reply – evaluation, two adjacent pairs of talk moves. The two pairs look forwards and backwards, taking account of what has gone before and what is expected next, so individual interactions are not autonomous but form part of wider sequences which, though usually initiated by teachers, are structured by both teacher and student. Extended sequences were less common, but tended to arise when new information was being sought, and were likely to be more unpredictable than the IRE sequence. Mehan investigated the "interactional competence" (p. 127) of participants, his research in schools suggesting that students' age and social and language development influenced participation. In teacher education, this is important and will be explored later in the study: whether adult learners are more interactionally competent and have more rights of initiation than a child.

Mehan's work has been criticised in terms of the insufficient scrutiny of nonverbal aspects of classroom interaction and the structural issues which impact on exchanges (Hawkins, 1979) and the neglect of possible evolution of, even deviation from, the structures of interaction that he identified (Amarel, 1979). Heap (1981) questioned Mehan's presupposition of intent, adding that the ethnomethodological approach does not actually allow examination of the orientation of participants, only of the display of orientation. He also challenged the indexing of classroom interaction, arguing that some which Mehan had categorised as evaluation, for example, could be coded as further initiation. The function or intent underlying interactions can be ambiguous, making coding less reliable. Nevertheless, the IRE model as a heuristic for analysis has been influential, Mehan and Cazdan (2015) suggesting that the IRE pattern continues to be evident in many different contexts and cultures. It has been criticised as a teaching approach because it tends to lead to convergence, rather than divergence in discourse, seeking 'correct answers' rather than a productive discourse which develops more sophisticated reasoning. Mehan and Cazdan proposed changing the third turn in the exchange from Evaluation to Feedback where the teacher prompts students to give reasoning for their response. This promotes more varied types of responses and facilitates joint construction of meaning between students and teacher, allowing them to change position or move away from previous understandings. Where this was identified in the research settings, they concluded that longer and more complex responses resulted and students were then more likely to initiate the next phase. However, it does

not answer the question of whether extended participation actually resulted in learning: they suggested that further research was needed to establish this.

Many of the themes in Mehan's work were developed in later research. Michaels and O'Connor (2015) have written extensively on the use of talk moves as tools for teachers, defining talk moves as "families of conversational moves intended to accomplish local goals" (p. 334), highlighting again the significance of intention and goals. They identified talk moves which move conversation away from simple recitation of correct answer to an opening up of conversations into listening and reasoning: "*productive talk moves"* (p. 335). They acknowledged resistance on the part of teachers, related to valid concerns regarding time factors and interactional issues, so they developed a set of goals to which teachers could relate and which would be achieved through a series of suggested talk moves, modifying the first and/or third turn in the IRE sequence for more academically productive conversation. Teo (2013) described a "discursive space" (p. 91) which teachers can create so that learners can co-construct knowledge through active participation, and used analytical frameworks to understand the detail of classroom talk in terms of its intended function, not simply its form. So, for example, the effectiveness of a question asked by a teacher is not determined simply by its type (such as open or closed) but by how it is used to elicit a response. He argued that "a nuanced understanding of the relationship between teacher questions and student responses is needed to cultivate a truly dialogic classroom space" (p. 93). He examined instantiations of dialogic teaching within lessons and classified them in terms of their function using models such as that of Burbules. He argued that the teacher-student relationship has a very significant influence on the nature of the exchange, including how the teacher perceives their role in relation to their students, which impacts the culture of classroom talk. He emphasised the necessity of fostering an egalitarian relationship if a truly dialogic space is to be created, which requires students to reimagine their own role and responsibilities in classroom talk. Similarly, Cazden and Beck (2003) suggested that where there was a greater difference between out of school discourse and the forms that children experience in school, children needed help to play those new roles. The teacher needed to guide students into awareness of the learning function of talk and its value as a tool for their academic growth, purposefully introducing and modelling participative patterns of dialogue. These findings potentially related to my study of what participants perceive as effective dialogue in a teacher education setting, in particular how each sees their own role in dialogue.

2.2.2 Identity and Participation

Participation and identity are recurring themes in literature on classroom dialogue and connections between thinking, speaking, participating and learning have been extensively explored. Vygotsky highlighted the complexity of the transformation of internal dialogue within the individual into

articulated speech which is comprehensible to others. “Every sentence that we say in real life has some kind of subtext, a thought hidden behind it… Precisely because thought does not have its automatic counterpart in words, the transition from thought to word leads through meaning” (Vygotsky and Kozulin, 1986, pp. 250-251). This is one reason why determining intent or function from single utterances is complicated, as is identifying the purpose and intent behind an individual’s participation in dialogue. Sfard (2015) questioned the current emphasis on the “talking classroom” (p. 235) and argued that whilst there are many reasons given why talking is beneficial to learning, there is little empirical evidence or theoretical analysis of the relation between communication and learning. Reasons given for increased engagement of students in classroom talk include democratic goals, equity and the availability of technology which has enabled unprecedented levels of communication. So, it is possible that classroom dialogue is considered beneficial simply because it reflects the social norms and tools of our age. In the classroom, the object or intent is learning and dialogue is one of the tools used to realise this object but Sfard argued that communication, rather than just a vehicle for learning, “is the very object of learning” (p. 239). Sfard viewed disciplinary knowledge as the expression of one’s thinking about specific disciplinary practices using the communication rules and language of that discipline; this led her to question what kinds of talk best promote learning. She concluded that there is no single form but many valuable types of talk which lead to learning, including peers talking to one another, which she suggested brings about more basic change, and talk by the teacher which “is indispensable when meta-level learning is about to occur” (p. 241). Sfard also saw a need for self-dialogue: “therefore, while celebrating the noise of the talking classroom, let us not undermine the importance of the inaudible self-dialogue” (p. 242), because this underpins agentive participation. Sedova et al. (2019) hypothesised that there would be statistically significant correlation between student participation and achievement. They operationalised participation in terms of the amount of talk but excluded any talk which was not related to the subject, such as organisational matters. Whilst their conclusions were interesting (that there was a strong relationship between quality and frequency of student talk with academic achievement), on a teacher education programme it is much harder to define what constitutes talking about ‘the subject’. The forms of talk which are effective for learning in ITE are more varied, as the learning required is not confined to conceptual or abstract knowledge, but would include those very organisational matters which are excluded in some research. The ways the lecturer organises the room, the learning tasks and the sequencing of activities are potentially areas for learning for a student for whom becoming a lecturer is their own learning goal, so the areas of dialogue included for analysis of participation would need to be much broader. This will be returned to in Chapter 4.

There have been attempts to locate empirical evidence of any correlation between participation and learning. Michaels et al. (2008) described many years of research into Accountable Talk, a set of practices with three required facets (accountability to community, knowledge and reasoning), designed to promote equity and academically rigorous learning. They suggested that: "In the ideal discussion-based community, students have the right to speak and the obligation to explicate their reasoning, providing warranted evidence for their claims so that others can understand and critique their arguments" (pp. 284 – 285). However, they concluded that these norms of discourse are not available to students in their home environments in equal measure, so there are different levels of participation in the classroom environment as students are comfortable with or alienated by such practices. The social relationships which shape classroom discourse are broader than simply the relationships between teacher and student, or student and student, but are influenced by other relationships. In school-based studies this would primarily be with parents, but for adult learners, there could be multiple relationships which shape the student's willingness and capacity to participate in dialogue.

In a later work, O'Connor et al. (2017) explored how much individual learning actually results from the individual's verbal contribution to the discussion. They measured the amount of talk from each student in the discussion groups studied, recognising that it is difficult to measure the level of participation of the silent student. They referred to previous studies which found that silent students' learning was equivalent to that of vocal students (in aggregate) and in their own study, for individuals, performance in end-of-unit tests were not predicted by vocal participation in discussion. Academically productive talk benefitted the whole class, not limited to the individuals who had a greater number of verbal contributions. One possible limitation of their study was that students were deliberately encultured into norms of active listening for a period before the observations took place, so findings of no statistical relationship between vocal participation and learning should take account of this environmental context. Their study focused on whole class discussion and they recognised that there might be different outcomes if the context was small group discussion and variance according group size. Fay et al. (2000) found that small groups tended to be more interactive than large groups, based on interruptions and length of turns. In small groups, students were more sensitive to their current conversational partner than in the larger groups, but speakers were also more likely to be interrupted in small groups. As utterances were designed for the particular audience, they concluded they were likely to vary according to context. Schultz (2009) looked at a similar aspect of dialogue, noting that although students might participate in classroom dialogue in a number of ways, only certain actions were considered to be positive participation. For example, providing the predicted answer as part of the IRE sequence was positive, whilst talking out of turn was disruptive. Schultz suggested that there

is an expectation of students regarding their role in talk sequences and questioned whether students who are silent are not participating, not fulfilling the student role of teacher-student interaction. She chose to define classroom participation as being both contribution and connection, which included nonverbal, visual and written contributions (a student who nodded assent could be considered to be participating). The student who listens, giving space to another to speak and rephrase or reframe their thoughts, might contribute to the learning of all parties, since speech is always in relation to a hearer. She suggested that if students are using silence to communicate, the lack of verbalisation cannot be equated with lack of participation. Students might also be using some thinking time and Cazden and Beck (2003) suggested that IRE level analysis can miss relevant contributions to an exchange which are not in adjacent utterances; larger units of analysis might be needed to see this. Where students are working in small groups, it cannot be assumed that all will contribute verbally in an equitable manner from the start. Drawing on Lave and Wenger's (1991) concept of peripheral participation in a community of practice, they suggested that some contributors might see themselves as peripheral, at least in the early stages, whilst others (for personal, social or cultural reasons) are full participants from the start. This was identified by Sohmer et al. (2009) in their study where students were encouraged to use home-based ways of talking whilst also being introduced to new discursive formats and processes. Tasks and tools were combined with these talk forms to induct them into new skills and knowledge, enabling increased participation by learners.

One interesting consideration regarding participation in dialogue is whether learners themselves see dialogue as valuable in terms of their learning. Howe (2017) cited studies in which students considered dialogue to be a distraction from what should be happening in the classroom. This would suggest that seeking the student view of the value of dialogue is essential if effective features of dialogue are to be understood.

Central to these debates is the identity of participants in dialogue. Kumpulainen and Rajala (2017), in the context of dialogic science teaching, argued that the teacher role is to create space in which students can discuss together to advance their thinking and take on the discipline's norms, processes and discourses, noting that there has been less research into the role and identity of students in this process. They suggested that identity is socially situated but not static. Multiple factors influence the level of participation of individual students, such as the way the interaction is structured, student sense of agency and cultural, linguistic and considerations. They combined sociocultural and sociolinguistic approaches in which social activity and discourse are considered core analytic units. From video-recorded whole class discussions, they identified interactive episodes and analysed them using sociolinguistic Discourse Analysis. They explored how students use language to signal their identities to others and used the concept "*discursive identity*" (p. 24) to analyse the way students

negotiate their identity in lessons. They found that, within classroom dialogue, identities were created, sometimes only momentarily. Dialogue provided the opportunity to open up new possibilities (such as taking on the role of group leader), but there were times when opportunities were closed down (such as an insensitive response to a contribution). Their school-based study illustrated the significance of management of dialogue by the teacher and peers in developing a discursive identity which supports full participation. In the ITE setting, these discursive identities could be different, and the discursive identity of the individual might influence what they perceive as effective dialogue.

The identity of each participant is a factor in their expectations of dialogue, many of them tacit as part of their sociocultural experience. A classical IRE sequence tends to locate the locus of control with the teacher, and leaves the learner little room for their own interpretations. Fisher and Larkin (2008) investigated the views of children and teachers as to what 'good talk' meant and how good talk could be achieved. They concluded that there was no agreement, even between teachers, as to what kind of talk was 'good talk'. Confidence of the child was mentioned by all, but there was considerable variation in their responses. The child participants mainly saw themselves as good at talking but differed in their views of whether teachers liked them to talk, showing keen awareness of talk rules prescribed by adults. They concluded that their evidence showed "many children exercising agency to get by in the classroom rather than engage with cognitive challenge" (p. 15). It might be expected that in adult learning the student's sense of identity and agency would be stronger, but Bathmaker and Avis (2005) found that student teachers in a further education (FE) setting were in a very marginal position and that this "closed off the possibility of exploring the dilemmas they faced with more experienced lecturers" (p. 59). Whilst they attributed this in large part to the particular context of FE, it illustrated the influence of the student's sense of identity on their willingness to initiate dialogue, especially around what could be contentious issues. Adult status does not appear to guarantee confident, agentic participation in dialogue. Some studies of teacher professional development highlighted issues of identity and agency. Wallen and Tormey (2019) used dialogic inquiry in an action research project for professional development of primary school teachers. They suggested that talk between teachers is a resource for achieving a sense of teacher agency because it develops from interactions in which shared meanings and sense making are reached. A particular feature appreciated by participants in their inquiry groups was learning situated in sharing experiences and views, rather than tips and advice from an 'expert'. Similarly, Lefstein, Vedder-Weiss and Segal (2020) made a case for "pedagogically productive talk" (p. 362), a form of professional development focused on practice issues, encouraging pedagogical reasoning, and situated in real representations of teachers' practice. Different perspectives were represented, where dialogue both supported and critiqued. They argued that, even with understandable reservations about cultural expectations and the vulnerability that it

can entail, productive learning can result from “the messy spaces of teacher on-the-job conversations” (p. 365). This idea of the participants as agentive but vulnerable applies to ITE in the same way as to teacher professional development, as does the identification of teacher learning as ‘messy’, with gains that can be difficult to define precisely.

Poulos (2008) wrote passionately about the value of accidental dialogue, occasions where it is stumbled onto but has a profound impact on the participants. Whilst we search out effective conditions for engagement in dialogue, it might not be something teachers solely create. Poulos likened it to unchoreographed dance where there is a creative energy which emerges from “both the desires and the actions of the dancers. Once you begin the dance… you never really know where on the dance floor you will end up” (p. 119). It requires courage, but stories both emerge and grow organically if given the opportunity. Helgevold (2016) described dialogue as growing out of the “here-and-now situation…through students’ and teacher’s mutual struggling with how to understand and make sense of an academic topic” (p.316). She suggested that dialogue has cognitive, emotional and relational elements and that the teacher should be the one who creates the space in which students can participate in a genuine way, such as through holding back and passing on, or being prepared to follow unplanned directions, with the overall objective of valuing each individual’s contributions. This was also explored by Twiner et al. (2014) in their investigation of intentionality and improvisation in classroom dialogue. They suggested that development of understanding takes place through dialogue, not only in planned ways, but through unplanned occurrences which also lead to meaning making. Teachers conceptualise an intended trajectory of learning for students and by examining pupil responses to questions and the ways the teacher responded to that response, they were able to see how closely dialogue followed the intended trajectory and to what extent there were instantiated meaning making trajectories. They referred back to Alexander’s work on how teachers extend and build on student responses, particularly providing opportunities for and working with the spontaneous nature of the dialogue. They examined how teachers brought dialogue back to the planned trajectory or allowed the diversion, seeking eventual alignment of the different trajectories. They acknowledged limitations of their findings, including the extent to which they were able to account for the social, historical and cultural context influences on classroom talk and the limitations of transcribing dialogic events. However, they cited examples of rich points of learning when teachers responded to unanticipated questions which exhibited curiosity in the subject, but away from the planned trajectory. This was challenging, requiring teachers to be able to improvise and demanding conceptual rather than object knowledge (a point also made by Sedova et al., 2014). It also required social confidence and commitment to reciprocity, the locus of control potentially moving from the teacher to the pupil. But perception of identity was significant: where the teacher identified the student as

agentive, their question was responded to and led to “opportunities for the creation of meaningful, continuous and cumulative learning experiences” (Twiner et al., 2014, p. 105). Waring et al (2016) described how teachers use the structure of talk to manage the sometimes competing demands of teacher control (order in the classroom) and encouraging student participation. They applied a Conversation Analysis framework, arguing that Conversation Analysis tools capture all the details of talk (both verbal and nonverbal) where the evidence of how social actions are achieved can be located. Further, Conversation Analysis’s central question (‘Why that now?’) drew attention to the purpose of participant contributions, the meaning of the interaction from their perspective. They also made use of Goffmans’s participation framework which makes visible the identity of the participants (e.g. could be a ratified participant, or eavesdropper). By combining these different approaches they concluded that teachers were able to restore order, when there had been a shift from the intended trajectory, whilst still promoting student participation. This draws on the concept of repair of interaction, when one participant diverges from the expected or preferred response.

These studies were all of interest for my project in a teacher education setting, and it was hoped that I would be able to compare their findings with research in my setting where students come with prior experiences that they seek to offer in classroom dialogue and are potentially more agentive than children in school settings.

Carter (1993) argued that stories allow us to capture “the complexity, specificity, and interconnectedness of the phenomenon with which we deal” (p. 6) and therefore provide an alternative to an atomistic view of teaching. This has been explored in teacher professional development, such as Savvidou (2010) who, in a professional development study for English Language lecturers, identified storytelling as effective in helping teachers construct their professional knowledge. Teacher stories were videoed, uploaded to a digital platform and responded to by another teacher through a story of their own. Whilst storytelling is often thought of as monologic, Savvidou conceptualised it as interactional, a reflective dialogue in which participants connected a story to another, echoed phrases and words, and used questioning and development of meaning to draw conclusions which allowed for construction, or reconstruction, of professional knowledge. The digital nature of the storytelling meant it was asynchronous: for my study the focus is on oral interaction, but the conception of storytelling as dialogic was helpful in relation to my research question. Savvidou recognised limitations such as issues of trust and privacy, and the risk of storytelling becoming a kind of folk pedagogy, but she did not argue for storytelling as a superior knowledge form, rather a recognition of the way one’s own values and experiences shape professional knowledge. Shank (2006) explored whether the storytelling in a Creative Inquiry Group (in which new and veteran high school teachers met regularly) could facilitate collaborative learning. She found that it helped participants to

"form new patterns of interaction, make sense of teaching practice, and imagine new practical and conceptual alternatives" (p. 720). Shank also identified the potential of storytelling for student teachers, helping them reflect on their experiences, develop a shared understanding with experienced teachers and have the reassurance of not being alone. This indicated another area to investigate in terms of what constitutes effective dialogue for participants in ITE programmes. Like Savvidou, Choi et al (2016) examined digital discourse, but in their case with pre-service teachers and synchronous interaction. They concluded that small stories, the everyday narratives of student teachers, enabled sharing and learning from each other, including better understanding of course readings. These small stories showed student teachers using "narrative eliciting moves" (2016, p. 10) in their interaction, which helped to bridge academic/teaching as well as personal/professional.

Segal (2019) suggested that storytelling can be a tool in discourse between teachers, having a role in terms of identity (social positioning), of representing practice, and for argumentation. Her own research indicated that stories allowed the narrator to introduce a differing view in a non-confrontational way, allowing consensus to be built. However, she found little criticality in the responses to stories, so learning potential was limited and the nature of the interactions was impacted by the teacher's positioning (in particular on the learner-expert continuum). It was a very small study but was one which raised interesting points to be aware of in my own research, including the significance of the identity and perceived agency of participants in storytelling dialogue, and of consensus or criticality.

There are many diverse ways in which the sharing of stories can be investigated. Some reference a methodology in which the narrative is treated as data. 'Narrative' itself does not have a single, uncontested definition, used variously from whole life stories to brief episodes described by a narrator, but here understood as telling the story of an experience. Savvidou used Labov and Waletzky's framework (1967; a very detailed methodology of narrative analysis, which introduced concepts to analyse narrative structure in terms of effectiveness and completeness) to investigate narrative in terms of function and connections. Segal (2009) referred to the attention that Bamberg and Georgakopoulou (2008) brought to small stories, that is, stories embedded in everyday interactions. Bamberg and Georgakopoulou developed a systematic analysis which allowed the researcher to investigate positioning processes at work, taking account of the speaker, the listener, the dominant discourses and the interactional engagement. As an ethnographer, Segal identified the prevalence of stories in teacher conversation and explored the function of small stories in a school setting, through recording then coding the interaction between teachers. Choi et al (2016) chose a sociolinguistic approach, using discourse analytic methods to count moves and identify patterns from which working hypotheses were developed. They were seeking to understand teacher education

through small stories, so they coded the recorded discussions to identify their discursive functions. They combined quantitative and qualitative analysis and addressed the issue of the trustworthiness of such small-scale studies through various strategies such as member checking and use of multiple data sources and analysis. Juzwick and Ives (2010) combined narrative analysis with Conversation Analysis because, like Bamberg and Georgakopoulou, their interest was in narrative as a social practice, in particular the way identity is constituted. However, they also argued that small stories can produce a hypothesis which can then be investigated in broader data sets.

Narratology is a very diverse, cross-disciplinary field. Riessman (2005) explained that narrative analysis can be thematic, structural, interactive or performative; the particular approach selected will depend on the nature of the research and the research question, and some modes of analysis will necessarily be slow and painstaking. But the intention is to access layers of meaning, the sense-making at different levels by participants in interaction. Narrative analysis recognises that each storyteller will interpret the past: narrative is a refraction rather than a mirror image of what took place. Subsequent transcription and analysis further extend the interpretation of the original story, and the social world of the narrator, the transcriber and the researcher will all play a part. In my own study, I anticipated that small stories would feature and I hoped to capture them through observation and interviews. I was aware that my own background, interests and the research question, as well as potential limitations of the way data would be recorded, would all influence the form of the research methodology adopted, learning towards a sociocultural approach rather than a linguistic one.

Schultz and Ravitch's (2013) study of the use of written narratives by beginning teachers introduced a further dimension, as participants read aloud their narratives then received comments of other teachers about how that narrative reflected their own experiences. They described how one reader: "brought the private and protected experiences of new teachers into a public space and, in so doing, opened up a generative dialogue" (p. 35). Storytelling with peers allowed students to combine experiences on the programme and their growing participation in the teaching community with their prior autobiography, revealing their developing identity. Rex (2011) summed this up: "For pre- and in-service teachers, narrative is a way of becoming and being professional. They talk and think in story" (p. 6).

2.2.3 Effectiveness for Learning

In their 2013 review, Howe and Abedin identified: "that much more is known about how classroom dialogue is organized than whether certain modes of organization are more beneficial than others" (p. 325). They argued that research should focus on whether some modes of dialogue are more beneficial and if so, whether sufficiently so to develop directives for practice. Subsequent research

has sought to do that, although Alexander (2015) suggested the complexity of coding genuinely dialogic talk in the classroom can lead to inconclusive findings and recommendations, so scaling up of research from specific contexts is a challenge. He also commented that in the current political climate, a transmission view of education, with recitation style responses in the IRE form, continues to prevail. Howe (2014) examined effective dialogic practices in the context of small groups. She reviewed her own and others' research to identify whether small group work does result in student learning and to question whether there are prevalent forms of productive discourse within small group discussion. From her own research in science teaching, she concluded that there is strong evidence that small group work involving discussion of contrasting ideas allows students to develop conceptual knowledge. However, her review indicated that the focus of other research was not so much on discussion as a tool for learning, but a means to observe learning, so did not move forward the question of whether particular modes of organisation of dialogue are more beneficial.

Others have attempted to identify which of the processes of dialogue actually support learning. Greeno (2015) explored sequences which require student engagement in deeper cognitive processes, to support not only learning but the potential for retention and transfer of that learning. This was similar to the talk tools approach of Michaels and O'Connor (2015), where the use of specific talk moves allows the teacher to orchestrate a particular form of dialogue. But the question of the extent to which learning is enhanced by such dialogue, even if it is more cognitively complex, remains elusive. To address this gap, Howe et al. (2019) investigated the impact of dialogue on student outcomes in primary school settings. They describe how they measured teacher-student outcomes through six indices (SATS in maths, writing and reading, plus science, general reasoning and attitude tests) and examined evidence of correlation with particular patterns of dialogue. They identified five themes which have emerged consistently from previous research into productive classroom dialogue: open questioning, extended contributions, differences of opinion acknowledged and critiqued, integrated lines of inquiry pursued and awareness of participants of the value of interaction and subsequent reflection on it. From these themes, thirteen codes were devised to analyse classroom discourse (e.g., invite elaboration, reasoning, querying). They investigated whether the identification of these characteristics within the coded dialogue correlated with student outcomes, using a quantitative approach to seek evidence of statistical significance. They took account of potential confounds which could be influencing factors, such as use of different resources and teaching approaches, and they analysed at both class and individual level (school effects were found to be immaterial). They identified two forms of dialogue as positively related to SATS outcomes, as long as there was extensive student participation: elaborated (building on, clarifying or evaluating own or another's contribution) and querying (doubting, challenging or rejecting a statement). Frequency of elaborated dialogue also

showed a positive correlation with the PASS scores (attitude). However, they did not impact on science and reasoning tests. They concluded that it remained unclear why these dialogue features were beneficial for some outcomes but not others, nor why other dialogue variables did not appear to influence outcomes. They suggested possible explanations, but the data did not allow certainty about them. They noted what earlier studies found to be beneficial for learning in small groups did not have the same effect in whole class dialogue, perhaps because in small groups, without the authority figure of the teacher to confirm 'correct answers', there was more discussion and justification of ideas to peers. They suggested that the basic IRE format could be preserved, but that embellishment with high levels of Elaborated, Querying and Student Participation characteristics was beneficial and argued that their findings were strong enough to form the basis of teacher professional development programmes. What they do mention, which was of particular interest to me, is that a large proportion of the observed talk was coded UC or OI (uncoded or invitation to all kinds of verbal contributions, considered "Non-Dialogic", p. 39); much classroom talk was simply not analysed beyond initial coding in their classification of educational dialogue.

Alexander (2020) refers to Howe et al.'s research, noting consistency of findings with his own Education Endowment Foundation (EEF) project, as well as with Hattie's (2009) meta-analysis of studies of learning. In the EEF study, increasing divergence between the intervention group and the control group in terms of specific dialogic features (such as greater use of open questions, extended student contributions, wider repertoire of student talk), resulted in the intervention group achieving greater gains in test scores. Alexander claimed that "the sum of dialogue's parts yields a classroom culture, a pattern of relationships and a pedagogical and epistemic stance that together foreground and explicitly signal the empowerment of the student as speaker, thinker, reasoner, learner and evaluator" (p. 119). Whilst various approaches such as classroom organisation can support this, he suggested that the most significant aspect is how the teacher manages the 'third turn', deliberately using this to empower the student and providing the teacher with feedback on the student's learning.

Park et al. (2017) suggest a number of reasons which can deter the use of dialogue in the forms discussed in these studies, including student reservations (such as fear of going public with their ideas) and teacher reservations (such as not believing that their students are sufficiently capable in this form of talk, or concerns about social relationships within the classroom). A further problem in identifying the effectiveness of classroom dialogue is to know the goal of the dialogue. Burbules, in his definition of dialogue, highlighted that it is "intentional" (1993, p. x), that is, to foster teaching and learning. The studies cited above seek to examine the effectiveness of different kinds of dialogue for learning. But learning what? Howe et al. (2019) and Alexander (2020) used standardised tests to measure outcomes. Learning about techniques of classroom management, lesson planning and educational

theory feature highly on the curriculum in ITE programmes. There are measurable outcomes assessed through assignments (e.g., to judge knowledge of legislation, codes of practice and education theory), and classroom observation (putting this knowledge into practice). But the varied nature of the learning required on such programmes may make identification of goals and measurement of their achievement even more difficult. Does learning to cope with the emotional toll of teaching and be part of a teaching community appear in the curriculum? Is this an intentional part of the teaching and learning offered to student teachers? If so, what is the nature of classroom dialogue which is effective in supporting this?

These issues form part of the backdrop to my research. Alexander (2020) makes the point that in trying to identify what it is that makes a difference in terms of classroom dialogue, we are looking at both "holistic and atomistic explanations" (p. 119) and I suggest that investigation of the perceptions of participants about the effectiveness of dialogue is as significant as the observation of it.

In the next chapter I introduce two theoretical approaches, Community of Practice and Activity Theory, which have been widely used in the study of education, including teacher education, and which support examination of dialogue in this context.

Chapter 3 Theoretical Lens

"We absorb the way the world around us works so that incongruities become familiar and unnoticed. This underpins the need to delve beneath the obvious, which conscious theorization allows. Analysing education with the benefit of a coherent theoretical approach avoids a paralysing relativism that says situations are too complex to explain... The point is to adopt an analysis that is sophisticated enough to comprehend complexity" (Avis and Orr, 2019, p. 34). This quotation is from a textbook which I recommend to ITE students in the context of using theory in teaching practice, but it resonated with me as a justification for identifying a theoretical lens to frame literature and analyse the research data: to help to comprehend complexity. In this chapter, I refer to some of the approaches that have been used by other researchers to investigate dialogue, but go on to explain why I have chosen to adopt two particular social learning theories that I have found especially useful, looking at similarities and differences between them, and some of their concepts which have relevance to this study. I evaluate their use in practice by looking at how they have been applied in other research and conclude with a statement of the research question and the conceptual framework for analysis which I have developed.

It is important to make visible my position in relation to what is being studied, as this shaped the formulation of the research question and the methodological approach taken. Edwards and Westgate (1987) argued that it is not possible to find a single approach to serve all purposes or research, nor to apply to every educational setting, so the researcher must make "principled choices" (p. 51). Mercer (2010) helpfully set out some of the methods for analysing talk between teachers and students, drawing attention to the key traditions from which they have been drawn, mainly linguistic ethnography and sociocultural research. Linguistic ethnography examines classroom talk in its social and cultural context, typically using non-interventionist observational methods. Sociocultural research also uses observation, treating language as a cultural and psychological tool which allows the continual negotiation of meaning. Because each is interested in the nature and functions of talk, both tend towards qualitative methods. Whilst there is no precise definition of sociolinguistic Discourse Analysis, it tends to seek to categorise talk in terms of acts, moves, exchanges and transactions. Conversation Analysis, with its roots in ethnomethodology, focuses on how interaction is achieved and how participants "'account for' their social experiences" (2010, p. 8). It involves very detailed analysis of transcribed talk, which makes it difficult to use for large sets of data. Mercer argued that it might be possible to combine different methods to analyse talk but cautioned that their different disciplinary roots lead to differing conceptions of talk and what counts as valid analysis, so care needs to be taken

on choice of approach and possible combinations. Park et al (2017), in an article titled "Expanding the Conversation", attempted to bring transparency to the range of traditions which shape an investigation. They argued that the approaches on which they drew shared a focus on discourse, were rooted in ethnomethodology and paid attention to the situated nature of dialogue. However, the different emphasis of each approach allowed exploration of specific aspects, so whilst there was value in combining them, it was essential to be transparent in doing so. in Their own research design included three different approaches: sociolinguistic Discourse Analysis, which offered insights around sense-making by participants, Conversation Analysis which focused on patterns (sequence moves, turn taking, positioning), and sociocultural approaches which highlighted the influence of social, cultural, and historical features.

Much of the literature in dialogue research makes use of discourse analytical methods. Discourse Analysis includes many different approaches, from formal sociolinguistic analysis studying interaction at the micro level of language, to Critical Discourse Analysis, which combines study at the micro level with consideration of the power and ideological relations which shape interaction. All forms focus on interactions and local management of social categories but Critical Discourse Analysis also considers the control of the production, distribution and consumption of discourse practice. Fairclough (2010) for example, described how he treats textual analysis as having both linguistic and interdiscursive characteristics but his analysis aimed to provide interpretation and explanations of social life which show the causes of social wrongs, ultimately to facilitate the mitigation or correction of them. Use of Critical Discourse Analysis therefore served a particular purpose. Within Discourse Analysis, positioning is an important concept, how identity is constructed through the individual's relationship to what is being said, to the other and, in some forms of DA, to dominant ideologies. Sociocultural and historical forces position the speaker, but speakers also positions themselves, choosing the means by which they construct their identity (De Fina, Schiffrin and Bamberg, 2006). Language is seen as action, observable and analysable, and as my research design included observation of naturally occurring interaction between lecturers, students and mentors, Discourse Analysis was a possible option as an analytical approach.

Conversation Analysis is better understood as an analytic process than as a discipline or theory (Drew, 2005). It has been used in many disciplines but foundational ideas include interaction being orderly, collaborative, and having discourse obligations (what the speaker anticipates as a response), as well as discourse markers, such as using 'oh' to allow a pause prior to response (Heritage & Clayman, 2010; Horton, 2017). Participants orient to patterns in conversations, through turn taking, preference organisation and repair (Drew & Heritage, 2013). Talk is viewed as action, which suggests Conversation Analysis starts from activity (e.g. a request) rather than through linguistic features: whilst there is

interest in language, and Conversation Analysis facilitates detailed analysis and notation of a wide variety of features of linguistic components, this is in order to make visible social actions and social consequences (Seedhouse, 2005). Methodologically it is based on recorded, naturally occurring interaction, transcribed and revisited repeatedly for analysis. It is sequential analysis, focused on turn taking and how speakers conduct social actions, with a central question: "*Why that now*?" (Heritage & Clayman, 2010, p.14). In Conversation Analysis the focus is on how the participants interpret and make meaning from the interaction, providing a social display of their understanding of prior utterances as well as acting on them (Hutchby and Wooffitt, 2008). This collaborative behaviour, or alignment, continues the order within the interaction. Conversation Analysis's attention to the micro analysis of these social acts is described by Richards: it is able to direct "researchers' attention to apparently tiny features of interaction and explode their dimensions beyond all expectations, revealing delicacies of design and management that resist the assaults of clumsier instruments" (2005, p.1). It recognises the situated nature of talk, but the significance of context is the way in which is it used in the interaction by participants. Interaction is both context-sensitive and context-free in the sense that there are universal tools but that their use will be by selection by participants (Hutchby and Woofitt, 2008).

Conversation Analysis was a potential analytical option for my study, but key features of my project meant it could not be the primary method. Seedhouse (2013) described it as an approach which seeks an emic rather than etic perspective, so the unit of analysis is not etically specifiable; sequences which are selected for analysis will be determined by the markers indicated by the participants in the interaction. Seedhouse goes on to explain how Conversation Analysis is a method that seeks discovery, it does not have prior motivation behind the looking, with insights emerging from the interaction itself, not sought with a prior agenda. I was already looking for indicators of participants' views on the effectiveness of different features of dialogue, including my own view (based on literature and experience) on what might be effective. Although an insider to the setting, I was an outsider to the interactions and therefore my analysis of the dialogue would be shaped by theory and ideas that preceded the analysis. An emic perspective also means that Conversation Analysis does not sit comfortably with triangulation strategies, such as using interviews and other data collection alongside observation of talk-in-interaction. Seedhouse acknowledges that some studies do use triangulation but it is not truly consistent with an emic perspective. In interviews, for example, the researcher directs the conversation, it is not naturally occurring and the researcher's orientation will be towards gaining evidence relevant to the research question (it was my intention to ask participants their view on dialogue within the conversation). Whilst observation was planned to be a key data collection method, I was less interested in the linguistic form and structure than the overall patterns of larger

episodes and how these linked to participants' expressed views (in interviews). The theoretical lens which is adopted provides both the conceptual framework and the vocabulary through which research data is interpreted. My position is that the multiplicity of purposes and formats of classroom talk means that investigation needs to take account of more than the simple exchange of words, to also consider contextual aspects. Roles and identity are relevant, as is the function of the interaction, so investigation of dialogue needs to acknowledge these intrapersonal and interpersonal factors, at micro and macro levels (Horton, 2017; Wells, 1999). For these reasons, and anticipating potential restrictions with of video or audio recording naturally occurring interaction, I leaned towards a sociocultural approach, drawing on sociological rather than linguistic traditions.

Theory needs to be anchored in empirical evidence and whilst some research might be drawn to dramatic moments or exceptional cases, dialogue research acknowledges that ordinary moments and commonplace events are the foundation of what is being studied (Renshaw, 2019). Mercer (2010) suggested mixed methods enable the researcher to draw on complementary understandings of the nature of talk and what can be considered valid analysis. The key components of any dialogue will include setting, purpose and participants (Brown and Fraser, 1979) and analysis over time, with a sociocultural lens, seeks to capture these aspects, supporting understanding at a contextual macro level and events at a micro level (Mercer and Dawes, 2014). Mercer and Howe (2012), drawing on the work of Vygotsky and Alexander, argued that a sociocultural approach is useful in understanding classroom talk and can help to develop more effective practice, taking account of the temporal nature of dialogue (Mercer, 2008). Utterances, even cycles of utterances, cannot be isolated from the context, as their meanings can lack stability. Utterances refer back to previous events and experiences, have a forward-focused trajectory, and are sited in historical, cultural and social contexts which are themselves fluid.

Within the broad framework of sociocultural approaches there are a number of overlapping but in many ways distinctive theoretical positions. In this chapter, two particular approaches are discussed, situated learning theory, in particular Community of Practice (Wenger, 1998), and Activity Theory (Sannino and Engeström, 2018). They have some shared roots and some similarities. Each provides a heuristic for analysis, a framework for understanding. I examine key concepts within each and their use in teacher education literature, either explicitly used by the author or applied myself as a lens on work which has direct relevance to my study.

3.1 Community of Practice

Community of practice (CoP) as a concept was set out in Lave and Wenger's (1991) theory of situated learning. Wenger later stated that the primary focus of his social learning theory was "learning as

social participation" (1998, p.4), which he clarified as participation in the practices of a community; learning involves identity and practices as the individual is shaped through their participation in that community. Initially this is through legitimate peripheral participation: the newcomer's participation changes over time, shaped through interaction with a master/mentor, mediated through culturally and historically formed tools (shared repertoires) and mutual engagement in social practices. Wenger set out essential, connected components in a social learning theory: community, identity, practice and meaning. He described the central concept of CoP as "a point of entry into a broader conceptual framework of which it is a constitutive element" (p. 5). It implies analysis at the level of practice, situated within a particular community, but recognises the capacity of communities to change over time. It also supports consideration of interrelated communities ("constellations", p. 17), which is helpful for studies such as mine where individuals are members of multiple communities. A CoP concept is not a model, it "cannot be legislated into existence or defined by decree" (p. 229) because practice does not lend itself to design; rather it is a conceptual tool for analysing and making sense of social learning. One example of its use is in the work of Biza et al. (2014) who drew on Vygotsky and Lave and Wenger to analyse the role of community in the context of mathematics teaching in a university setting. The concepts of reification and participation are central to a CoP, with learning characterised as becoming; that is, taking an identity within, or at least in relation to the community. Biza et al. developed these concepts by introducing the idea of inquiry: whilst alignment is often viewed as perpetuating the practices and norms of that community, critical inquiry can contribute to the process. As students (the peripheral participants) appropriate reifications from the community, these become part of their identity. The community creates joint participation not simply by students but also by teachers, and each engages in inquiry, or critical alignment, which supports the learning of all participants. Dialogue is central to inquiry and the nature of the dialogue shapes the way in which inquiry proceeds. Vadeboncoeur et al. (2015) suggested that diversity within the community can stimulate dialogue as it offers an opportunity to consider additional views and experiences and so think differently: in teacher education this diversity is not simply between apprentice and veteran, but between students who come from a range of backgrounds. A critical factor is the way the teacher facilitates this dialogue, including recognition that they are learning alongside their students.

Whilst concepts such as practice, mutual engagement, participation and identity can be helpful in examining activity, they have some limitations, in particular paying less attention to participation of individuals in more than one community of practice and the related issues of how different participants identify with and align with a community in terms of its rules and structures. Likewise, trajectories were initially considered to be inbound, from community periphery to its centre, with little attention to ways in which trajectories might operate across the community. By extending the original

concepts to accommodate the idea of inquiry and critical alignment, the theoretical lens of CoP can be a better fit for analysing classroom situations.

Rogoff (1990) also used CoP concepts, accommodating ideas from Vygotskian perspectives. She developed a concept which she called guided participation: a structured, supportive bridge to move children between what they already knew and what was to be learned. In this approach, children are apprentices in thinking, agentive in their own learning, who participate both with peers and more expert others in the context of social settings. Social relationships and sociocultural tools and practices are central to their apprenticeship. Although applied in school settings, she noted that individuals' ways of thinking reorganise throughout life, so the concept has continued relevance. Each time a new role is taken on, such as becoming a parent, or changing career, transformation of thinking, of perspective and of relationships are required, so new understandings develop and learning continues. In her model, development was seen as multidimensional, and goals were shaped by the nature of the community because different goals are differently valued in different communities. Using the concept of apprenticeship, she, like Biza et al. (2014), argued that the expert or master also continued to learn through participating in and guiding a novice through activities, not least because in this process, the expert made explicit their tacit knowledge; collaboration through dialogue could lead therefore lead to shared learning. Rogoff's work was developed by Rojas-Drummond et al. (2013). They considered dialogue to be central as a means of learning and development and analysed the function of dialogue in its sociocultural context through the way scaffolding was enacted. They used Rogoff's (1995) framework of three mutually constituting planes of analysis of sociocultural activity (participatory appropriation at an individual level, guided participation between individuals, and apprenticeship in community activity) which enabled researchers to ground the theories in empirical evidence, through analysis of classroom interactions. Benzie et al. (2004) described an investigation into higher education students' differing progress with information technology, similarly using a CoP lens to interpret the data. They concluded that CoP was a useful analytic unit in this context because it allowed identification of factors which shape an individual's participation in a community, and facilitated examination of the community as it developed, not just the individual participants, as mutuality of learning was identified. Moving from a notion of cognition to enculturation opened new ways of understanding the experiences of and outcomes for students.

Kaartinen and Kumpulainen (2004) also took a sociocultural approach to their study of science learning with specific research questions around the negotiation of roles and status of participants, how cultural tools are applied and how meanings are negotiated. What makes this study of particular interest is that although two classrooms comprised younger students, the third case was of student teachers. They found that whilst the teacher in the youngest class took a more guiding role, in the

secondary setting the students were more agentive. In the university classroom, humour was present in the interaction, which they suggested reflected negotiation of power relations. For the adult students, "role negotiation was shaped by the cultural histories of the students as they interpreted the learning activity through the lens of their personal experiences" (p. 187). Micro exchanges in dialogue can illustrate these social relationships and role negotiation, but there also needs to be understanding of the multiple communities in which learners operate, their identity and agency in these worlds, and the competence of learners in moving between them, as each has implications for learning (Kumpulainen and Lipponen, 2010). In sociocultural approaches, learning is often characterised as initiation into the practice of a community, but practices change over time. We might need to think of practice not as something that is simply reproduced as each set of apprentices is absorbed into the community, but is simultaneously subjected to scrutiny. Participation has a sense of involvement, acting "in the midst" (Smeyers and Burbules, 2006, p. 448) of a practice even without fully knowing the rules. Identity and relationships continue to be central: some practices thrive on multiple identities and complex relationships; others might be threatened by them. Investigation using a CoP approach needs to consider the stability or otherwise of practices, identity and relationships.

Fuller (2007) noted that conceptualising learning as arising from participation in social practice means that learning can be studied in any learning context. She outlined how key concepts within the theory such as social relations of learning, participation in community, identity formation and the roles of novice and expert fit well with research in workplace learning. This is unsurprising, as much of Lave and Wenger's research (1991) was located in workplaces. Much educational research is schools-based, with analytical frameworks and models designed for those settings, but teacher education programmes combine university-based teaching with workplace learning. Whilst some authors criticise the lack of attention given in Lave and Wenger's early work to a tight definition of communities of practice, Fuller argued this allows researchers to use the concept flexibly. The key indicators (mutual engagement, joint enterprise and shared repertoire) allow identification of communities in many settings. She suggested that some of the concepts in CoP can be expanded and developed to take account of critiques of it, such as recognising the significance of multi-directional trajectories of participation and greater fluidity in the novice-expert roles and identity, where novices may have different expertise. Likewise, individuals participate in multiple communities and this may itself create an expansive experience for apprentices. In the real world, boundaries of communities can be hard to define; it is the judgement of the researcher where to place the boundary for investigation of any given community. Communities may be "interlinked, overlapping or nested in some way" (Hughes et al, 2007), creating both opportunities and tensions within and between communities. In a large institution, such as a college, there may well be groups of communities (Avis

et al., 2020): for student teachers, communities can include their placement staffroom, the classroom where they teach and their ITE community. The degree of peripherality of an individual can vary according to time and context (Fuller et al, 2005), depending on both their own identity and the power and organisation structures within these communities. Recognition of the potential instability of the community and of individual roles develops the original concepts as they are tested empirically.

Carey Philpott (2014) suggested that Lave and Wenger's work did have a number of limitations, including the neglect of structural influences on the social context, which leads to neglect of power and conflict within the community (a point also made by Biza et al, 2014). Power relations within the community mean that legitimate peripheral participation can be "either an 'empowering' or 'disempowering' experience" (Fuller et al, 2005, p. 53) for the newcomer. Further, Lave and Wenger (1991), having acknowledged that schooling was often assumed to be the more effective means for learning, shifted the emphasis from formal learning to naturally occurring communities, so there are issues around applying it to a learning programme which combines both forms. Lea (2005) responded to such criticisms of CoP by seeking to recapture it as a heuristic rather than a model and used the concept to critically analyse the process of learning in higher education where the student is not best characterised as a novice and where participants are members of multiple communities. This can lead to meanings being contested, and although this is less evident in Lave and Wenger's conceptualisation, she concluded that there is room for it within the approach.

3.2 Activity Theory

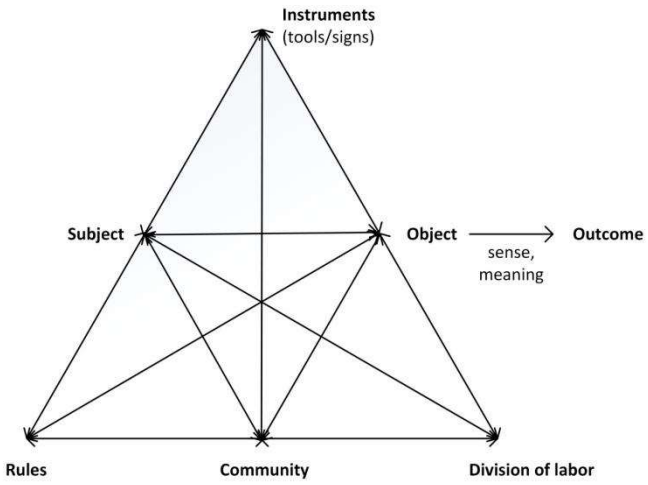
An alternative approach within the sociocultural tradition is Activity Theory (AT), based on the work of Vygotsky and Leont'ev and developed by Engeström (Sannino & Engeström, 2018). There are many different variations of the theory: I focus here on Engeström's work, but also look at ways in which it has been applied in education research. Engeström valued the social learning theory approach as it moved the focus of analysis from the individual to the social, with participation as a central feature. But he challenged its ahistorical nature, believing all activity has cultural and historical influences which are relevant to analysis. He was also concerned that the community was presented as well-bounded, whereas in reality communities of practice were likely to be more permeable and problematic (Engeström, 2007). The most basic model of activity represents it as a mediational triangle: the subject acts on tools and artefacts in order to realise an object. The subject may be an individual, dyad or group but is the perspective from which the activity is viewed. The mediational tools or artefacts may be symbolic or real. The object determines the direction of the activity but it is always in a state of change (Edwards, 2009; Wells, 2002), an enduring purpose rather than a short term goal. Engeström described objects as "carriers of motives; they are generators and foci of attention, volition, effort and meaning" (2014, p. xvi). Roth suggested that "the object of activity also

includes its image, which is something perceived by and characteristic of the individual" (2004, p. 3). In AT the activity is the main unit of analysis, opening up the whole activity and its constituent phenomena to analysis, rather than simply selecting snippets which "are not particularly meaningful units of social life for the participants 'in their own terms'" (Engeström, 1999, p. 170). Goal-directed actions can be subordinate units of analysis, but always within the broader, object-oriented activity (Engeström, 2000).

The second generation model of AT expanded this simple mediational triangle to an activity system, a structure which included influencing factors on the activity: rules, community and division of labour. The community shares the same general object and activity is undertaken within a set of rules and allocation of roles which shape interactions within the system. The influence of cultural and historical context and precedents are recognised and the model encompasses both the individual and the collective (Figure 2).

Figure 2

Second Generation Activity Theory Model (taken from Sannino & Engeström, 2018)



AT attempts to reflect the multi-voiced nature of an activity system and this helps to identify possible sites of tension within it (Wells, 2002). Within the division of labour, different individuals may have different goal-oriented actions which together combine to serve the overall object (Sannino & Engeström, 2018). Whilst activity is always object-oriented, there is room for ambiguity, competing interpretations and change, and it is the contradictions which lead to development of the activity system. The focus on activity offers fluid boundaries, making it possible to analyse activities that cross

institutional boundaries, rather than being limited to more formally bounded institutions (Edwards, 2009).

The third generation model of AT was enlarged to represent interaction between activity systems. The object could take three forms, conceptualised differently in each system and in a third form at the intersection of the two systems, perceived differently by the different subjects in their separate systems and again when the systems connect. Wells (2002) pointed out that these complex systems have complex connections between them, and that temporal sequences must also be considered. Many of the actions within an activity system will have antecedents: the rules, for example, may have arisen from a different community or activity system but overlap with the one being studied. The third generation model is pertinent to the context of teacher education, where the student teacher could be a subject in at least two activity systems: the university ITE system and the teaching placement system. The subject's identity shifts between activity systems, usually situated in different communities, with different sets of rules and a different division of labour. These differences may be tacit, not articulated to or by the student, yet resulting in tension or even breakdown of the activity and changing the nature of the object as the internal contradictions combine with contradictions between systems. In relation to my focus on dialogue, Wells (2002) made an interesting point regarding joint activity: there are situations in which interaction between participants is "ancillary to the focal action" (p. 60) and "on other occasions, the dialogue may become the focal action in one phase of the activity" (p. 60). However, Roth and Lee (2007) sound a warning about isolating a tool as a separate entity in research analysis, because separating a tool, including language, from the subject and the object can lead to misinterpretation of the data (p. 202) so dialogue must be analysed in light of the subject, object and wider context.

In Cole and Engeström's "cultural-historical activity theory" (2007, p. 484), they described a number of theoretical principles which relate to the design of empirical studies, including activity as the unit of analysis, mediation through artefacts (the cultural and social aspects of human life), and the need to examine the history of the phenomena being studied. Rantavuori et al. (2016) translated Cultural-Historical Activity Theory (CHAT) and expansive learning theory into a methodological framework in order to test its applicability in practice. They analysed a single session of collaborative learning, examining the formation of the object and of the types of interaction, and the relationship between learning actions and types of interaction. The most significant finding was the identification of "the importance of transitions and disturbances" (p. 22) and they concluded that the primary question regarding the value of CHAT as a methodology had been answered: it had been tested and proven valuable as a methodological lens.

AT has been widely used but is not without critics. Peim (2009), for example, challenged each of Engeström's principles from an ontological view, starting with the unit of analysis. He suggested that it is very difficult to identify where an activity system begins and ends and this is further complicated by the notion of community and division of labour. It is not clear whether the community is "above and beyond the activity system" (p. 174) nor whether the division of labour represents something internal to that activity system or a product of the wider community in which that activity system is located. Other criticisms of AT concern the notion of power: although multi-voicedness of the system is a core principle, the dominance of one voice over another is not explored in terms of structural positions, political dimensions or power, and the same concern arises regarding the resolution of contradictions. It might therefore provide concepts as analytical tools, but caution would be needed in claiming the sufficiency of them without an examination of power and structural forces which impact on the activity system.

Jaworski and Potari (2009) used AT to analyse a mathematics education context because the unit of analysis allowed consideration of structures and systems alongside classroom practice. They identified episodes from their observations and analysed them using the conceptual framework of object, tools, community, rules, division of labour, outcomes (in relation to object) and tensions. From their theoretical model they looked closely at issues of motive and drew conclusions about the distance between student motives and teacher expectations. They identified the significance of affective factors on student motives, which students did not consider were appreciated by the teacher. Roth and Lee (2007) suggested that where a student might be viewed as unmotivated, they could simply be enacting different motives. These findings have relevance in the teacher education context where there could be different motives on the part of all three groups of participants (students, teachers and mentors) and where affective factors of motivation are evident.

3.3 The complementary nature of the two theoretical lenses

Keating (2005) suggested that the centrality of the activity system in AT usefully develops analysis of concepts originating in a CoP approach. Firstly, it sees the relation between the individual and social as best observed through the way in which individuals act upon objects, mediated by tools or signs. Secondly, it focuses on how the sociocultural context in which the activity takes place impacts on internalisation processes. Thirdly, it highlights the historicity of the sociocultural context. Arnseth (2008) described similarities and differences between AT and situated learning approaches. Each attempted to overcome the dualistic tendency in educational paradigms where either the individual or the structural are afforded primacy: the focus of inquiry is on social practices, so both individual and social are central. Within AT, activity is action-oriented, so the object is of great significance. It

provides direction for the activity, but may be changed by the activity. Artefacts mediate that activity; they are embedded within it and get meaning through activity, not simply in the moment, but with historical dimensions. Likewise, the system itself is embedded in a framework which includes rules, the division of labour and the community: it can only be understood in its context. Learning is viewed as the transformation of the activity system over time, the expansion of it through the actions of those within it. Similarly, situated learning theory perceives learning as "constituted in the lived-in world" (p. 294); a constantly changing set of relations and mastery through participation in a community of practice. CoP recognises the social and cultural aspects of the particular context of practice in which the individual is situated, but pays relatively little attention to the structures which shape that world. With context tied to a particular time and place, the activity is more likely to be seen as over a shorter time span than in activity systems which evolve and continue over time. So, whilst both attend to macro and micro aspects, Arnseth argued that situated learning theory can be viewed as an "*agency-driven micro* approach to practice while AT can be conceived as a *historically relevant macro approach"* (p. 300): effectively two ends of the same continuum.

In applying those lenses to my study, a degree of simplification was used to bring them together and to apply concepts which could be relevant to analysis and making sense of the data. For example, the three basic elements of the meditational triangle in AT – subject, instruments and object – correlate to key concepts in CoP (mutual engagement, a joint enterprise and a shared repertoire; Wenger, 1998). In AT the subject is the individual, dyad or group whose perspective is taken to view the activity system, and in my study this was the student. 'Subject' related to taking on an identity within an activity and the community, and identifying the student as the focus in my study allowed exploration of the subject as the newcomer, apprentice or legitimate peripheral participant. The CoP lens also takes account of the perspectives of the participants who surround the subject, in particular the experts or 'old-timers' whose practices were shared with the subject (as the student's lecturer in the ITE classroom or mentor in the placement). It also allows for consideration of the changing nature of subject identity over time, from the perspective of the subject or other participants in the activity system.

The instruments of the activity system, acted on by the subject, could be seen as similar to shared repertoires, the ways of working that are adopted along with others within the community. The object is the common goal towards which the subject, along with the other participants, is working, their mutual engagement for a joint enterprise. In the second-generation model of AT (shown at Figure 2 in Chapter 3), where the basic mediational triangle is located in communities with given roles and a division of labour, we can recognise the situatedness of the activity system. This is a fundamental feature of a CoP approach in which learning is conceived of as participation in practices, where the

community has historically and culturally established ways of being and of acting. The activity system is located in the practices of a community, it rules and roles. This means consideration of the social, cultural and historical context and in my study, this was the social, cultural and historical context of an ITE programme delivered in a FE setting. As explained in the introduction, there are differences with school-based case studies, or even ITE for primary or secondary teaching. In general, the students are older, with established careers or vocational specialisms and are likely to be attending a college local to their home. The subjects in this community or activity system bring with them an individual biography which shapes their participation.

3.4 Theoretical Concepts Applied in Literature Relating to Dialogue in Teacher Education

Any review of literature on teacher education is necessarily selective, so I have focused on a few studies which have applicability to dialogue as a research theme, where concepts from these two theoretical approaches have been applied to studies of school-based and FE-based teacher education. Research into teacher education forms a specific sub-section of educational research: the students are at a different stage of life to school pupils, engage in both formal classroom learning and work-based learning and are being prepared for a specific profession. It is widely recognised in the literature that this is an area filled with complexity, both in terms of classroom variables and the nature of learning to teach. Howe et al. (2019) identified the multiplicity of variables involved in classroom teaching and the difficulty of isolating the effect of particular variables. Labaree (2000) identified some of the realities of the teaching profession that make practice particularly complex, including the problem of student co-operation, of a compulsory clientele, of emotion management, of structural isolation and of chronic uncertainty about the effectiveness of teaching, further compounded by perceptions of teaching that it is something that can just be learned by observing others. Shulman (1986) used archive records to examine what was regarded as teacher knowledge over centuries, including how this knowledge was demonstrated and judged, and noted that a distinction between content and strategic pedagogical knowledge developed. One of Shulman and Shulman's (2004) findings was that learning to teach was particularly complex because the individual student teacher is situated in a contextual web which is impacted by multiple forces. They discussed a new model of teacher learning, a more collaborative approach based on individual and collective reflection, situated in a community which provides support, scaffolding and shared expertise. Opfer and Pedder (2011) suggested that the complexity of teacher learning has led to a focus on the micro context without attention to the meso and macro level contexts. Like Shulman and Shulman, they recognised the

nested nature of teacher education, where multiple systems are at play, but in their analysis the three systems were the individual, the school and the activity. Whilst each of these systems had characteristics which could support or hinder teacher learning, the interplay of the three systems was also significant, so any explanatory theory of teacher learning had to be mindful of the multiple and complex aspects of each system and subsystem as the researcher needs "to be able to distinguish between those aspects of professional learning that are unique and those that are generalizable to other teachers and contexts of practice" (p. 394). Another consideration is the dynamic aspect of teacher education. Fuller (1969) identified that the concerns of student teachers tend to change over time, from an early focus on self and coping mechanisms, only later shifting to pupils. This resonated a little with my experience in that student teachers' concerns did seem to change over the year, but it was not in this simple linear way, with concerns for themselves and their own learners intertwined and priority of focus affected by multiple factors, including their own and learners' performance and wellbeing. With FE student teachers often mature students themselves, their prior experience sometimes drew them into teaching with a concern for giving learners a positive, successful experience. Avis et al. (2011), researching ITE in a FE setting, identified that student teachers were very aware of the wellbeing needs of their learners and the emotional demands of the role as well as the performative requirement. So, to the complexity issues already identified, we can add the varying concerns of student teachers.

Edwards-Groves and Hoare (2012) suggested that teacher education neglects the issue of classroom talk and dialogue in terms of what student teachers are taught, which has led to known patterns being replicated; specifically, the prevalence of the IRE sequence. They found that the prior experiences of a pre-service teacher were significant as they adopted roles or practices apparently by default. Reflection in dialogue with a mentor or peers was a means of bringing these tacit processes to light, opening the possibility of changed practice going forward. O'Donnell (2004) also referred to the impact of the pre-service teacher's prior learning, citing a study by Lortie published in 1975 which suggested that by the time student teachers get to such a programme, "they have experienced approximately 10000 hours of an 'apprenticeship of observation'" (p. 233). The teacher education curriculum includes things they are apparently familiar with, but initially understood through lay language rather than theoretical principles. Moving into the teacher community, there is therefore a need to develop new knowledge and possibly new beliefs about teaching and learning. O'Donnell argued for the use of cases as a means to creating a bridge between theoretical knowledge (through coursework) and practical knowledge (acquired in the classroom). Learning can be facilitated through dialogue around cases, as ideas are shared and collaborative solutions identified. Vloet and van Swet (2010) suggested that teachers and teacher educators construct meaning and identity through

reflection on their experiences and that they draw on these stories in their dialogue, stories which include context, personal biography, emotion and culture and history. Identity is constantly reconstructed as stories are told by and about the person. Their focus was on the teacher educator and they quote one participant who described what she needed for professional development: "I need 'the other' to learn: in contact with others; in a conversation. I can only learn in dialogue" (p. 163). If this was the experience of the teacher educator, it follows that student teachers might also benefit from such dialogue.

As seen in these examples, there are multiple areas of complexity in teacher education, including the classroom context, the learning outcomes, and the nature of the subjects (students). Each of these can be usefully studied through the lens of CoP and AT to bring insights which take account of this breadth of relevant considerations.

A sociocultural approach was used by Edwards and Protheroe (2003) to examine learning of student teachers in their school placement setting. They noted that, unlike some of the peripheral participants in Lave and Wenger's early studies, student teachers do not have extended periods of being peripheral to activity but are very quickly expected to be working independently as teachers, with the mentor in a supervisory role. As a result, student teachers see teaching as individual performance, underpinned by one-to-one mentoring meetings. In the original conception of situated learning in a CoP, the newcomer, over time, appropriates practices and language for him or herself. In ITE, more often the student teacher is provided in the university classroom with knowledge about teaching practices, then sent out to apply it in placement. They found that mentors tended not speak about their knowledge in abstract terms; rather "knowledge is heavily situated" (p. 229). They hoped to find evidence of Rogoff's guided participation, where mentors helped students to find more expert interpretations of situations they came across; instead, conversation was more descriptive than interpretive, with the focus on "polishing the visible performance of student teachers" (p. 230). Using sociocultural analysis, they suggested that what students were missing was exploration of the object of their actions. The students' focus was on planned curriculum delivery not a conception of pupils as learners and this shaped the conversations with their mentors. Student teachers are learning in a context with rigid systems of accountability so the focus on curriculum delivery rather than wider pedagogy may be understood as an external force operating on both student teacher and mentor. In a more recent study, Eshchar-Netz and Vedder-Wiess (2020) concluded that collaborative planning between novice and veteran can provide opportunities for learning for both parties, by making tacit knowledge explicit and releasing both from the socio-emotional tensions in the mentor-student dynamic. Lahiff (2015) examined post-observation feedback discussion between teacher education students and their tutor or mentor and found that this discussion can be a space where practice is explored, creating new

knowledge through social engagement. Co-construction of knowledge, that is, learning by both student and mentor/tutor, is possible, as well as the recontextualisation of prior knowledge and workplace practice to the classroom. Dialogue provides the opportunity for these often tacit aspects of practice to become an effective part of the learning programme. However, Lucas and Unwin (2009) suggested that where teacher training takes place in FE, learning tended to be from sharing ideas with colleagues, including other student teachers, rather than with a mentor because students rarely had contact with them. Intentions were good, but the community in FE can be very fragmented.

The mentor/student teacher relationship is the subject of many research studies. Bullough and Draper (2004) framed it as a storyline in which the triad of mentor, student teacher and university supervisor are the main players, each with a personal biography. They examined the motivation of each participant and their data indicated that participants had shared goals, such as for the pupils to learn and have a positive experience, and for the student teacher to find a job and be a good team player. They found huge complexity in the roles, relationships and positioning of the three participants and concluded that while talk about teaching is essential for learning to teach, "the conditions for good talk need to be created initially" (p. 419). For my research project this last point is very significant: what are these conditions and what constitutes good talk between participants? Sorensen (2014) combined features of Alexander's work on dialogic practices, collaborative models of teacher education and concepts from an expansive learning approach (from CHAT) to examine the use of paired placements in a teacher education programme. In this study, student teachers had not only an expert mentor for reflection on their placement experience, but also a colleague student teacher. He found that this supported higher level thinking and a more critical approach. However, it was affected by the way the placement was structured and there remained a separation of theory and practice in dialogue with mentors. Power relationships were also relevant: he noted that "experience becomes 'learning how to fit in'" (p. 136), a situation which does not lend itself to expansive learning. Dixon et al. (2012), in a study of teaching placements for student teachers in an FE setting identified inconsistent contact between different trainee/mentor pairings. Some placement communities welcomed the student; others did not, even within the same institution, so the opportunities and support for dialogue varied significantly. It is not unusual for teachers in FE to experience isolation, due in part to working on split sites, with part-time contracts and evening teaching, and Orr (2012) found that students experienced this in their placements. Students did not necessarily see this as problematic: in a way, it prepared them for the career they were entering, but isolation does not support effective dialogue, nor enable participation in a community of practice. Orr suggested that student teachers' experience was that compliance rather than challenge was expected, finding ways to cope with the job being a primary object. This contextual feature of FE, which reflects my own

experience in this sector, tends to undermine rather than support meaningful dialogue. Orr and Simmons (2010) identified that within ITE courses, the lecturer, in particular, provided space and support while students are learning to cope with the challenges of teaching in FE, but this support could actually "mitigate against challenging trainees to experiment or challenge their practice" (p. 83). This suggests a need for different forms of dialogue, but students tended to be offered one or the other, as the supportive form did not coexist with a critical form.

The role of HE providers as partners with schools in ITE was explored in Burn's study (2006) in which she examined conversations that student teachers had with their mentor and with their university tutor. There was some consistency, such as in terms of the goals advocated (primarily the progress of pupils) and providing students with suggestions for activities. Where they differed was in the extent to which they offered procedural advice by making pedagogical decisions explicit: tutors consciously set this out, but mentors were more likely to take this for granted. Tutors focused on the student as a learner: mentors' main focus was their pupils. In this way there is a similarity with Orr's (2012) study, where the student is seen by the mentor as a teacher first, learner second. Burn also found that mentors were more likely to draw on their experience in their current institution when advising students, whereas tutors made more use of educational literature, with commitment to scrutiny and challenge. This was not to say mentors did not critically evaluate their own or trainees' practice, but in their conversations, students expressed few queries or different interpretations. So, although there were similarities, there were also differences in the dialogue with a school mentor and a HE tutor. The immediacy of decision making in the placement setting, compared to the time that can be taken in the university conversations, as well as the complexity of relationships in the different settings were identified as factors in these differences. Such differences in the types of dialogue could be beneficial to students, and Burn argued that they reflect the particular role of HE institutions alongside school-based input in teacher education programmes.

The issue of shared goals between participants in teacher education is important: in Edwards and Protheroe's (2003) study, at a surface level, goals appeared to be shared, but over time differences came to light. It has been investigated using AT because the object of the activity is a core part of the conceptual model. Lupu (2011) explored how collaborative learning is used in pre-service teaching programmes in the UK and in Romania. She used concepts from second and third generation CHAT theory, to carry out comparative analysis of the two systems. The subjects acted upon an object, which she describes as "the development of professional identities in pre-service teacher education students" (p. 15). The tools were both material (such as the syllabus) and mental (such as teaching vocabulary). The community could be seen through its rules and division of labour, which are themselves culturally and historically determined. In the UK, collaboration is part of the object of the

activity, as student teachers seek to tie the learning experience of the university into the professional role they are taking in placement. In the Romanian system, student teachers role play approaches to learning in contexts outside real classrooms, to provide fragments of 'model' teaching without introduction to systemic practices. To combine the university experience with school placement means finding "tools to mediate the imperatives of pedagogically grounded actions with the institutional rules and particular divisions of labour" (p. 14). This does seem to be an area where teacher education programmes struggle. Collaboration should produce a stimulating learning environment, and the contradictions offer opportunities for growth in the different activity systems, but studies indicate problems in realising this potential.

Spendlove et al. (2011) used CHAT theory to analyse apparent tensions in school/university ITE relationships, a division of labour in which schools focused on practice and the university on theory. Rather seeing the university and placement school as two partners in a single system, they conceptualised the student as being between two activity systems. In the school system the focus was on mastery of particular techniques required for teaching, while the university system had a broader aim of ensuring that the student teacher had underpinning theoretical knowledge. Their study followed a very small number of student teachers (four) and found tensions derived from a number of sources; they concluded that the way mentors define competency reflects and "legitimises an impoverished view of what it is to be a professional" (p. 75). They argued that such partnerships are unlikely to be successful unless there is a change in rules, division of labour, and conception of the object, all of which will require associated changes in the subject. One aspect of this is the nature of identities of the different subjects in the activity systems. Williams (2014) noted that teacher educators felt some ambiguity in their identity: whether they saw themselves now primarily now as teachers, academics or researchers. The relationship with the schools-based mentors was consequently complex and raised issues of demarcation of practices and responsibilities both for the educators and the mentors. A similar theme was explored by McNicholl and Blake (2013) who conceived of the community being both the university-based setting and the placement settings. Within CHAT, the object motive directs the participation of subjects in the system and they noted that different subjects might interpret this object motive slightly differently. For the teacher educator, the learning of the student teacher was the object, with the main outcome being successful completion of the learning programme. They found that the construction of the object was shaped by a number of factors, including activities of other members of the community and the quality assurance burdens that apply. A CHAT approach does not tend to recognise or analyse individual agency, with its unit of analysis being the activity rather than the individual, but they argued that different interpretations of a shared object motive suggest agency at some level. The community mediates relationships within

the system, including the use and significance of tools and different participants in the system can have different perceptions of the most effective use of dialogue as an available tool.

Douglas (2011) also used AT concepts to examine teacher education programmes. He noted that the object is open to negotiation and it is through the way subjects interpreted and responded to the object and the way they used tools (which would include dialogue), that motives are visible. Tools are developed within specific cultural and historical contexts and therefore reflected the department or school in which they were used. In a teacher education activity system, the partnership between placement and university is shaped by the rules, the nature of the community and the division of labour within that community, so student teacher learning was different in different departments. Douglas (2012) also described how different departments took a different view on their relationship with the university ITE partners. For example, the history department viewed it as beneficial to them, whereas the MFL department saw it as potentially detrimental and maintained a greater separation. He concluded that whilst there was a shared object, different motives of different departments were evident. For one it was developing the student teacher as an able practitioner, for another as a team player who could adapt to the practices of the departmental community. But, "when the ITE activity system interacted with others, the clearer and more focused its object, as indicated by a shared understanding of this in tool use, the greater possibility that the interaction contributed to the ITE activity with less likelihood that actions were guided by object motives of other activity systems" (p. 299). Douglas highlighted that generic ITE tools were being used across all departments, but their use depended on social practices and relationships within those departments. If dialogue is one of these tools, understanding of its significance and use is an important feature of the activity system.

3.5 Conclusion

Chapters 2 and 3 provide a partial overview of some of the literature on the subject of dialogue in education. I have sought to identify key issues relevant to my area of interest, specifically the forms that dialogue can take, its function in the classroom, the identity and participation of students and teachers and the effectiveness as measured by conventional assessment outcomes. I have also introduced concepts from AT and CoP which have been used in teacher education research and from which I shaped a conceptual framework to fit the topic and my own philosophical approach. Much of the literature is school-based, but there is also useful material which references the specific context of teacher education. Some of the issues I have identified in this literature concern the prior experience that student teachers bring to the programme, the complexity of the learning required, whether an ITE programme is a single or multiple activity system, and the expectations, roles and

identities of the participants: each issue is significant in shaping the dialogue which takes place within the programme. For me the gap which remained concerned the specific nature of dialogue which is effective for participants in ITE programmes, so this formed the basis of my research question. Early attempts to measure the effectiveness of particular types of dialogue against specific outcomes have had limited success and there is little to indicate what participants themselves consider to be effective. Even if findings were valid and reliable in the school setting, their generalisation to the teacher education context would need to be tested. My research question therefore took the following form:

What are the features of dialogue which are effective in a teacher education programme: effective from the perspective of the student, the lecturer, and the mentor?

Having acknowledged the issues around definitions and unit of analysis, I should set out here that in my study, 'dialogue' was based on a broad, everyday use of the term. This allowed inclusion of both productive and nonproductive forms, to use the terminology of Howe et al. (2019), because themes and issues identified as relevant to dialogue in teacher education could well be overlooked if only the conversation defined by rigid dialogic coding was used. The choice to use AT and CoP as appropriate theoretical lenses was made because both are sociocultural approaches but each draws attention to different aspects or levels of activity, allowing a more robust examination of dialogue in the context of ITE. Chapter 4 explains how these theories and the findings proposed by the literature have been operationalised in the study, including the choice of unit of analysis and the conceptual framework created.

Chapter 4 Methodology

This chapter describes and evaluates the methodology adopted for the research project. It sets out the theoretical and philosophical approach which shaped the design and describes the setting in which the research was undertaken. The data collection methods (observation, interviews and documentary evidence) are explained in terms of the research question and their fit with the interpretive approach taken, followed by a discussion of the way they were implemented. The techniques for data analysis are described: the qualitative approach necessitated data analysis concurrent with data collection, as well as further stages of analysis once all data had been collected. Ethical considerations are explored, in particular of insider research and of the research design (case study) and data collection. The chapter concludes with a discussion about validity and reliability: how they were conceived in this study and the challenges of ensuring that the findings have credibility in both research and practice communities.

4.1 Design of the Study

4.1.1 A Case Study Design

The research question evolved through my reading and research over several years, eventually expressed in its final form: "**What are the features of dialogue which are effective in a teacher education programme: effective from the perspective of the student, the lecturer, and the mentor?**" The nature of the question suggested a close study of dialogue in a specific, bounded context. At an early stage, I made the decision to use a case study approach, following an ITE cohort through an academic year. George Bernard Shaw wrote of Ibsen: "He gives us not only ourselves, but ourselves in our own situations. The things that happen to his stage figures are things that happen to us" (Shaw, cited in Collins, 1957, p. 7). In a sense, this is what case study seeks to do. To give us ourselves, in context, so that we can observe as if we are the audience and question or celebrate what we might not normally have the time and perspective to see. The study's findings might or might not resonate with others' experience, but the value of presenting it in this way is to illuminate: "A case study is not meant to provide proofs. Rather its strength lies in illuminating and producing context-dependent knowledge and experience, taking issues further than what context-independent knowledge allow for" (Helgevold, 2016, p. 319).

The case is the basic unit of study, made up of relationships both within and beyond the case. Yin (2014) emphasised two key features of a case study. Firstly, it is the in-depth study of a bounded unit

in a given context. A teacher education cohort, a year group on a particular programme, could be such a case. Gillham (2000) suggested a case can only be studied in the real world in which it exists, but acknowledged that this means it is difficult to draw accurate boundaries. This is certainly true of a case in education, where a cohort is gathered for one purpose, but its members are located in multiple contexts.

Secondly, case study inquiry recognises multiple variables and sources of evidence, offering the opportunity to capture perspectives of multiple participants in several ways. This wide scope means that data collection is likely to need to be guided by the development of theoretical propositions or "foreshadowed issues" (Simons, 2009, p. 38), to narrow the focus and be more manageable. Case study can be differently designed to access data consistent with the researcher's epistemological position. I identified in Chapter 3 that I have taken a sociocultural perspective and an interpretive position on knowledge creation. A case study methodology is a good fit with this approach as it accesses the views of different participants in one setting, using observation, interviews and documentary data to see and hear their perspectives relevant to the research question. Flick (2007) described qualitative research as explaining social phenomena "from the inside" (p. x) to gather insights into phenomena in a way that is meaningful to individuals and communities; case study facilitates such exploration. Jocher (1928) expressed one of the attractions of case study as the depth of data that it generates: "Since case study is a process of intensive investigation often extending over a long period of time, its very nature precludes superficiality" (p. 206). This "thick description" (Geertz, cited in Gilham, 2000, p. 19 and in Stake, 1995, p. 42) suggests more than simple descriptions of a phenomenon, as it can include interpretation of meaning(s) and even evaluation. This was necessary as my research question sought to explore what is 'effective' in dialogue within an ITE context. It was my aim to examine effectiveness in terms of how dialogue supported realisation of the intentions of the three participant groups (students, lecturers and mentors). In an interpretive approach, multiple perspectives and multiple methods generate detailed descriptions and explanations and contribute to establishing the validity of the findings.

Variables and patterns were anticipated to emerge from the data as the case was studied. Rather than setting out and testing a theory, I intended to use case study's intensive attention to a particular phenomenon as an opportunity to develop theory. However, sociocultural theories, in particular Activity Theory (AT) and Community of Practice (CoP), have influenced the development of the project, shaping its design and analysis. Vaughan (1992) described the "alternation of induction and deduction" (p. 181) which occurs within case study as emerging patterns are noted then confirmation or contradiction sought through continuing data collection. Analysis concurrent with data collection,

over the full academic year, making use of concepts from AT and CoP, allowed key themes to emerge, possible interpretations to be weighed and findings tested.

There are many different types of case study and they can be characterised according to different features. Stake (1995), for example, distinguished between case studies which are intrinsic, where the case itself is the object of interest; instrumental, where the case is selected to allow examination of a particular issue or phenomenon; or collective, where multiple cases are selected in order to look for commonalities and difference. Yin (2014) makes a two-fold distinction, suggesting that the case study design can be single or multiple cases, and either holistic or embedded. This is similar to Stake's differentiation: in the holistic design the phenomenon is examined throughout the case. Ragin and Becker (1992) suggest that there are four case types, organized along two dimensions. The first dimension reflects a realist or nominalist epistemological orientation, that is, whether the case is a theoretical construct or exists empirically. The second dimension concerns whether the case category is general (external to the research) or specific (developed for and through the research). In my research project the design was a single case study, and the purposes were descriptive, interpretive and evaluative. The case existed empirically as an ITE cohort, with sub-units of students, lecturers and mentors. The case was instrumental in that the focus of the research question, effective dialogue, was examined within the particular case. There has already been considerable research on the subject of dialogue in education, but this study was concerned with dialogue in ITE (Lifelong Learning), so the case was selected accordingly.

In selecting case study as a methodology, it is necessary to consider some of the criticisms that have been levelled against it. Flyvbjerg (2011) described these as misunderstandings and identified them as: whether theoretical knowledge is more valuable than a concrete case; whether generalisations can be made and scientific development can be based on an individual case; whether case study is suitable for testing hypotheses and building theory; whether case study has a tendency to confirm the researcher's biases; and whether general propositions can be made from specific case studies. He argued that these misunderstandings have undermined the use and credibility of case study and provided a systematic defence of it in relation to each one. I focus here on three key issues: generalisability, suitability for social science research and subjectivity.

Case studies undoubtedly provide interesting anecdotal data, but it is less clear whether theory can be developed from this. However, by studying the case in a situated way the researcher examines closely the contextual factors and produces detailed descriptions, which help to indicate the extent to which findings could be transferable. Flyvbjerg (2011) argued that generalisation need not be a goal of such research; rather that case study research produces knowledge that can be transferred to other

settings or disciplines. Simons (2009) similarly suggested that whilst generalisations might not be possible, inferences can be made. Stake (1995) argued that case study's attention to the particular provides its unique contribution; however, it is possible to see commonalities, things that occur time and again. Whilst these might not generate new generalisations, they might allow modification or refinement of generalisations, by seeing what contradicts and what reinforces the already known as case study directs attention to the singular, the context in which a phenomenon is embedded, rather than necessarily making a claim for the transferable. By providing thick description, including contextual and methodological detail, the reader is given the opportunity to apply from the specific instance to wider populations (Robinson and Norris, 2001). Hammersley, Gomm and Foster (2000) expressed reservations about these approaches to generalisability or transferability, stating that while case study research can argue for general relevance of findings, this carries methodological requirements that might not be met by case study researchers, primarily the identification of the case in terms of its representativeness or otherwise of the target population. However, there is usually generalisation within a case, as the researcher selects data points in terms of time and location. It is an important principle to retain clear, transparent documentation of the entire process, including case selection and sampling decisions, and to set out the extent to which generalisations could be made from or are limited by this particular case study design.

Flyvbjerg (2011) suggested that the rich data from case study research offers valuable knowledge about human affairs; indeed, that its naturalistic style is particularly suitable for social science, as it provides a better match with the social world being studied. The level of detail provides a nuanced understanding of the case, which is necessary in social science where behaviour is not a question of rules or causal relationships but is culturally and contextually shaped. This is influenced by the researcher's view of what constitutes knowledge and what 'science' is; a longstanding debate, but the researcher needs to be explicit about the epistemological position taken. With my research and work background, I take the view that a case study is an appropriate methodology for social science.

All research involves interpretation, but in standardised, quantitative research, the intention is usually to restrict the influence of researcher interpretation so that data is value free. Jocher (1928) stated that subjectivity is inherent in case studies but that if researchers are thorough in their approach, they minimise its effect by studying every aspect from every angle. Interpretive social scientists regard subjectivity as necessary in the study of humans and provide extensive guidance on techniques to optimise its benefits, whilst reducing bias. Transparency is required at every stage, from planning, through data collection and analysis, to the interpretation of findings and final conclusions. Flyvbjerg (2011) dealt with a related argument that case study is intrinsically biased towards confirmation of the researcher's pre-conceived notions because it does not apply a rigorous scientific method. He

challenged this argument on the grounds that whilst bias can be a risk in case study, it is a risk in all research. He cited case studies where the researcher has revised a position on the basis of data collected and suggested that case study might actually lean towards falsifying preconceived ideas due to the closeness established with subjects and the opportunity for contrary views to be identified. In the philosophical approach that I have taken, interpretation is central to the research process, to be embraced rather than avoided, but explicitly documented throughout. I have incorporated these principles into the research design and conclude the chapter with a discussion of insiderness, validity, reliability and credibility of data collection and findings.

Choice of methodology is shaped not simply by technical and practical considerations but by the epistemological and ontological position of the researcher, reflecting prior experiences and preferences. Renshaw (2019), writing about positionality in researching the dialogic self, suggested that researchers need to "position themselves more explicitly in terms of 'where theory comes from'" (p. 91). He explained that this is not by simply naming theoretical influences, but recognising that the researcher will have goals and agendas when they evaluate theories and potential methodologies for pursuing the research question. My academic background was in sociology and prior to moving into education I worked in the field of social work for several years. Social theory and case study approaches to learning and practice feel familiar and the 'natural fit' of them to this research project can be traced back to these experiences, as much as to wider reading and research.

The next section narrates the process of the case study design and implementation and the reasoning behind each selection and decision. However, this can suggest a simplistic, linear process, when it was actually complex, with occasional travels in unexpected directions. Plans for observations cannot be imposed on participants, the human beings who make up the case have lives which are unpredictable, and even technology can throw up complications. Sanger (1996) stated that "research is riven with pragmatism and compromise" (p. 44) and suggested that any deviation from design should be documented in the public reporting. I therefore describe the implementation of a case study approach to investigate the research question, but also indicate where changes from the planned design were made.

4.1.2 Sample Selection – the Case and the Participants

The case that I proposed to study was a single, full-time cohort of a combined Professional Graduate Certificate in Education/Certificate in Education (Lifelong Learning Sector) programme (PGCE/Cert Ed), delivered in a FE college in partnership with a local university. The college is in a relatively rural location and draws students mainly from the surrounding area. The programme prepares student teachers to teach in Lifelong Learning settings, such as FE, HE or adult education. Each cohort was usually around

15 - 20 students although this varied year to year. The students were taught by three lecturers, each an experienced teaching practitioner. One of the lecturers was the Course Director for the programme; each lecturer led on at least one module and each carried out observations of the students' teaching practice (a core aspect of the programme). Each student was allocated a subject-specialist mentor for their teaching practice placement which ran throughout the year alongside the ITE taught sessions. The mentors were provided with induction and support from the lecturing team but their work with their student varied according to their own and the student's preferences, as well as the demands of the subject and the department. Mentors were shadowed by their student for the early part of the programme and gradually handed over teaching of specific classes so that students were teaching independently for the later part of the academic year. Mentors carried out observations of the student's teaching practice, alone or with an ITE lecturer, and were expected to contribute to formal progress reviews and student learning records.

I had worked at this college for several years and am part of the teacher education team. I completed the in-service ITE programme at this institution in 2013. I primarily lead programmes other than the PGCE/CertEd, so within this programme my role had been to teach and assess as required, usually on one or two modules per year. The selection of this case was a convenience sample, the use of my own institution having significant benefits. The research question concerned the nature of dialogue in ITE and it was my belief that familiarity with the format and context of this programme would allow a closer focus on the detail of classroom dialogue. A cohort in another institution could have been selected, or additional cohorts and institutions identified to provide multiple cases, but I considered that lack of familiarity with other institutions, their ways of working, and different policies and processes for teaching and assessing, would have distracted from the minutiae of interactions within a single, familiar case. This micro level of analysis was expected to produce valid data in relation to the research question; the idea of making the familiar strange, questioning what was seen (from a research perspective, rather than as a teacher or student) was a technique anticipated to bring about rich data (Clough and Nutbrown, 2012). Ethical implications need to be considered in any research which brings the researcher into contact with participants, particularly with the researcher as an insider. This is discussed later in the chapter and the process of seeking participants and collecting data was shaped by awareness of the potential impact of insider research.

4.1.3 Data Collection – Planned

The timeline for the project began with an application to the EDU Research Ethics Committee, four months ahead of data collection. To fit in with the academic year, it was planned that provision of Participant Information Sheets and contacts with potential participants would begin in September of the fieldwork year. An example of one of the Participant Information Sheets and Consent Forms is

shown at Appendix A and each information sheet was designed for the particular sub-group (student, lecturer, mentor). The nature of the research question meant that data collection needed to span a full academic year, following a pre-service cohort from the start of the programme to the end. As themes were anticipated to emerge from the findings, data analysis was planned to be carried out alongside as well as beyond data collection.

The intention was to collect data from the cohort at different points during the programme so that sufficient sampling was undertaken to include key moments, capturing changes in the nature of the dialogue. Students who started the year as student teachers would, by the end, be qualified teachers and one consideration was whether the features of dialogue which were effective change through the course of the programme. Although the plan might need to be revised, it provided an outline structure for the process and required a clear statement of the rationale for each stage. This encouraged transparency about the selection and timings of different elements of the data collection strategy, justifying each decision made.

The planned timeline is set out in Table 1.

Table 1

Planned Timetable of Data Collection for the ITE Year

Month	Activity	Rationale/Comment
September	Information to potential participants, consent forms issued and returned.	Students and mentors will be confirmed by September. Induction takes place in September.
October	First phase classroom observations.	Students have settled into the programme, but still at early stage. Minimum four observations; at least two different lecturers (to increase anonymity of data).
November	First phase interviews: students and lecturers.	To follow up first observations.
December	Checking of transcripts by interviewees. Observations of student/mentor reviews. Examination of documentary data.	Student progress reviews timetabled this month.
January	Interviews with students and mentors. Second phase classroom observations.	To follow up observations. Minimum four observations; at least two different lecturers.
February	Mid-point interviews with lecturers.	
March	Checking of transcripts by interviewees.	
April	Third phase classroom observations. Observations of student/mentor reviews.	Minimum four observations; at least two different lecturers. Final mentor reviews timetabled for this month.
May June	Final interviews: lecturers, mentors and students. Examination of documentary data.	Students about to become qualified teachers. Interviews to follow submission of final assignments.
July August	Checking of transcripts by interviewees.	

An interpretivist framework necessitates multiplicity of methods, examination of the phenomena through multiple lenses of methods and of participants. It was intended that the case study would generate both detailed descriptions and data for interpretation and evaluation, accessing the perspectives of the main participants in the programme, so the data collection methods selected were qualitative: observation, interviews and examination of documentary records (Table 2). This combination of methods allows the researcher, "to 'get the feel' of their research settings and situations" (Clough and Nutbrown, 2012, p.29).

Table 2

Data Collection Methods for Planned Fieldwork

Participants from which to select sample (anticipated numbers)	Method	Type of Data
Lecturers (3)	Observation (whole class teaching)	Field notes, audio record[a]
	Interviews	Notes, audio record
	Documents	Lecture notes/resources, records of reviews/tutorials
Trainee teachers (20)	Observation (whole class sessions)	Field notes, audio record[a]
	Interviews	Notes, audio record
	Documents	Journals, records of reviews/ tutorials
Mentors (20)	Observation (reviews)	Field notes, audio record
	Interviews	Notes, audio record
	Documents	Records of reviews/ tutorials
[a] Audio record of classroom observations planned but not implemented other than for some small group work.		

Observations

Observations were selected as I considered that they would allow me to see, in situ, the nature of the dialogue within the programme, and to gain an unmediated understanding of it within the case context. It is unlikely that the flow of life does continue completely naturally when the researcher is present, as the observer inevitably has some impact on the phenomena being studied, but recognition of this, clarity over the role of the researcher and collaboration with those involved in the research, can help to address the issues which arise (Angrosino and Rosenberg, 2011). Clough and Nutbrown

(2012) state that observations provide direct cognition of what is being studied and that the familiar can be seen differently from the perspective of research observation. The programme involves a number of different forms of dialogue, between different participants and in different settings. Two contexts for this are classroom sessions led by the lecturers (lecturer-student and student-student dialogue) and in the mentoring relationship (mentor-student dialogue); my experience as a student and lecturer suggested that these were among the most significant. Such interactions tend to be quite complex and observation allows the researcher to see and start to understand these complexities. It was my intention to carry out all observations myself, in a passive observer role, not initiating contact with participants. I planned to position myself in such a way as to minimise my impact on routines and interactions and obtain as realistic a picture as possible. I did a pilot observation with a different cohort, which highlighted this issue. I had sat close to the students in order to hear the dialogue and one began asking me questions about the module assignment, while she waited for the lecturer to become available. I therefore ensured that in the research observations, I positioned myself where direct engagement was discouraged. Although I minimised contact with participants during the observations, using observations ahead of interviews meant that participants became used to me and I could familiarise with their environments and their ways of working, which Rubin and Rubin (2012) identified as an advantage in naturalistic research. Records of observations were planned to include clear descriptions of the setting (such as nature of classroom, location of mentor meeting, module being studied, my position) so that the reader could visualise the context, with field notes reflecting not just the verbal dialogue but the situational conditions. Observation involves all the senses so the eventual description in the field notes documented a number of factors in the setting as well as the interactions which took place (Marshall and Rossman, 2016). To examine the effectiveness of dialogue, I also wanted to see the relation between participants' perception of the dialogue and what had been observed: there can be discrepancies between what people say and do, as well as lack of awareness of one's behaviour, so observations and interviews combined to offer more robust data.

In the early stages the observations were planned to be relatively open discovery, with more focused attention to particular features as these emerged. This inductive approach allows understanding to develop from the field, rather than imposing a framework to guide observation (Sanger, 1996). Templates for observation of the classroom sessions and mentor review sessions were developed (Appendices B and C), based on literature and prior experience of the programme, to support noticing and recording key events or moments. These were of an open nature, especially as other research indicated that sometimes interactions that were unplanned by the teacher proved productive (Twiner et al., 2014). Lefstein et al. (2015) challenged the common use of individual discourse moves as the most appropriate unit for analysis, suggesting that some balance between reductionism and holism is

necessary to capture the nature of classroom dialogue, so I opted for as open a recording template as possible, to be free to note any interactions of apparent significance, within broad time segments. I used a format which Kern et al. (2007) had developed. They were looking for evidence of cooperative learning and devised a classroom observation recording instrument which allowed them to log each time one of the five identified elements of cooperative learning was observed in a given session. This was too specific for my purposes, but the first part of their protocol was formatted to record contextual characteristics and I adapted this section for my own template.

It was anticipated that my templates would evolve through the three phases of observations (Table 1), to become more focused, but in fact the original was maintained. There were multiple strands emerging and to limit to just one of these risked not documenting aspects which could later prove significant. However, following a process identified by Angrosino (2007), the field notes made in later observations did focus more on what were indicated as potentially important at that stage of analysis (for example, interactions which indicated collaboration or competition, or referred to wellbeing). The course was divided into two semesters and the plan was to carry out observations of classroom teaching and mentor/student reviews to capture dialogue at key points in the programme. The selection of which sessions to observe was planned to take account of variables which could impact the nature of the dialogue (including lecturer/mentor, module content and style, location), to include as many of these variables as possible. These contextual variables were to be noted on the record so that their impact could be considered when analysing the data. Field notes could not be transcriptions of interactions but indicators of what was observed, with some detailed descriptions of verbal exchanges and the tone, gestures, purposes and activities associated with these exchanges. These notes were then to be expanded through reflection to identify key words, themes or patterns for discussion in interviews.

Interviews

It was planned that observations would be followed by semi-structured interviews, intended to generate a more complete description of the dialogue for each participant. Interviews enhanced observation data by moving from a monologic position in which the researcher narrates what they have witnessed, to a dialogue where the participants join the conversation (Clough and Nutbrown, 2012), allowing participants to discuss observed practices (Lahiff, 2015). Kvale (2007) defined the interview as “a conversation that has a structure and a purpose determined by the one party – the interviewer…. goes beyond the spontaneous exchange of views as in everyday conversation, and becomes a careful questioning and listening approach with the purpose of obtaining thoroughly tested knowledge” (p. 7). This highlights several ways in which interviews were appropriate for this project. Interviews allow exploration of meanings behind words and actions observed, capturing the

interpretations of different participants in the ITE dialogue, offering an opportunity for knowledge to be mutually created through interaction unique to that situation (Kvale, 2007), rather than seen as externally existing knowledge mined from the subjects by the researcher. The participants are 'experts' on what their behaviours mean, so interviews which gave opportunity for them to explain, clarify, confirm or contest meaning attributed to observed actions and dialogue, were essential for reaching shared understanding.

In order to focus the interview, and to support a systematic approach, indicative questions were included in interview schedules (Appendices D, E, F, G and H), developed from what had emerged from the observations to seek insights into participants' perspectives on the dialogue. The second round of interviews with students and lecturers was planned to include questions which addressed themes emerging through data analysis, to test interpretations or findings identified, individualised to follow up specific comments or interactions. Active listening, probes and second questions were to be used in the interviews to open up different aspects of participants' responses. The time lapse between first and second interviews allowed further reflection and analysis, so second interviews could explore themes relevant to the research question. Inevitably, the researcher influences responses by their own phrasing, body language and response to the interviewee; even if no formal theory is used in framing the interview, the researcher is likely to hold "sensitizing constructs" (Brenner, 2006, p. 360) so field notes and audio records were to be used to capture as much as possible of these influencing factors. Each set of interviews was semi-structured to focus the conversation on the research question, but even these relatively open questions risked limiting interviewee responses and missing things that were important to them; even the order or length of the question reflects something of the researcher's personal position.

The intention was to interview each lecturer and a large proportion of the students and mentors: if all students and mentors consented to participate, a sample could be taken, but in reality the sample self-selected by who agreed to participate and who were available in the interview periods. I wanted to interview as many participants as possible as each was anticipated to have a unique experience and view of effective dialogue within the programme. The recording and portrayal of different perspectives, individually and in some kind of aggregated form, was central to an interpretive approach. Interview questions were piloted with representatives of previous cohorts (two students, one mentor, one lecturer), as well as critiqued by the research supervisors, to refine them into a form which could be understood and answered by interviewees, and which tapped into descriptions and interpretations relevant to the research question. Pilot interview schedules were revised as these interviews showed the questions to be too generic, generating responses that were interesting but not sufficiently focused on dialogue. In an observation, the researcher seeks to have minimal

influence on the activity; interviews provide an opportunity to focus on relevant themes so the interview schedule drew on prior reading and research. The literature review suggested, for example, it was important to explore what the interviewee considered dialogue to mean, as it is used in very many different ways, and to explore the extent to which students saw themselves active agents in the various forms of dialogue in the ITE programme. It was intended to be an opportunity to ask questions of participants about key moments from the observed sessions but also to provide insights into aspects of the programme that had not been observed, as questions allowed participants to comment on the programme as a whole. Planned observations could only be snapshots of a much wider experience for each participant, and interviews were intended to tap into this wider experience.

The quality of interview data depends in part on the nature of the relationship between researcher and interviewee. The interviews were to follow observations, so participants had become used to my presence and a degree of trust building would have started. They were planned to open with easy, general questions to help to establish sufficient rapport for the interviewees to feel comfortable and relaxed, whilst also using techniques to maintain neutrality (Brenner, 2006): a challenging balance to sustain. Although the questions were not of a particularly personal nature, they were designed to access insights into participants' private thoughts, things they might not have shared with other people. As a researcher, a good rapport was needed to probe some of this knowledge, whilst being respectful of the participants' right to maintain privacy (Sanger, 1996). Where interviewees were uncomfortable, or could not find words to express a view completely, they might self-protect by presenting a particular view or position which is not the complete truth (Marshall and Rossman, 2016). The researcher does likewise, presenting a version of him or herself, which is judged to be a best fit with that particular situation, so self-awareness is essential (Rubin and Rubin, 2012). A limitation of interviews as a data collection method is that the quality is so dependent on the skills of the researcher, so I kept a journal of the process, documenting my reflection on any shortfalls or issues in the interviews, including my own errors, to consider in later analysis.

Documents

In their review of research into classroom dialogue, Howe and Abedin (2013) stated: "Our definition of dialogue is not restricted to talk, since verbal exchanges can be textual. Equally, it is not restricted to exchanges that occur face-to-face or in quick succession: addressed individuals can reply from a distance or after an interval. Thus, ICT-mediated interaction, such as via email, is potentially included" (p. 327). Flick (2007) suggested that qualitative research uses different ways to document and analyse the social world and one of these ways is "by analyzing documents… or similar traces of experiences or interactions" (p. x). These quotations explain well the value of documents to supplement my main data sources of observations and interviews, providing a window onto the thoughts and priorities of

participants, written independently of the researcher. Labaree (2002) described documentary data as often representing "a filtered 'truth'" (p.98); in my project, observation and interviews had the potential to be filtered for the researcher due to my physical presence. Documents related to the programme were created by the participants independently of my research role; whilst they might have been filtered for other purposes, such filters could be taken into consideration. Documents used as evidence fell into two categories: resources of the staff team and documents recorded by students. I selected documents in which lecturers communicated their intentions (e.g., planning documents) and guidance (e.g., good practice resources) and students communicated their view of their progress on the programme (e.g., individual learning plans) and their reflections on practice (e.g., journals and case studies). This combination was intended to provide data concerning the students' development and the nature of the language used as the course progressed. Documentary data can also familiarise the researcher with terminology, resources or activities within the programme which helps understand observed activities and build rapport in interviews (Rubin and Rubin, 2012). In contrast with the time constraints which limited the interviews, documentary data could be downloaded from the Virtual Learning Environment (VLE) and examined without disrupting the participants, allowing analysis at a later date without risk of the documents deteriorating or disappearing. It was an important feature of this methodological approach to access the voices of different participants in the ITE programme, and documentary records represented a different means of expressing oneself to others. Documents can give insight into the background and values of an individual or organisation (Marshall and Rossman, 2016); they might be expressed differently in a prepared document as to when they are spoken in a moment in time in an interview or observation situation. Lecturer-created documents were audited as part of performance management by senior managers; student journals and learning plans were assessed for the purposes of the qualification, so documents had to be read with such influencing factors in mind. However, they provided a different lens to examine related activities in different ways.

In addition to these more formal documents, students communicated with their mentors and lecturers through email and with each other through a social media application. I did not access these interactions as they were more personal and I believed that these particular forms of dialogue, whilst significant to all participants, should be respected as private and not included in data collection. Similarly, a decision was made not to observe students during the coffee breaks in the taught sessions. Participants made reference to these additional forms of dialogue during the observed sessions and in the interviews, and I considered this to be sufficient for the project, accessing their views on the nature and value of such dialogue without imposing on the safety and privacy they experienced in these interactions.

4.1.4 Data Collection – Actual

Data collection broadly followed the plan set out in Tables 1 and 2, although there were some changes, mainly due to the smaller number of students on the programme and subsequent changes to the timetabling. There were also changes to the programme's VLE which led to a delay in access to online programme resources. The overall data collected is shown in Table 3, with further detail in Appendix I.

Table 3

Overall Data Collection in Numbers

Method	Semester	Participant Group(s)	Number
Classroom observations	1	Students/lecturers	8
Mentor observations	1	Student/mentor	1
Student interviews	1	Students	7
Lecturer interviews	1	Lecturers	3
Classroom observations	2	Students/lecturers	9
Mentor observations	2	Student/mentor	3
Student interviews	2	Students	9
Lecturer interviews	2	Lecturers	3
Mentor interviews	2	Mentors	6
Course related records	1/2	Lecturers/mentors/ students	11 student record sets 3 lecturer resource sets

Just before the start of Semester 1, given the number of students on the full-time, pre-service programme, the ITE course team decided to combine the first module pre-service classroom sessions with those of the part-time (in-service) student group. The part-time group were also starting the

PGCE/Cert Ed programme, but as a two-year course, and were employed in teaching roles rather than on placements. Some had been teaching for a few years, some had only recently started and some were moving between roles in education. In Semester 1, the two groups combined for one day per week, and the pre-service, full-time students then had a second taught module later in the week. In Semester 2 the groups separated to study different modules. I made the decision to include both groups in the research study: to have limited it to the pre-service group would have halved the number of sessions that could be observed. In addition, the number of pre-service students was smaller than usual, so the inclusion of in-service students brought the number of potential participants closer to the anticipated number. It was recognised that this would probably change the dynamic of the cohort, but it potentially offered additional insights and valuable data about the nature of dialogue. In total there were 17 students on the programme: 11 pre-service and 6 in-service. The consent process allowed participants to consent to all, some or none of the research activities. In total 12 students (eight pre-service and four in-service) consented to some or all activities; one opted out of the mentor observations and interviews. Timing of observations during each semester, and interviews of students were able to be carried out broadly in line with the original plan, although the number of observations was increased, to take account of the additional complexity of this combined programme. Seven students were interviewed twice (at the end of each semester); two were interviewed only at the end of Semester 2 and two were not interviewed as we were unable to arrange suitable appointments. Lecturer interviews were reduced from three to two (one interview towards the end of each semester) to accommodate changes to their availability in Semester 2.

The other significant change was the observation of mentor-student meetings as they proved very difficult to arrange. In total, seven mentors agreed to participate (only the 11 whose student mentee had consented to mentor meeting observations were approached), some citing workload as the reason not to participate. Although student reviews with mentors were timetabled in the programme, in reality actual dates were negotiated between the mentor and student, often at short notice and fitted around other commitments, so arranging for me to be present was challenging. I did contact students and mentors at intervals to seek to arrange observations, but fewer were achieved than planned. This affected the timing of the interviews which were to follow observations. Interviews with students followed the classroom observations, but interviews with mentors were postponed until a mentor session had been observed (four mentors), or were carried out without prior observation, rather than abandoned (two mentors). One mentor who had given consent did not respond when it came to arranging an interview.

If it had been possible, interviews would have been longer, with more time for detailed exploration of some of the issues raised. However, a commitment had been made at the start that interviews would

be up to an hour and it was very clear that all participants were under pressure with other demands on their time, so most interviews were around 30 minutes (although ranging from 15 – 52 minutes, depending on individual circumstances). Angrosino (2007), describing ethnographic interviews, discussed ways in which the researcher must adhere to points of etiquette, including awareness of the situation of the person being interviewed. Angrosino referred to participant frailty or distraction, but for my participants, their limited availability and workloads influenced the frequency and duration of the interviews.

Observation and interview records were produced from handwritten field notes, typed up within a few days, initially as an overview of impressions of what was seen and heard. They were as comprehensive as could be recorded at the time, speed of writing and where to focus attention being limiting factors. It was intended that fieldwork would be "initially dictated by the field rather than by the pre-planned theoretical framework" (Douglas, 2011, p. 197). Where consent had been given, audio records were made as a check of the accuracy of field notes. Audio records were used minimally in the classroom sessions as there were students present who were not participating in the research and I considered it more straightforward and more ethical to separate them in the records if field notes were the sole method of recording. However, audio records were used for the interviews and mentor observations, with two exceptions. One interview was carried out by telephone as the mentor was unwell that day; it was not practical, nor did it seem ethical, to audio record this conversation in its unplanned format. In one mentor observation, the mentor and student were meeting in one corner of the classroom with a learner working in another corner, so audio recording was not appropriate. I transcribed sections of the audio records which were identified as significant through early analysis. Transcription allowed the words of participants to be cited accurately and with confidence, particularly where the participant was willing to check them and provide any necessary clarification.

A new platform for student resources and assignment submission was introduced and teething problems with this delayed access to it until the beginning of Semester 2. Records created by lecturers were obtained for the data set where they were relevant to observed classroom sessions, such as the course handbook. I also accessed 11 sets of student materials, including journals and individual progress records. These latter documents were created by the course leader in a template form and acted as an online repository for observations records (by and of the students) and progress reviews. They were shared documents, completed by the students, mentors and tutors, and provided a record of formal, written dialogue between them. These documents were assessed, a feature which was considered when weighing them as authentic representations of student perspectives. The materials spanned the whole programme, so later access did not affect the volume available, only the timing of their addition to the data set. Initially the documentary records were intended as a verification check

on observation and interview data. However, their nature meant that I reassessed their use as they provided additional insights into the perspectives of different participants on dialogue, expressed more formally and with opportunity for consideration and reflection. They were therefore repurposed and analysed as a separate source of data.

One further variation related to participant checking of interview transcripts. This was planned to start at an early stage, but the data analysis process changed slightly with a decision made to transcribe only sections of the interviews. An overview of each interview was typed up within a week of the event and those sections to be transcribed were then identified through first stage analysis over a period of approximately eight weeks, selecting sections where a key word or theme appeared to me to be significant. For this reason, transcripts were made available to participants later in the process than first anticipated.

4.2 Data Analysis

4.2.1 Data analysis: The framework

The analytical framework drew on my own background knowledge and experience in the field and on theories and frameworks that I had reviewed in the literature, which appeared to be a good fit with the research question and my philosophical approach.

A key consideration was the unit of analysis. In Chapter 2, the complexity of the unit of analysis was explained, whether to use utterances, or broader sections of interaction. Hennessy et al. (2016) developed a methodological framework for analysing classroom dialogue, based on work by Hymes (1972). Hymes had created a taxonomy for ethnographic analysis of communication, explaining that a taxonomy is not an end in itself but serves to identify features and elements relevant to a goal which is situated in the particular discipline. At the micro level are 'Communicative Acts' (CA). These acts are embedded in 'Communicative Events' (CE), which are themselves part of 'Communicative Situations' (CS). CS represent the broader context in which the communication acts and events take place, so the researcher can take account of educational processes and culturally relevant factors which shape conversation. The CE represents a series of turns and enables the researcher to examine the form of the dialogue, such as group or dyad, as well as the purpose or topic around which it is focused. Hennessy et al. suggested that the appropriate level of analysis will depend on the researcher's aims and what is coded will be selected based on what the researcher wants to scrutinise. In their own study, they only coded CA which had dialogic interaction, based on Alexander's principles. They coded by function of the CA, not the role of the speaker, a choice determined by their research aim, facilitated by using CA as the unit of analysis. Awareness of the CS means that researchers have

to acknowledge that when coding, they are not themselves context free, so the inferences about function and intentions and the actions of those observed are likely to be shaped by the CS. In a similar way, Renshaw (2004) argued for a three-tiered framework of analysis which involves the social plane, the individual plane and identity aspects to provide "a heuristic for researchers from different traditions to locate their particular focus on dialogue within a more encompassing field" (p. 12). Even with a focus on one particular plane, acknowledgement of the influence of the others avoids overlooking what could be significant when interpreting data and drawing conclusions. Hennessy (2020) suggested that whichever coding approach is used, it follows from a conceptual framework in which a position is taken on the most appropriate unit of analysis and inevitably influences what is included and excluded for analysis and consequent conclusions.

Lefstein et al. (2015) expressed concerns with the utterance as a unit of analysis, because to take an individual talk move out of its embedded sequence is in conflict with the co-constructed nature of discourse, as the characteristics of the context in which the utterance is made help to understand that utterance. But any chosen unit could be limiting: some factors or potentially relevant elements, even apparently far removed, could impact on the verbal exchange. They argued that the researcher must select a unit of analysis which is not only appropriate to their research purposes but "is well-suited to the intrinsic qualities of the object of enquiry" (p. 882). Mercer (2008) highlighted a further complicating aspect of dialogue in the way it relates to time, both historically and dynamically. Howe (2010) referred to this in a study of peer dialogue, one of her conclusions being that "although differing opinions must be productively resolved if progress is to occur, resolution does not always happen at the time differences are expressed" (p. 43). Dialogic classroom talk can be "messy" (Arend and Sunnen, 2015), sometimes with resolution of miscommunication beyond the observed moment, because dialogue is not bounded in the time and location in which it is observed. Kershner (2020) commented that dialogue develops outside of the classroom as well as within it, so "social relationships inevitably cut across the formal and informal boundaries of educational activities and they are affected by participant' interpersonal histories, motivations, emotions and understandings of self and others. This web of social connections and personal experiences presents practical, methodological and conceptual challenges for research" (p. 199). This illustrates the risks of drawing conclusions about the effectiveness of dialogue if it is only observed in the moment and analysed through single utterances.

Choosing to take a sociocultural approach meant it was important to consider the individual biographies of the subjects, as well as of the wider context and other participants. Where possible, it was intended that this would be examined using the AT and CoP lenses: however, in a small case study, there needs to be caution about the extent to which this can be explained in the recorded findings

due to issues around identifiability of participants. Nevertheless, social, cultural and historical aspects of the cohort reflected those general characteristics of teachers in FE: mature, some with children, some educated outside the UK, bringing years of experience of education and employment prior to starting their ITE learning programme, and attending a local institution to enable them to continue their life in family, social and work communities alongside the new communities of the ITE cohort and their placement department.

With my research question focused on dialogue and the conceptual framework drawn from socio-cultural approaches, the main unit of analysis was planned to be clustered CAs at the micro-level, alongside attention to situational factors of the CE which help to interpret what was observed. Interviews and documents allowed me to consider the CE and CS. Clusters of CAs formed episodes which are described in the findings and discussion chapters, short sections of dialogue which include exchanges of varying lengths, from simple paired utterances to multiple utterances in which two or more participants were engaged in a single event. Many of the studies cited in earlier chapters used Conversation Analysis (CA) or Discourse Analysis (DA) approaches to data analysis. These employ varied methods or strategies, for example, Lefstein et al (2015) used lag sequential Discourse Analysis to support their investigation around processes of continuity and change over time and differences in pedagogic activities. This version of Discourse Analysis allowed them to reach different understandings of meanings which would not have been revealed through simple frequency counts, showing relationship and meaning rather than simply the form of dialogue. But Conversation Analysis and Discourse Analysis rely on being able to systematically analyse dialogue for which transcripts of naturally occurring conversation are required. As I did not have audio records to transcribe for the main classroom observations, nor for all the mentor observations, such systematic analysis was not an option form me. A simpler, thematic approach, drawing on component and concepts frameworks based on related literature, was more pragmatic.

The research question does not contain a hypothesis to be tested but required teasing out of themes suggested through the data, with wider literature and research forming a background from which significance was judged. At this early stage, significance was indicated by what resonated with my own professional experience, with what I had noted in existing empirical research and theory, and with possible gaps in the literature. When typing up the field notes, areas of potential interest were recorded in the form of memo comments and these were used during the analysis to focus on certain parts of the data set. Where audio records had been made, sections identified as of particular interest were transcribed alongside field notes. Analytic notes on the field notes were made on a spreadsheet which gradually built as a summary and set of memos across the full data set (an example of this is shown at Appendix J). Searches for key words used by participants and themes that were potentially

significant were done manually, with repeated reading of notes and transcripts and listening to audio records. This began alongside data collection so that there was an increasing focus for ongoing observations (what to include in the field notes) and for shaping questions in the second set of interviews. I then worked through three stages of data analysis, described below.

An early assumption that I made was that dialogue *does* have value in these programmes (although I had to remain open to this being challenged through participant responses in the interviews), but that the specific features which are effective for different participants in this ITE context had yet to be identified and evaluated. I was therefore seeking evidence of positive responses to dialogue in observations, and reports of dialogue of value to participants in interviews or documents. In their meta study of research into classroom dialogue, Howe and Abedin (2013) identified that the majority of studies published were descriptive rather than explanatory, with the emphasis on features rather than benefits. However, in order to explore the benefits (what was effective for participants), it seemed necessary first to identify the features of dialogue in this setting. Case study's strength lies in producing knowledge and experience in context (Helgevold, 2016) so the first stage of analysis was descriptive, noticing, ensuring that data relating to dialogue was logged and coded because, as other studies have noted (for example, Howe et al., 2019; Hennessy et al., 2016), there is a vast number of possible variables within classroom environments. The lack of shared vocabulary and ways of conceptualising dialogue makes drawing comprehensive conclusions from qualitative data difficult. Calcagni and Lago's (2018) framework, discussed in Chapter 2, set out domains and components in dialogic educational approaches. This framework helps to map key components, separating different aspects for clearer understanding of each feature. For this first stage of analysis, I operationalised their framework by using codes for each of the components (a full list of codes is shown in Table 4). By identifying specific components within the data, it would be possible to see patterns emerge or to notice features which resonated with or challenged findings in other studies. Their framework provided tools to "serve as entry points to understand current literature" (p. 10) by using a shared vocabulary for describing classroom talk to compare different approaches. My intention was to apply the framework to my data so that key aspects of the use of dialogue could be identified and examined.

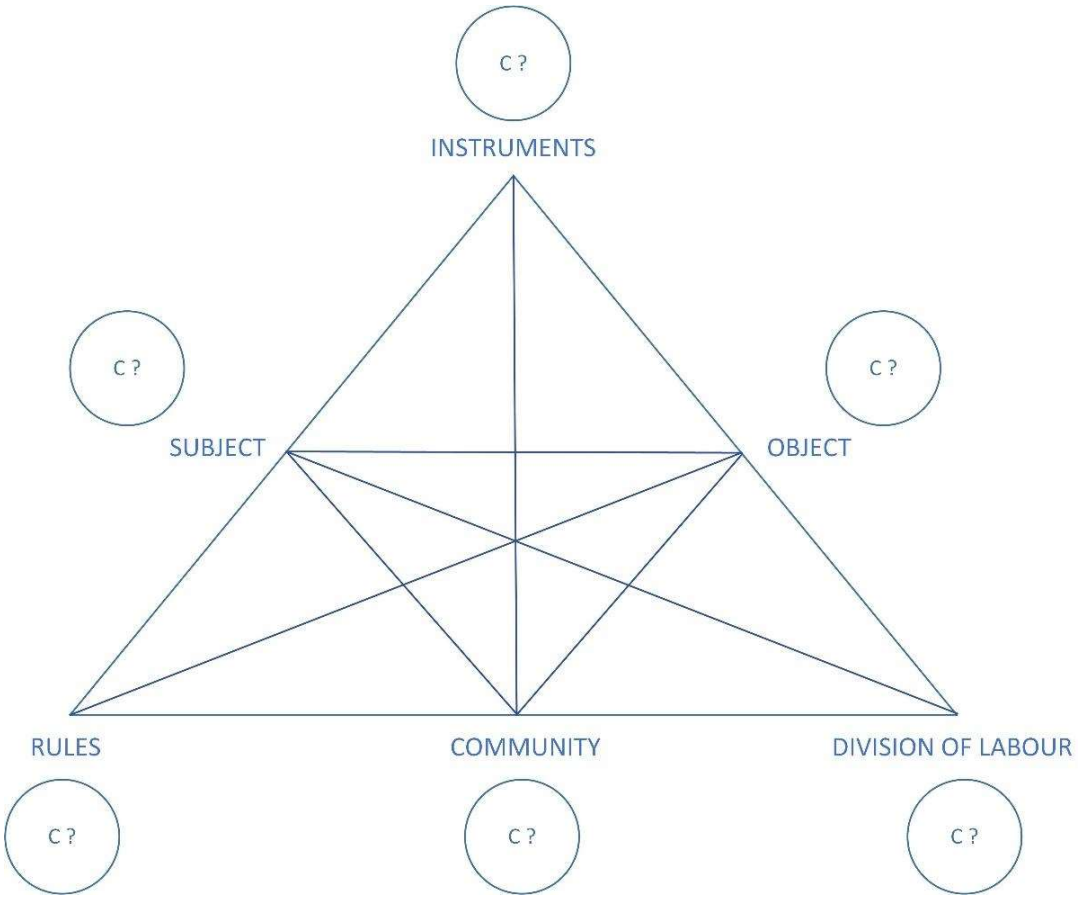
This first part of the framework allowed me to assign descriptive labels to data in a form of inventory (Saldaña, 2016), but my aim was to start to make sense of the data from the perspective of different participants, to facilitate the extraction and labelling of "'big picture' ideas suggested by the data" (Saldaña, 2016, p. 97). This second stage of analysis involved applying theoretical lenses, using concepts from the two theoretical approaches: CoP and AT. These approaches have been used extensively in the literature around dialogue and some of the concepts appeared to have potential for exploring what was important to different participants in the ITE programme. I used codes which

represented key concepts from these theoretical approaches (Table 4) to start to connect and make sense of individual elements within the data sets. The codes I used were subject (and subject identity), object, instruments, rules, community and participation in community, division of labour and identity in the division of labour and a code for wellbeing, as this had been mentioned in many of the interviews.

The intention of the framework was to bring together descriptive coding and theoretical coding to illuminate the data and to identify features which participants found to be effective, identified through observed behaviours (classroom and mentor observations) or expressed views (interviews and documentary data). It was anticipated that there would be some links between particular descriptive and conceptual features, perhaps best illustrated diagrammatically. In Figure 3, the activity system is presented in the second-generation model of activity theory and alongside each theoretical concept code is an indication ('C?') that the data might indicate a related code or codes from the components/domains framework. For example, data coded as referring to an instrument acted on by the subject might also be regularly coded as a component, such as a talk tool. Likewise, where the activity system object was coded in an episode, it might also be coded descriptively as a learning goal.

Figure 3

Possible links between components/domains and theoretical concepts



4.2.2 Data analysis: The process

I carried out two phases of coding using the field notes and transcripts. They were divided into sections and each section coded using domains and components. Then the notes/transcripts were revisited and coded again using the theoretical codes. These were formatted in two ways: as a spreadsheet (Figures 4 and 5) and as handwritten notes (Figures 6, 7 and 8), the two forms being developed in parallel.

The spreadsheet was a concise log of each set of data, identifying key words and the codes for each section. The sections added to the spreadsheet were those which I had identified as being of potential significance, based on my own experience and the wider reading. This was the first formal selection of data ready for coding, although it is acknowledged that selection was already taking place even in the decisions as to what to record in the field notes during classroom observations, inevitably shaped by my insider status. With interviews, audio records allowed all conversation that had taken place to be considered and re-considered multiple times for relevant and significance, but in the observations, these decisions were started contemporaneously with data collection and continued as different parts of the observation were selected for further analysis. As data collection and analysis continued, the field notes became more focused on the emerging topics of interest. The spreadsheet example shown in Appendix J is explained below:

Figure 4

Layout of spreadsheet to summarise data by episodes and codes

1	2	3	4	5	6	7
Session	Comments	Evidence	Keywords	Codes - domains and compon-ents	Codes - AT, COP, Well-being	Links to theory/ theoretical constructs

Column 1 locates the data source, such as observation 3 or interview 2.

Column 2 shows comments which indicate what drew my attention to this section, initially to have been included in the field notes during the observation, then as data to be coded because it was potentially of significance.

Column 3 is cut and pasted from the typed-up field notes or interview transcripts in that section, with line numbers for easy location (pseudonyms used throughout).

Column 4 shows keywords located in that section, either used or implied in the data, for early identification of possibly significant aspects of the data.

Columns 5 and 6 show the codes for each of the sections. These were initially handwritten onto the field notes during the first stages of analysis, then recorded on the spreadsheet, one column of the descriptive codes and one of the theoretical codes. A summary of the codes is set out in Table 4.

Table 4

Codes used for analysis, by domain/component and theoretical concept

Codes used for data analysis based on Calcagni & Lago, 2018.	
Domain/component name	Code
Domain: teaching-learning	
Types of talk	TL1
Relationships	TL2
Knowledge building	TL3
Domain: instruments	
Learning goals	I1
Tasks	I2
Talk tools	I3
Arrangements of participants	I4
Assessment	I5
Domain: assumptions	
Beliefs	A1
Aims	A2
Norms	A3
Codes based on concepts from Activity Theory, Community of Practice and own experience.	
Concept	Code
Object	O
Instrument or tool	T
Subject	S
Subject identity	Si
Rules	R
Community	C
Participation in community	Cp
Division of labour	D
Identity in division of labour	Di
Wellbeing	W

Column 7 was added to identify any related theory or literature that connected specifically with that section, either to confirm or in addition to those indicated by codes.

In the example spreadsheet excerpt (Figure 5), section 3F was included from the field notes because it seemed interesting that the lecturer had invited a student to respond to a peer's question, as the student had lengthy experience in that specialism, which the lecturer did not. Section 3H was included

in the spreadsheet as the lecturer was modelling something the students could do with their learners (engaging in dialogue about assessment).

Figure 5

Example of populated spreadsheet section

Session	Comments	Evidence	Keywords	Codes - domains and compon-ents	Codes - AT, COP, Well-being	Links to theory/ theoretical constructs
3F	Alice asks these two to give feedback to peer, to confirm if he is right. The one who does is normally quite quiet: the invitation and devolved authority drew him in.	63-69 X gave another example, explaining that he has several learners who are on the autistic spectrum and what he does to support a particular learner as well as the other learners in that group. Alice: "Ian, Karen: Does that sound about right?" Ian said yes and Karen agreed, commenting "structure is key…I use quite a lot of visuals as well as the text, just to back it up." X chipped in with another comment. Ian: "I make the work more personal to them" giving an example of a game he had adapted, with pieces personal to them and differentiated questions suited to the individual learner.	Devolved authority in dialogue	TL2 TL3 I3	T D Di	
3H	Discussion of the assessment and how it works/could be	85 - 109 (embedded in lengthy sections)	modelling by lecturer			

	done, was a model of what the lecturer was encouraging them to do in their practice and to explain their presentation.					

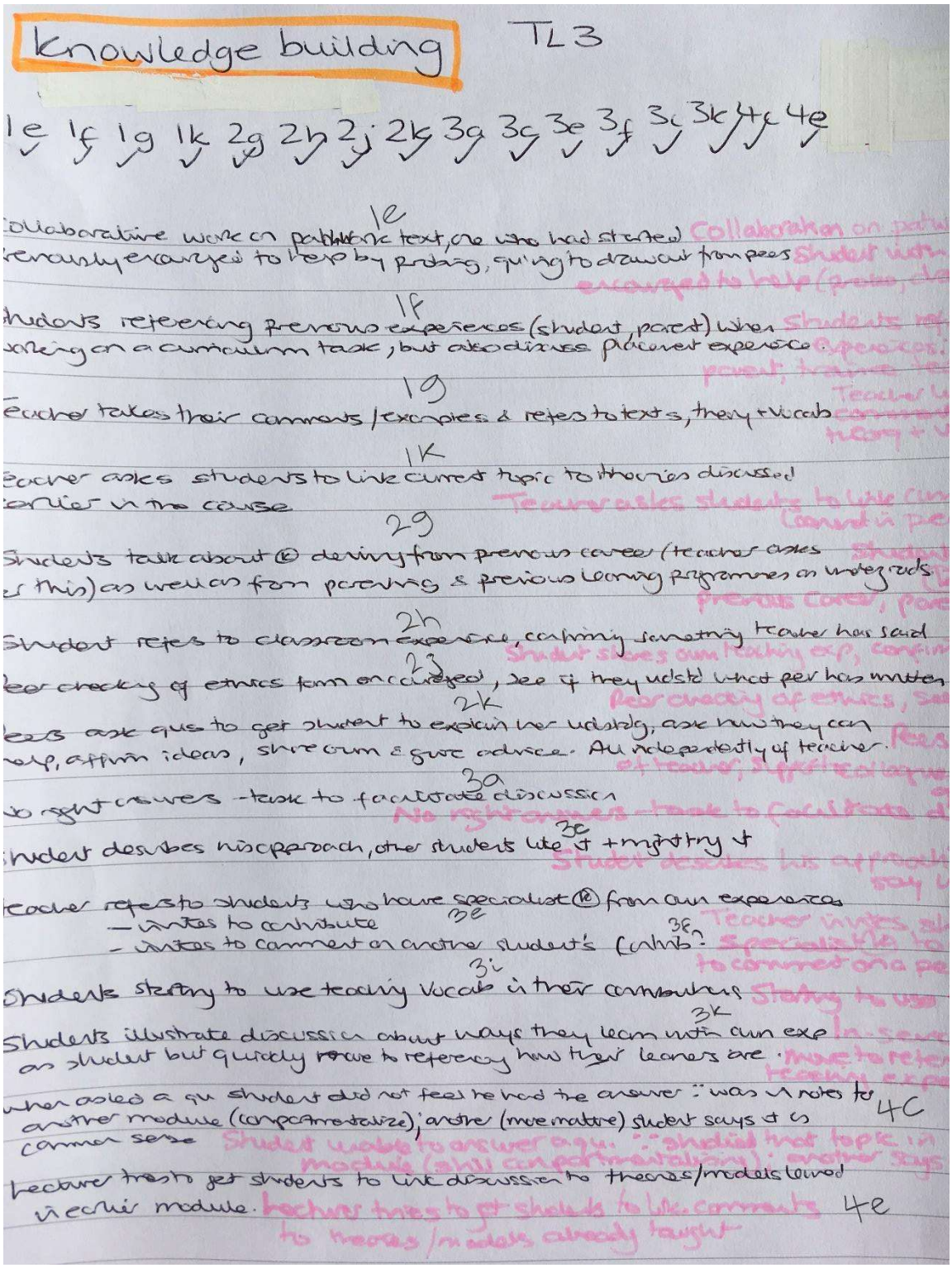
The spreadsheet allowed me to get an overview of the two sets of codes alongside key words, highlighting how different parts of the conceptual framework contributed to overall interpretation of the data. For example, in 3F the comments and key words had drawn attention to the way the lecturer devolved authority to the student, based on the student's prior experience. The student responded to this, engaging in dialogue more extensively than I had observed previously. Codes linked to this section were: TL2 (relationships), TL3 (knowledge building), I3 (talk tools), T (instrument/tool), D (division of labour) and Di (identity in the division of labour). This episode illustrated the link between how participants viewed the way roles were undertaken in the ITE classroom, and that the invitation from the lecturer, combined with the student's prior experience, enabled the student to support peers in building knowledge.

In the second example, section 3H, the field notes were included as the episode showed the lecturer discussing upcoming assessment with students, identifying that the discussion they were having was one they could have with their own learners, therefore modelling teaching practice and clarifying the expectations of their upcoming presentation. However, when the episode was re-examined for coding, none of the codes appeared to be a good fit, so this section was not used for further analysis.

Once this was completed, I reformatted the data by code, rather than by section. I used the code as a heading and listed by hand all the sections where it had been identified in each data set. For example, Figure 6 shows one of the handwritten summaries for the second semester classroom observations. All occurrences of TL3 (knowledge building) were listed and a key sentence (on which the coding was based) was written out, so the example shown in the spreadsheet above (section 3F) can be seen in this summary. A memo comment was written alongside in a different colour either to link, or to explain, or to summarise.

Figure 6

Handwritten summary of all locations of code TL3 (knowledge building) in the second semester classroom observation data



The comments were reduced to shorter statements and presented as an overview of the coded data for each data set: examples are shown in Figures 7 and 8.

Figure 7

Overview of data from second semester classroom observations by domains and component codes

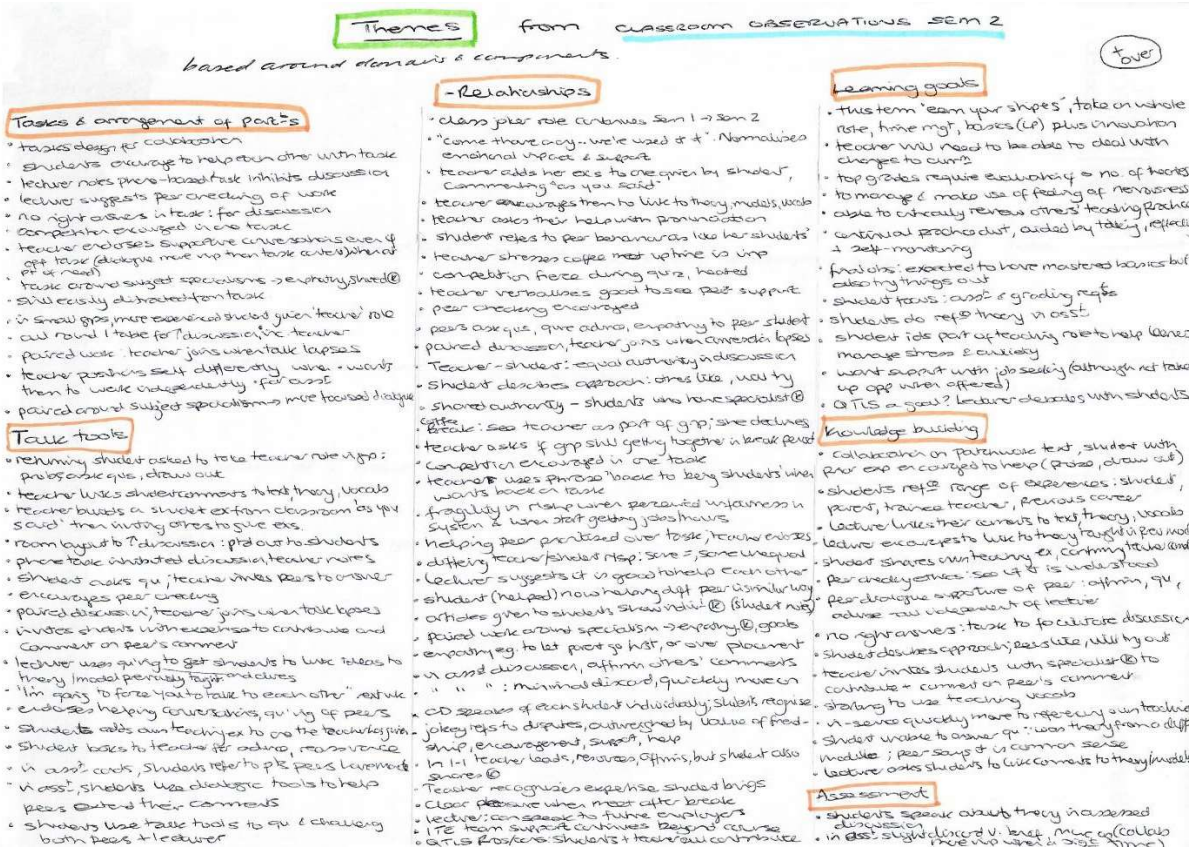
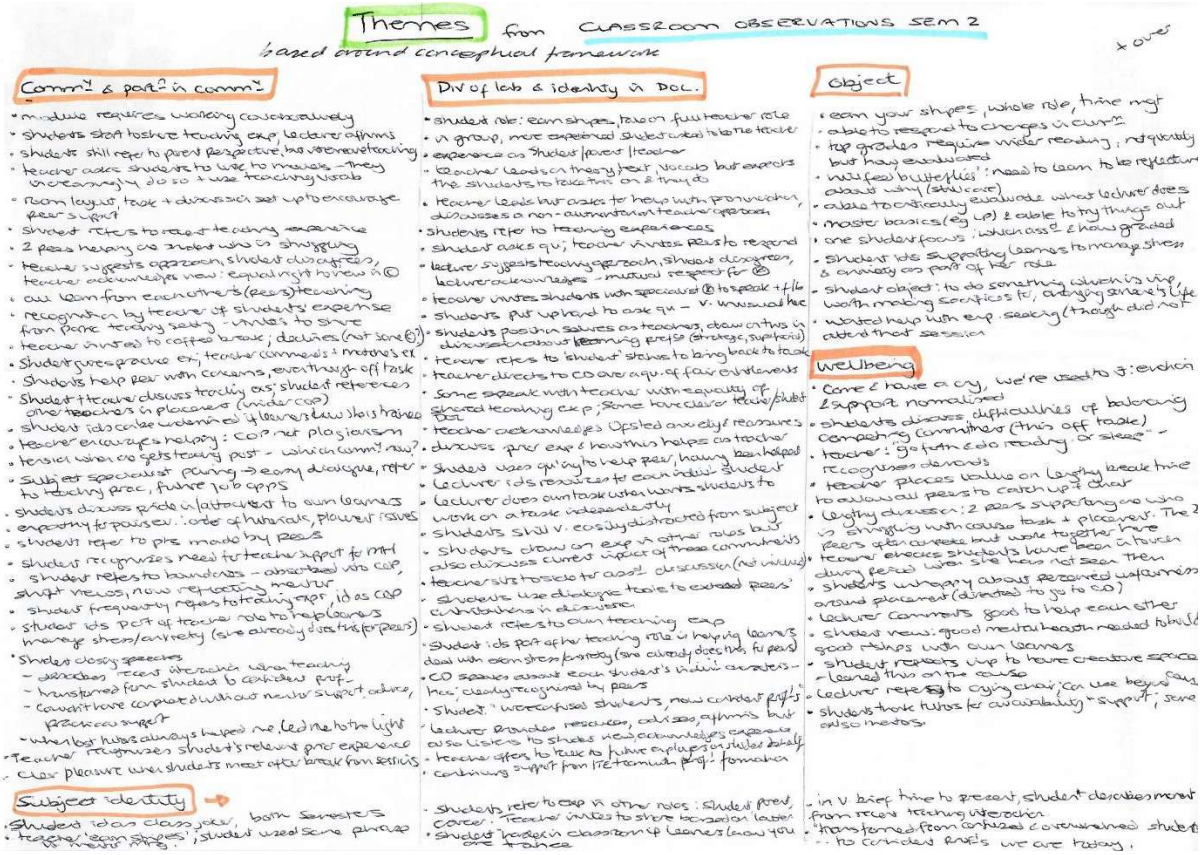


Figure 8

Overview of data from second semester classroom observations by conceptual (AT/CoP) codes



This visual representation was helpful in seeing the volume of data for each code, and starting to see any repetition, patterns and discrepancies. For example, it could be seen that the talk tool used by the lecturer in the example above was also used by other lecturers when I observed them. However, whilst that example showed a division of labour in which a student was treated as the expert, a later section of the same observation had students putting their hands up to ask a question. The list of data under the division of labour code therefore showed differences as well as similarities even within single observed sessions.

This process was repeated for all the methods and participant groups and the formatted analysis was used as the basis for discussion papers which were made available to supervisors and discussed in supervisory meetings, both to establish the accuracy of the coding and to explore the implications of the early analysis.

There were frequently overlaps of codes within single episodes: every potential code was noted so that the analysis was robust in terms of all possible interpretations. Links between certain domains/components and theoretical concepts helped to check that nothing of significance was overlooked. For example, the component 'relationships' was coded frequently in the interview data: this fed into the concepts of community and identity and to some extent the division of labour, each of which were coded in the second analysis. Data coded as 'aims' and 'learning goals' linked to the 'object' of the activity system. Whilst many authors opt for a single theoretical framework, there were aspects of the two theoretical approaches that promised useful interpretation in this study. Hennessy et al. (2016) suggested that the level on which the researcher focuses will depend on their research question and aims and that there is value in using "a wide lens that can open and close its field" (p. 19). Whilst AT in its second generation form acknowledges the wider context of an activity system, CoP looks closely at the features of that community. Wenger (1998) suggested that there are three dimensions of practice which make it the coherent source of a community: mutual engagement, a joint enterprise and a shared repertoire which includes tools, stories and discourses. When the conceptual framework was applied, these dimensions were anticipated to be evident as aspects of the community context of the activity system. Third generation AT considers interacting activity systems, which could represent the different communities within the ITE programme. If the activity is operationalised as learning to be a teacher, the student does this in the ITE activity system and the placement activity system, two communities each with a slightly different version of their joint enterprise, of the way individuals were engaged with the community and the repertoires that they share, but having broadly shared objects. Student, mentor and lecturer operate in both systems, but with different roles, responsibilities and identities in each, and the lenses of AT and CoP allowed both systems to be examined.

The third stage of analysis therefore brought together the descriptive coding and the conceptual coding to examine areas of interest. The use of observations of different configurations of participants, alongside interviews with the three main participant groups, gave insights into the views of the system from three different perspectives. It enabled exploration of areas of conflict in perspective or interpretation which is an important aspect of AT, that contradiction drives development. I initially coded wellbeing separately, but it was increasingly incorporated into the concept of object as it was a conscious or unconscious outcome of the programme, and a feature of much of the dialogue.

Application of the various concepts was not straightforward. The activity system was primarily that of the cohort in their teacher education programme, but it was perhaps best conceived as two overlapping systems of ITE class and placement. One of the considerations when using the concept of subject from AT was who was conceptualised as the subject in the analysis. Whilst different participant

perspectives were explored, the subject in each activity system was the student. The identity of the subject in the activity was significant (who was speaking/acting) but development of a teacher identity was a possible object of the activity. Likewise, dialogue was a tool within the activity system, used by participants to achieve the objects of the programme. But mastery of dialogue was itself an object of the activity. I was tentative in allocating particular codes to specific observed moments or interviewee comments, often using multiple codes in relation to a single comment or moment rather than overly narrow the potential findings.

It was anticipated from the start that coding might evolve during the process of analysis, as the research question required searches for what participants considered to be effective dialogue and the codes might not, in their earliest phase, fully capture this. When identifying the codes to be used, two of the theoretical codes, Subject (S) and Division of Labour (D) were broken down to take account of aspects of the CoP as well as of AT. Data could be coded as S or D, if it represented something related to Subject or Division of Labour but I added Si and Di to represent data that specifically indicated features of the identity of the Subject, or the identity of any participant which was specific to their position in the Division of Labour. Identity related to how this was presented in the observation or interview and could be specific to the teacher education role of that individual or to their wider sense of identity (such as parent) in the different communities to which they were referring. As the observations notes and transcripts were read and re-read, it appeared that how participants perceived the identity of the subject was important in the nature of the dialogue, so it was important that the codes applied allowed this to be fully investigated. It was evident that some revision and clarification of the conceptual framework, as applied in the ITE context, might be necessary and it was anticipated that this would be interweaved with ongoing data analysis, described further in Chapter 5.

4.3 Ethical Considerations and Researcher Role

Within the methodological design there were a number of ethical issues to be considered and managed. Primarily these concerned the participants: recruitment, informed consent, data collection and storage. However, an ethical approach also extends to respect for the quality of the research, that it is carried out in a manner that results in reliable, trustworthy data and that conclusions can be justified from the data. This research was carried out in accordance with the British Educational Research Association (BERA) Ethical Guidelines for Educational Research (2018b) and was approved by the University of East Anglia's Research Ethics Committee (Education): this was referenced in letters to potential participants, an example of which is shown at Appendix A. The use of techniques and approaches to establish validity and reliability is not simply to establish a technically acceptable

process, but represents a commitment to a way of conducting research that shows respect for participants, for wider practice and for academic communities. Overarching principles of beneficence, equity and respect for the rights of all involved needed to be operationalised in the processes and methods of the whole study. BERA published a statement concerning close-to-practice research: "Close-to-practice research focusses on issues defined by practitioners as relevant to their practice, and involves collaboration between people whose main expertise is research, practice, or both." (BERA, 2018a). The statement set out clear guidelines regarding how such research, often small scale and with a narrow focus, should nevertheless draw on sound theoretical and methodological approaches, and on practitioner voices, if it is to generate knowledge that is useful not only to the researcher, but to the wider public. This guiding principle underpinned my approach to ethics and to validity and reliability.

Case study research necessitates close connections with those studied and the researcher needs to ensure that participants are properly protected. There is a personal involvement with participants which means that the values of the researcher are particularly significant and the researcher's voice will be present alongside that of the participants (Clough and Nutbrown, 2012). In this research I was an insider: insiderness tends to be defined by the biography of the researcher which provides the researcher with a "lived familiarity with the group being researched" (Griffith, 1998, p. 362). Labaree (2002) defined it as "a result of the person's biographical profile, political activities, research agenda and the relationship with the community under study" (p. 102). Research undertaken as part of a professional doctorate usually means the researcher already has "an attachment to, or involvement with, the institutions or social groups in, or on, which their investigation is based" (Sikes and Potts, 2008, p.3). As a member of the teacher education team, I had a history and a level of access that would not be the same for an outsider researcher. However, a researcher is rarely categorically inside or outside their research: Mercer (2007) suggested that the level of insiderness varies according to a number of factors (of the researcher, site and participants), so conceptualised insider research as a continuum. The insider can bring to the research process the rapport that comes from prior contact with participants, or from the familiarity of shared experience. They are more likely to have knowledge of the tacit rules of interaction within the group so might find it easier to blend in, avoiding the culture shock that an outsider might experience. Their insider status can provide access to people, systems and resources that might otherwise be limited. However, each advantage can have corresponding limitations: previous contact could have resulted in a negative perception of the researcher, knowledge of rules and the ability to blend in could mean that significant matters are not given sufficient attention, or assumptions made about the meaning of certain actions or interactions. Mercer (2007) described this as "like wielding a double-edged sword" (p. 7) and the researcher needs

to be attentive to and responsive to the potential for their insider position to obscure rather than illuminate. Reflexivity allows the researcher to critically reflect on their "assumptions, worldview, biases, theoretical orientation, and relationship to the study that may affect the investigation" (Merriam and Tisdell, 2016, p. 257). It is a strategy recommended by Cumming-Potvin (2013) to enhance the rigour of the research process as researcher impact on the process is acknowledged; for example, the perception of role, power or authority may not be the same between researcher and those being studied. Reflexivity also supports the researcher in identifying the impact of the participants and research setting on their own views and practice: the influencing process is not one-directional. McNess et al. (2016) argued that, from a sociological perspective, we are all both insiders and outsiders due to the multiplicity of factors within our make-up and our membership of some groups but not others. The context is also multi-faceted: the boundaries between inside and outside are moveable, visibly when these boundaries are fixed and recognised, but at other times almost invisible. A reflexive approach can enable the researcher to take the advantages of the outsider position, whilst still being an insider in many respects. It is necessary to alternate between the immersion of the insider and the stepping back of the outsider, taking time to withdraw to a place where – alone or with a trusted other – a critical appraisal of the process and relationships can be undertaken. This dualistic position is complex but, as Labaree (2002) suggested, offers a unique contribution to building understanding.

Mercer (2007) identified three particular dilemmas associated with insider research. Two of these (informant bias and interview reciprocity) are addressed in the later section on validity and reliability. The third is research ethics and the dilemma is one which Labaree (2002) also addressed. For the insider researcher, what to tell participants is a very significant part of the ethical approach, from first entering the setting (how much information to give about the research project) to its conclusion (how much to report of the findings). Where the researcher is an insider, the start of the data collection can be less clear than if an outsider was coming in to the setting to carry out research. For interviews, whilst ethical issues can affect any interview, where the researcher is an insider, these can become more significant. In this setting, one of the benefits for students of becoming involved with the research was an opportunity to reflect on the programme and to learn about research processes which could help with their own research. But reflecting about their experiences, with someone identified as part of the course team, they could reveal more than they intended. Researchers need to consider whether the participant could feel that their privacy has been violated; even if they did give consent and did speak those words, they could regret them later. Kvale (2007) set out guidelines for the ethical conduct of interviews which include matters of consent and confidentiality, with emphasis on the integrity of the interviewer, and I sought to implement these in the study. Rubin and Rubin (2012)

stressed that being respectful of the interviewee involves the need to be very self-aware. This means awareness of your personality, of your role, of cultural and power issues that could influence the conversation and managing the way your express yourself and your emotions: honesty is important, but restraint might be needed to protect the participant. Awareness of self also helps to avoid the temptation to pressure the interviewee into saying more than they really want to say. Confidentiality of data and the anonymity of participants is already difficult to protect in case study and this may be compounded when the researcher is an insider. Finally, when the insider completes the research project, they might not actually leave the setting, so disengagement from participants is only partial, and relationships with participants will inevitably have changed.

There was therefore a need to build safeguards into the management of the research process. The process of applying to the Ethics Committee and preparing Participant Information Sheets and Consent forms (example at Appendix A) prompted identification of potential risks and a statement of processes and planned actions to manage these risks. This included being aware of the disturbance that can be generated as a result of the researcher's interaction with the setting (Smyth and Holian, 2008) and development of contingency plans. Permission for the research was requested from the Head of Higher Education (the department where ITE is based) before any staff or students were approached. Clarification of the researcher role was included in the information given to all potential participants, with tailored information provided to allow them to make informed decisions about consent to participate at different levels, including their right to withdraw. This information was intended to help potential participants identify possible costs and benefits for them individually, but not all contingencies, costs and benefits could be anticipated. For example, on one occasion the interview room had been double booked and interviewees were re-directed. This was not problematic for most interviewees but caused anxiety for one: an unanticipated cost. The documents and verbal information were intended to ensure as much transparency as possible about the role of the researcher and of the participants in the process; it was hoped that participants would be collaborators on the project, from informed consent through to checking of transcripts and involvement in the validation of themes. This was not to the extent described by Angrosino and Rosenberg (2011) where the researcher is an agent of the community. The collaborative element of my research was more limited but was consistent with an interpretive approach, where the views and meanings of different participants were to be sought and woven together, and efforts made to enhance the faithful interpretation of those views and meanings. Research can be a dialogue between the researcher and the study community; the researcher may be in a position of power within the setting but participants have the power to choose not to be involved, so participation has to be negotiated on the basis of respect and goodwill. The interpretation of data and the decisions on what

would be reported were intended to be collaborative, but this turned out to be more limited largely due to the time constraints for participants, many of whom opted not to engage with the checking processes offered.

It was essential that participants could trust how their data was used, not only in terms of consent and checking of accuracy, but the security of that information and anonymity as far as possible in any published work. A commitment was made at the start that data storage would be in compliance with the General Data Protection Regulations 2018 and the University of East Anglia's Research Data Management Policy (2017) and Guidelines on Good Practice in Research (2017 version at the point of ethics application, but the 2019 updated guidelines applied once issued). Pseudonyms were used, and the cohort year was not disclosed, but it was acknowledged from the start that a case study approach, with a relatively small number of participants and an insider researcher, risked participants being identifiable. Elliott (1990) argued that in case study, "anonymity is never more than a partial protection" (p. 53). As well as being written into the participant information documents and consent forms, this was discussed with potential participants and they were invited to choose their own pseudonym if they wanted to do so. Grinyer (2002) suggested that the likelihood of participants wishing to be acknowledged in a research publication is underestimated and we should not assume that anonymity should be the default position. This was considered in relation to my research project, but with a single case study cohort, identification of any participant who wanted their contribution acknowledged risked the identification of others who did not. The decision was made therefore to assign pseudonyms to every participant and to anonymise the institution.

It was also important that data collected in the field was an accurate reflection of the observed behaviours and interactions and of the views expressed by each participant in the interviews. For that reason, the plan was that interviews would be recorded using audio recording and field notes. Observations would be recorded primarily by field notes, but where possible supplemented by audio recording to allow verification of field notes and provide transparency of data. Increasingly, video recording is used to record research observations, especially if the intention is to use Discourse or Conversation Analysis, as the linguistic features can be meticulously documented then analysed through frequent revisiting of the transcribed records. However, Lefstein, Vedder-Wiess and Segal noted: "Video seems to appeal more to researchers and teacher educators than to practicing teachers" (2020, p. 362). I was concerned that participants, particularly students and mentors, might be uncomfortable with the use of video recording so the plan was to use field notes and audio recording, audio being less intrusive but still adding to the transparency of data. Nevertheless, it was possible that awareness of any recording device could impact on what participants felt able to say, resulting in interaction that was not truly representative. Relying solely on the researcher's field notes

risked the accuracy and to some extent the validity of the data collected, but I judged that this was a risk that needed to be taken for the participants to be genuinely comfortable about their involvement. My professional role involves regular observation of students' practice, with notetaking the main source of recording, so I considered that I had a strong skill set for this. A commitment was made that audio recording would not be used for classroom observations if some students chose not to participate in the research or did not give consent to audio recording and that it would only be used for interviews and mentor meeting observations where each participant has given consent. A small proportion of the cohort did not give written consent to audio recording so it was not used in the classroom observations, except in observations of small group work where all participants in that group had given prior consent. In these situations, verbal consent was sought again before the audio recorder was switched on. It is recognised that not having audio or video records, and relying mainly on field notes meant that interactions could be missed that, with hindsight, would have been significant, but this was an ethical and pragmatic decision that had to be made. Sanger (1996) described how particular moments are selected: "There are a 1001 stories in any half-hour in the classroom and this is just one that the net drags in. It depends, researchers would say, on who your audience is. And what kind of research you are doing. Sometimes these amount to the same thing." (p. 4). Wherever possible, justification for inclusion or exclusion of aspects of what was observed has been set out so that conclusions can be drawn about the significance of the moments I selected.

The position of the researcher as an insider raised one other further ethical consideration as it was likely that I would have contact with participants outside of the formally agreed data collection occasions, including being in a shared office, where conversation between staff about the programme naturally takes place, and students call in for advice or support. It was stated from the beginning that only data gathered through the agreed methods would be included in the study; no data would be recorded from any other contact with any participant. In interviews and the observed sessions, participants had some control over what they allowed me to hear: whilst this did not remove the risk of sharing information that they wanted to remain confidential, it was much reduced by my negotiated presence as a researcher. When at my desk in the office, inadvertently overheard conversation was a much higher risk and it was made clear that this would not be included in the data. However, even where conversation is not documented, exposure to other contacts with participants inevitably influences the researcher's perspective.

In preparing to carry out the research and to manage insider issues, I took account of specific considerations for different participant groups:

- Students: it was agreed that I would not teach on the programme nor mark assignments for the academic year so my role in relation to the students was solely researcher. It was acknowledged that students could nevertheless have concerns about the impact of the research on their studies so it was important to assure them, in person and in the documents provided to them, of their right not to participate and that this would have no repercussions for their support and outcomes. In practice there were challenges in terms of staffing levels and at intervals I had to reiterate that I could not teach or assess the research cohort. It was hoped that observations would include the whole cohort, but if consent was not given by any member of the group, steps were in place to ensure that data relating to that individual was not included in the analysis. It was anticipated that later observations might focus on a small group of learners within the cohort, as initial data analysis identified possible themes and areas for closer investigation.

- ITE lecturers: there was an open culture in the team, with all members involved in research and/or learning projects, which provided a very supportive context for my research. It was agreed that dates, times and duration of classroom observations and interviews would be negotiated with the lecturers in advance, taking account of workload and timetables. Those arrangements would be confirmed again on the day, sensitive to changes in timetabling or the situation of individual participants. One significant factor for lecturers was the way classroom observations could be perceived. It was necessary to exercise sensitivity around observations: there was no intention to judge teaching practice and, although this was set out in the participant information, it was essential that it was restated during the various phases. This was reinforced through the opportunity for lecturers to comment on the field notes and any conclusions arising from those observations, and to provide their own perspective in the interviews.

- Mentors: most of the mentors taught in the research institution, although a few were in other settings. Some already knew me; others had not had any previous contact. As with the lecturers, it was important that dates for observations and/or interviews could be negotiated on an individual basis, taking account of the ITE timetable and other demands on mentors' time. The issue of sensitivity around perceived judgements of teaching practice was also pertinent to mentors, although it was likely that the mentoring relationship rather than teaching practice could be perceived as under scrutiny. There was no intention to judge their practice; this was written into participant information documents and emphasised verbally to mentors during the study.

It was acknowledged that observations, especially carried out by an 'insider' could present dilemmas if something observed was not ethical or consistent with the programme methods and best practice. My lofty intentions not to judge were tested during observations of classroom teaching on modules which I had previously led, or seeing the different approaches taken by different mentors. The discipline of writing up field notes with observations and comments after each data collection occasion was useful in this respect. Similarly, a chronology of data collection activities (a brief outline of activities, with reflection on each occasion) helped to ensure that my responses and reactions were documented and available for scrutiny, to see any developments and for discussion with supervisors.

Confidentiality of observation data was important: observations made in the researcher role could not be reported back to the course leader in the way that observations made in a teaching role would have been. Similarly with the interviews, where a student or mentor raised something that could have been useful to the teaching team, or made a comment which showed misunderstanding of an aspect of the programme, it was frustrating not to be able to report it to the team, but simply to record it as research data. In these matters, discussions with the research supervisors were essential to maintain the integrity of the research role, an opportunity to acknowledge and set aside, as far as possible, personal and professional responses to what had been observed, heard or read during data collection. The reflexive process was enhanced by structured reflection with different individuals (supervisors, peers, colleagues and participants) in different ways and for different aspects of the project.

Stenhouse (1980) stated: "behind all descriptive case study… there lies another and extremely serious problem: access to data in terms of the rights of the subjects who are studied" (p. 5). It was intended that participant checking of transcribed data would form part of the data analysis process, to establish the accuracy and validity of data, and to enhance transparency with participants. In an interpretive framework, meanings are negotiated, so the transcript, as a representation of the interview, is a shared record, drawing "interviewer and interviewee closer in the mutuality of the event" (Sanger, 1996, p. 70). Participants were invited to say whether they would like to check data transcripts, and some opted not to do this, especially the lecturers and mentors. This was mainly down to the time commitment that they believed this would involve, and their decision not to do so was respected. Participants were also asked to indicate whether they would like to receive feedback on the overall results of the study and most opted to receive this. Knowing that participants would be reading what was written about them provided a continuing check on the way I recorded data and presented the findings, seeking to be faithful to the participants' words, reflecting them as accurately and fairly as possible.

4.4 Validity and Reliability, Researcher Bias and Assumptions

Validity and reliability are areas for concern at multiple stages of the research process: data collection, analysis, drawing conclusions and presenting the findings, applying both to methodological matters and the interpretive process. The general considerations around validity and reliability within a case study approach were discussed earlier but here I set out particular applications in this study. From the start of the research, when the topic and research question are selected, a view is being taken: the researcher stands somewhere in relation to the research and I was mindful of this throughout the process. Lincoln and Guba (1985) suggest that in a naturalistic paradigm the characteristics of a study which allow it to be judged as 'trustworthy' are different to those criteria which would be used to judge whether or not a scientific study is sound. So, terms such as 'valid' and 'reliable', if used at all, are likely to be understood in a different way. In the naturalistic paradigm, realities are constructed and multiple. As researcher, I was interacting with the object of study and the whole process is value-bound, so traditional conceptions of validity and reliability as ways of judging an inquiry are not a good fit. They suggest that there are criteria which can be substituted for validity (internal and external), reliability and objectivity which allow the reader to weigh the trustworthiness of the inquiry. In addition, forms of validity are enmeshed with aspects of ethics, because how we come to know what we know has a moral dimension (Lincoln et al., 2011), so consideration of validity and reliability overlaps with some of the ethical issues of an insider case study approach. These include respect for the participants in the study, in terms of interactions and the privacy of their data, as well as informed consent throughout. There were occasions where the ethical considerations meant that certain data was not recorded, and whilst this might limit the data set in some ways, it was essential for trustworthiness to be established with participants as well as with the wider audience (Marshall and Rossman, 2016). Clough and Nutbrown (2012) refer to successful studies being "persuasive" (p.39) in that the relationships between the research questions and what is examined in the field is clearly articulated, with ethical questions considered at every stage.

Valid data is data which measures what is intended to be measured. Elliott (1990) described how validity will be determined by what the researcher believes most accurately represents social reality and what is most relevant will be influenced by beliefs about what constitutes knowledge. This study aimed to examine the features of effective dialogue in a teacher education setting and a naturalistic approach was selected to generate data which is credible. The way the research was carried out enhanced the likelihood that the findings will be considered credible by those who constructed the realities studied (Lincoln and Guba, 1985), matching the reality of participants but also of the researcher and future readers. Stake (1995) set out ways in which validity may be supported, such as the representation of adequate raw data and clear descriptions of methods; he concluded: "de-

emphasize the idea that validity is based on what every observer sees, on simple replication; emphasize whether or not the reported happenings could have or could not have been seen" (p. 87). In order to achieve this match between research and the real world, I selected three methods of accessing data (observation, interviews and examining documents), involving each of the three groups of participants in a specific teacher education programme. Triangulation of methods was intended to help to establish the validity of the data: accessing it in three ways allowed checking for accuracy. For example, the interviews were a useful opportunity to review my descriptions of observed activities and for participants to report on activities which were not observed but which they considered of significance. Triangulation was not about verifying data as this is not possible in a naturalistic inquiry (the same person, for example, could answer an identical question differently on a different day due to innumerable factors) but it provided multiple lenses within the study. Triangulation of time and place was also used to ensure that the phenomenon studied (dialogue) was examined at different points in time, between different sets of participants and in different settings. Observations were organised to include every lecturer and every participating student on several occasions. Interviews with students and lecturers were carried out twice where possible and were audio recorded so that the records were accurate and complete. The second interviews were intended to validate what had been collected by other methods and to review consistency of responses, as well as an opportunity to clarify or add to earlier comments. This was not simply to truthfully document what was seen, heard or read, but to acknowledge that participants might not feel that what was seen or heard or read on a single occasion or in one context fully reflected their perspective. Member checking of transcribed audio records was offered to participants, to check accuracy and allow additional clarification. Participants were also invited to comment on the key words or themes that had been identified alongside the sections of transcripts, to offer a view on this analysis and to clarify or challenge if they did not feel it was a fair interpretation. Reflecting later on the member checking process, I was slightly naïve about the desire of participants to be involved in this (many opting out) as well as to the potential risks. Two participants expressed embarrassment at the transcribed record of their hesitation ("Err") or their phrasing. We discussed this and their discomfort was eased as I highlighted both my own hesitations which were similarly recorded, and the value of hesitating to give depth of thought to an answer. But I had not considered this sufficiently in my planning to have had a contingency if they had wanted the data removed or had withdrawn from the study, as was their right. A genuinely collaborative approach helps to address the potential subjectivity of conclusions, giving opportunity for alternative interpretations or conclusions to be drawn. It was my intention to present a truthful representation of dialogue in this programme, ensuring that participant voices were not distorted and that my voice – whether summarising participant contributions, shaping the interviews,

or selecting episodes to include – was acknowledged. But the potential risks of member checking (Hallett, 2013; Carlson, 2010) should have been considered more fully and the participants appropriately prepared for this.

Reliability is a very complex concept in a naturalistic case study. One conceptualisation of reliability suggests the ability to replicate the study, for example, with a different researcher who draws the same conclusions. But in this case study, where I am an insider, data would almost certainly not be the same with a different researcher. The very features which made insider case study research an appropriate method for this research question within this research paradigm are the features which would compromise reliability in terms of replication. Merriam & Tisdell (2016) suggested that in naturalistic research, reliability is better understood in terms of whether the reported findings are consistent with the data collected, rather than a claim of replicability. Strategies for credibility or validity also enhance reliability: triangulation, participant checking and reflexivity all helped to establish the data and conclusions as consistent and trustworthy. They also recommend keeping records which provide a clear audit trail and I did this in the form of a chronology of data collection, descriptions of the data collection process alongside a running record of personal responses and reflections. These formed the basis of discussion with supervisors and supplemented the case record.

In an earlier section I examined how case study been criticised in terms of whether findings can be generalised (external validity). Naturalistic inquiry is distinct from other paradigms in that it does not seek to or claim to control the conditions of the study, so the study cannot be reproduced. The equivalent that Lincoln and Guba (1985) suggested was transferability, facilitated by the researcher providing contextual detail so that the reader can make judgements about the similarity to their known contexts. My intention was to describe the setting, the participants, the process and the researcher in such a way that readers can decide on the applicability of findings. The emphasis is on the user's decision, rather than the researcher setting out a claim for this. In case study and an interpretive framework, there is no easy consensus on terms that are used or on measures of key phenomena, such as the term dialogue. I have therefore set out as clearly as possible the key terms being used and the progression from initial research question through to methodological design and use of multiple data collection methods to describe and evaluate dialogue. Continual reflexivity was important (Clough and Nutbrown, 2012), to be self-conscious from the construction of the research question, through the translation of this question into field questions and the continuing examination of one's response to ethical questions which arise. In setting out how and why the methodology used here has been selected, and the practical considerations which resulted in variations from the original plan, I have attempted transparency which allows readers in practice and research to weigh the relevance of the data and the findings to their knowledge of these phenomena in their own context.

A linked consideration is the extent to which the sample (the case) is representative of the wider population. The cohort was selected as a convenience sample and its representativeness of teacher education programmes across the country, let alone internationally, would be hard to establish. Burn and Mutton (2015), writing about making claims of causality within schools-based ITE commented: "the inevitable variety between schools makes claims difficult to assert even at programme level, while the range of programmes within particular contexts makes system-wide claims more complex still" (p.228). This is equally true for ITE in the Lifelong Learning sector where provision within and between programmes varies enormously. Detail about the context as well as about the phenomenon being studied is intended to allow readers to draw their own conclusions about the relevance of claims. Stake (1995) described providing the reader with "vicarious experience" (p. 38) from the case study, which adds to their socially constructed knowledge. Within this single case, the various participants represented a range within the cohort, to maximise variation as far as possible in a small study. There were three groups of participants, and each individual in each group was invited to participate. As participation was on a voluntary basis, those who consented to be involved might not be representative of the cohort, but the episodes described in the findings and conclusions do not make any claim to represent the whole cohort, and they are accompanied by information which contextualise that contribution. To ensure accessibility, dense descriptions need to be presented to participants and interested others in manner that is readable (Stenhouse, 1980), so only short sections of transcripts are included in this final report. However, I have retained the full data set so that if it is needed, its veracity can be checked.

Within each of these areas of consideration (validity, reliability, generalisation) is an embedded view of objectivity – whether the researcher has established neutrality in their research process. I have taken the view that objectivity or neutrality is not possible in this type of research: data was obtained through interaction with participants and interpreted through lenses shaped by my own biography. This interaction, my position as an insider, and the acknowledgement of multiple constructed realities mean that an objective position is not achievable. Knowledge grows iteratively through alternating data gathering, reflection and analysis and transparency of both process and values is critical to establish trustworthiness. Detailed descriptions and a reflexive approach recorded in narratives and memos are intended to allow the reader to judge the potential impact of the researcher on the process and the findings, with the author clearly located in the text rather than claiming to have no impact. Participants are likely to have been affected by being part of the study and by interactions with me; equally I have been impacted by those interactions. Mercer (2007) suggested that in insider research there are issues of informant bias and interview reciprocity as participants might think they know what the researcher wants to hear, or the researcher may share their own experiences in order to draw out

or affirm an interviewee. This does not mean that the researcher should be any less rigorous, but that transparency, robustness and a systematic approach allow the insider to provide a "clear chain of evidence and ethical practices" (Sikes and Potts, 2008, p. 360). Although researchers need to employ a skill set to carry out systematic and competent research, the key instrument is the researcher. This necessitated careful reflection and reporting of any biases or reactions, as well as acknowledgement of my own biography, having safeguards in terms of the analysis of data, and drawing of tentative, partial and situated conclusions, so that the reader can see how the conclusions flowed from the data.

4.5 Conclusion

Clough and Nutbrown (2012) stated: "Methodology is about making research decisions and understanding (and justifying) *why* we have made those decisions. Our research methodologies are rooted in our own personal values which, in some form, inform our ethical and moral responses to problems and challenges... Our point here is that researchers are rarely distinct from their research topics" (pp. 64 and 65). In earlier chapters I set out why the topic of dialogue, particularly in teacher education, is of such interest to me, and in this chapter, I have sought to explain and justify why I adopted this methodological approach and these research methods to answer the research question. My ontological position and my beliefs about how knowledge about social phenomena can be generated were shaping factors in those decisions, as were my work, study and other life experiences. These have been described and evaluated in terms of the extent that they have might have impacted the research, a reflexive process which was greatly enhanced through critical conversations with peers and supervisors. In Chapter 5 I describe findings from the analysis of each set of data, then in Chapter 6 I discuss themes that I have identified. In the final chapter I also reflect on the research process, including its potential limitations, evaluating the extent to which my intentions and strategies for an ethical, valid and reliable approach were achieved.

Chapter 5 Description of the Findings across the Data Set by Method and Participant Group

In previous chapters, I explained my personal and professional interest in dialogue in education. I have reviewed literature about dialogue, examining its form and function in the classroom, the identity and participation of students and teachers, and its effectiveness as measured by conventional assessment outcomes. I also reviewed theoretical approaches used to analyse dialogue, drawing on Community of Practice (CoP) and Activity Theory (AT), particularly in the context of initial teacher education (ITE), where learners are adults and already have specific disciplinary knowledge and vocabulary. This is particularly relevant when the theoretical approach references the culture and history of subjects and the community as it draws attention to the prior experience that student teachers bring, the complexity of the learning required, the activity system(s), and the expectations, roles and identities of the participants. As explained in Chapter 3, the AT triangle model identifies the way an activity system is located in the practices of a community with its associated rules and roles in the division of labour. In the FE setting, student teachers tend to be older in comparison to students in primary and secondary ITE courses, many having established themselves in prior careers and/or family lives, and selecting an ITE course which allows them to remain local. These characteristics can be relevant both at individual and group level and can be seen in the data. Where possible these characteristics have been identified in the findings and later in the themes, whilst recognising the ethical issues around the extent to which this can be done without compromising participant anonymity in a small case study. Nevertheless, social, cultural and historical aspects of the cohort reflected those general characteristics of teachers in FE and this has been drawn out in the findings. Howe et al. (2019) commented that "many future studies will be required before the optimal patterns of classroom dialogue can be specified in full" (p.39). I wanted to explore classroom dialogue as it was used in ITE settings, and whether participants would reach the same conclusions as researchers as to the 'optimal patterns' of dialogue. The research question therefore took the following form:

What are the features of dialogue which are effective in a teacher education programme: effective from the perspective of the student, the lecturer, and the mentor?

The dialogue included in data collection was based on a broad, everyday use of the term so as to include both productive and nonproductive forms (Howe et al., 2019) and data collected is summarised in Appendix I. In this chapter I describe what I found across the data sets, and in Chapter 6, I examine significant themes which emerged. The findings describe how dialogue was manifested,

its characteristics identified through observations or perceived by participants and expressed in interviews or documents. The analysis made use of a conceptual framework, based on a descriptive domains and components classification of dialogue (Calcagni and Lago, 2018) and AT and CoP. AT and CoP offer explanatory concepts for the activity and the community, and I wanted to apply them to the particular activity of teacher education. All codes created from this framework are listed in Table 4 and shown in **bold** for first use in each section.

I initially reviewed each set of data separately, by method and by participant group, producing a descriptive paper on each to allow the perspective of participants to be heard and explored. Discussions around these reviews with supervisors helped to validate the coding applied and to press for greater clarity about the components and their significance in relation to the research question. In the following sections I summarise these descriptive papers. The decision to present the data in this format corresponded to my research design intention to evaluate the effectiveness of dialogue from the perspective of different participants, using descriptive then theoretical codes. This meant detailed descriptions and some repetition, but illustrated areas of commonality and difference in actions observed and views expressed.

5.1 Observations

5.1.1 Classroom Observations

In the first semester the most frequently coded components from the observations were **relationships** and **knowledge building**, both within the teaching-learning domain. Whilst lecturers generally led the dialogue with students, the relationship and balance of power between the two shifted. On occasions, control was delegated by the lecturer, for example, when Florence invited students to question her as she had questioned them (S1, O7)[1]. On other occasions it was simply adopted by a student, for example, Daniel telling the lecturer to be assertive, when she tentatively asked students to move forward in the classroom (S1, O1). Lecturers regularly shared stories either to start a discussion or in response to a student's story. Student initiation of dialogue was observed occasionally and lecturers also picked up themes from listening in to small group work. For example, when two students were discussing a point, Tasha asked "what's the question over here, lads?", joining their discussion (S1,

[1] An abbreviation is used to reference the location: S1 indicates Semester 1, O7 indicates Observation 7 and the particular participant is named by their pseudonym where this is relevant. In later sections, I indicates interview, MO indicates mentor observation and R indicates documentary records. Appendix I provides an overview of the data collection occasions referenced in the study.

O2). This indicated a form of instantiated dialogue (Twiner et al., 2014), which sometimes took classroom conversation in a different direction.

Peer-peer dialogue and support was evident: lecturers encouraged it verbally and by **arrangements of participants**, and highlighted it when it occurred. They used **tasks** which encouraged participation and described the ITE classroom as a safe space ("You don't need to be scared here because we are all doing it together"; S1, O5, Tasha). Students held differing views about whether consensus was expected or whether it was acceptable to reach different conclusions: each perspective was expressed Lecturers appeared to validate the view that much of what was discussed was contested knowledge. In one session, Anna explained why she thought an assessment method met several principles; her peer, Francesca, said the opposite. A third student said in a joking tone "and they were working together!" Francesca explained the justification for her position. The lecturer, Alice, commented: "so there's a good argument for both ways" (S1, O1). The two students who had come to different conclusions were both mature students, with previous careers and teaching in humanities, whereas the third student, who commented on there not being agreement, had come directly from a STEM degree programme, so it is possible that their disciplinary and life experience backgrounds influenced the way they approached this task. These comments were also coded as **beliefs** and **norms**, because views on whether consensus was required could be an assumption about teacher knowledge and practice. Initial coding indicated there were various **types of talk** and different **instruments** for knowledge building and shared meaning, as well as for empathy and support between students.

Relationships closely related to the **knowledge building** component of dialogue: control of knowledge building was related to the power, relationships and identity of participants. Student contributions appeared to be welcomed, but at times the lecturer had the final say. In one small group activity, Chloe commented that she would not finalise her own task responses until the lecturer had gone through their answers (S1, O6) suggesting she felt that the lecturer had the correct answers. Knowledge building took many forms, including responding to student questions and concerns, using contributions referencing the background experiences and expertise of participants, and through transparency of method by lecturers who encouraged students to collaboratively reflect on tasks. **Assumptions** coded during the observations included that all participants had knowledge and all could contribute but also that theory was important and that high grades were an aim (expressed by lecturers and students). **Learning goals** referred to in these sessions included mastery of teaching vocabulary and professionalism, as well as procedural awareness and preparation for the emotional impact of teaching.

Subject identity was indicated in dialogue. Pre-service students frequently deferred to the in-service students, suggesting a hierarchy within the group, and the lecturers sometimes invited specific in-service students to share their experiences. However, all participants had multiple identities and their peripheral status in teaching was sometimes mitigated by experience and knowledge they brought as parents, governors or school support staff.

The concepts of **community** and of **participation** were evident as participation and peer support were encouraged by the lecturers through dialogue and tasks. In-service students sometimes dominated discussions, perhaps because they saw themselves and were viewed by peers as less peripheral in the teaching community. Even when the lecturer encouraged every student to participate verbally, students allowed a peer to be silent, such as stepping in when Lucas faltered (S1, O3). Observations indicated that the teacher was regarded as the expert in the community, established through storytelling, validation of student responses to questions and use of specialist vocabulary. However, each lecturer expressed willingness to be challenged and they invited participation by all students. Positive responses to such participation indicated that these invitations were genuine rather than rhetorical, such as a good-natured dialogue when Daniel questioned the lecturer's allocation of alternate male/female seating in the classroom on one occasion. Tasha said this was random, but he responded that it was "almost impossible to be random. You must have been thinking it" (S1, O2). Lecturers used transparency of teaching methods, explaining what they were doing and why, suggesting that all were part of the teaching community. This linked closely with **division of labour**, as the teacher largely directed the activities, room layout and dialogue, but expertise of students was recognised, whether from teaching or from other roles and identities (e.g., Chloe sharing insight into Ofsted as parent of a child in an inspected school; S1, O6). When student stories were matched by a story from the lecturer, this could be interpreted as the recognition of shared experience, the lecturer using such dialogue to validate student contributions. **Rules** of the classroom were a mix of explicit ground rules agreed together and tacit rules and expectations. Mutual respect was shown in dialogue, but there were different views on whether consensus was an aim. An AT perspective is useful here as it emphasises the significance of culture and history: some students' background was in subject disciplines where convergence rather than divergence was the norm, such as in solving a maths equation; for others this was not the case. One student who taught a STEM subject challenged a suggested teaching approach, questioning how it fits a subject where there are right and wrong answers (S1, O2, Daniel); this frustration was something I had encountered when teaching previous cohorts. There is not necessarily a shared epistemology within the classroom and such episodes illustrated how some students, in particular those who were teaching in humanities and social

sciences, were comfortable with being able to express different views and not reach a shared conclusion whilst others found this difficult.

It was not easy to establish the **object** of the activity system and even more so with students in two different activity systems. Roth (2004) suggests the object is an image perceived by the subject, rather than an entity, which means it might not be easily visible to the researcher. In observed sessions, lecturers identified short-term goals, such as good grades in an assignment, or longer-term goals such as preparation for the professional role. In conversation with peers, a student differentiated between what they needed to focus on in class and what was for break time conversation; she suggested deferring dialogue not related to the learning task until break time (S1, O3, Grace). In one episode, Alice took feedback from group discussions, but shifted the dialogue towards her objective, which was to apply learning theory, bringing theoretical terms into the dialogue to build the teaching discourse. Using her experience, her authority and the rules of the setting she was able to move from what students had said to reach that point (S1, O3). This appeared to be effective for the lecturer in achieving her objective, and for the students, who heard their own words linked to theory. Tasha took comments that students brought from their different experiences and integrated them into the discourse for the teaching community (S1, O5), moving them from a discourse with which they were familiar, to the teaching discourse which they were developing. This form of dialogue developed further during the second semester.

One possible object of the activity system that I had identified from literature and my own teaching experience was **wellbeing**, so I coded evidence of this in the data, although there was less than I anticipated. Lecturers showed interest in student wellbeing by asking about their placement and advising them about the need for self-care throughout their career. Peers were supportive of each other in classroom dialogue which included life outside the course. In one session, a small group discussion around a case study moved into talking about their emotional responses to it; two students were very engaged while a third withdrew until the conversation had moved back to procedural matters, so there appeared to be differences in the extent to which such dialogue was effective for different students (S1, O4).

In the second semester, **relationships** continued to be coded frequently. On their own initiative and encouraged or directed by lecturers, students worked collaboratively, both for task achievement and for mutual support. In many of the observations, students were off task, discussing challenges of the programme including difficult placements, with peers as empathetic and resourceful problem solvers; lecturers encouraged this, often affirming this peer support. Peer relationships were occasionally strained: in one observation, a competitive task became very heated, and there was tension in

dialogue concerning perceived inequities such as entitlements in different placements, or gaining paid teaching hours, where the lecturing team was appealed to with regard to what was fair (S2, O4). Lecturer support was embedded in observed dialogue, but also referred to explicitly: lecturers mentioned the "crying chair" where previous students had come to offload during an emotionally challenging year.

Another aspect of relationship was the perception of power. Lecturers continued to take the lead in classroom sessions, but regularly deferred to students to share their views, experience and knowledge, to take the 'teacher' role in group work, or to challenge a lecturer view. Alice asked students who worked with SEND learners to advise a peer on this topic during discussion (S2, O3). But in the same observation, students put up their hands to ask questions, a more traditional student/lecturer interaction which was unusual for a group confident to discuss their experience and challenge the lecturer. Alice was invited by students to "come with us" for their coffee break, following very animated classroom discussion, as if break time was an extension of this conversation. However, she declined, saying she wanted to do some marking (S2, O3), which was accepted by the students.

These adult students came with considerable experience and lecturers encouraged them to reference their life experiences in dialogue in order to **build knowledge**. Lecturers made links between the students' comments and theory, models and teaching vocabulary, encouraging students to do this for themselves, and students' dialogue increasingly referenced theory, models and vocabulary learned in the classroom or from placement. In Semester 2, students frequently interweaved teaching practice stories and lecturers often matched with their own examples or invited others to share examples. When lecturers gave an example, students increasingly matched with one of their own (for example, Lucas, S2, O2). When Ian mentioned a teaching approach he had tried, peers commented they liked this and some said they would try it themselves (S2, O3). Alice explained that the task she set did not have right answers, it was to encourage dialogue and she validated student knowledge demonstrated in the resulting discussion. When a student challenged Alice's suggested approach to a classroom issue the student had encountered, Alice agreed that the approach the student had taken was probably more appropriate (S2, O3). Such dialogue indicated that knowledge was not simply absorbed from the expert lecturer but built through dialogue involving a range of participants, a shared **belief** and **norm.** The **types of talk** and **talk tools** supported this partnership approach, as did the **tasks** and the **arrangement of participants**. Students were encouraged to help one another, Tasha, commenting that to do so is not plagiarism but working as "a community of practice" (S2, O5). Alice joined a pair when she noticed their conversation had lapsed, posing a question and engaging in the resulting discussion (S2, O3). Students were often in small groups around tables, although in one session Florence put all tables together and had the whole group seated around this central table, herself

included, explaining this was so they could all discuss the topic together. She reinforced the value of classroom talk when she commented that in the following week's session: "I'm going to force you to talk to each other" (S2, O4), going on to explain its value for reflection, challenge and learning.

Learning goals and **aims** observed in this semester focused on teaching practice, lecturers suggesting that students should have sufficiently mastered the basics to be able to be innovative in their classroom. Goals discussed included being able to manage time and to adapt to curriculum changes. Being able to apply educational theory, and achieving a good grade, was also mentioned and was the focus of a student's questions during one session (S2, O5, Daniel).

In this semester, there appeared to be more evidence of students identifying with a teaching **community of practice**. In one task, students were paired according to their teaching subject specialism and the resulting dialogue focused on the challenges and work opportunities for teaching in that community (S2, O5). Students often drew on stories from their teaching experience, from a teacher perspective, rather than student or parent, including speaking of their pride in and attachment to their learners and noting their own transition from student to "confident professionals" (S2, O7, Francesca). Grace referred to what she had learned from other teachers in her placement; the community she had become part of extended beyond the ITE staff and her individual mentor (S2, O4). Another student, in an assessed discussion, talked about needing to set boundaries (S2, O6, Lucas): a very different view to one he had expressed earlier in the course, but which reproduced advice I had observed being given to him by his mentor. Students were clearly taking on the practices of mentors and other teaching staff and spoke confidently of themselves as part of these communities. When asked a question by a student, lecturers often redirected this towards the student's peers and on one occasion the lecturer asked students for help with pronunciation of a word (S2, O2, Florence). When Tasha invited a student to be the teacher in his small group, she explained this as meaning he should question, probe and draw out from the group (S2, O1). Tasha commented that this was the term where the students would take on and prove themselves in the full teaching role (S2, O1), and they were given opportunities to use their teaching skills with peers as well as with their own learners. In an assessed discussion at the end of one module, students made use of dialogic tools they had learned, using different types of questioning to help peers extend the discussion. There was a brief moment when a student expressed a different view and challenged a peer, but the discussion quickly moved towards consensus (S2, O6). Students continued to operate as a supportive group, but group bonds seemed to become more fragile as students had different opportunities and experiences in their teaching placements, and as some secured teaching positions. In this semester, **identity** was shifting from student to teacher (S2, O7).

Lecturers established their authority in different ways and to a different extent on different occasions. Florence used the phrase “back to being students” (S2, O4) when students had gone off task and she wanted them to return to the activity, and in a session with Alice, students put their hands up to ask a question (S2, O3). One student mentioned how much harder it is when you are seen as a trainee, rather than just as a teacher (S2, O4, Hannah); their identity was in part established by the way mentors introduced them to learners. The **division of labour** and identities in the ITE classroom varied according to various factors (the session, the individual student, the subject matter) which impacted the nature of the dialogue. For assessment matters, the lecturer was the acknowledged expert but **assessment** was rarely coded in this data.

The **object** which directed the activity was visible when verbalised by participants. One lecturer described this semester as the one where students “earn their stripes” (S2, O1, Tasha), and emphasised the practical skills that they would need. Grace described how she had realised that one of the roles of a teacher was to help her learners to manage their stress and anxiety: this student had come from a career outside education in which she routinely dealt with people in challenging circumstances. She was very supportive of peers within the ITE programme and appeared to be transferring this to her placement (S2, O6). In the end of year conference, Anna referred to a previous work role in which there had not been any sense of value in what she was doing, and commented on her objective to do something which had sufficient value to be worth making sacrifices for, to change another’s life (S2, O7). The object was reflected in the way lecturers sought to build the emotional resilience of students, offering support for their **wellbeing**.

At the end of one session, when Tasha had challenged the students to find books and articles relevant to their next assignment, she dismissed them with “Go forth and do reading. Or sleep.” (S2, O1). Students often discussed and empathised with the challenges of balancing teaching, studying and other commitments. Lecturers facilitated peer support, using **tools** to support dialogue, including the arrangements of participants, or timetabling lengthy breaks so students had time to chat, encouraging them to talk to each other and form continuing supportive networks. Students were appreciative of this, referring to dialogue as emotional support from peers, mentors and lecturers.

5.1.2 Mentor Observations

The **relationship** between mentor and mentee was complex: it varied between different mentor and mentee partnerships and there were multiple aspects to each of these partnerships. Two mentees asked their mentors for teaching hours, suggesting the relationship included a gate-keeping element (MO1; MO3). There was clearly respect for mentors from mentees, for some deriving from relationships which pre-dated the mentoring arrangement. For all it was expressed in the student

asking questions or seeking advice on matters such as lesson plans, resources, professional boundaries with learners, or policies and procedures. Mentors expressed empathy, discussing their own student experience, or sharing how they managed the stressful aspects of teaching. The relationships were usually imbalanced in terms of the length of teaching experience of each participant, but the impact of this on dialogue differed: some mentors were more directive and some more discursive, actively seeking the student's view.

The **learning goals** were not generally explicit, but were implicit in much of the conversation. Chloe explained to her mentor that she saw this PGCE year as her time to "earn my stripes"; her goal was to prove herself in the classroom (MO1). Some expressed a desire to master technology required in the teaching role or wanted to learn about policies and procedures to guide their practice. Mentors spoke about the need to take ownership of a class or classroom, providing advice on how to do this, and to manage the demands of the teaching profession, finding strategies to cope with stress and the emotional aspects of the role. When students referred to academic goals, such as preparing presentations, some mentors were very supportive, Anna's mentor suggesting that Anna share study outcomes from her assignment with the placement teaching team (MO4). Others saw less value in the academic tasks, Margaret expressing her **belief** that teaching practice is where you prepare best for the role (MO2). This related in part to what each considered the **aims** of education, prioritising the practical or the academic. Mentors indicated that **knowledge building** was established through teaching practice, enhanced by dialogue, some demonstrating that they were also willing to learn from their mentee.

Chloe's phrase to "earn my stripes" (MO1) suggested a desire for recognition within the teaching **community of practice**, Chloe viewing her mentor as an expert from whom she could learn ("when I observe you I always think how on earth am I going to pull this off", MO1). Each student sought specific advice from their mentor, and in this sense, dialogue suggested apprenticeship to the master teacher, an expected **division of labour**. In another observation, Jasmine described to her mentor how she intended to approach a lesson. The mentor advised her that this would not work, explaining why, based on her own experience, and suggested an alternative. Jasmine initially defended her approach, but eventually agreed to the mentor's preferred way (MO2). This was not the pattern of all mentor/mentee relationships, with one mentor, Paul, seeking Lucas' view on supporting a particular learner because Lucas had more contact with that learner so was better placed to identify the best strategy (MO3). These could have also had sociocultural influences, with Jasmine teaching in a STEM department and Lucas in an arts department. Historically these departments have had different approaches to the degree of diversity of teaching strategies and the autonomy of the teacher in relation to the curriculum.

One area in which the division of labour was evident was in the allocation of teaching hours. Chloe asked her mentor if she had any other placement teaching hours that she could take up (MO1) and Lucas asked his mentor if there was any progress on whether he would get teaching hours once he qualified, commenting that he didn't "like to pester" (MO3). Mentors were gate-keepers and power undoubtedly sat with them. The observations did not support a simple conception of the student as peripheral, with an inward trajectory towards full participation whilst apprenticed to the mentor: relationships, position and authority within the community were more complex and the trajectories were more varied. The **identity** of the subject was mostly coded in terms of their role in the division of labour, however, in one discussion the student commented how much he appreciated that learners respected him, describing to his mentor how his teaching identity was in part established by how his learners responded to him (MO3).

The **object** of the activity was rarely an explicit topic of dialogue. The mentors' emphasis was on practical aspects of the programme: they provided teaching opportunities, advice and support, and observation and feedback on the student's practice. The student taking ownership of a class, or establishing their classroom presence, or managing the emotions and stresses of teaching, were aspects of the object which were evident in mentor/student dialogue. **Tools** used to realise the object included conversation about specific moments in the classroom that the student had experienced, or the mentor offering examples of their own practice, or discussion around observation feedback (from tutor and mentor) and ways the student could develop.

Attention to the **wellbeing** of the student was evident in each of the observed meetings as it had been in the classroom. Two of the mentors responded to student comments by sharing their own experience of managing the emotional impact of the job (MO1; MO4) or advice on professional boundaries (MO3). One student spoke about how he felt about positive feedback from his learners: this was quite a revealing personal comment and was followed by a slightly awkward pause, before the conversation moved to more practical planning matters (MO3). One observation had no explicit discussion about wellbeing, but a shared interest in gardening became the topic of conversation, briefly distracting from lesson planning (MO2). Anna described how she had been wrestling with an issue and in conversation with her mentor, he suggested this was a discussion Anna could usefully organise with the whole team, as all would benefit. Anna agreed, commenting: "making something into a task can solve the storm in your head" (MO4).

5.2 Interviews

5.2.1 Students

In the first semester student interviews, **relationships** were coded most frequently, as students commented on the value of relationships with peers, lecturers and mentors. Relationships were often described in very equitable terms: students felt that they were challenged to develop their own knowledge and practice, but were also able to challenge each other and teaching staff. The overwhelming sense was of supportive relationships, although competition, dominance of discussion by one student and different types of relationships with sub-groups of the cohort were mentioned. Talking through experiences, whether with peers, lecturers or staff in placement, brought "mental relief" (S1, I6, Jasmine) and a feeling of "belonging" (S1, I7, Anna).

Various **types of talk** and **talk tools** or **instruments** were identified as helpful. Students valued the lecturers' interactive styles, commenting that lecturers actively got students involved in classroom dialogue, either with themselves or with peers. Specific examples of helpful dialogue cited by students included a mentor explaining and dissecting their own lesson in dialogue with the student (S1, I5, Daniel) and a lecturer's storytelling, which drew on a wealth of teaching experience and educational theory (S1, I3, Karen). Peer discussion was seen as an opportunity to challenge one's own views and being able to ask questions of peers was important to students as they recognised the skills and knowledge that their peers brought to the dialogue, from diverse careers, cultures and experiences. One student commented how much she valued "chit chat" in classroom sessions and conversations with the mentor which went beyond teaching matters (S1, I2, Grace). In terms of the **tasks** and **arrangements of participants,** students appreciated small group work as it allowed greater participation in dialogue and better use of non-verbal communication, which a student with English as an additional language felt was helpful (Jasmine, S1, I6).

When asked about their **learning goals** and the **aims** of the programme, many students paused, as if they had not previously articulated this. Two students referred to being the "best" or "as good a teacher" as they could be (S1, I1, Chloe; S1, I2, Grace). In-service students, Karen (S1, I3) and Evie (S1, I4) described achieving professional status (QTLS) as their original objective but that they had gained other, unexpected benefits. Several students had some prior teaching experience and were seeking to become more professional in their practice, such as awareness and practice of inclusion and differentiation (S1, I1, Chloe). Using educational theory to help develop teaching practice and mastering teaching vocabulary were also mentioned, or to have good knowledge of teaching procedures (Jasmine, S1, I6).

Learning from peers was identified as effective for **knowledge building**, through dialogue which encouraged reflection, or to draw on their own experience or from what they had observed of others' teaching (Evie, S1, I4). For some, the disciplinary knowledge and language of teaching was very different to that of their subject specialism, so it was a challenge to develop new ways of expressing themselves. But students' comments suggested that one of the classroom **norms** was equality in the dialogue with the right to challenge peers or the lecturer. Evie stated: "You're meant to challenge it and question it and debate it and discuss it anyway, so it's not wrong... even some of the theory stuff we've been taught" (S1, I4). This was also coded as **rules**, because her perception was that the rules for teaching were open to debate and that classroom dialogue facilitated this debate.

The concepts of **community, participation, division of labour** and **identity** were frequently identified alongside relationships and knowledge building**.** The extent and nature of participation in the community depended in part on how the individual viewed the contextual division of labour and their role in this. Students commented on the diversity within the group and the resulting dialogue in which to learn; all were in this together, so everyone participated and it relieved the sense of being alone. There were also comments about how much they appreciated the way lecturers made themselves available to the students.

In coding these interviews, I considered **division of labour** in terms of whose responsibility it was to teach, to learn, to support and to advise. In a school classroom, even where teachers encourage learner agency, they remain largely in the teaching role and the learner in the learning role. In the ITE classroom, lecturers were teaching new teachers – the lecturers were well qualified and experienced, but with adult student teachers, this division of labour was blurred. Students commented on how they sometimes saw themselves as students, sometimes as teachers. They noticed that lecturers steered dialogue to involve them all and to use the expertise that each brought; also, that they were encouraged to challenge, because it was acceptable to hold a different view as long as this could be justified. Pre-service students commented on how useful it had been when in-service students shared their experience, especially with regard to topics such as behaviour management and individual learner needs. Daniel commented that he could ask these peers how they resolve particular teaching situations (S1, I5) and Grace said she could ask them questions and get copies of their teaching resources (S1, I2). In-service students seemed to have enjoyed sharing their experience without resentment of taking a teaching role in their own learning programme. However, Anna commented that those with more experience may have lost their "spark" (S1, I7) and there were a few comments that in-service students occasionally dominated discussion. This also linked to **subject identity.** Students were both student and teacher; how they were perceived, and how they perceived themselves varied across settings and over time. Students each had a multitude of identities which

were evident in the classroom and in interviews. Some students saw themselves as teachers from the very start; for example, Anna, when asked an interview question about highlights in the classroom, responded with a story about her own teaching. She interpreted the question as directed to her as a teacher rather than about her student experience (S1, I7).

The **object** of the activity was expressed by one student as "showing me the best ways I can become the best teacher I can be" (S1, I1, Chloe), and more than once the term "be effective" was used to describe students' aspirations. Some referred to passing the qualification and getting professional status, but the emphasis of many was on mastering practical teaching skills and knowledge. Whilst the object gives the activity system its identity and direction, it is typically difficult to define (Sannino and Engeström, 2018) and responses to the question about what students were trying to achieve might have been limited as the students did not yet have the tools to describe this, responses indicative of short-term goals that would weave together to form an overall object. **Wellbeing** was mentioned, as was resilience. Students valued conversation beyond the classroom, where they could chat and support each other. Grace summed up a view expressed by several students, that different dialogues were supportive but in different ways: lecturers guided, peers provided humour and mentors talked about things beyond teaching (S1, I2).

In the second semester student interviews, **relationships** were again commented on frequently, mostly positively. One repeating topic was the balanced nature of relationships. Jasmine appreciated the mentor's practical advice, but also identified how she had influenced the mentor's practice (S2, I1); Karen mentioned the reciprocal nature of the relationship she had with her mentor (S2, I9). Daniel commented that the most useful part of the programme was that the mentor, through being present in the student's lessons, was able to give ideas how he could improve (S2, I4). The opportunity to talk over matters professional and personal with mentors and lecturers was highly valued. Chloe commented: "I needed dialogue to just chat it through": although she had largely resolved an issue in her own mind, dialogue enabled her to have confidence about her way forward (S2, I3). Grace identified dialogue with the lecturers as the most valuable. She described a particularly significant conversation with Florence as "chit chat" (S2, I5). The basis of this conversation was common life experiences; the student did not feel she had this same connection with her mentor due to their different age and background, although she did express respect and appreciation for the knowledge of teaching that her mentor shared with her. Another student identified that being located across different placement sites made this dialogue more difficult (S2, I7, Francesca). This reflected sociocultural and historical features of ITE in FE identified by Powell (2020) around the fragmentation of FE (such as teaching hours, locations and timetables) when compared with school-based teaching.

Many students commented on the support from other students, either in person or via WhatsApp. This included conversation about practicalities of the course or life outside the classroom, some students commenting that when you are in the same boat as your peers, you can share that worry. Two students mentioned the value of dialogue in the placement staffroom: for Anna this was personal, when colleagues recognise that you are not OK and ask how you are (S2, I6), whilst for Chloe it was picking up information about learner behaviours (S2, I3).

Students mentioned times when relationships became more competitive, either in classroom tasks (quizzes) or when applying for jobs, but they stated that support from peers overrode any competitive aspects. Daniel suggested that competition tended only to be over things that didn't matter (S2, I4); this was evidenced when a student's challenge to a peer's view was quickly diverted in an assessed discussion (S2, O6), suggesting avoidance of conflict so as to support a peer. Francesca commented that as an adult student, she did not need to be friends with peers to be motivated to attend lectures, but this supportive group enhanced the experience (S2, I7). One student emphasised the responsibility of the student group to self-monitor in classroom dialogue so as not to offend, although found this was not always the case (S2, I5, Grace). Another student described himself as quiet in the classroom, laughing that this was because some of his peers talk a lot (S2, I2, Lucas); the expectation that peers facilitated fair participation in dialogue was not always achieved. Evie commented that she had been shocked at the differences in views across the group and that it had been useful for her learning to become aware of different views: she did not feel she had changed her position as a result, but had benefitted from this dialogue (S2, I8).

Students described how lecturers got to know them as individuals. This shaped both tutorial dialogue (being able to talk through boundaries, future career plans, time and coursework management) and classroom dialogue, where individualised responses and resources were provided to each student. The lecturers' willingness to listen to the student view, to encourage their participation and sharing of experiences continued to be mentioned frequently.

Some comments coded as relationships were also coded as **knowledge building**: many students characterised this as a joint venture between student and lecturer or mentor, rather than a one-way flow from expert to novice. Anna described Tasha's approach, that even when presenting information, it was a conversation, a dialogue not monologue (S2, I6). Karen appreciated how Alice let conversation run, allowing students to share experience and knowledge, which she felt was her main source of learning for one module (S2, I9). Evie commented that this was more possible when they were split in Semester 2, where all students could draw on real teaching experience (S2, I8). Chloe stated that asking questions in class was her responsibility, allowing her to move from partial to full

understanding, but she felt lecturers encouraged this (S2, I3). For Grace, a discussion about curriculum models enabled her to make sense of something she had been noticing in the placement classroom (S2, I5). Lucas stated that just reading textbooks meant information went in and straight out again, but being able to talk it through with peers in class was helpful (S2, I2). Francesca said that she would have liked more discussion of real life scenarios, having particularly appreciated a case study task. Although peer discussions at break times were useful, she believed that discussion which included a lecturer guided them towards best practice (S2, I7).

Comments coded as **types of talk, talk tools**, **tasks** and the **arrangement of participants** developed these points. Dialogue was valued where it enabled students to work through dilemmas. One student characterised the conversations with her mentor as "purposeful," "professional" and "inspiring" (S2, I3, Chloe). Lucas referred to helpful advice from his mentor about boundaries between teacher and learner, but concluded that in the end this was something that he had to work out for himself (S2, I2). For Grace, the tutorial session with the lecturer covered the formal agenda such as module assignments, but then moved into "chit chat" which had greater impact as it focused on matters of particular significance to her priorities (S2, I5). Daniel commented on the value of being able to discuss teaching issues with peers who had teaching experience in the same subject or who faced similar practical issues because this was relevant for him (S2, I4). Some students mentioned the need to become familiar with and use teaching vocabulary, or more generally disciplinary vocabulary associated with the social sciences, rather than the familiar vocabulary of their subject discipline. Two of the students mentioned the dialogue they had with their own learners, one that it was a significant aspect for his learning (S2, I4, Daniel), and another that their feedback was more valued because it was spontaneous and "heartfelt" (S2, I2, Lucas). This was a dimension of dialogue I had not considered, and it was interesting that these comments were made by students who were closer in age to their learners.

Participants' **learning goals** shaped the way knowledge was built, the relationships and the tasks. Some students identified the qualification or professional status as the original driver. For some, practical advice from mentors, peers and lecturers was of the most value, suggesting that mastering their skills in the classroom was their priority. Others spoke of developing confidence, becoming resilient in the role, having strategies to be able to adapt to learner needs and reassurance from others who are experiencing the same thing. Some students mentioned being able to make sense of teaching through a good understanding of models and theories and key vocabulary.

In this final semester, the interviews indicated how students perceived the **community** and their participation in it**.** One student appreciated her mentor's regular advice from her own experience, but

also believed that the mentor had learned from the student's practice (S2, I1, Jasmine). Another commented that the lecturers shone a light on teaching from their wealth of experience, but that the peer group also had a vast skill set, so they learned from each other (S2, I3, Chloe). Many saw discussion of shared life experiences with peers, lecturers or mentors as particularly important. One in-service student mentioned that they did moderate their conversation when they were with pre-service students because they did not want to accentuate their different experience, preferring to talk about things they had in common (S2, I8, Evie). Students also referred to the benefits of being part of staffroom conversations in their placement, for wellbeing (S2, I6, Anna) or to glean information about learners (S2, 13, Chloe).

Again, this linked to **division of labour**, and the participant's **identity**. Students frequently commented on the experience and expertise of the lecturers and mentors and how much they had learned from them, Francesca suggesting lecturers' input was needed so students knew if the conclusions they were drawing in discussions were correct (S2, I7). Likewise, Lucas valued being able to ask questions of peers through WhatsApp but said this was only for the small things; for something important, he would go to the lecturers (S2, I2). But many stated that they had learned much from peers and found expertise more widely distributed in the group than they had anticipated. Student references to their own responsibilities in dialogue in terms of asking questions (Chloe, S2, I3 and Anna, S2, I6) or to self-monitor in discussions (Grace, S2, I5) suggested effective dialogue was a shared responsibility which did not fall into a simple lecturer/student division of labour. Likewise, in terms of the subject identity, some students identified a role in 'teaching' peers or their mentor through sharing skills and knowledge. The students had wide-ranging life experiences and this was significant in how they identified themselves in the activity system and communities of which they were part. Students who were parents juggled competing responsibilities: this was a bonding factor with peers and with lecturers, a significant factor in being able to talk openly and effectively within the programme. Identity was also discipline-related; some students referred to the difficulty of being on a programme which they perceived as social-science based when their identity, language and processes were based in STEM disciplines and discourses.

The most commonly mentioned **tools** were conversations, although I recognise that students knew this was the focus of my research. This included dialogue to resolve a dilemma or talk through an issue, asking questions, seeking and receiving advice on teaching practice or discussing experiences and case studies with peers, or listening to views which challenged the student's perspective. Students particularly appreciated dialogue where they were not rushed, but allowed to work through different views, or where the lecturer followed their lead, linking student conversations to the lesson topic. Grace commented that although it was useful when you had dialogue using key teaching vocabulary,

"teaching dialogue doesn't necessarily have to be about teaching for it to be of value" (S2, I5). When I asked about highlights of ITE lessons, students mentioned lessons where everyone had participated, each person having to contribute, such as a quiz, or a task where each selected an object to discuss in relation to subject teaching.

Few comments were coded as **beliefs** or **norms**. Those that were tended to be what students understood as the lecturer or mentor beliefs and norms, as they experienced them. For example, Anna commented on her placement team treating her as one of them, without any hierarchy, and a commitment to innovation and creativity on the course, which she had not expected (S2, I6).

The **object** of the activity system was perceived in different ways by different students. For some, the qualification and professional status were primary, self-initiated for progression or a requirement of their employer. For many, the emphasis was on classroom teaching skills, either as ends in themselves, or, through mastery of these skills, to give them confidence, or to benefit their learners. A few students mentioned the need to master teaching vocabulary, models or theories to make sense of classroom practice. **Wellbeing** appeared to be an object and this was experienced through lecturers encouraging peer bonding and support, to discuss worries with peers and get advice from them. Peer discussion was considered valuable in terms of knowing they were not alone, as was time to talk through issues with lecturers, such as 'chit chat' which extended beyond the formal programme objectives, to include finding a career to fit the student's own situation (S2, I5, Grace).

5.2.2 Lecturers

In the first semester interviews, lecturers spoke less about **relationships** than the students did, but it was nevertheless coded several times, in particular facilitating good relationships between students so that they could form supportive relationships beyond classroom sessions and because "dialogue flows better when you feel comfortable with people" (S1, I1, Florence). Alice reflected that too much lecturer direction of dialogue can actually limit students (S1, I3), however, lecturers noted different cohorts established different relationships with lecturers and there was no definitive pattern.

Various **types of talk** and **talk tools (instruments)** were identified in the interviews. Talk that acknowledged the whole person was important. Lecturers stressed the need to use techniques to create a safe environment in which students could speak up (e.g., 'think, pair, share'; S1, I1, Florence) and to model approaches which allowed students to challenge, be challenged and make mistakes. However, Tasha pointed out the need for students to have something to speak about: this could be experience, case study material or independent research (S1, I2). Peer dialogue was considered of value and Alice commented how it had now become her default position, when asked a question, to pass it to the class, commenting that the "to and fro in the room" (S1, I3) meant they looked after

each other, although students often wanted the lecturer to confirm the 'correct' answer. Other tools mentioned were explanation through questioning, storytelling and individually tailored dialogue in sessions where students worked more independently.

Analysis of the **learning goals** and, to a lesser extent, assumptions of educational **aims,** showed similarities between lecturers and students. Tasha referred to students being the best teachers they could be, clarifying this as being her "heart" goal, with passing the course being the "head" goal in terms of accountability (S1, I2). Each lecturer referred to developing students' resilience for the teaching profession, through building networks, coping strategies and practical classroom skills and knowledge. Lecturers described how they wanted students to master teaching vocabulary through repetition and application and to use theory for good grades in assignments, but this could be undermined if the lecturer is too prescriptive and does not give students free rein to explore theories they were interested in (S1, I3, Alice). This also linked to **knowledge building.** Like the students, lecturers identified learning from peers as an effective way to build knowledge, facilitating dialogue which encouraged learning from the expertise that different individuals bring. However, there seemed to be different authority attributed to different inputs. Tasha stated that for dialogue to be effective, expertise needed to be fed into class discussions through teacher talk or through students' own reading, which enabled them to "speak to the group with, with authority" (S1, I2). The **tasks** and **arrangements of participants** supported these approaches, in particular small group work, independent study and storytelling, identified by Tasha (S1, I2) as good both for instructional teaching and for collaborative work. She explained that listening in to student talk provided a way to check whether learning was taking place (therefore also coded as **assessment**).

Some interview data was coded as relating to **community, participation, division of labour** and individual **identity.** Lecturers commented on ways they promoted a sense of belonging, both within and beyond the classroom, noting that pre- or in-service status was not a predictor of participation in the classroom community. In-class dialogue was identified as an opportunity to let off steam about teaching, using the class community to manage stresses of placement. Alice commented that it was better that they looked to each other than to her for support as they were in the same place, adding "I'm out of that" (S1, I3).

Division of labour coding showed lecturers, like students, recognised the different identities of students and Florence explained that this meant they had to switch the type of dialogue they were using to fit the role at that moment (S1, I1). In-service students did not necessarily seek advice or support in the ITE setting as this was available in their departmental team, or because they had a status to maintain with the pre-service students, but lecturers reported that this had not been true of

a previous in-service cohort, so generalisations could not be made. It was a common experience for lecturers, even if student agency had been encouraged, to be asked to give the definitive answer. It seemed some students felt the lecturers' extensive experience gave them ultimate authority, a horizon view beyond their own (developed further in the second round of interviews).

In this data set the concept of **subject** referred to lecturer perceptions of subject identity. Lecturers commented on the extent to which students identified as teachers, that some struggled to see themselves as teachers in this first phase of the programme; this was not a simple in-service/pre-service division. They also noted that students would sometimes refer to their experience as parents, taking a parent rather than teacher perspective in dialogue.

Lecturers had the language, experience and the wider view to be able to articulate the **object**; they saw the same phenomena and tools slightly differently to the students. It was mainly framed in terms of helping students to be effective in all areas of classroom practice, but sometimes presented them with contradictions between the immediate goal of students passing the course and supporting students to be the best they could be (head/heart, described earlier). All lecturers referred to equipping the students for the long-term: helping them to develop resilience, not just to become a teacher but to sustain this. This **wellbeing** object was revealed in lecturers' comments that individual dialogue with students allowed them to get to know the whole person, their progress and the pressures on them, beyond the course itself, especially given the small number on the programme (S1, I3, Alice). Lecturers said they encouraged discussion between students for wellbeing as well as for the academic benefits. Few comments were coded as **norms** or **beliefs** although it is possible to interpret some of their comments as beliefs about education, such as that making mistakes is part of the learning process, and that dialogue flows better when students feel safe.

Lecturers shared similar perspectives with each other on the nature of the **relationships** on the ITE programme. In the second semester interviews, all noted the close bonds that they observed between students, in particular their acceptance of and curiosity towards each other's views, which Alice felt was effective dialogue (S2, I1). This was enhanced by the respect between students which Florence attributed to the maturity of the group, how articulate they were, and to having had careers which engendered professionalism in dialogue (S2, I3). She felt lecturers needed to know the particular interests and concerns of different students because if you found a common identity, you could break down barriers (a view mirrored in her tutee's interview; S2, I5, Grace). Tasha stated that good teacher-student dialogue shaped good peer-peer dialogue: "It's how you set them off on a talking task, can very much influence how they tackle it." (S2, I2). She said that she pointed out at the start that they will need each other, and that the course "is not comparative", although acknowledged that human

nature is to compare and there had been some competition between students (S2, I2). Lecturers mentioned sub-groups within the peer group, based on similarities such as being a parent. Florence likened it to siblings who, whilst supportive and protective of each other, had little "spikes" where things flared up. However, the necessity of seeing and having to talk to each other each week meant they managed this (S2, I3). She noted a change in relationships when one student secured a teaching post and whose behaviour changed within the group. Other students withdrew to some extent from this student, although whether due to the change in behaviour or in status (the first to gain employment) was unclear.

The way dialogue was managed by the lecturers was coded as **types of talk, talk tools, tasks, arrangement of participants** and **assessment.** Lecturers commented on using different types of talk, including debates and storytelling in class discussion, and more formal dialogue for observation feedback and progress tracking. Tasha and Alice each talked about stepping back and letting discussions run as students enjoyed these sessions and gained a lot from them. Both mentioned the risk of abandoning aspects of the planned lesson, but students had shown interest in each other's ideas and engaged in what Alice described as "warm disagreement", with a "playful nature to the conversation" (S2, I1). Tasha emphasised the importance of helping students to use teaching vocabulary in classroom discussion, to explain the rationale for their practice decisions (S2, I2). Other important **instruments** they identified were anecdotes and stories shared in discussion. Tasha explained that students were advised explicitly at the start of the course to make use of each other, to talk to each other. She suggested that hearing a peer or tutor talk about a similar experience reassured and validated the student, indicating that they were part of this community (S2, I2). Lecturers commented that talk was linked to the stage that students had reached and they took account of this: with pre-service students, early talk focused on assignments whereas for the in-service students it was the daily toil of teaching. Between these two sets of students there were some dialogue features which were the same, but some which were different.

Alice described the impact on assessment of lengthy, free-running discussions that had taken place. She explained that although her plan was to cover briefly a range of theories, the students had not wanted to leave one particular theory, and they devoted a whole lesson to this, with students debating and demonstrating genuine emotional responses to the topic. In the related assessment, students demonstrated higher levels of critical engagement both with this theory and with others that they had investigated independently (S2, I1). Similarly, Tasha mentioned that one class discussion had become quite impassioned and the work submitted for assessment reflected this. Whilst students subsequently neglected some of the criteria, going off on personal tangents, she commented that this gave "faith that those going into the profession do actually care, …so you can't really penalise them

for that" (S2, I2). These indicate instantiated trajectories in dialogue, lecturers following the students' interest rather than the intended plan (Twiner et al., 2014). **Knowledge building** was recognised as a joint venture and lecturers considered that sharing of stories, even about the daily toils of teaching, was productive.

The **learning goals** expressed by lecturers this semester included wanting to see students critically engaging with theories and concepts, not just for higher grades, but to be able to evaluate different views. Learning goals were often expressed in terms of coping in the teaching profession, such as developing skills (Tasha mentioned storytelling and questioning; S2, I2) which prepared the student for unexpected situations. Alice emphasised that stepping back and facilitating peer debate, rather than giving 'answers', supported students to be confident in their own judgements, which they would need when alone in their classroom (S2, I1). When asked what student outcomes she was looking for, Florence responded: "enjoying their job, that's what I really want for new teachers" and because teaching can be all-consuming, she gave students time to talk about their lives outside the course (S2, I3).

In the lecturer interviews there were no direct references to a **community of practice**, only to a community between the students. Tasha described encouraging students to communicate with each other, commenting that the act of communication was more important than what it was about: "it's that sort of feeling part of something" (S2, I2). She stated that at the start she told the students: "You are all in the same boat; don't try and sail it by yourself" (S2, I2). She spoke about a student situation where, with permission, she had made a couple of the student's peers aware that the student was struggling in one module and they immediately got in touch to offer her support, a response Tasha described as "one of our own needs us" (S2, I2).

The lecturers' view of the **division of labour** was similar to that of students, that the discussion of experiences was a vital part of their learning, whether from prior teaching experience, or from other experiences such as family experience of SEND (S2, I3, Florence). Two of the lecturers spoke about allowing discussions to go on longer than planned, where students were engaged and learning from following their own threads. Tasha commented that she modelled this approach so that students would know that it is possible for a teacher to step back at times (like a "puppet master", S2, I2). Alice explained that she had wondered if she was actually earning her keep, commenting that this felt like "cheating as a teacher", although she would not let a lesson get "taken over" (S2, I1). Lecturers might orchestrate dialogue, but routinely involved students in teaching and learning in the group.

Subject identities were perceived as blurred and when asked if the students saw themselves as teachers or students, Alice (S2, I1) said that in-service students had embraced aspects of student

identity, but saw themselves as teachers, whilst it varied more among the pre-service students. Tasha said there was a shift in how students saw themselves; for most this occurred just before the end of the first semester (S2, I2). Students had multiple identities to which they referred within discussions; Florence commented that their prior identities had been significant in the respectful nature of classroom dialogue, as well as the connections they made with particular others (S2, I3).

This linked to the programme **object**. Two lecturers referred to good outcomes in assessments, students able to engage critically with theory and practice, and passionate about the profession they were entering. Other outcomes mentioned included students' confidence in their judgements and having generic teaching skills to cope with the unexpected. **Wellbeing** came up less frequently in second interviews, although Tasha commented that she tried to help students see that it is dangerous to bottle things up and to know they can talk about the stresses without feeling they are not going to be a good teacher, as "this is part and parcel of a tricky profession" (S2, I2). **Tools** used by lecturers to realise these objects included dialogue with students following observations and giving students freedom to pursue discussions in the direction they wanted to take them. The use of stories both by lecturers and students was considered effective as it validated students' experiences to hear of similar peer experiences. Tasha added that dialogue allowed rehearsal of ideas and articulation of the rationale behind classroom practice, so it was important to give space for this (S2, I2).

Some of the **beliefs** held by lecturers**,** and **norms** which were assumed included the commitment to a collaborative approach. Florence referred to **rules** more explicitly, commenting that the students benefitted from consistent messages from lecturers which contributed to the safe environment for effective dialogue. For example, being clear about the standards expected in teaching practice meant dialogue with students in observation feedback could be honest and meaningful (S2, I3).

5.2.3 Mentors

Relationships were coded in the mentor interviews although as an underlying feature of their comments and mostly referring only to the relationship between mentor and student. Like the students, mentors often described the relationship with mentees as reciprocal: they provided advice and guidance but also took up ideas from the mentee. Reciprocity was also mentioned in relation to fulfilling formal mentoring responsibilities, such as collaboratively recording progress reviews. Most spoke of the pleasure they took in having a mentee, being able to share their experience and their passion for teaching with someone coming into the profession, but also the fresh perspective brought by the mentee. Some emphasised the importance of open communication, in the sense of being available to the mentee, or the content of the dialogue. Some mentors referred to the importance of honesty in the relationship, for the mentee to speak openly and receive an honest "warts and all"

response (S2, I2, Ruth). Margaret commented that if you did not have regular meetings with the mentee they would flounder (S2, I1) but it was acknowledged that as the skills and confidence of the student grew, they were able to take more of a lead in conversations and come up with their own solutions (S2, I6, Nick). Two mentors commented that they wanted to see the mentee simply as part of the team, and for the team and learners to see them the same way. Nick mentioned that banter with team colleagues illustrated how the mentee "fits in" (S2, I6), although he acknowledged that whilst other team members might allow the student to observe lessons, experienced teachers could be very protective over what they do, so the student needed to be diplomatic in commenting on others' practice. Although only voiced by one mentor, I had noticed this caution during mentor observations.

Most mentors referred to two aspects of their mentor role, summed up by Sophie: "It's not just about educating them, it's also about supporting them through it too" (S2, I5). Margaret commented on how their weekly meetings tended to focus on the progress of the student's learners (for whom mentors retained responsibility) and planning teaching delivery, whereas the formal reviews were all about the progress of the student (S2, I1). When asked about what they were hoping to achieve with the students (**learning goals**) most mentors mentioned practical aspects of teaching, such as familiarity with the syllabus, planning teaching resources and approaches, and developing good classroom management techniques. A common theme was to support the mentee to develop confidence and the ability to make sound judgements. Whilst passing the course was important, this broader idea of good judgement and insight into why they were doing what they were doing was considered essential; as Theo expressed it, "not just a set of AOs" [aims and objectives] (S2, I3).

Knowledge building was perceived as giving advice to the student, and giving the opportunity for them to talk through things they encountered in their teaching classroom or in the ITE taught sessions in order to make sense of them. Theo explained that in dialogue, the mentee could explore things, give their own thoughts and feelings, then reflect and put them in a "neater order" (S2, I3).

The **types of talk** that mentors described included talk about teaching responsibilities and talk about the mentees themselves. For some, these different types took place in different meetings and for others they combined in everyday conversations; home life discussed alongside lesson planning. The **talk tools** (and **tasks**) included honest dialogue: Ruth commented that if the mentee was upset, there was no point just giving reassurance as the mentee needed to learn their craft (S2, I2). What they could give was space to talk and advice or strategies for the mentee to try, although post-lesson conversations got shorter as the mentee gained confidence; with suitable questioning from the mentor, students came up with solutions (Nick, S2, I6). In terms of the **arrangement of participants**

Theo mentioned the importance of face-to-face conversations, as there was immediacy and clues from body language, which was important when dialogue covered emotionally challenging topics (S2, I3, Theo). For Nick, phone or electronic conversations were the norm. He said it had been easier to give positive feedback in this format to the mentee who would probably have found receiving face-to-face praise embarrassing. In post-lesson conversations the mentee was more likely to gain understanding from making an error in the classroom then reflecting on this with their mentor, than by the mentor just telling them what they should do: "you have to fall down sometimes before you can understand why you're falling and why things don't work" (Nick, S2, I6). Sophie mentioned dialogue around the mentee's workload, asking how the mentee was coping so that adjustments could be made if needed (S2, I5). Theo said that many of the conversations with his mentee took place in the staffroom and other staff would chip in, which added to their dialogue (S2, I3). **Beliefs** which underpinned their practice included the need for mentor support of practical teaching skills (S2, I1, Margaret) and being passionate about teaching to be an effective mentor (S2, I2, Ruth).

There were a few references to the wider **community of practice** in which the student teacher was situated, such as arranging for the student to shadow a colleague, or directing the student to a specialist for specific advice. Some reported that the student rapidly became part of the staffroom community, participating in ongoing discussion and staff development, and gaining a sense of belonging. Nick commented that the staffroom was a place where the student worked through practical aspects of the teaching programme but also began to apply education theory (S2, I6). In an FE setting, it is common for mentors to get no additional pay and no remission for their mentoring role, and this was the case for the research college (unless individual departments made special arrangements for an individual mentor). It is possible that this contributes to a sense, in the FE teacher education context, that the student teacher is 'shared' across the department, rather than the responsibility of a single mentor.

The **division of labour** coding included ways mentors had helped and advised students, but also ways in which they had learned from the students, adopting a particular task or resource, or being challenged by a different perspective or subject knowledge that the student brought. Most expected the student to become as if a full member of the team, so the mentor responsibility to guide was primarily in response to student questions or concerns, which changed over the year. Nick said he discussed with his student with very practical, day-to-day teacher tasks that were perhaps not covered so effectively in the main ITE group. He gave the example of lesson planning: whilst the ITE team gave a broad outline, the student needed guidance from the mentor who knew that subject and learner group (S2, I6). Each mentor had a clear **identity** as an experienced teacher, but they also recognised the skills and qualities that mentees brought. Some mentors perceived the student **subject** identity as

a trainee, apprenticed to the role, but others identified the student as a team member from the start and treated them as such, albeit a less experienced member. Again, this could be related to the FE setting where subject or industry expertise has historically been more valued than teaching expertise (see, for example, Thomson, 2014, who described "a *cultural* tendency in the FE system to undervalue ITE, particularly as a pre-service requirement. Extensive knowledge of the skills, norms and values of the primary occupation have often been seen as sufficient grounding for a teaching career in FE…" p. 9)

For mentors the **object** related to these practical aspects of the programme. Paul commented that in the placement the student learned a lot, such as working out boundaries with learners and coping with long working hours, which they discussed in mentor meetings (S2, I4). Some mentors mentioned giving advice on classroom management, especially following teaching observations. Whilst some mentors mentioned the goal of passing the course, most emphasised the student being well prepared for the challenging aspects of the job and able to make sound judgements, having mastery of lesson planning and a good knowledge of the subject syllabus to be able justify their approach. Several mentors mentioned supporting the student to manage the demands of the teaching role, including workload (Sophie, S2, I5) and the emotional pressures (Theo, S2, I3), which reflected **wellbeing** as one aspect of the object.

The **instruments** used to realise these objects were focused on dialogue with the student. There were some practical tools, such as providing resources, but most mentors spoke about the meetings they had with the student, to provide advice, to signpost them, to explore ideas and to review progress. Some mentors referred to the value of conversations that the student had with other placement team teachers, either for practical advice or just the confidence of being part of the team.

5.3 Documentary Data

Several students mentioned **relationships** in the documentary data, often referring in the reviews to supportive relationships with mentors, tutors and peers. Chloe commented that peer support helped her to "proceed at challenging times" (R2). In reflections on observing other teachers in the wider placement team, some students commented positively on the nature of the relationships those teachers had with learners, commonly described as friendly but with clear boundaries; this was perceived as a **norm** of dialogue, and I also tentatively coded it as **rule**.

The **type of talk** and **talk tools** most frequently referred to as beneficial by the students was feedback from mentors and tutors. One student recorded that the in-depth discussions he had with the subject

team enabled him to move from a dependent relationship with the team to a full role, where he could give as well as receive (R3, Daniel). One mentor, in a progress review, advised the student to find her own strategies in the classroom, but assured her that they could work together on this (R2, Chloe). The tools moved students towards independence although one student, even with affirming feedback from the tutor and mentor, still lacked self-belief, resisting that affirmation (R7, Ian).

Identifying the **community of practice** to which the student felt they belonged was quite complex. Many students expressed a clear sense of community in the ITE group and described in their reflections how much they benefitted from this, for support and for learning. Francesca (R5) and Beth (R1) each described how peer group conversations allowed them to share good practice, exchange problems and issues and through discussion to find solutions. Some students quickly felt a sense of belonging to their subject team community of practice, where perhaps their subject or industry knowledge was recognised and valued, even if the student was new to teaching. One of the mentors recorded that the student had "developed alongside colleagues, pulling experience from wider CPD and team meetings" (R4, Evie). Many of the students described specific gains from observing teachers in their specialist area and Grace recorded how getting involved in an extracurricular activity had been a way of building relationships in the teaching community (R6).

Related to this was the perception of the **division of labour**. Many students recorded that they appreciated feedback they were given, following observations by mentors; however, they were not passive recipients of feedback, with some students challenging mentors' feedback and justifying their own approach. In the research college, it was not unusual for an in-service student to have more recent industry or subject experience than their mentor, or even to have more teaching experience than their mentor, if the mentor had chosen to do their teaching qualification earlier in their career. In one record, Beth listed evidence to show she was already demonstrating the skills and knowledge that her mentor had suggested she needed to develop (R1). Evie reflected on how she had actioned one of her mentor's suggestions, but remained unconvinced of the effectiveness of this approach with her learners (R4).

The **instruments** identified in this data were the opportunities to discuss issues in depth, either with peers, the mentor/tutor, or the subject teaching team and to have feedback on practice from the tutor/mentor. One student commented on aspiring to the quality of conversation that she had observed between her mentor and learners, then in later feedback, her mentor stated that the student's reciprocal sharing of stories with learners had been a very positive aspect of her teaching practice (R5, Francesca).

Subject identity was evident in the documentary data. In the ITE classroom the student was a student, but on placement they were a teacher. Some students felt little sense of being a teacher at the early stage of the programme, and tutors' and mentors' documented feedback was often phrased around taking on the role with confidence. Lucas stated that he had to get over the feeling of not being able to "perform a good lesson", even though his mentor commented that the learners responded to him "as a teacher, rather than student" (R10). He expressed a view that because his teaching style was relaxed, he "doesn't always feel like I'm teaching" (R10). The perception of what 'teaching' looked like was very influential in whether the student felt they were a teacher, so I also coded this under **norms** because it suggested that he felt was not in tune with other participants' views of what teaching is. Francesca noted that when she was seen as the teacher "in charge" by learners (being given a learner group of her own), she was able to develop good relationships and mutual respect with them (R5). Two students (Beth, R1, and Grace, R6) referred to their previous careers and ways in which this had been helpful to them in teaching situations. One tutor commented on a student's success in juggling the competing demands of parenting and teaching (R2, Chloe), and advised another student to take a break over Easter and have a good plan to manage the end of term workload (R1, Beth). Such comments indicated an **object** was **wellbeing** and longevity of teaching careers.

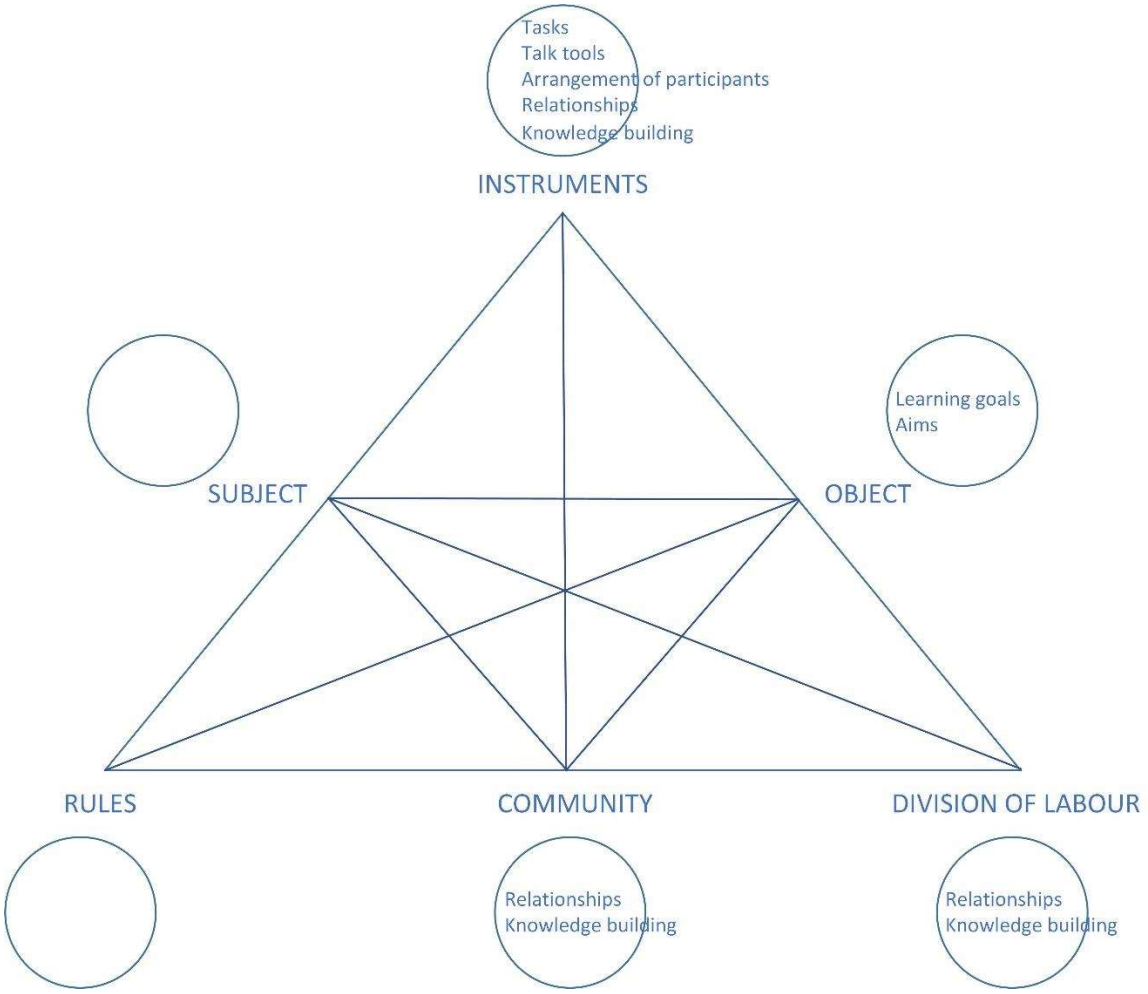
The documentary data was consistent with observed data and the views expressed in interviews, reinforcing those findings and sometimes adding clarification or situational detail.

5.4 Review of the conceptual framework in light of findings

The empirical data which was analysed, using descriptive and theoretical codes, clarified the nature of the overlaps between the descriptive and theoretical elements of the conceptual framework, as well as overlaps between the two theoretical lenses from which analytical codes were drawn. Although these had been set out tentatively in earlier chapters, the research process allowed clarification of these overlaps and further development of the conceptual framework. Coding recorded in the spreadsheet format (Figure 5) set out, side by side, descriptive and analytical codes against each of the selected data excerpts. The handwritten summaries (Figures 6, 7, and 8) and the discussion papers revealed those components and concepts which figured frequently and consistently in the observations, interviews and documents. It was possible to populate the earlier diagram (Figure 3) connecting the two elements of the conceptual framework with links established empirically. An example, drawing on the spreadsheet shown in Appendix J, is shown in the diagram below to illustrate these links across the framework.

Figure 9

Populated diagram illustrating links between domains/componts and theoretical concepts from AT and CoP



It was necessary to simplify the complex theoretical approaches of AT and CoP to form operational codes, with AT used as the basic model, enhanced by concepts within the CoP approach. For example, a CoP is recognised through three key features (shared repertoire, mutual engagement and joint activity) which are represented in the model simply as 'community' or 'participation in community'. But in coding the data and in analysing the excerpts to which that code was applied, those three features foregrounded the process. The anticipated connections between components and concepts were able to be tested so, for example, learning goals and aims were identified in the excerpts where object was identified. Likewise, where relationships and knowledge building were coded, division of labour and the subject's identity in that division of labour were also coded. This provided a useful check on the process: if the usual links were not present, or there were additional codes that appeared

to stand alone, the excerpt could be revisited and the coding re-checked. But it also allowed clarification, such as that although an overall object can be hard to identify in the normal activities of the participants, specific learning goals which feed into that object were verbalised by participants either during observed activities or in interviews.

The codes for rules, division of labour and community directed attention to the context in which the activity system operated. They were therefore useful in identifying characteristics of that context which could be relevant in terms of shaping the dialogue and in what was considered effective by each participant. This sometimes highlighted general features of the cohort, such as that the majority had had other careers before coming into education, or features that were particular to an individual, such as experience of supporting a family member with SEND requirements. In addition, they drew attention to wider contextual features, found in the research cohort but also identified in the literature, such as the fragmented nature of FE delivery, which impacted on student/mentor dialogue and the prioritisation of vocational over teaching skills which might have made it easier for student teachers to identify with their placement community of practice.

5.5 Areas of Interest

I sought to examine the activity system from the perspective of three different participant groups: lecturer, student and mentor. Analysis of the data showed that there was more than one activity system operating, with the student a subject in two systems (ITE class and placement), and operating both as student and teacher, these being common features of teacher education in FE (Powell, 2020). Some codes were not pursued further because they were not identified frequently in the data (such as assessment and norms) and others were absorbed into a broader code (such as wellbeing into object). But the coding process generated some useful insights and identification of areas of interest, these decisions based on my own sense of what is significant educationally and academically, using the theoretical lenses to focus attention on key components, concepts, and patterns and contradictions within the data. Each area can help to explore effective dialogue from the perspective of participants.

1. The significance of prior experience (a unique, rich biography) that students bring: this shapes their identity and the nature of their participation in dialogue in terms of both confidence and the stories they have to tell. The CoP lens highlighted how participants felt there was reciprocity in dialogue, rather than a classical expert-apprentice model of community. Some students saw themselves as peripheral at the start, gradually moving into the community, but others saw themselves (and were seen) as central within the placement team and in the ITE

classroom, able to contribute, but also to challenge which an AT lens suggests is an opportunity for expansive learning.

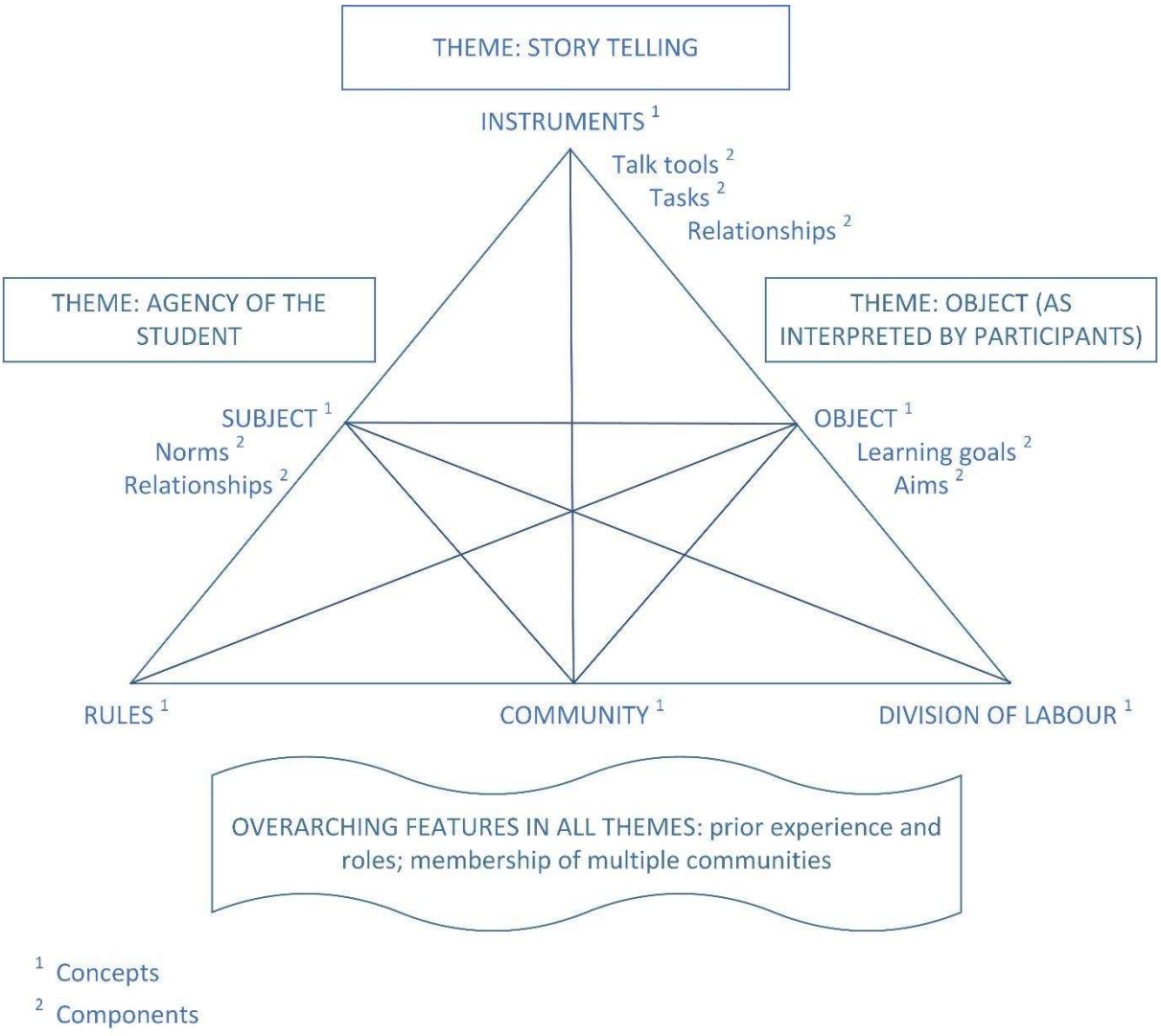
2. There are differing perceptions of the object of the activity system. AT does not see the activity system as static and different perceptions of the object may be one of the drivers of change or development. Different participants, with different roles in the division of labour, each have their own goal-oriented actions which combine to serve a collective object (Sannino and Engeström, 2018). Dialogue might be an instrument to achieve the object, but it might also be an object of the activity system.
3. One aspect of the object appeared to be wellbeing, preparing a resilient teacher who manages the demands of life during and beyond the programme. It permeated dialogue between participants and included managing moments of tension.
4. Talking through issues with peers/mentor/lecturer: what students described as "chit chat" and conversational tasks which "solves the storm in your head". Participants viewed this as a very effective feature of dialogue even though it often took place away from the classroom and did not take a classical dialogic form, but often as narrative exchanges.
5. The value of wider communities of practice in the learning process: dialogue is not confined to the ITE community but extends to teachers in the placement setting. This suggests multiple activity systems, interconnected through the student who is the subject in each.
6. Student agency in terms of how the lecturer/mentor is viewed by students and how the students view themselves (identity). This was reflected in their dialogue patterns and content. Students acted agentively in dialogue, facilitated by lecturers/mentors, or on their own initiative (asking questions or self-monitoring in discussion).
7. Specific tools which supported effective dialogue in ITE: storytelling, stepping back to allow students space to explore and debate, safe spaces, practical applications (case study, lesson analysis), instruction through questioning. Tools and tasks are planned but there may be deviation from the intended dialogue, following student trajectories (Twiner et al., 2014).

Ravitch and Riggan (2017) point out that in most social science research, it is very difficult to separate out hypotheses which are "more like interwoven threads in a complex tapestry" (p. 139). Whilst the areas of interest that I have identified are not in the form of hypotheses, the same principle applies: that these areas, whilst listed separately, are connected within episodes in the empirical data and within theoretical frameworks. I chose three themes – storytelling, agency and object – to explore further. Whilst a number of themes could have been selected, these three were chosen because they draw together aspects of separate findings, and between them touched on all seven of the findings. Further, they represented significant features of dialogue in the activity system and communities

situated in FE-based ITE, as identified through the conceptual framework that I had developed. This is shown in Figure 10, developing the earlier illustration of relationships between codes to show how the selected themes linked to different parts of the framework.

Figure 10

Populated diagram illustrating themes associated with both components and concepts



Each theme, although particularly associated with one point in the triangular representation of the activity, was also related to the wider situated nature of the activity system, that is to the nature of the community, its division of labour and its rules. These themes therefore capture multiple elements of the findings, including perception of object, chat including storytelling, agency, and the significance of prior experience and membership of different communities of practice. As with all earlier aspects of the analysis, selection of themes was undoubtedly influenced by my insider status, my location

within the communities that I was researching. Some codes were discarded because they did not feature very frequently. But I also revised the code of wellbeing into a subcode of 'object': my own professional experience and my wider reading prior to starting the research had led me to believe that this would be a very significant aspect of dialogue on the ITE programme in this setting, but the analytical process indicated that whilst it was a feature, it was one of many ways in which the object was conceived by participants, or one of the aims of participants, and it did not warrant a separate code.

The three themes selected to pursue further reflect one instrument of the activity system (storytelling), the nature of the activity of the subject (student agency) and the intended outcomes of shared activity (object); these themes are discussed in the next chapter.

Chapter 6 Discussion of Themes: Storytelling, Agency and Object

In this chapter, I discuss three themes which emerged from the analysis in relation to my research question: What are the features of dialogue which are effective in a teacher education (ITE) programme: effective from the perspective of the student, the lecturer, and the mentor? These themes represent three different aspects of the answer to that question and three different points in the classic activity system model (Diagram 3). Storytelling was identified as a tool, one form of dialogue that different participants found to be effective. The theme of agency related to the degree to which dialogue both made visible and supported or constrained the agency of students on the programme, so was particularly related to the concept of subject in the activity system. The concept of object was significant as dialogue which was effective as a tool in the activity system was shaped by perceptions of the object: different participants perspectives on the object emerged, some shared between the three groups and some interpreted differently. I have separated each theme into subthemes, but some threads recur through each section, such as the community in which the student is located, their prior experience and their identity (shown at the bottom of diagram 3). These reflect sociocultural and historical characteristics of individuals and of the context(s) in which teacher education took place, in this case, an FE college, as each individual came with their own, unique biography but undertook their training in a setting which has a particular history in terms of its location and the wider history of FE teaching. In this way, the seven areas of interest that I had drawn from the early analysis of the findings were clustered under the three theme headings, some as the visible theme title and some aspects underpinning each of them.

6.1 Theme: Storytelling

One of the phenomena evident in ITE classroom observations was the use of stories. The word 'storytelling' would not be located using a search tool on the study data, but storytelling was observed as participants narrated their experiences. Use of stories in teaching and learning is well researched (for example, Carter, 1993; Savvidou, 2010; Poulos, 2008; Sfard and Prusak, 2005; Segal, 2019) and I was very aware of it when I started teaching in FE. I quickly discovered that students who seemed uninterested in the health and social policy I was teaching them, became enlivened and engaged when I told stories of my time as a social worker. They found it hard to connect with the abstract nature of legislation, funding and local authority responsibilities but loved to hear about how Mrs A and her children were supported to escape an abusive situation with the intervention of local agencies

(involving legislative responsibilities and local authority funding). Stories brought to life structural and abstract knowledge in the form of narratives with which learners could connect.

Stories were evident in the ITE classroom, but the key difference was that storytelling was reciprocal. Lecturers embedded stories of their teaching experience, but students also had stories which they shared both in the classroom and outside it. With my FE students there was no equality in our ability to tell stories about health and social care policy. In the teacher education setting all students had experience of being taught and some students had other relevant experience, from a current teaching post (in-service), or from having been unqualified teachers, tutors, teaching assistants, school governors, or a parent, and this was visible in discussions. As the course progressed, all gained teaching experience and brought stories from their practice into dialogue.

The four subthemes identified were storytelling for learning, for participation in a Community of Practice, for debate and argumentation and for reassurance and wellbeing. They connected through underpinning characteristics, such as students having biographies which shaped their interaction, and reciprocity of storytelling**.** Storytelling may be characterised as monologic communication but as seen in the literature review and in this study, it can take a dialogic form. Storytelling can be conceptualised as a mediating tool used within the activity system to achieve the object, but was also identified as an object itself.

6.1.1 Storytelling for Learning: Linking Principles and Theory to Practice

In a discussion about the report, 'Inside the Black Box' (Black and Wiliam, 1998), Alice invited students to share their own experience or observations.

> *Francesca explained the context of the lesson she had observed, explaining the descriptive, flexible, fluid feedback given by the teacher in this type of lesson. She thought it was good that everyone was praised. Alice made a link, commenting that this was very clearly a positive example of what Black and Wiliam were talking about.* (S1, O3)[2]

The story that Francesca told of teaching she had observed was commended by the lecturer who took the lead in layering theory onto the narrative. As the course progressed lecturers encouraged students to do this for themselves. In an observed discussion towards the end of the programme, Hannah talked about the Black and Wiliam (1998) work, giving an example from her teaching placement, explaining how she applied theory in her teaching (S2, O6). She was able not only to tell her own story, but to

[2] Referencing abbreviations were explained in Chapter 5. An index of data collected is shown at Appendix I.

relate it to wider issues of curriculum development and related theory, which she integrated through the narrative of her experience.

Mentors likewise told stories from the classroom to illustrate points they were making. Anna (student) and Theo (mentor) were discussing the obligation of teachers to be relevant to their learners and the demands this placed on teachers. Theo repeated a comedian's anecdote about the miniscule amounts of thinking time that individuals have that is their own. He and Anna then exchanged stories of different ways of getting to and from work, agreeing the principle of needing time to process events of the teaching day and to avoid this spilling into homelife (MO4).

Some learning occurred vicariously (a feature found by Choi et al, 2016, in a study of online storytelling between pre-service teachers), through the shared stories of peers who represented a wide variety of backgrounds, subject specialisms and teaching contexts. Francesca described how students came in early to talk about what had happened in the classroom, but added:

> *it was exchanging of situations, of experiences, however we did not have this guidance [Interviewer: Yes] whether, yeah, whether we were, we were, erm, you know, erm, getting the right, erm, how should I say, observations from it, what we were, erm, the right conclusions* (Francesca, S2, I7).

In the classroom, the lecturers could give their view on best practice, which she did not feel peers were as well equipped to do. Alexander (2008) distinguished between what he categorised as dialogue and discussion: discussion involves "the exchange of ideas with a view to sharing information and solving problems" (p. 30) whilst dialogue represents "achieving common understanding through structured cumulative questioning and discussion which guide and prompt, reduce choices, minimise risk and error, and expedite 'handover of concepts and principles" (p. 30). Francesca's comment suggested, although students exchanged stories and ideas for information sharing and problem solving, there was not a resulting common understanding or handing over of teaching principles. In interviews, some students referred to wanting to become more professional in their practice, explaining this as developing it with established principles of teaching (Chloe, S1, I1) or consolidating practice "with regards to kind of theories and reasons why you do it" (Karen, S1, I3). In observations, the student's story was often followed by the lecturer commenting on a general principle or theory illustrated by the story, with evidence of students doing this later in the programme. Storytelling could therefore contribute to practice development, but dialogue needed to connect with theory or educational principles to be most effective.

6.1.2 Storytelling for Participation in the Community of Practice

Many episodes also illustrated the ways individuals in the ITE programme participated in a community of practice through storytelling, including reciprocity of stories between lecturer and students, and discussion of shared practice and career pathways. The students had a community of practice within the ITE programme, with rules, practices and language, but they were also entering a wider teaching community of practice, represented by placement teaching communities.

In a session about equality and diversity, the lecturer, Tasha, gave students cases to discuss. A student chipped in with his own experience, which was followed up by the lecturer who shared an example of her own. When Tasha talked about legislation, a pre-service student asked a question about this and an in-service student, Karen, responded with a story from her teaching situation (S1, O4). In another session, Tasha asked the students to talk in groups about one positive thing from the last week and one thing that had gone wrong. After a few minutes, she asked "if anyone was brave enough to share anything that went really well." A couple of students did this, one to applause as she described learners handing in some work. The lecturer then asked if anyone wanted to say anything about something that had gone wrong. Francesca told a story about an incident from her classroom when she had not known how to deal with a learner's behaviour. This student had moved from telling the story of teaching she had observed (cited in 6.1.1), to her own story (S1, O5). These episodes were significant because dialogue through storytelling allowed the students and lecturer to describe shared knowledge and practices from operating in like communities.

In the second semester, students increasingly recounted stories from their teaching practice. In one session, Tasha asked Lucas to share something she had heard him talking about in his small group.

> *Lucas spoke up giving an example from his teaching practice, speaking more confidently than I had heard him previously. Tasha added to this although using the phrase 'as you said', referring back to Lucas's comments. She asked if anyone else felt they had restrictive criteria. Grace shared her experience...* (S2, O1)

Lucas, who was usually very quiet, spoke confidently when he had a story to tell of his classroom teaching. The lecturer built on this in her response and invited other stories, allowing students to demonstrate shared experience as part of a community. Lecturers frequently matched student stories with one of their own. I questioned their intent: was it to demonstrate expertise, that for every student story the lecturer had several, or was it to establish commonality in the community? Interview data suggested that the expertise of the lecturers and mentors gave students confidence and extended their horizons beyond what they had yet experienced. Lecturers' stories affirmed points that students made in their own stories, reinforcing a sense of practice they were engaged in together.

Grace described how she had discussed with her tutor her enjoyment of teaching SEND learners. She explained that she was helped by her tutor sharing her career story with her.

> *She was sort of saying to me that might be something that, you know, you'll roll into in a different, you know in a few years' time [Interviewer: Mmm]. She was equating it to her career and how different that had been from what she set out...* (Grace, S2, I5)

This sense of community was also established through storytelling with peers. Karen commented:

> *It was really nice just to be able to talk around a subject area and share our experiences [Interviewer: yeah]. Cause it's quite nice to know that people are going through the same things that you are going through [Interviewer: Yes, yeah]. It's that reassurance that you are not alone.* (Karen, S2, I9)

Chloe, a pre-service student, summed this up:

> *So the input in the dialogue that we receive from the lecturers in the teaching team, that's so valuable to me because our teaching team are teaching experts: they can shine a light on subjects and with their wealth of experience that I don't have so that input for me is really valuable. Erm, but also there's great value, I would almost say on an equal basis amongst our peers [Interviewer: Mmm]. We have quite a vast skill set amongst us as individual people, we've got a really fabulous diverse group, so actually we're learning all the time amongst ourselves, through sharing our experiences and some of them, some of us, have teaching experience too.* (Chloe, S2, I3)

Each participant group appreciated reciprocal storytelling as affirming not competitive: dialogue to share practice and to make visible their bonds in a teaching community.

Storytelling dialogue also made identity visible. In many of the early observations, the identity of the storyteller had been primarily student or parent, but increasingly their dialogue demonstrated identity as a teacher. Alice commented that the stories that pre-service students told in her module tended to be "about their children's schools and governors" (S1, I3) This was because the subject matter (quality assurance of teaching and learning) had rarely been encountered by students in their teaching practice by that stage of the programme. I had observed this in a classroom session where Alice was talking about quality assurance processes in education. Chloe responded with a story of her experience, from a parent perspective:

> *Our local primary school has just had an Ofsted visit and it requires improvement.*
> *Unfortunately, [our children] were due to go next September but there's time to sort it out*

> *potentially there. But there was a big reflection in the report about governors and their role as governors...* (S1, O6)

In the interview, Alice considered whether using case studies would be a way to fill this gap in student experience, offering students a hypothetical story where they did not yet have a real one.

In an observed mentor observation, Chloe responded to a comment from her mentor with a story from placement teaching where she had brought a careers advice magazine to get students talking about careers they could go into, describing how disillusioned the learners were. In her story, she reflected how she had anticipated being able to relate to learners, but now her identity was a teacher, so whilst she could draw on her own experience of doing the course, she was in a very different place (MO1).

In the end of year conference, students were given an opportunity to speak about the impact of the programme and several chose to tell a story from their teaching experience, such as Daniel who recounted a learner telling him that it was the first time he had passed anything (S2, O7). Storytelling therefore appeared to support students in making visible to themselves and to others their developing identity as part of a teaching community.

6.1.3 Storytelling for Debate and Argumentation

Several students referred to helpful dialogue within a cohort that was diverse in terms of experiences, opinions and religious beliefs, which created an opportunity to "change our ideas and approaches" (Chloe, S1, I1). Students also appreciated the variety of stories their lecturers or mentors told, Evie commenting on how she admired the range of experiences represented through these stories (S1, I4). But students were not just listeners who passively adopted lecturers' views. In one observation, Alice was using prompt cards to encourage discussion about assessments.

> *Evie described an assessment she had done recently and how she had adapted for a learner who had missed a couple of lessons, allowing her to do just the part of the test which covered the lessons she had attended. Alice reflected back that this was differentiation on the spot. She suggested that it is possible to do an assessment after minimal teaching, just to see what they know. Evie said she would do this with some learners, but not this one as she was already anxious, had panicked just at the idea of the test, and Alice affirmed this.* (S2, O3)

This was a fascinating episode and one which contradicted some of the consensus patterns observed at other times. The lecturer sought to add to the student's story by suggesting a different approach; this could have been the end of the dialogue, with the student accepting the lecturer's wise advice. But Evie (an in-service student teacher) defended the action she had taken, presenting a well-argued

case why the suggested alternative was not appropriate, and the lecturer agreed. Segal (2019), in research into professional discourse between teachers, identified three core functions of storytelling: identity, representations of practice and argumentation. This short episode revealed each of these elements, as Evie argued her case, based on her identity as a knowledgeable teacher of that learner, justification of her teaching approach and challenging the lecturer's view. It also illustrated that teacher knowledge cannot be reduced to abstract rules (Carter, 1993): representation of knowledge through story accommodates ambiguity and dilemma, so debate and challenge in this episode did not appear to undermine either participant.

Tasha described a task where students had to collaboratively create a fictional story, noting that story creation became rather competitive:

> *They all were trying to get their point across and get their ideas and see how it would work and challenge each other. And then present that. So I think, I mean, I'm a strong believer in the use of storytelling and narrative as ways of teaching things...* (Tasha, S1, I2)

I had observed this session and the competitive element appeared to enhance argumentation in students' dialogue. It is interesting to consider whether this competition translates from fictional story-writing to storytelling of real experiences. Segal (2019) commented that in storytelling, teachers used their experience or status to either provide opportunities for learning or to constrain learning. It is possible that creating a fictional story meant there was less at stake; so it was acceptable for peers to challenge or be challenged, but they might be more reluctant to do so when representing their own practice or identity in story form.

Within the student group there were different views as to whether consensus across the group was an objective in dialogue (see section 5.1.1), with students whose teaching specialisms were in STEM subjects most commonly commenting on the dissatisfaction of not agreeing single correct answers in the teacher education discourse, so storytelling for debate and argumentation, whilst appreciated by some, was less valued by others.

6.1.4 Storytelling for Reassurance and Wellbeing

Stories were also used to reassure and to support students' wellbeing. Alice compared this cohort to a previous cohort of in-service students who used ITE classroom time for "letting off steam" and to support their classroom practice (S1, I3). She considered that being able to share examples of what was actually going on for them in their classrooms, was a healthy way to manage stress and gain peer support.

Tasha emphasised the reassurance that students felt from telling their stories, especially if these were validated by students with more extensive teaching experience:

> *It's part of that reassurance again that actually it's, it's not a sense of you can't do this or you're not going to be a good teacher or you're going to fail [Interviewer: Yeah] it's, sadly, it is part and parcel of a tricky profession... I think also when they hear anecdotes and stories from peers or from tutors, if they, if it's something they can, it's an experience they identify with, it almost makes your own experience seem more, well validated I guess, in that, I'm not the only one who's had this experience.* (Tasha, S2, I2)

Similar comments were made by students, cited in the subtheme of participation in a community. Sharing stories provided a sense of not being the only one to feel a particular way, and story-based dialogue was considered valuable by many interviewees for their wellbeing. However, whilst one mentor described positively the regular wellbeing dialogue with a student, including monitoring their workload (MI5), students sometimes experienced this differently, attributing it in large part to the structural arrangements of FE which meant the mentor and mentee were rarely in the same place at the same time. It did appear that storytelling had potential for reassurance and wellbeing, but this required time and whilst several students commented positively on the availability of the lecturers, for some this contrasted with limited opportunities for effective dialogue with their subject mentor.

6.1.5 Storytelling: Conclusion

As a part-answer to the research question about features of effective dialogue in the ITE classroom, dialogue usefully includes storytelling, not just by lecturers, but blending in stories of the students. This can build knowledge which connects theory and practice and which encompasses the complexity of teaching, including context-specific application of broader principles. But it also helps to build community, affording newcomers opportunities to bring their stories and to establish common practice and understanding. Findings from this study sit in the gap between research into teachers telling stories to pupils and into teachers telling stories to colleagues for ongoing professional learning. Student teachers straddle this boundary.

A further consideration is how storytelling is conceptualised in ITE because it features as both tool (instrument) and object. Tasha explained that storytelling and questioning were core skills that student teachers needed to develop. Storytelling on the ITE programme was both a reassurance in the here and now, and a practising for situations that students would encounter throughout their teaching career (S2, I2). Student progress records showed students using storytelling effectively as part of their dialogue with learners. Grace reflected that she had used some of the experiences from her previous career to give real life meaning and practical applications of concepts "which students seemed to

appreciate"; her mentor's comments confirmed this (R6). In one of the last observations in Francesca's records, her mentor commented that Francesca builds "relationships with new students by sharing stories and asking them to share their own experiences" (R5).

In this sense, stories were mediators of learning but students' use of storytelling was also an object of learning. Inevitably, if lecturers are developing the students as teachers, students will aspire master these same tools and storytelling as an object as well as a tool of the activity system will be returned to later in the chapter.

6.2 Theme: Student Agency

A linked theme was the sense of agency that students felt and the agency expected by lecturers and mentors of the students. As with 'storytelling', the term 'agency' is not found through a simple data search, but linked ideas and concepts were evident, including student views about their participation and responsibilities, and the intentions of lecturers and mentors to step back to enable students to take responsibility. This study is focused on dialogue and although agency can take many forms, it is considered here as a feature of dialogue, as verbal interactions made visible student agency and were used to support or constrain it.

'Agency' is a term used with different meanings in different theoretical approaches and contexts. Bandura (2006) stated that: "To be an agent is to influence intentionally one's functioning and life circumstances. People are self-organizing, proactive, self-regulating and self-reflecting. They are not simply onlookers of their behavior. They are contributors to their life circumstances, not just products of them" (p. 164). Eteläpelto et al. (2013) examined different conceptualisations of professional agency at work, each reflecting an ontological position. Sociocultural approaches, representing varying conceptualisations of agency, share a view that the context in which the individual acts is significant; in more recent sociocultural approaches, there is also recognition of the importance of the subject and their agency. "Actions can have a social genesis, but they can also emerge from subjects' personal histories" (Eteläpelto et al., 2013, p. 56). The identity, history, interests and goals of the individual should therefore be considered, whilst acknowledging the support or constraints of the social and cultural context. Agency is used here in sociocultural terms, whilst drawing on some aspects of Bandura's definition, in particular the way student teachers self-regulated and were proactive and reflective in their dialogue. The individual is not subjugated by sociocultural factors, but as all actions are socially based, relational aspects are significant and many of the episodes within this theme were first coded as division of labour, rules and relationships.

Priestley et al. produced some very interesting work on agency, particularly teacher agency, but they stated that agency is a "slippery and much contested term" (2016, p. 19). They took an ecological approach which conceived of agency as both relational and temporal, thus taking account of the way individuals operate through their environment over time and with others, shaped not only by the past, but also by present contingencies and the anticipated future. Agency is not possessed but achieved and its future as well as past and present orientation suggests intentionality (choosing among options for action) alongside contextual factors which promote or constrain those action choices. Context is therefore considered critical as it shapes prior life experience, impacts the present and influences motivation for the future. They described how this position is not only a theoretical position on agency but provides a methodological framework for enquiry because each of the three temporal dimensions (iterational, practical-evaluative and projective) can guide data collection and analysis. Although not used as a methodological tool in my study, the findings nevertheless showed each of these temporal dimensions as I considered agency in terms of the intent of the participants, the significance of prior histories and the effect of practical constraints and affordances in the students' communities. As indicated earlier, the different findings are not discrete but intertwine, so, for example, the learning aims of individual students (their short- and long-term goals, or objects) were weaved through with their life history and sociocultural features of the setting.

Edwards (2015) identified that a methodological issue when studying agency is that: "we can, at best, access the actor as 'person', as they interpret, negotiate, resist and so on, we cannot access the 'self', the well-spring of desires and intentions that is so often connected with notions of agency" (p.781). I am aware that it would be arrogant to assume that either interviews or observations did fully access the intent of participants. Nevertheless, in this section I review interview data to explore students' perception of their agency and lecturers' and mentors' intentions to facilitate student agency. I then examine three subthemes of agency in or through dialogue: exploring theory, exploring practice and participation in communities.

6.2.1 Intentions of Students, Lecturers and Mentors in Relation to Student Agency

In each set of interviews, participants expressed views suggesting expectations of students to be agentive in aspects of the programme: taking responsibility for participation in the ITE classroom through self-monitoring and reflection, proactive in speaking up and in challenging others. Students indicated that they expected this of themselves and peers, encouraged in this by lecturers. Chloe stated that:

> *I think for me I'm confident that everybody in, in my course is getting the opportunity to have input, so those that perhaps step back a little bit more, erm, that need a bit more pushing are steered with dialogue, with, erm, you know involving them in conversation and task and debate… I think everybody plays a part and the teachers have helped that to be so.* (Chloe, S1, I1)

Karen commented that this meant dialogue with lecturers and with peers:

> *I would say dialogue is about a two-way communication [Interviewer: Yeah], erm, so maybe posed a question and being asked, erm and sort of answering that question but also asking the questions and sort of not necessarily directing it towards Tasha but it might be erm one of our peers….* (Karen, S1, I3)

For the lecturers, there was intent to give control to students, within limits. Tasha expressed this as "stepping back… almost like being the puppet master" (S2, I2). Alice felt her own approach had varied according to the teaching experience of different groups. She had let in-service students run with discussions on subjects which the pre-service group did not have sufficient experience to discuss in the same depth and concluded that giving greater responsibility to the students had probably been a more effective approach (S1, I3).

Mentor interviews suggested a range of views concerning student agency. Mentors saw their role as to guide the student, but the extent to which students were given autonomy in their teaching varied. Margaret described how regular meetings were vital for giving students advice based on the mentor's experience:

> *without a sort of regular meeting time of some description, these poor students are sort of going to go off on their own, [Interviewer: Yeah] and then not really gonna know what to do, they're not really gonna know how to pitch it, [Interviewer: Yep] not gonna really know the style of resources that work or don't.* (Margaret, MI1)

But she also explained:

> *Sometimes the mentees come up with new resources, new ideas which I can draw from because I'm not proud, you know.* (Margaret, MI1)

Some mentors stated that their intention was the student should act as a full part of the teaching team. For example:

> *I would like them to become part of the department, so that students don't see them as, as a, as a trainee, or a [Interviewer: Yeah] you know, erm, and it's important to actually embed*

> *them in everything [Interviewer: Yeah] and for them to, you know, take ownership, just start assessing work and actually just become a, a member of staff if you like, [Interviewer: Yeah] so they're not, you know they're a member of staff that are always here.* (Paul, MI4)

There appeared to be a general intention from all groups that students should be agentive in their approach, and in the following sections I examine the degree to which this was enacted through dialogue.

6.2.2 Student Agency in Relation to Exploring Theory

One of the episodes which appeared to show intentions of agency enacted occurred when Alice described Black and Wiliam's (1998) work as theory.

> *Grace asked if Black and Wiliam's is a theory or just a piece of research. Daniel chipped in with "formative assessment is central." Grace challenged whether this is a theory. Alice clarified that this is the biggest piece of research on assessment. She suggested they bring the research together to make a summary of points and their synthesis of what is important in assessment could be considered as a theory. Black and Wiliam could therefore be labelled as theorists, as could Scales or Gravells. Grace said: "Sorry" but Alice came back with "No, that's good, you're wanting to be careful, that's good academic practice."* (S1, O3)

Grace referred to theory as she had understood it from her social science subject background and Alice validated Grace's independent thinking and her willingness to use dialogue to challenge so as to reach a better understanding. I asked Grace if she had felt comfortable expressing a different view to that of the lecturer:

> *Grace: Yeah, I don't have any problem with that. No, one because it's er Alice [Interviewer: Yes] and she wouldn't see it as being confrontational, erm, because I wasn't. As far as I'm concerned, Black Box is just a bit of research, it's not a theory, they're not putting forward a theory as, as far as I can see [Interviewer: Mmm], erm, it's maybe theory in the loosest sense of the word, but I would just look at that as a journal article talking about, erm, giving an overarching view of [Interviewer: Mmm], of teaching, assessment.* (Grace, S1, I2)

Evie made a similar point:

> *So we're not, we don't take everything as like the rules anyway. You're meant to challenge it and question it and debate it and discuss it anyway, so it's not wrong... even some of the theory stuff we've been taught.* (Evie, S1, I4)

Alice explained how one theory that I had observed being covered in a single lesson with pre-service students had become an extended debate over three lessons with in-service students. She concluded:

> *It's a small group [Interviewer: Yeah] but there's, you know, a lot of interest in each other's thoughts and tolerance for different perspectives, erm. We definitely have er, quite differing views sometimes in the group, I differ with the views sometime (laughs), and it's nice, you know, it's warm disagreement, er, lots of humour and er, tolerance for each other's different points of views.* (Alice, S2, I1)

She expressed a dilemma that, in handing responsibility to the students to manage their dialogue, a lecturer could be failing to fulfil their expected responsibilities, yet this seemed a more successful approach as their critical engagement with theory resulted in higher assessment scores.

> *Letting them toss backwards and forwards, 'well, I don't know about that', 'I'm not sure' and 'I like this idea' and just giving them a complete free rein. It feels like cheating as a teacher and that's something I've learned before as well… It definitely felt like the less I was doing, the less I was interfering, the more they enjoyed it and the more they engaged with the, its, it is a little bit alarming sometimes, you feel, oh, am I earning my keep?* (Alice, S2, I1)

Tasha also valued handing over responsibility to the students, although she acknowledged that this was more effective, with students better able to lead the dialogue, if they had done prior reading:

> *We have done this once with the SEND research, [Interviewer: Yeah] but I think them having a chance to do some research then they can almost feel like they have, not so authority, but they are in a position to speak to the group and [Interviewer: Yes] engage with the group and actually to have their peers ask them questions, I think it's quite a validating experience for them as well.* (Tasha, S1, I2)

In the second interview she concluded that she wanted discussions which challenged opinions, to make students think, and to learn that process for itself, not just to pass an assignment (S2, I2). She linked the ability of students to participate agentively (present, challenge and respond to challenges) to their knowledge; she saw her role as to facilitate students' development of the knowledge needed to be effective in dialogue and to provide an environment in which students had opportunity to act 'agentively' in dialogue.

6.2.3 Student Agency in Relation to Exploring Teaching Practice

There was also evidence of students' agency in dialogue around teaching practice. Alice described how she redirected student questions about practice towards their peers, commenting that this kind of dialogue was "really powerful":

> *Its end argument does come from that, debate I should say [Interviewer: Yeah] and erm, er, it's some very interesting ones and then they look at me slightly uneasily saying please can you just give us the answer please [Interviewer: Yes. Both laugh.] so that we can all stay friends. Er, no, it's never got that bad, but, you know, sometimes they do look for a little bit of, erm, the clarity sometimes [Interviewer: Yes] but a lot of the time they look after each other and to me that does seem more meaningful, sometimes because they're the ones living it, experiencing it [Interviewer: Mmm] whereas I'm sort of safely out of the, you know, [Interviewer: Yeah] the intensity of being a new teacher.* (Alice, S1, I3)

I asked Alice about an episode (section 6.1.3) in which Evie challenged Alice's advice. Alice stated:

> *It's a good sign, isn't it, they're feeling confident about their own judgement, cos it's only them in the room, isn't it, [Interviewer: That's true, yes] you know, in, in the teaching room, they've got to decide, so it's no good, [Interviewer: Yeah] panicking at that moment, thinking what would Tasha, Florence or Alice say, what should I do, it's good to feel that they can make a good judgement.* (Alice, S2, I1)

As the academic year progressed, students were also able to act more agentively within their placement. Nick reported how he witnessed this in dialogue between Daniel and team members:

> *He'd get into the, erm, discussions about, I don't know, like the, not office politics but the kind of office chat about classes and students and [Interviewer: Yeah], erm, why things are working, why things aren't, what resources to use and why, and that was quite nice… so it was, like he was genuinely part of the team [Interviewer: Yeah] but he was only there two days a week*. (Nick, MI6)

Daniel commented in his final reflective journal:

> *Initially I was very dependent on support from other members of the [subject] team for lesson planning and materials. However now I am sharing resources with other members of the department, having in depth discussions about the level and difficulty of questions in worksheets and other resources used in lessons to ensure they are at the most appropriate level.* (R4)

His sense of agency had increased over the programme, through the opportunities in his placement team, and in particular through dialogue with the team, illustrating the value of dialogue with people beyond the lecturers and mentor.

An important factor seemed to be whether mentors saw their mentees as capable of taking on responsibilities or challenges, supported to do so through dialogue. Nick commented:

> *But, yeah, you have to fall down sometimes before you can understand why you're falling, [Interviewer: Yeah] and why things don't work, so doing it in that style and seeing that it doesn't work is better than saying, right, I don't want you to do it like that, I want you to do it like this and not have a discussion as to why. I think it's important to have that dialogue.* (Nick, MI6)

For him, the student should act agentively, but dialogue around the impact of the student's actions was essential for understanding and development.

In an observed meeting between Lucas and his mentor Paul, Paul asked Lucas's view on a particular learner and about one of the courses, because Lucas was more directly involved with these than Paul at that time; each listened to the other and built on suggestions made (MO3). Other mentors took different approaches. During an observed mentor meeting Margaret suggested her mentee, Jasmine, "need to take ownership of the group" and asked her how she would approach the next session. Jasmine explained her proposed approach and resource but Margaret advised against this. She showed Jasmine an activity she had designed and suggested Jasmine could use this. Jasmine queried this, but Margaret clarified that Jasmine could adapt it for the topic (MO2). My impression was that this had rather squashed Jasmine's initiative but she did not see it this way. When I asked about this episode, Jasmine explained that her mentor has long experience and preferred traditional methods, but she cited occasions when she had persuaded her mentor to use her ideas, such as new technology (S2, I1). She respected and drew extensively on her mentor's advice, but saw herself as agentive, able to make her own choices and decisions. For many students in this cohort, prior careers and life experiences gave them knowledge which they could draw on and confidence in communication, enabling them to be proactive in such discussions.

In interviews, each of these students described how valuable they had found dialogue about practice with their mentors, despite the varying agency afforded to them.

6.2.4 Student Agency in Relation to Participation in Communities through Dialogue

Students had an expectation that they should participate in dialogue in their communities, to share their experience with others, but also to challenge and be prepared to be challenged by others. Grace explained the responsibility of students to self-regulate in dialogue, commenting that they should be able to get their point across without causing offence. She commented that there were characters

with strong views in the group so sometimes she chose not to engage in a conversation. However, she did not believe that it was up to the lecturers to manage this:

> *We're adults and, erm, you know, if it was a class of 16 year olds it, yeah, absolutely, but we're not, we're adults, and we have far more awareness, well I say that, we don't always do we. No, I don't think it is [Interviewer: Yeah] the tutor's responsibility at all. I mean if something really offensive is said, [Interviewer: Oh, yes] then absolutely, but...* (Grace, S2, I5)

Chloe explained her view that students should take responsibility for checking their understanding, particularly how to relate information they were given to their teaching practice:

> *So, through dialogue, I think I as an individual can ensure that I really understand the concepts of things. So I have asked questions or have asked our lecturers to expand on something or [Interviewer: Yeah] or give a further example and with that approach I can then leave the classroom having a full understanding.* (Chloe, S2, I3)

Anna explained that she had noticed early on:

> ***if I wouldn't voice that question, it wouldn't be answered****. [Interviewer: Yeah] So there's nothing wrong with asking questions.* (S2, I6, my emphasis)

She commented that Tasha never discouraged her from contributing to discussions, believing this was because she was curious and happy for students to use dialogue to explore ideas (S2, I6).

It appeared that it was the intersection of student expectation and intent with lecturers' and mentors' affordance of opportunity which resulted in agentic involvement in dialogue. Evie explained how Alice letting discussion run was effective as she could compare her own ideas with those of peers:

> *It's interesting that what you think is not what everyone else thinks. That's been a bit of a highlight. I suppose. It's like when we've been discussing, like case studies and things like this and I'm like, how can you think that, that, people saying quite out there things and I'm like 'woooah'. I'm like the other end of that style.* (Evie, S2, I8)

Karen made a similar comment:

> *I think the dialogue in that particular unit was a huge part of it… it was really nice just to be able to talk around a subject area and share our experiences [Interviewer: Yeah]. Cause it's quite nice to know that people are going through the same things that you are going through [Interviewer: Yes, yeah]. It's that reassurance that you are not alone.* (Karen, S2, I9)

This last comment highlighted another aspect of students engaging agentively in dialogue: giving and receiving support as part of a community of practice, within the ITE peer group, and the placement teaching team. Students were regularly observed taking the initiative in supporting each other. In one observed episode, Hannah was supported by two of her peers, without direct lecturer intervention, although the tasks and groupings fostered peer dialogue. She was quite despondent about her action research project. Her peer, Daniel, asked her what it was she wanted to change and Hannah spoke about the limiting issues in her placement context. Grace made some suggestions and empathised with Hannah's situation, describing how she was approaching her own project and offering practical support. Hannah thanked them for their help, although she went on to say she would run her idea past the lecturer and proceeded to do so. This perhaps illustrated a limit on agentic dialogue: students proactively supported each other, gave advice, reflected and produced a plan of action, but sometimes wanted the lecturer's confirmation. Alice commented on how students took responsibility for identifying their own needs, and for seeking support from their peers:

> *Again and again, they say how much they enjoy that, being able to say what their specific needs are, support needs, [Interviewer: Yeah] get those addressed directly and not having a whole class delivery, erm, and the sort of peer support that happens in those sessions as well, there's a lot of sort of, erm, 'does anybody know what I should do for this' and then people answer.* (Alice, S1, I3)

However, whilst lecturers agreed on the value of handing over responsibility to students for dialogue, this was within boundaries. Tasha had used the term "puppet master" (S2, I2) to describe the lecturer giving opportunities to students to act agentively, whilst remaining in control. Likewise, Alice commented:

> *If I can see a group getting frustrated, I wouldn't, I would be responsive, I wouldn't just let a lesson get taken over.* (Alice, S2, I1)

In her view, backing off to let dialogue run was productive, but she would not "let a lesson get taken over." This accords with the comment in Grace's interview that students should take responsibility for their own participation in dialogue, but that there was a point where she would expect the lecturer to intervene (S2, I5). In one lesson, Florence led a quiz which became highly competitive. At one point there was a strong exchange between two students, with various side discussions taking place. The phrase Florence used to bring them back to her activity was "Back to being students" (S2, O4). This was a fascinating shift from handing responsibilities to students earlier in the lesson, to an instruction that the student role now was to comply with the intended activity of the lecturer. There were

perceived limits on student responsibility and authority and perhaps this was an example of intervening to avoid a lesson "taken over".

6.2.5 Agency: Conclusion

There were a number of features of dialogue which appeared to support learner agency, and aspects of learner agency which supported effective dialogue. The first was student intent and expectation: students considered themselves to bear some responsibility for their own participation in dialogue and for their own learning. This was expressed in terms of responsibility to ask questions, to contribute ideas to discussion, to listen to and reflect on the ideas of others, to challenge, and to self-monitor in dialogue. But a second necessary feature was lecturers' and mentors' intention to give students opportunity to participate in dialogue, encouragement to voice their views, openness to challenge, and activities where dialogue could be led by students. Observational data indicated that these intentions were enacted, with students given and taking opportunities to be proactive and reflective in dialogue. A further feature was that students not only had intent to be proactive, but their prior experience, both within education and beyond it, gave them the disposition and skills to be so. Undoubtedly there were limits on their agency and although encouragement of agentive dialogue and practice was observed, some episodes illustrated how it could also be constrained.

Toom et al. (2017) studied of the impact of the teacher education learning environment on student teachers' sense of professional agency in the professional community, concluding that there were different contributions of peers and teacher educators. Teacher educators created a challenging and reciprocal environment by demonstrating recognition of individual student participation and equal treatment of all students. Interactions with other students allowed for processing of the emotions inherent in professional learning programmes and this was as important as the interaction with the educators. Although their research was with primary teacher education students, their findings were consistent with the ITE Lifelong Learning context: students recognised their own responsibility and capabilities to create a suitable environment for active participation in discussion and debate, but it was underpinned by the dialogue facilitated by lecturers and mentors, which gave time for, supported and validated reciprocal interactions.

6.3 Theme: Object

As with agency, the extent to which a researcher can access the authentic intentions of participants, interpreting their understanding of the activity system's object(s) might be limited. The object of the activity system is a central component, a heuristic to conceptualise what drives the activity, but can be difficult to locate in the empirical data. The historically evolved object is interpreted by individual

subjects, translated into a motive which directs their actions within the activity system. Sannino and Engeström suggest that "The object of an activity is typically difficult to define for the participants" (2018, p.46): this ambiguity was noted in the earlier findings, as some participants found it hard to express what they were seeking from the programme, and some had changing, even contradictory intended outcomes.

In this research, it was hoped that interviews and observations would identify the object as perceived by participants and examine how dialogue was used to achieve the object. Intention is important in dialogue – Burbules (1993) defined dialogue as "a conversational interaction directed intentionally towards teaching and learning" (p. x). Engeström (2014) suggested that learners will respond differently to what the teacher had intended, "Therefore, we need to look at instruction and learning – the plans and actions of instructors as well as the actions of learners – as dialectically intertwined…The two will never fully coincide" (p. xix). Within the ITE programme the overarching object could be operationalised as 'learning to teach' but how it is understood in terms of individual motives and intentions can vary. Carey Philpott (2014) stated that the object could be "student teachers' professional competence" (p. 49) but this might be differently conceptualised in the activity systems of the ITE and the placement, as well as in different placements (identified by Douglas, 2012, as different between departments). The interpretation of the object shapes the individual's engagement with it and guides action (Edwards, 2005), but negotiation or change of the object may result from different perceptions of it within the activity system and between different activity systems.

The conceptual framework applied here revealed multiple connections between dialogue and the object of the ITE activity system. Tools can make the object visible, revealing motives of participants to each other and to the researcher; my particular interest was in the tool dialogue, and how this was used to achieve the object. With a sociocultural approach, the motive is not sought inside the individual subject but in the activity itself, hence observation of dialogue in classroom and mentor sessions, with interviews to allow participants to voice their interpretation of the object. There appeared to be four clusters of objects as voiced or acted on by participants: career longevity, practical skills, critical analytical skills and becoming part of a community of practice. There is also a sense in which dialogue is not only a tool in the activity system, but an object itself, as students seek mastery of it both to engage in the ITE programme and to teach effectively, which I refer to in 6.3.2 regarding practical classroom skills.

6.3.1 Career Longevity: Looking After Yourself and Making Good Choices for the Future

Managing wellbeing was evident in the data, indicating that this was an object of the programme. Lecturers often asked how the students were feeling in their placements and the feelings expressed were acknowledged as to be expected: ("Up and down", "That's normal." Grace/Alice, S1, O6). In the second semester, as the demands of the assignment schedule and placement teaching increased, Tasha commented if they were struggling: "come and have a cry in the office; we're used to it" (S2, O1). In the final group session, she suggested students continue to come and talk to lecturers once they had graduated, because the students had become part of their lives (S2, O7). One mentor, Sophie, emphasised how an aspect of her role was to monitor the student's workload. She explained:

> *If there was a book about it that it would have two sides, so like here's how to educate but also here's how to support. And you know, how to use dialogue in those two ways.* (Sophie, MI5)

Tasha commented that talking to others was an essential part of the process of long-term survival as a teacher:

> *I think the, the most dangerous thing is if people bottle things up and think that they are the only one going through that experience [Interviewer: Yeah]. So I think the feeling that they can talk about it and have experienced people say, yep, been there, this is normal, erm, it, it's part of that reassurance again that actually it's, it's not a sense of you can't do this or you're not going to be a good teacher or you're going to fail [Interviewer: Yeah] it's, sadly,* ***it is part and parcel of a tricky profession****...* (Tasha, S2, I2, my emphasis)

For me this was a very significant comment, characterising one way that the object was interpreted: learning to be a teacher meant developing coping strategies for a demanding job, and dialogue was a tool not just for the ITE programme but throughout a teaching career. This interpretation of the object as work-life balance and sustainability was also evidenced through observed discussions or described by participants in interviews. Alice commented:

> *That's my interest really, is the progression and feeling that it's going to be a sustainable life choice, career choice… we're lucky that we're a small course, small cohort, which I've always worked with, I've never worked at a big university with, you know, huge numbers going through, erm, that I have been able to take a, you know, take an interest in each individual's progression.* (Alice, S1, I3)

Students valued these discussions. When asked what the most useful part of the course had been, Grace commented:

> *I think the things that I've got out are the times when I've seen Florence and Tasha about other things, about like coursework and stuff, and then just had a general chit chat. [Interviewer: OK] That's been, out of everything, just from their experiences. And I know that kind of is doing my mentor a disservice, but they're far more experienced and far more worldly wise… Florence said that she wouldn't look at anything over Easter and there were some people that were really, oh, you know, why? Why isn't she? And I just thought, yeah, that's how, that's what I need to be like.* (Grace, S2, I5)

In this episode, what Grace referred to as "chit chat" included much valued dialogue with tutors about her future career, her wellbeing and time management, with Florence sharing her experience of decision-making in her own career. In classroom dialogue, students were encouraged to look out for their physical wellbeing and to carefully manage their work-life balance, preparing now for their career, with an emphasis on talking to others as part of this process.

Wellbeing was discussed in different ways in each of the observed mentor sessions. Theo and his mentee chatted about using the walk to and from work to create space for your own thoughts:

> *Just be able to sort of let everything in the day sort of settle, and you go home, and see stuff, because otherwise you're awake at 3 o'clock in the morning thinking about it.* (MO4)

Chloe's mentor, Ruth, advised her that teaching takes resilience ("It's a hard gig") and shared her own way of managing stress, which was talking to her car-share colleagues. She described how this:

> *Balances us before we come in and it balances us before we go home.* (MO1)

Most of the observations and interviews indicated positive experiences of dialogue in relation to wellbeing and career longevity, although there were a few occasions where students described more negative experiences, such as competing with peers for jobs or competing for a mentor's limited available time.

6.3.2 Developing Practical Skills, Knowledge and Confidence in the Classroom

A second way in which the object was interpreted was the development of practical teaching skills and knowledge, along with confidence to manage the classroom. Dialogue included tips and advice for planning and delivery of lessons and discussion of procedural requirements. When asked about their hopes or intentions for the ITE course, two students referred to being the best teacher they could be. Chloe clarified this:

> *in terms of professional practice, lesson planning, really thinking about inclusion, differentiation of resources for example, and just really putting those professional standards into practice.* (Chloe S1, I1)

Grace stated:

> *I suppose at the end of it I would like to be a really effective and efficient teacher. And, you know, I have a real deep sense of responsibility to the students, [Interviewer: Yeah] erm, that they do well as a result of my good teaching.* (Grace, S1, I2)

Students engaged in dialogue about the realities of classroom teaching during the classroom and mentor observations. Lecturers often encouraged reflection about what they were doing, modelling teaching approaches and facilitating dialogue among the students about how they could use these in their own practice. The ITE setting was presented by lecturers as a safe place to practice, reflect on and engage in discussion about the skills needed for their own classrooms. This included mastering use of dialogue with their learners, suggesting that dialogue was both a tool in this activity system, and an object of it.

Mentor sessions provided students with opportunities for dialogue around lessons they had taught, including feedback. Jasmine referred to the support and practical advice that her mentor, Margaret, had given her (S2, O7) and Margaret commented that her own PGCE had focused on classroom practice, which she considered the most important way to learn to teach (MO2). She saw her role as to guide in terms of selecting resources appropriate to different learner groups and understanding the syllabus (MI1). Jasmine, when asked about the most important dialogue in ITE, commented: "I am looking to get any valuable advice or information which can inform my practice, this is the main thing…" (S2, I1). This focus on practice was enacted in the dialogue which I observed between them (MO2).

Daniel, when asked what the most useful aspect of the programme had been, said it was the dialogue he had with his mentor because his mentor was the one who saw his teaching practice: "he sees what I do, what can be improved, so that is probably the most useful one…" He explained that the amount of post-lesson chat had "become less now as I've got more comfortable with it all" (Daniel, S2, I4).

In her interview, Ruth explained that, whilst students will learn in the ITE classroom, it is when the student actually uses this knowledge in their own classroom that they learn their craft, with a mentor whose role is to tell them the truth about their practice. She emphasised that this dialogue needs to be honest as the mentor is there to listen, not to reassure but to help them find strategies to deal with situations they face (Ruth, MI2).

In Paul and Lucas' mentor session, they discussed what Lucas was planning to do in his next lesson and the progress of a particular learner that Lucas taught, debating options to manage this situation. This was a very balanced, wholly practice-focused dialogue. Paul explained how the placement and the mentor relationship supported skills development:

> *You've got the management of relationships, you've got the sort of the balance if you need to between sort of student and staff and how you erm, you know, put those boundaries in place…*
>
> *We haven't spoken that much about teaching methodologies or [Interviewer: Mm] something that sort of stuff. It's more about students actually [Interviewer: Yes], that's the main, that's the main kind of topic of conversation…* (Paul, MI4)

Mastery of classroom skills was clearly important to students and in the end of programme presentation, several commented on their impact in the classroom. Daniel referred to a learner who had passed an exam for the first time (S2, O7) and Daniel's pride in this showed how important learner success, resulting from his teaching, had been to him. This matched the intention of lecturers to equip students to teach, perhaps best expressed by Florence:

> *I still feel quite passionate about actually giving people practical advice [Interviewer: Mmm] and support and strategies to help them in their careers. Because so many people are leaving this profession because I just think they're not really prepared for what they're about [Interviewer: Yeah] to face.* (Florence, S1, I1)

Key to this was dialogue around observed practice:

> *I think they're very aware of this is the expectation what we're looking for, and we've made it very clear, consistently told you, you haven't met that standard and because you haven't met that standard, we need to be telling you and I think you know it's been an open door [Interviewer: Yes] so they can come and have a conversation with us as well...* (Florence, S2, I3)

Tasha captured the two sides to the outcomes she sought for her students:

> *With my heart I would say, try to make them the best possible teachers they can be so they can make a difference in whatever sector they decide to go into, trying to make them, sort of, resilient teachers who [Interviewer: Yes] can actually last in the job. With my head I would say trying to get them through the course, (laughs) erm, because obviously accountability is on us as well as on them.* (Tasha, S1, I2)

This comment reflects a theme identified by Rantavuori et al.: "In educational settings, the students' object is a contradictory unity of meaningful knowledge (use value) and grades (exchange value)" (2016, p.4). Students and lecturers alike interpreted the object in a combination of use and exchange value, passing the course to achieve a qualification and to be equipped with skills and knowledge to be effective teachers. Whilst these were generally complementary there were occasions where the two aspects could be in conflict, especially when students felt they had limited time and had to make choices between the academic demands of the course and placement responsibilities. Dialogue was a tool used to support both aspects; in this section the focus has been on classroom practice and in the next section I turn to development of analytical and evaluative skills.

6.3.3 Critical Engagement: Using Educational Theory, Models and Vocabulary

Critical engagement was identified by participants as another important part of the programme, underpinning practical skills and judgements that students would need in the classroom, but also necessary to pass assessments, with high grades, to achieve the qualification.

Nick (mentor) commented that whilst the student might be taught general theories and principles in the ITE classroom, and whilst the placement provider might have a preference for particular teaching approaches, what was important to him was that the student could discuss the rationale for their approach. He said this dialogue was important:

> *kind of conveying to, erm, someone who could be naïve to it, that, um, you don't have to do what you're told all the time. There's a, if you, if you can justify why you wouldn't [Interviewer: Yeah] then that's OK….* (Nick, MI6)

Another mentor explained:

> *I just look to help them as much as I can and, and then for them to be able to make sound judgement [Interviewer: Yeah] and er, get through the course.* (Margaret, MI1)

In an episode referred to in section in 6.1.3, Alice suggested that student Evie could have taken a different approach to assessment of one of her learners, and Evie defended her approach. In our interview, Alice explained that this was good because students need to be confident about their own judgement when they are alone in a classroom, with no lecturer to consult about what they should do (S2, I1).

Criticality was something that lecturers encouraged in the classroom dialogue, whether the student was critically reflecting on literature, on their own practice, or the practice of the lecturer. Florence, having carried out an activity in a lesson, explained to students that she would expect them to critically

review what she did and Francesca (student) responded that this made people think for themselves (S2, O4).

Tasha emphasised the value of letting students engage with material, even if this meant dropping a planned activity, in order for them to have effective, meaningful dialogue. In the curriculum module, she noted that this year's group had:

> *been quite vocal. It means that in some of their work, both verbal and written, erm, they've missed some criteria because they've gone off on their personal tangents…. teacher training is about those discussions that you have with people to challenge your opinions, to make you think, that, you know, that actually that process [Interviewer: Yes] is part of the training, just because it's not being assessed in a specific learning outcome or assignment.* (Tasha, S2, I2)

For one of the in-service students, refreshing the link between theory and practice was particularly important:

> *I needed that kind of breath of fresh air, and look at things from a different perspective and I actually think that, you know, so far on the course I've got that, it's kind of consolidated some of the things that I've been doing in sessions [Interviewer: Ok, yeah], like with regards to kind of theories and reasons why you do it.* (Karen, S1, I3)

Another student commented that it was discussion of theoretical models that had helped her to make sense of something she had noticed in her teaching placement classroom:

> *I think Tasha's model, erm, curriculum theory model, now that could be really boring but in actual fact it made total sense because, erm, it made sense to me that I could work out what it was that I was, the problems that I saw in the classroom I could then [Interviewer: Yes] see why they were [Interviewer: Yeah] the way they were, so that was, that was really useful… it kind of fitted the jigsaw puzzle together. (*Grace, S2, I5)

In 6.2.4, I cited Chloe who commented on the way dialogue, specifically asking questions of lecturers for clarification, moved her from partial to full understanding of concepts (S2, I3). Alice reflected on how the in-service group had spent longer on just one theory, but their module presentations scored higher due to the critical engagement demonstrated (S2, I1). Extended dialogue moved students from simple use of theory to deep, critical engagement, with peer discussion enabling them to respond to it very effectively.

Alice explained how some teaching vocabulary can seem to evade definition, but that understanding came through application of it (S1, I3). Evie commented that teaching vocabulary was of a very

different nature to the STEM subject in which she had had a career for several years and which she was now teaching, but that they were encouraged to critically engage with what they were taught, including the vocabulary:

> *It's just a bit of a different approach, you know, and like, where I would just use words not really think about them, now I'm suddenly like, realising that words aren't interchangeable quite so much and you know 'do you mean that word or do you mean this word?' It's a bit like that sometimes. [Interviewer laughs] Which is definitely not my skill set at all… Sometimes we are actually discussing the meaning of it, so sometimes we do [Interviewer: Yes] get a chance to say what we think about it, or what does this word mean to you, or what do we understand about this word, or you know, from what we read was that we thought that meant or do we think it means something different.* (Evie, S1, I4)

Dialogue certainly made visible epistemological differences between different disciplines and helped students to start to adopt the language and practices of the teaching community. As the academic year progressed, students made greater use of teaching vocabulary and theory in their dialogue. Tasha commented that they could use the words more naturally because they had experienced it in practice, but that the discussions they had in preparation for writing assignments about their practice were helpful:

> *It's sort of that, 'oh I must back this up', sort of thing… So if anyone were to challenge it they've sort of got that back up and reasoning for it.* (Tasha, S2, I2)

Dialogue was an essential part of this process, allowing students to rehearse and test what they would later write. Chris Philpott (2014) argued that an apprenticeship approach to teacher education is not sufficient, because teachers need meta level understanding which allows them to be creative and autonomous, and that apprenticeships approaches lack the necessary criticality. Evidence here suggests that in some of the dialogue in the programme, students were encouraged to bring that critical voice.

6.3.4 Becoming Part of the Profession: Joining the Teaching Community and Gaining the Qualification

Becoming part of the teaching community, experienced as the ITE group and/or the placement teaching team, appeared to be an object which was a significant motivator of students, lecturers and mentors. Rogoff (1995) commented that "apprenticeship involves more than dyads" (p. 143) and this was the case here with evidence of support amongst the peer group and in the placement teaching team. Occasionally a student suggested that there were recognised times and places for the social

aspects of peer conversation, such as when Grace said to her group: "We're digressing – let's talk about that at break" (S1, O3). But more commonly, personal stories and teaching-related conversation were integrated during classroom sessions and mentor meetings. In one classroom observation, students were tasked with discussing action research topics. They did so briefly, then:

> *Jasmine asked how many students are in their classes. They discussed this for a while, and moved on to talk about other matters related to these classes such as good practice they had observed, how they were making up their teaching hours. They talked about how they were getting on, with different types of classes and one-to-one work.* (S1, O7)

Break times were recognised by all participants as time and space to talk and Florence asked the students to remind her when it was close to "cake time" so that the two groups did not miss meeting up together (S2, O2). Grace commented that:

> *Break time is quite a nice time to have a really good chat with people and see what's going on. I quite like that they give us a bit more of an extended break [Interviewer: Mm] because it is a really nice opportunity to catch up with people and realise you're not, you can get quite isolated otherwise I think…*
>
> *It was really nice to sort of have a chat with [peer] and just sort of say, well, you know, do you, are you experiencing this too. So that you realise you are not, you know, alone.* (Grace, S1, I2)

She reflected that she also had this supportive dialogue with her mentor:

> *With my mentor, erm, I'm really fortunate, we get on really well, so we have a really good working relationship but that also is sort of starting to become a friendship I suppose. So [Interviewer: That's interesting], yeah, we talk about all sorts, not just teaching, which is a really good thing. Cos I think it would be overbearing otherwise.* (Grace, S1, I2)

In a later interview, Grace commented that the most useful part of the course had been when she had talked with tutors about coursework, and then:

> *just had a general chit chat… some of the dialogue in teaching is bespoke to teaching [Interviewer: Yes], erm. (Pause.) You always have that like that professional dialogue, key words that are used and why. Erm, (pause), that teaching, teaching dialogue doesn't necessarily have to be about teaching for it to be of value.* (Grace, S2, I5)

These comments, made at different stages of the programme, highlighted the multi-faceted aspects of the object and the different dialogue forms which supported that object. Whilst the conversations about teaching were important, if they were limited to teaching, they would be "overbearing" but

their value was in the range of things they encompassed. These interviews were pre-pandemic; during periods of lockdown, many teachers found that, although teaching continued online, it was staffroom chat that was missed as it helps to normalise stresses of the teaching role. The absence of this was keenly felt, and it was significant that Grace identified the value in dialogue which was not specifically teaching focussed.

Anna described similar experiences, having found dialogue with peers, lecturers and her mentor very helpful in different ways. She went on to say that such dialogue:

> *Makes you feel more professional so it makes you feel part of the group [Interviewer: Yes] because they discuss things that, erm, happen to them or, you know, even if they haven't happened to them, so you sort of feel like you're one of them now. You know, that's sort of feeling of belonging, and to that certain group and that helps if you are a new teacher, if you're a trainee teacher, it helps you to feel like you're actually doing the right thing.* (Anna, S1, I7)

Frequent dialogue with her mentor and placement teaching team was important to her, not just for exchanging information, but because they also looked out for her wellbeing (S2, I6).

Francesca explained that students would come in early for lectures specifically to chat to peers:

> *The group was wonderful. And, er, we like to come in, er, to uni much earlier and sit together in the, in the, er {café location} or somewhere and er, and talk and er, exchange experiences, well, erm, gossiping about [Interviewer laughs] mentors and, or, or just discussing what happened in the classroom and what would you do and how would you, erm, deal with this situation, that was quite helpful.* (Francesca, S2, I7)

Grace, Anna and Francesca were pre-service students, but their views were echoed by in-service students, for example:

> *It was really nice just to be able to talk around a subject area and share our experiences [Interviewer: Yeah]. Cause it's quite nice to know that people are going through the same things that you are going through [Interviewer: Yes, yeah]. It's that reassurance that you are not alone.* (Karen, S2, I9)

Each lecturer encouraged this type of dialogue, Alice identifying its value as supporting day to day practice through being able to "let off steam… in a constructive, focused way" (Alice, S1, I3). Tasha suggested that for the curriculum module it would be good to talk to each other, clarifying that this was not plagiarism but working as a "community of practice, reading each other's work, commenting,

asking for ideas" (S2, O5). In one session, Florence commended discussions she was hearing as students worked on action research projects, and advised them that the following week:

> *I'm going to force you to talk to each other, they may ask a question you haven't thought about. It is very useful to talk so I will make you talk to each other.* (Florence, S2, O4)

Mentors talked about their own emotions and experiences to empathise with students and normalise their experiences. When Lucas talked about the challenges of teaching one particular group, Paul shared with him how nervous he had felt when he was first teaching, that feeling of having "all the eyes on you" (MO3). Mentors made efforts to include students as full teaching team members and they, and students, were able to identify when this happened. Daniel's mentor, Nick, described how he would come back from teaching a lesson and find Daniel at Nick's desk, having banter with another teacher. He commented that: "he was genuinely part of the team" (MI6). Daniel, in his final reflective journal, commented on the way he had moved from being an observer and recipient of support from the team, to a situation where he was sharing resources and having deep discussions:

> *By having these discussions challenges are shared and theoretical solutions can be conjectured and then trialled. It is also comforting to know that classroom difficulties are mostly common amongst all lessons and it's not personal.* (R3)

Conversation in the communities was not completely unproblematic. Anna, who was so enthusiastic about the dialogue on the course, commented that "I think a lot of people lose the spark… as the time goes by, they sort of lose hope" (S1, I7). Writing as a teacher educator, Rex (2011) reflected that her stories lost some credibility due to the time since she was last a practicing teacher in a high school and so she rarely used stories from her own practice. There was no data to suggest this was an issue in this study, but it is possible that students coming in from diverse career backgrounds or experience of education in different countries and cultures, with new ideas and exercising critical skills, could challenge the existing community of practice; this might be welcomed or create discomfort or conflict, but could lead to expansion within that activity system.

One aspect of the object as becoming part of the teaching community was to achieve the qualification and professional status. In many areas of FE this is not a requirement, but for students who aspired to teach in schools, it was a conscious goal. For Evie, it was an expectation within her department, so even if she had no intrinsic motivation to engage in a teacher education programme, she was required to do so. However, her teaching responsibilities felt a greater priority than student responsibilities:

> *I see myself as a somebody who turns up for 4 hours to a teacher training lesson and frantically tries to do what I need to do the rest of the time… So actually I'm a teacher who goes on a course is how I see it, rather than I'm an actual student.* (Evie, S1, I4)

Dialogue was sometimes used to clarify what was needed for higher grades and which aspects of the programme were graded. Daniel asked about the grading of the conference and the professional practice module (S2, O5), but I did not observe many discussions of this type. Students were provided with a handbook which set out grading and weighting of each assessment and although lecturers referred to this during classroom sessions, it was not frequently discussed and did not seem to be a priority for dialogue.

6.3.5 Object: Conclusion

Burbules' (1995) view was that dialogue is conversation "directed intentionally towards teaching and learning" (p. x), and the data analysed here suggested that learning to be a teacher involved all of the subthemes described. A classical dialogical format, one student building on another's contribution, scaffolded by the lecturer, might be an appropriate tool for some of the aspects of the object, but dialogue in the form of "chit chat" was effective in the pursuit of others, such as the sense of belonging and self-care for a long career. There was a broad consensus concerning the overall object by students, lecturers and mentors, with recognition that there were sometimes contradictions between the use value and exchange value of what they were learning, for example between what they needed to learn to survive in the classroom and what was required in the assignments. Passing the course was a goal that was a given, but there were different perceptions of the relative significance of other objects. This was partly reflected in the nature of the dialogue observed – whether the focus was on teaching practice or critical thinking skills or wellbeing – and of the dialogue reported through interviews as being of most value to each participant. Sometimes dialogue which strayed from the topic was encouraged, whilst at other times a lecturer or mentor moved the dialogue in a different direction (perhaps back to the plan) which suggested competition between objects (or intentions) and participants had differing authority to prioritise them.

6.4 Themes: Conclusion

This chapter has described how concepts from AT and CoP were used to explore dialogue in an ITE programme for the Lifelong Learning sector. It has enabled a close look at the nature of the object of the activity systems in the university ITE delivery setting and the practice placement. The object could be viewed as 'becoming a teacher', rather than learning a set of discrete skills and knowledge. In consequence, the nature of mediating tools used to realise the object, including dialogue, are broad.

Whilst early findings suggested many types of dialogue which could be explored, storytelling was evident in both the ITE classroom and the mentor meetings and was highly valued by participants. The agency of the subjects (the students) was evident in the observed dialogue, shaped by students' intentions to be agentive and their capabilities to do so. As with storytelling, these adult students brought skills and knowledge from roles held prior to the programme, so were equipped to participate in the activity system, to use its tools and realise its object. With the object expressed as 'becoming a teacher', there were forms of dialogue which would perhaps not usually be considered significant in a research study, notably what Grace described as "chit chat" (S2, I5), but which enriched the programme. Students, mentors and lecturers all recognised the value of such dialogue in bringing the student into the teaching community, and enabling them to make use of the language and rituals of it. This was not just about coping now, but developing ways of managing the impact of being a teacher on the whole of one's life and wellbeing. As student teachers, subjects needed to act agentively, and one aspect of the object, that of developing critical analytical skills through dialogue, prepared them to take ownership of their classrooms and to be able to make sound judgements. As they participated in these teaching communities, there were occasions when the students looked for endorsement of their ideas or practices from the lecturers or mentors (the expert others) but there were also occasions when they used dialogue to challenge ideas or practices. These different dialogues indicated ways in which the students were aligning themselves with the communities, but sometimes in critical alignment, with opportunities for both the student and the community to develop. Their prior experience equipped them to share knowledge, to express empathy and to offer ideas and practical support to their peers and, on occasions, to mentors and lecturers.

This discussion will be continued in the final chapter of this work, in which the contribution of the study to knowledge and practice in the field will be presented more fully. The final chapter will also set out the limitations of the study, those things which could be followed up in future research or which simply need to be acknowledged in terms of the potential transferability of conclusions.

Chapter 7 Conclusion

I have a long-standing interest in the subject of dialogue, both personally and professionally and I was keen to explore why it appears to have such an impact on learning. As part of my Masters study, I examined the effectiveness of students' written reflections on practice, a standard component of portfolios in many competence-based programmes. This research and reviews of literature indicated that whilst written reflections had a part to play, what learners valued most was the opportunity to talk through their experiences with others, whether these others were peers or tutors (Horrex, 2009).

These ideas crystalised further when I read *Iceberg: A memoir* (Coutts, 2014), in which Coutts described life with her journalist partner whose brain tumour was eroding his ability to speak. She reflected on the impact of this not only on him, but on herself, as she was losing the person with whom she talked about her world: "There is seeing and there is telling and what is one without the other…. The world experienced is the world described. This retelling in turn is such an intimate pleasure and so deep in the muscle of seeing and following on from that, of being. Soon, sometime soon I will have no one to tell this to. What will experience be then?" (pp. 162-163). There is something about dialogue, communicating experience to another, that when dialogue is missing, there is a sense of incompleteness.

My research was to investigate the features of dialogue which are effective from the perspective of those involved in a learning programme. I opted to explore the research question in the context of initial teacher education, a learning programme that I knew well but in which I was slightly peripheral as I was not the course leader. The answer, I believed, would not be a generic truth, the same for all contexts and situations; rather it would be specific to that setting, those relationships, the purpose of the interaction. I sought to examine dialogue with students, lecturers and mentors through observation, interviews and documents.

Stenhouse (1981) wrote that "research is systematic self-critical inquiry. As an inquiry, it is founded in curiosity and a desire to understand; but it is a stable, not fleeting, curiosity, systematic in the sense of being sustained by a strategy" (p. 103). He continued: "a full definition of research might include the qualification that it be made public" (p. 111). The investigation of dialogue within teaching was undoubtedly a stable curiosity on my part, but for a long time I had understood it as a personal, professional curiosity. During the research process, I was challenged that research needs to be made public, that making it available was as essential a quality of research as a systematic and self-critical approach. Stenhouse acknowledged that making the research public could take various forms, not

least being tested by practitioners. So, the findings and the themes identified as significant would be made public and tested. Any new knowledge claimed might be tentative or provisional, but its integrity and validity was enhanced by subjecting it to the critical eyes of others, including wise and knowledgeable supervisors, participants who checked transcripts and early theme analysis, peers who commented on presentations of findings at academic conferences, and practitioner colleagues who listened patiently, with an invitation to critique as the investigation progressed.

Stenhouse's second reason for making research public was to disseminate its fruits and make possible the cumulation of knowledge: in this final chapter I set out what this study could add to knowledge in the field of education, including use of concepts from existing theory, and refining existing knowledge in terms of context and currency which I hope will be of value to practitioners and to other researchers. I conclude with some proposals for further research.

7.1 Findings and Contribution to Knowledge in the Field.

In answering the research question about the features of effective dialogue in teacher education, as perceived by its different participant groups, I have made a contribution to knowledge in two ways. These contributions add to the literature around dialogue and offer conclusions which practitioners in the field may consider worth testing in practice, particularly those who work in ITE in Further Education settings. The first is the findings and subsequent discussion of themes arising from the data generated from the study, in particular around perceptions of effective dialogue as storytelling, the agency of students on the programme and the impact of the interpretation of the object on the experienced effectiveness of dialogue. Whilst there is already extensive literature on dialogue and on teacher education, the particular setting of FE offers the potential to extend knowledge by examining the themes in this context. Key differences between teacher education in schools and FE have been identified in literature (Powell, 2020) and the impact of these on the nature of dialogue in the research cohort was evident in the findings of the study. For each theme, the demographic make-up of the students was significant, as these adults brought prior experiences and were able to participate in programme dialogue extensively. But the second contribution is in terms of the process of the research: the conceptual framework which guided the methodology, in particular the data analysis, was a novel approach which drew together the work of other researchers and theorists in order to examine a particular phenomenon in a particular context, and which could be applied or adapted by others. This contribution is perhaps most pertinent to researchers, but with the increased interest in practitioner research in lifelong learning, I would hope that it would also be of use to practitioners

who are embarking on research in their own classrooms, particularly those in FE settings and in teacher education in particular.

In this section I look at each of these contributions, to consider how they add to the literature and how they could be of use to practitioners and researchers in this field.

7.1.1 Storytelling

In this study, prior knowledge and experience of participants showed itself in storytelling which was valued by all participant groups. Bathmaker and Avis (2005) in a study of ITE placement experiences in FE found that students "told stories which attempted to contrast and distance themselves from experienced lecturers" (p. 56); they did not feel supported by experienced lecturers in placement and did not have an affinity with them, and the marginal nature of their role in the community of practice meant that these dilemmas were not explored. In contrast, observations and interview data in my study indicated that storytelling by students matched those of lecturers and mentors and looked more like dialogue than the monologic form often associated with storytelling. The anecdotes which were shared, matched, affirmed, and challenged, offered a form of dialogue which was valued as effective in a number of ways by students, and by lecturers. Students were able to use the language of and share in stories of the shared activity (teaching), even coming in early before lectures so that they had time together for this purpose. Whilst their early stories were of experiences from roles other than teaching, these allowed them to enter dialogue with meaningful contributions and established participation in dialogue which gradually developed a teacher perspective. There were similar exchanges in the interactions between mentors and students, and little evidence of distancing themselves from placement ways of working when they were in the university setting. Rather, the story exchange existed between all parties and served a number of purposes including entry into the community of practice and establishment of a teaching identity. This was evident in 'chit chat' (a phrase used by one of the students), not only between peers but between the lecturer and student in tutorial sessions, based on common experiences and experienced as affirming and helpful. The same student commented on the value of talking about things 'beyond teaching' with her mentor: the dialogue did not have to have an explicit 'teaching' focus for it to have been helpful to her. Re-telling an experience as a story in dialogue with another practitioner facilitated reflection, learning and reassurance which were important aspects of the programme. It demonstrates the ways in which student teachers created their "discursive identity" (Kumpulainen and Rajala, 2017, p. 24), an identity which shifted from student in the ITE classroom to teacher in the placement classroom; these identities merged with prior identities already established. Student self-awareness, and awareness of this identity by lecturers and mentors, can enhance student agency in dialogue and in practice.

Shank (2006) described storytelling as a social practice as teachers re-create their experiences in narrative form to make sense of these experiences, but they choose what and who to tell. Engaging in dialogue with peers, lecturers and mentors, re-telling their experiences in their own words to be examined and responded to, supported students to feel part of a community of practice, and to establish a teacher identity Kaartinen and Kumpulainen (2004) described how learning activities were interpreted by students through their personal lens, with that lens shaped by cultural histories. In ITE participants engaged in telling and listening to stories through their own lenses, which derived from their own history, culture and experience, and which expanded to include lenses developed through teaching in an FE setting. There should be a note of caution for practitioners, if making more extensive use of storytelling, that each story is a context-bound incident and its relationship to models and theory needs to be considered. Lecturers and mentors can use their own stories to reinforce those told by students or can present alternative interpretations for students to consider when they share their story as truth based on a single incident. On occasions, lecturers listened to a student story then explicitly linked it to a theory or model which the story illustrated and this was a helpful connection of the concrete to the abstract. Whether the story aligned with or challenged theory, students could connect with theory more easily in this form of dialogue. Rex et al. (2002) expressed concern that increasing use of technological applications across curricula could mean the loss of some of the space for narratives in classrooms. I shared this concern, but my study appeared to show the exchanging of narratives as alive and well.

7.1.2 Agency

The second theme of agency was linked closely to these ideas. Lecturers and mentors described actions which would encourage and support students' agency. Observations showed this enacted in practice, although there were occasions where lecturers or mentors took back control or where students looked to them for definitive answers or intervention. The degree of agency reflected a shifting division of labour within the activity system as well as the power and authority of different participants, such a mentor overruling the student's suggestions for a planned lesson, or pre-service students deferring to in-service students in conversations about teaching practices. Some students expressed a view that they had to take responsibility for aspects of dialogue, such as asking questions if they did not feel they had full understanding and monitoring the way they contributed to classroom discussion, rather than expecting the lecturer to do this. This was underpinned by the prior learning and experience they brought to the programme: they aspired to have professional agency in the teaching role, and, for the majority, their experience equipped them for it, whether this was experience of teaching (unqualified) or from a prior career. It accorded with the findings of Kaartinen and Kumpulainen's (2004) study, where the adult students' roles and participation were shaped by

their cultural histories and equality between participants was “reflected in their social language and comments” (p. 186). In ITE (Lifelong Learning), where most student teachers come into teaching with vocational expertise, it should be expected that they are motivated and able to demonstrate agency from an early stage. Mentors and lecturers can make use of this, stepping back and allowing students to engage in dialogue with minimal scaffolding, fostering what Teo (2013) described as a “discursive space” (p.13). Egalitarian relationships facilitate such space, and this was the perception of many participants in the case study. In the teaching community of practice, lecturers and mentors are in the role of master or expert to the student apprentice, so there are occasions where they are called on to support initiation into the community, such as discussing feedback on observed teaching practice (which students highly valued). However, the apprentice’s participation is not classically peripheral, given the skills and knowledge they bring and the expectation that they teach relatively independently from early in the programme. Participation levels vary: some students do not take full responsibility for classes until close to the end of the programme, but in interviews students, mentors and lecturers commented on the value of the student being fully part of the teaching team. Student engagement in dialogue with the team, whether teaching-related or the general chat of the team, gave students a sense of participation and teacher identity which they valued greatly. This “guided participation” (Rogoff, 1990, p.8) is collaborative and provides scope for the expert to continue to learn, as well as the student. Iredale et al. (2013) suggested that work-based learning is an environment where pragmatism and compliance is more likely than risk taking, but in this study, lecturers encouraged students to take risks in the ITE classroom and to be innovative in their teaching practice as they approached their final observed lessons. Agentic participation of the student is likely to lead to challenges to the community, to the rules or practices that are established, partly due to their prior or continuing membership of other occupational communities of practice, bringing those ways of working, their rules, their culture and their discourse, a particular characteristic of ITE students in FE…. The ITE classroom could be characterised as a community of inquiry (Biza et al., 2014) and mentors’ and students’ descriptions of placement communities suggest that these were also places where shared practices could welcome inquiry. Sorenson (2014) found that a separation of theory and practice, and power relationships in the ITE structure could mitigate against expansive learning of the activity system if student teachers are just learning to fit in. However, most students in this ITE programme, bringing confidence and skills related to their sociocultural history, were prepared to be agents of dialogue from a very early stage of the programme. If lecturers and mentors demonstrate willingness to genuinely hear the student perspective, to model and encourage criticality of theory and practice, even to learn from students, they are more likely to generate a safe and forward-looking environment for learning.

7.1.3 Object

The object of the activity system was also significant in identifying what was, or was not, effective dialogue, from the perspectives of participants. In key conceptualisations of dialogue, purpose (Alexander, 2008) or intent (Burbules, 1993) are central. In this study, I asked participants about their intentions in relation to the ITE programme, seeking insights into the purposes served by dialogue. I identified four apparent interpretations of the object of the system: career longevity including wellbeing, practical teaching skills, critical engagement and becoming part of the profession. Purposeful or intentional talk was a tool to achieve them, but the form or features of effective dialogue depended on which of these objects dominated in that moment. For example, two of the objects could conflict: developing a critical approach and becoming part of the community. A classical community of practice process sees the newcomer in a legitimate peripheral role, gradually moving towards full participation. But in this study, whilst this was the experience of some students, the object of developing criticality in their thinking and writing endorsed being able to critique the practice of the community they were entering, and an AT lens would suggest such contradictions could generate learning. Challenges might have been small-scale, such as the student who credited herself with persuading her mentor to try using an item of technology. She described how, initially, the mentor had teased her in their dialogue about it, but had been won over when she observed the student making good use of it. Engagement in the placement community of practice was referenced by students who felt 'part of the team', 'accepted' and was noted by mentors who commented that students just fitted in. This was experienced by the students, and observed by mentors and lecturers, as operating within the dialogue between students and others, one aspect of the practices with which they were engaged. Another object identified was managing the pressures of the role so as to support a long career, particularly of teaching in the context of FE where teaching, by nature of split sites and day/evening timetabling, can be quite isolated. Learning to cope with the challenges could be a rather negative view of teacher education, suggesting compliance over criticality, which Orr explored through the Marxist concept of alienation (Orr, 2012). If one interpretation of the object of teacher education includes identifying with the community, taking on its rules and ways of working, this could conflict with an inquiry and criticality object. It is important that lecturers and mentors recognise this potential conflict and provide space for dialogue about it in classroom and mentoring sessions. Twiner et al. (2014) suggested that meaning making and rich learning can result from unplanned trajectories in classroom dialogue. Intentional dialogue directions might be set by the lecturer or mentor, but improvisation could be necessary when students take dialogue on an unexpected trajectory. If the student is an adult, exercising agency, it would be expected that dialogue which follows a trajectory

in pursuit of their own perception of the object has potential for the deep learning that Twiner et al. described, but the authority and power positions of the different participants tends to shape the effectiveness and outcomes of such dialogue.

In other applications to practice, transparency of the interpretation of the object in the ITE programme could justify using varied forms of dialogue. ITE lecturers and mentors may take for granted their motives and their interpretation of what 'learning to teach' looks like as an object of their activity. But the study indicated that these interpretations are significant for the way dialogue is used as a tool to effectively support the overall object. Clearly the object of the activity system for the ITE programme goes beyond the learning outcomes stated in the course handbook, beyond the Professional Standards against which students are assessed, but some aspects of the object are relatively unexplored. As one lecturer expressed it, there are heart objectives and head objectives; some will coincide and others might conflict, and the features of the dialogue used to achieve them will vary. But this study suggested confirmation of the findings of Edwards and Protheroe (2003) that there was no exploration of the object of their actions by student teachers; lack of consciousness about this might obscure the choice of talk tools used by all participants, rather than openly examining their effectiveness.

7.1.4 Conceptual Framework

I have described the conceptual framework, which combined a domains and components structure with concepts from Activity Theory (AT) and Community of Practice (CoP). This was a novel approach and one that could be replicated by other researchers. Calcagni and Lago (2018) proposed a framework which classifies domains and components to support analysis of dialogic approaches to education. They tested its applicability with Thinking Together and Accountable Talk approaches and I applied it here to the research data. This identification of components in the dialogue between programme participants was a first step to becoming aware of what each of these participants viewed as significant, and which appeared to be key aspects of dialogue in the programme. The subsequent coding using theoretical concepts developed the analysis to focus attention further on what might be the most effective forms and features of dialogue in this particular context. Data analysis identified connections between domain/components and concepts, facilitating a more robust, in-depth exploration of the data and synthesising the concepts from AT and CoP with those components which supported clarification of emerging findings. The basic AT mediational model was enhanced by looking closely at aspects of the context of the activity system, such as the rules and division of labour of the communities within which the subjects operated. For example, AT concepts drew attention to the perceptions of the object of the programme, with learning goals and aims (components) often indicators of how those objects might be visible, as shown in Figure 10. CoP concepts helped to identify the different communities in which students operated and how dialogue was different in those

communities, possibly related to the historical development and discourses of different subject departments. Chris Philpott (2014) suggested that learning to teach means preparing teachers "to become autonomous, creative and critical practitioners wherever they are working" (p. 5) He argued that a simple apprenticeship approach to teaching is not sufficient to achieve this, and an appropriate pedagogy is needed to develop such teaching practitioners. I would argue that the conceptual framework used in this study led to findings which provide some tentative insights into the use of dialogue as a tool within an ITE programme which combines apprenticeship to the community with criticality of theory and practice.

Wegerif et al. (2020) warned against research offering "final words that will close down all the other voices" (p.247) and point out that "Teachers and other practitioner colleagues are professionals who must make decisions that involve choosing between relevant and meaningful alternatives" (p.248). This study cannot claim definitive answers to the research question, but the tentative conclusions suggested, and the conceptual framework used to reach them, are offered for consideration.

7.2 Limitations of the Study

The broader limitations of case study as an approach to educational research were examined in Chapter 4, so the focus in this chapter is on limitations specific to the context, the implementation of the selected methodology and the findings.

7.2.1 Context

It was my intention to focus on a pre-service cohort of students but for the first time for the research institution, classes of in-service and pre-service students were combined. This challenged my intention to investigate how dialogue changed during the course of the programme for students with no teaching experience. In reality, some of the pre-service students had prior teaching experience and some of the in-service students had only been in their teaching post a few weeks, so the differences were not as profound as anticipated. It was possible that findings were slightly blurred, but in terms of teaching experience, there was not a clear divide between them. With much research focused on one or other group, combining the two in a single case study might have offered something new, even if not the original plan. Differences between them were considered during the data collection and analysis, but being 'pre-service' or 'in-service' turned out to be just one of many factors of the individual's biography which shaped their engagement in dialogue.

7.2.2 Implementation of Methodology

I had hoped to use audio recordings of observations. However, formal consent for this was not given by some students so audio recording was not possible for whole group ITE sessions, only for small group work or mentor meetings where all parties had given consent. This meant that I was unable to

access the details of the exchanges recorded in the observation field notes as I had hoped, which was frustrating when I realised, for example, that I did not have as much detail of a dialogic exchange as I would have liked. However, I had detailed field notes and many points that I identified as significant were discussed with participants during interviews, so the accuracy and authenticity of field notes was checked to some extent. Had I been able to audio-record observations, a wider range of data analysis options would have been open to me, such as Conversation Analysis (Heritage and Clayman, 2010), which could have generated further, possibly different insights. This could be an option for future research.

Although several mentors consented to participate in the study, actually arranging to observe meetings with their students proved challenging, as these were often organised at short notice and notifying the researcher was not their priority. I was grateful to those who invited me and whose sessions I observed, but I am aware of the limitation of only having observed four such meetings and of the caution with which any conclusions can be drawn. By contrast, more classroom observations were carried out than originally planned. Students and lecturers provided feedback about being comfortable with the observations and sessions were added to be able to see snapshots of dialogue at different points in the programme, and to balance other limitations.

In a single, small case study, it is difficult to fully protect anonymity. Every effort was made to ensure that individual participants could not be identified. One of the implications of this ethical decision was that characteristics of individuals or sometimes even of groups or activities, could not be included in the final text as they increased the risk of identification of participants. This meant that the intention to analyse the data in terms of social, cultural and historical factors could not be fully implemented. There were aspects of individuals' social and cultural background which I chose not to disclose which would perhaps have shed more light on those sociocultural factors. Where possible, such information was included, or at least referred to in aggregate form, but if future studies could be scaled up with larger or multiple cohorts, this would not be such a risk and analysis of social, cultural and historical factors could be carried out more thoroughly and systematically.

I committed to a reflexive approach and I tried to implement this throughout. Use of a notebook for thoughts throughout the process, journal entries during data collection, memos alongside data analysis and regular contact with knowledgeable supervisors allowed me to critique the process and to refine it as the project progressed, as well as providing a further element of triangulation to the study. Undoubtedly there was room for improvement: journaling could have been more systematic (multiple entries some months, then gaps at other times) and some field notes memos could have been done in a more timely way. Whilst this was sometimes justified as the volume of data collection

varied across the year, at times it was due to competing demands on my time. But these techniques were helpful to apply some criticality to the process. I committed to establishing trust with participants; informal feedback during the project and through member checking processes indicated that this was broadly achieved. I was very aware that, as an insider researcher, both the participants and I chose to present ourselves in a particular way. I presented myself as a researcher, part of the team but in some ways distanced from it. Student comments, however, indicated that they were very aware of my insiderness. In one interview, the student more than once referred to "you lot" or "you guys" when talking about the teacher education team; she clearly saw me as part of that group. I do not believe that this undermined the findings, although it does mean claims remain tentative. One possible consideration is that conflicts and dissatisfaction that might have been expressed to an outsider researcher were not expressed to me, so conclusions I reached might not have represented the whole of a participant's experience, but they are nevertheless valid in terms of aspects that I observed and that participants chose to share.

7.2.3 Findings

The research question itself changed a little from my original doctorate application to its final form. However, I became increasingly aware that there was a risk that use of the term 'features of dialogue' had led to a narrow focus on a 'tool' within the activity system, rather than genuinely considering the activity system holistically. Using AT within the conceptual framework supported adjustments in my approach, with greater consideration of all aspects of the system, allowing me to identity the perception of the object and division of labour (related to agency) among my findings.

This was a small case study, with small numbers of participants and a set of observations which could not reflect the whole of the programme. As a result, the findings are tentative. Participants have been involved in validating the findings and conclusions which affords them in-context credibility, but as Burn and Mutton (2015) have stated, there is a huge variety of programmes of ITE and variety of students within each programme, so it is very hard to draw causal conclusions which one could confidently apply across the sector. In order to arrive at a manageable number of themes to pursue, I necessarily had to set aside some of the initial findings, and the themes that I chose to take up, whilst selected with as much transparency as possible, might not have been those that participants or other researchers would have considered the most significant. The data set remains available to pursue these in future.

7.3 Proposals for Further Research

The context of this study means that any future research will need to consider issues related to the instability of the sector. The FE sector changes significantly and frequently, which makes planning of research, especially longitudinal research, problematic. But there is an increasing desire to engage FE practitioners in research, evident in expanding research networks and funding from the professional body.

Future research could take a number of different directions. Time and word counts meant some findings were set aside, but these could usefully be taken up in further research, including dialogue that takes place independently of the lecturers and mentors, outside the formal learning programme. It would also be interesting to explore the use of dialogue through technology, including social media, email and the VLE.

Adjustments to the methodology (larger cohort, audio-recording, described in 7.2.3), could allow a different approach to the data analysis. Transcriptions of the naturally occurring interactions in the classroom, and more openness about social, cultural and historical factors, could open up new findings or extend those which have been discussed here.

Another area to develop would be the applicability of the findings to other cases. This could be an ITE programme in a different college (particularly one where there was not the same wide range of vocational subjects covered but was more specialised), or a future programme in the same college. Changes in personnel and students would offer an opportunity to explore whether the findings were specific to this set of participants or were replicated in other conditions. Would a change in course leadership or in the modules offered, for example, shape the interpretation of the object of the activity system? I have already observed this anecdotally and it would lend itself to further study. Equally it would be interesting to explore further any differences related to in-service/pre-service status.

Another possibility would be action research, applying the conclusions to a future programme and testing for their usefulness. This could draw on a methodological approach described by Wegerif (2020b) as a chiasm methodology, using an inside/outside stance: not a reconciliation of the two perspectives but holding them in tension to gain understanding. In action research, the researcher would be a more fully embedded participant in dialogue and the research would have potential for inside/outside understandings.

7.4 Reflections on this Research Journey

The process of planning and carrying out research into a question that has puzzled me for years has been intriguing, frustrating, confusing and ultimately hugely rewarding. My early intentions were almost exclusively personal, but through the process I came to realise that my question might be shared by others and that the answers I was discovering could be of value to others, both practitioners and researchers in the field. Whilst this was perhaps obvious to my student peers and my longsuffering supervisors, I was slow to this realisation. The literature review allowed me to read more widely in the field than I had ever done before and to be challenged and enthused by that research. But it also showed areas of neglect, with teacher education in FE being one of those under-researched. The thought of being able to contribute not only to my own awareness and understanding, but to that of others, kept me going when I faced setbacks and apparent dead ends. My contribution has been to offer practical findings about effective dialogue forms and processes for consideration by other teacher educators, in terms of talk tools (storytelling), of students as agents of dialogue and of transparency of object for all participants. I also contributed an approach to analysing data through a combined concepts and components framework which could be used more widely in the field of education. I hope that these will also add to the growing interest in practitioner research in my own sector, particular in ITE and in FE. I do not believe that this investigation has come to an end: partial, tentative conclusions have been set out, but there is more work to do to test them rigorously and to pursue findings where only the surface could be scratched. I also look forward to the continuation and extension of dialogue on dialogue with an increasing range of practitioners and researchers as this work enters the public domain. In ITE and in the research community: we need to talk.

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Appendices

Appendix A	Participant Information Sheet and Consent Form (Student)
Appendix B	Observation Notes Schedule – Classroom
Appendix C	Observation Notes Schedule – Mentor Meeting
Appendix D	Interview Schedule Semester 1 - Lecturers
Appendix E	Interview Schedule Semester 1 - Students
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Appendix I	Data Collection Referencing Grid
Appendix J	Sample of Analytical Notes on Data

Appendix A: Participant Information Sheet and Consent Form

Wendy Horrex
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[Date]

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Working Title: We need to talk: an investigation of features of effective dialogue in an initial teacher education programme

PARTICIPANT INFORMATION STATEMENT – Teacher Education Student (PGCE/Cert Ed)

(1) What is this study about?

You are invited to take part in a research study about the use of dialogue in teacher education programmes, dialogue between students (trainee teachers), lecturers and mentors. For a long time I have been interested in the way dialogue seems to be central to any teaching and learning programme, even in the context of changing technologies, approaches and delivery methods. I would like to explore what are the effective features of dialogue for each of the participants in the process so that we can develop this in future programmes and possibly share any insights with colleagues in teacher education more widely. You have been invited to participate in this study because you are a student on the programme that I will be studying and as such will bring insight into what you find helpful in terms of the dialogue opportunities within the programme. This Participant Information Statement tells you about the research study. Knowing what is involved will help you decide if you want to take part in the study. Please read this sheet carefully and ask questions about anything that you don't understand or want to know more about.

Participation in this research study is voluntary. By giving consent to take part in this study you are telling us that you:

- ✓ Understand what you have read.
- ✓ Agree to take part in the research study as outlined below.
- ✓ Agree to the use of your personal information as described.

(2) Who is running the study?

The study is being carried out by the following researcher:
Wendy Horrex, Educational Doctorate Student Researcher, University of East Anglia. I am also a staff member at [Research College] but am carrying out the research as a Doctor of Education student.
My supervisor is Dr. Irene Biza and her contact details are given at the end of this information sheet.

(3) What will the study involve for me?

The project is planned to start in [date] and will last for one academic year. Your involvement would be to participate in interviews and to be observed during some of the planned taught sessions this year. I would also access documents (online through [VLE]) which relate to your programme of learning. You will not be asked to do any report writing, questionnaires or surveys.

I will observe some parts of some taught sessions on the full-time teacher education programme across the academic year during which I will use audio recording and take notes (around 8 sessions). I will observe some of the mentor-student reviews that take place at points during the academic year, so that I see two different types of dialogue that you experience as part of the programme. I will not observe you in your teaching role.

I will interview you no more than twice during the academic year; each interview would last up to an hour and would be arranged at a time and place to suit you. The questions would be about your experience of dialogue in your teacher education programme and you would have the right not to answer any question. The interviews will be audio recorded then transcribed; you will be given the opportunity to check the transcript for accuracy and to add any further comments. The recording will be deleted when the project is complete.

I will also examine any documents (online through [VLE]) that relate to the observed sessions, such as journal entries or review documentation (your ILP).

(4) How much of my time will the study take?

It is my intention that this project will take just a little of your time. The observations would simply be of activities already timetabled for your programme so will not impact on your time. The interviews would take up to an hour (on one or two occasions during the year), arranged at a time that suits you, and you might want to allocate some time to reading the interview transcript.

(5) Do I have to be in the study? Can I withdraw from the study once I've started?

Being in this study is completely voluntary and you do not have to take part. Your decision whether to participate will not affect your current or future relationship with the researcher or anyone else at the University of East Anglia or at [Research College].

If you decide to take part in the study and then change your mind later, you are free to withdraw at any time. You can do this by emailing me at W.horrex@uea.ac.uk. Be assured that this will have no negative consequences for your programme of study.

With reference to the interviews, you are free to stop the interview at any time. Unless you say that you want us to keep them, any recordings will then be erased and the information you have provided will not be included in the study results. You may also refuse to answer any questions that you do not wish to answer during the interview or to bring the interview to a close at any point.

With reference to the classroom observations, if you choose not to participate in this aspect of the study, I will ensure that no information relating to you is included in the data collected. It is my intention to audio record the classroom observations, simply to check the accuracy of my field notes. If you consent to the observation, but choose not to consent to audio recording, your individual contributions will be removed from this record of the session.

If you decide at a later time to withdraw from the study your information will be removed from our records and will not be included in any results, up to the point we have analysed and published the results.

(6) Are there any risks or costs associated with being in the study?

Aside from giving up your time, we do not expect that there will be any risks or costs associated with taking part in this study.

(7) Are there any benefits associated with being in the study?

There are no direct financial or non-financial benefits to you from participating in this research project. However, part of your programme involves carrying out some research of your own and it is hoped that being a participant in this project will give you experiences and insights which might be helpful to you in approaching your own research. In addition, participating in interviews does offer an opportunity to reflect on your participation in the programme and might provide you with insights which are of benefit to your studies and teaching practice.

More widely it is hoped that there will be benefits to practitioners from this investigation as findings will relate not only to this programme but could be transferable to other teaching contexts: as a future practitioner I would hope that the findings will be of interest to you in your teaching career as well as to practitioners in teacher education in other institutions.

(8) What will happen to information about me that is collected during the study?

The information collected will be in the form of field notes and recordings from observations, answers to questions in interviews and documents which are part of the teacher education programme of study.

Audio recordings from observations will be used only to check the accuracy of field notes: they will not be transcribed. Audio recordings from interviews will be transcribed and you will be given the opportunity to check the accuracy of the transcribed record. No identifying information will be included in the final report. While every effort will be made to keep your identity hidden (for example, pseudonyms will be used to anonymise individual participants and the institution in the report), given the small cohort of participants this may not be possible.

Audio and computerised records will be kept on a password protected computer and transferred using encrypted data storage. They will only be accessed by the researcher and made available to my supervisor at the University of East Anglia. Hard copy records will be kept in a locked filing cabinet to which only the researcher has access.

By providing your consent, you are agreeing to us collecting personal information about you for the purposes of this research study. Your information will only be used for the purposes outlined in this Participant Information Statement, unless you consent otherwise. Data management will follow the 2017 General Data Protection Regulation and the University of East Anglia Data Management Policy (2015).

Your information will be stored securely and your identity/information will be kept strictly confidential, except as required by law. Study findings may be published, but you will not be identified in these publications if you decide to participate in this study. In this instance, data will be stored for a period of 10 years and then destroyed.

(9) What if I would like further information about the study?

When you have read this information, the researcher, Wendy Horrex, will be available to discuss it with you further and answer any questions you may have. If you would like to know more at any stage during the study, please feel free to contact me or my supervisor, Dr Irene Biza (i.biza@uea.ac.uk)

(10) Will I be told the results of the study?

You have a right to receive feedback about the overall results of this study. You can tell us that you wish to receive feedback by indicating this on the consent form and providing an email address (or postal address) to which the feedback will be sent. The feedback will be in the form of a summary of findings and conclusions. You will receive this feedback after the study is finished.

(11) What if I have a complaint or any concerns about the study?

The ethical aspects of this study have been approved under the regulations of the University of East Anglia's School of Education and Lifelong Learning Research Ethics Committee.

If there is a problem please let me know. You can contact me via the University at the following address:

Wendy Horrex
School of Education and Lifelong Learning
University of East Anglia
NORWICH NR4 7TJ
W.horrex@uea.ac.uk

If you would like to speak to someone else you can contact my supervisor:
Dr Irene Biza
School of Education and Lifelong Learning
University of East Anglia
NORWICH NR4 7TJ
Tel: 01603 591741
i.biza@uea.ac.uk

If you are concerned about the way this study is being conducted or you wish to make a complaint to someone independent from the study, please contact please contact the Head of the School of Education and Lifelong Learning, Professor Richard Andrews, at Richard.Andrews@uea.ac.uk.

(12) OK, I want to take part – what do I do next?

You need to fill in one copy of the consent form and return this to Wendy Horrex via your Course Director. Please keep the information sheet and the 2nd copy of the consent form for your information.

This information sheet is for you to keep

PARTICIPANT CONSENT FORM (1st Copy to Researcher)

I, ... [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

✓ I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.

- ✓ I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- ✓ The researchers have answered any questions that I had about the study and I am happy with the answers.
- ✓ I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with the researchers or anyone else at the University of East Anglia or at [Research College] now or in the future.

✓ I understand that I can withdraw from the study at any time.

- ✓ I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.
- ✓ I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.
- ✓ I understand that the results of this study may be published, and that publications will not contain my name or any identifiable information about me.

I consent to:

- **PGCE/Cert Ed class observations** YES ☐ NO ☐
- **Review meeting observations** YES ☐ NO ☐
- **Be interviewed** YES ☐ NO ☐
- **Audio-recording** YES ☐ NO ☐
- **Researcher access to course-related records on [VLE]** YES ☐ NO ☐

Would you like to review transcripts of your interviews? YES ☐ NO ☐

Would you like to receive feedback about the overall results of this study?

YES ☐ NO ☐

If you answered **YES** to this last question please indicate your preferred form of feedback and address:

☐ Postal: _____

_____

☐ Email: _____

.....
Signature

....
PRINT name

.....
Date

PARTICIPANT CONSENT FORM (2nd Copy to Participant)

I, ... [PRINT NAME], agree to take part in this research study.

In giving my consent I state that:

✓ I understand the purpose of the study, what I will be asked to do, and any risks/benefits involved.

- ✓ I have read the Participant Information Statement and have been able to discuss my involvement in the study with the researchers if I wished to do so.
- ✓ The researchers have answered any questions that I had about the study and I am happy with the answers.
- ✓ I understand that being in this study is completely voluntary and I do not have to take part. My decision whether to be in the study will not affect my relationship with the researchers or anyone else at the University of East Anglia or at [Research College] now or in the future.

✓ I understand that I can withdraw from the study at any time.

- ✓ I understand that I may stop the interview at any time if I do not wish to continue, and that unless I indicate otherwise any recordings will then be erased and the information provided will not be included in the study. I also understand that I may refuse to answer any questions I don't wish to answer.
- ✓ I understand that personal information about me that is collected over the course of this project will be stored securely and will only be used for purposes that I have agreed to. I understand that information about me will only be told to others with my permission, except as required by law.
- ✓ I understand that the results of this study may be published, and that publications will not contain my name or any identifiable information about me.

I consent to:

- **PGCE/Cert Ed class observations** YES ☐ NO ☐
- **Review meeting observations** YES ☐ NO ☐
- **Be interviewed** YES ☐ NO ☐
- **Audio-recording** YES ☐ NO ☐
- **Researcher access to course-related records on [VLE]** YES ☐ NO ☐

Would you like to review transcripts of your interviews? YES ☐ NO ☐

Would you like to receive feedback about the overall results of this study?

YES ☐ NO ☐

If you answered **YES** to this last question please indicate your preferred form of feedback and address:

☐ Postal: _____

_____

☐ Email: _____

.....

Signature

....

PRINT name

.....

Date

Appendix B: Observation Notes Schedule – Classroom

EDU Research Documents: Observation schedule record (classroom; version 1)

Observation date		**Observation time**	
Location		**Session theme/title/ module**	
Number of students present		**Lecturer**	
Contextual factors of note	Physical aspects; time; bystanders: Activity type, subject matter: Participants: individuals (stable/temporal features), social categories, relationships, roles		

Classroom layout and position of participants at timed points: (repeat diagram if layout or positions change during observation)

Start of observation

Change 1

Change 2

Observation field notes:
Continuation sheets available if observation extended; each time slot space can be extended.

Time	**Descriptive notes**	**Researcher comments**
0-5 mins		
5 – 10		
10 – 15		
15 – 20		

20 – 25		
25 – 30		
30 – 35		
35 – 40		
40 – 45		
45 – 50		

50 – 55		
55 – 60		
60-65 mins		
65 – 70		
70 – 75		

Appendix C: Observation Notes Schedule – Mentor Meeting

EDU Research Documents: Observation schedule record (Mentor meeting; version 1)

Observation date		**Observation time**	
Mentor		**Trainee teacher**	
Location		**Contextual factors of note**	

Room layout and position of participants:

Any changes documented in running notes.

Observation field notes:

Continuation sheets available if observation extended; each time slot space can be extended.

Time	Descriptive notes	Researcher comments
0-5 mins		
5 – 10		
10 – 15		

15 – 20		
20 – 25		
25 – 30		
30 – 35		
35 – 40		
40 – 45		

45 – 50		
50 – 55		
55 – 60		

Appendix D: Interview Schedule Semester 1 – Lecturers

EDU Research Documents: Interview Outline (ITE educator, Lecturer)

Lecturer name	
Date and time	
Location	
Contextual features of note	

Question/comment (probe)	**Notes (key comments, observations)**
Outline reminder of purpose and nature of research and of this interview specifically. Highlight interest in dialogue. Opportunity for interviewee to ask any questions.	
Tell me about how you came to be teaching on this programme. How are you finding it so far?	
How would you describe what you are trying to achieve with the ITE students?	
What are you finding to be the most effective aspects of the programme? And the most challenging? *What works well? What has not worked so well?*	
As you know, my interest is in the effectiveness of dialogue. What does dialogue mean to you in the context of these programmes?	
There are clearly different forms of dialogue within the session, with different groupings and different people leading. Can you tell me	

something about these different forms?	
To what extent do you feel students get involved in these different forms of dialogue? *Are there any differences that you have noticed in the participation of pre- and in-service students?*	
I recently observed a classroom session (provide some reminders of when, session title/theme). What can you remember about that session? (questions to follow based on interviewee recollections)	
During the session I noticed….. Can you tell me a little about….. *May refer to anything pertinent to the observed sessions:* • *Small group discussion* • *pre- and in-service differences* • *prior knowledge/skills in teaching* • *confidence in contributing*	
Are there things you would like to do differently in terms of the dialogue in the classroom?	
Are there things that you think are particularly effective in terms of dialogue in the classroom? (Any evidence for this, examples of this?)	
Thank interviewee for their time and invite further questions or comments.	

Appendix E: Interview Schedule Semester 1 – Students

EDU Research Documents: Interview Outline (student, trainee teacher)

Student name	
Date and time	
Location	
Contextual features of note	

These questions/comments are only a guide; content and order may vary.

Question/comment (probe)	**Notes (key comments, observations)**
Outline reminder of purpose and nature of research and of this interview specifically. Highlight interest in dialogue. Remind of confidentiality and that it is to learn more about student, not the course: is not course evaluation. Opportunity for interviewee to ask any questions.	
Tell me about how you came to be on this teacher education programme. *How are you finding it so far?*	
How would you describe what you are trying to achieve on this programme? *What are your intentions for the whole, for each session?*	
What are you finding to be the most useful aspects of the programme to you?	
What happens in a typical classroom session on this programme, if there is such a thing?	

Are there any highlights of the classroom sessions that you would be able to tell me about? (Or any challenging aspects?) *Anything that works well for you?* *(Or doesn't work for you?)*	
What does "dialogue" mean to you, in the context of your teacher education programme?	
There are clearly different forms of dialogue within the session and within the course, with different groupings and different people leading. Can you tell me something about these different forms? • *Lecturer led* • *Peer led* • *Mentor led*	
To what extent do you feel able to get involved in these different forms of dialogue? (probe using data from observations if needed) *Do you have any preference for any of these types?* *Can you identify an example of some dialogue that was effective for you?*	
I recently observed a classroom session *(provide some reminders of when, session title/theme).* What can you remember about that session? (*questions to follow based on student recollections)*	
During the session I noticed….. Can you tell me a little about….. *May refer to anything pertinent to the individual student:* • *Small group discussion* • *pre- and in-service differences*	

• *prior knowledge/skills in teaching* • *confidence in contributing*	
How does dialogue with your mentor differ from the dialogue in the classroom? [might have come up in forms of dialogue question) What do you hope to get from those interactions?	
Are there things you would like to be done differently in terms of the dialogue in the classroom?	
Thank student for their time and invite any further questions or comments.	

Appendix F: Interview Schedule Semester 2 – Lecturers

EDU Research Documents: Interview Outline Phase 2 (ITE educator, Lecturer)

Lecturer name	
Date and time	
Location	
Contextual features of note	

Question/comment (probe)	**Notes (key comments, observations)**
Reminder of purpose and nature of research and this interview specifically. Highlight interest in dialogue. Opportunity for their questions.	
How are you finding the groups this year? *Possible prompts* • *Participation* • *Engagement* • *Performance*	
Have there been any moments of particular note? Things you have noticed that have particularly struck you this year? *Possible prompts* • *Highlights, progress* • *Concerns, challenges*	
What outcomes would you say you are looking for for these students?	
To what extent would you say these students see themselves as teachers at this point? Or as students?	
We talked previously about…. Have there been any changes in this view or situation?	

This term the pre- and in-service students are being taught separately. Have you noticed any change in the nature of the classroom talk with this different arrangement?	
I recently observed a classroom session (provide some reminders of when, session title/theme). What can you remember about that session? (questions to follow based on interviewee recollections)	
During the session I noticed….. Can you tell me a little about….. *May refer to anything pertinent to the observed sessions:* • *'academic' talk from students* • *'well-being' talk from students* • *Collaboration and competition*	
One thing I noticed was the use of self-selecting and tutor-selected pairs or small groups. In what ways did this (if at all) impact the dialogue that took place?	
What are you finding to be the most effective aspects of the programme? And the most challenging? *What works well? What has not worked so well?*	
Are there things that you think are particularly effective in terms of dialogue in the classroom? (Any evidence for this, examples of this?)	
It is my intention to be writing a thesis about effective dialogue in teacher education programmes. Are there any themes or points that, from your point of view, would be essential to include?	
Thank interviewee for their time and invite further questions or comments.	

Appendix G: Interview Schedule Semester 2 – Students

EDU Research Documents: Second Semester Outline (student, trainee teacher)

Student name	
Date and time	
Location	
Contextual features of note	

Question/comment (probe)	**Notes (key comments, observations)**
Outline reminder of research purpose and nature. Highlight interest in dialogue. Remind of confidentiality and that it is to learn more about student; is not course evaluation. Opportunity for interviewee to ask any questions.	
In a single sentence, how would you sum up your experience on this course?	
How would you describe what you were trying to achieve by doing this programme?	
What have you found to be the most useful aspects of the programme to you? *Overall at this stage*	
Have there been any aspects that you have not found useful? *Challenging? Obstacles?*	
What role do you feel dialogue has played in the course?	
Are there any highlights of the classroom sessions that you would be able to tell me about? (Or any challenging aspects?) *Anything that works well for you?* *(Or doesn't work for you?)*	

There are clearly different forms of dialogue within the session and within the course, with different groupings and different people leading. Can you tell me something about how these different forms have worked for you? • *Classroom dialogue* • *Dialogue with peers* • *Dialogue with mentors* *Can you identify an example of some dialogue that was effective for you?*	
I recently observed a classroom/mentor session *(provide some reminders of when, session title/theme).* What can you remember about that session? (*questions to follow based on student recollections)*	
During the session I noticed….. Can you tell me a little about….. *May refer to anything pertinent to the individual student:* • *prior knowledge/skills in teaching or other* • *confidence in contributing* • *well-being conversations* • *peer support*	
My thesis will be on the subject of dialogue in teacher education. What would you consider needs to be included in a work on this topic?	
Thank student for their time and invite any further questions or comments.	

Appendix H: Interview Schedule – Mentors

EDU Research Documents: Interview Outline (subject-specialist mentor)

Mentor name	
Date and time	
Location	
Contextual features of note	

Question/comment (probe)	**Notes (key comments, observations)**
Outline reminder of purpose and nature of research and of this interview specifically. Opportunity for interviewee to ask any questions.	
Can you tell me about how you came to be mentor on the programme? (follow up with questions to expand on response)	
What do you feel that the trainee gains from the relationship with their mentor?	

How would you describe what you are trying to achieve with your mentee?	
As you know, my particular interest is in the effectiveness of dialogue. What does dialogue mean to you in the context of the teacher education programme?	
Can you tell me about the mentor review that you carried out with the teacher trainee? How do you find this process?	
Who tends to take the lead in the review? (What makes you say this? To what extent do you feel the student is engaged in the dialogue?)	
What do you feel are the most helpful aspects of the review? (seek evidence or rationale for this)	

During the observed review I noticed that….. Can you tell me a little about…..	
Are there things you would like to do differently, things that could be different in the review? In the student/mentor relationship more generally?	
Thank mentor for their time and invite any further questions or comments.	

Appendix I: Data Collection Referencing Grid

Observations Classroom			
Semester	**Observation number (numbered chronologically)**	**Lecturer[3]**	
1	1	Alice	
1	2	Tasha	
1	3	Alice	
1	4	Tasha	
1	5	Tasha	
1	6	Alice	
1	7	Florence	
1	8	Tasha	
2	1	Tasha	
2	2	Florence	
2	3	Alice	
2	4	Florence	
2	5	Tasha	
2	6	Tasha	
2	7	All lecturers	
2	8	Tasha	
2	9	Florence	
Observed classroom sessions	**Students present in some or all classroom observations**		
	Anna – pre-service		
	Beth – in-service		
	Chloe – pre-service		
	Daniel – pre-service		
	Evie – in-service		
	Francesca – pre-service		
	Grace – pre-service		
	Hannah – pre-service		
	Ian – in-service		
	Jasmine – pre-service		
	Karen – in-service		
	Lucas – pre-service		

[3] All participant names are pseudonyms.

Observations with Mentor			
Semester	**Observation number**	**Student**	**Mentor**
1	1	Chloe	Ruth
2	2	Jasmine	Margaret
2	3	Lucas	Paul
2	4	Anna	Theo
Interviews: Students			
Semester	**Interview number**	**Student**	
1	1	Chloe	
1	2	Grace	
1	3	Karen	
1	4	Evie	
1	5	Daniel	
1	6	Jasmine	
1	7	Anna	
2	1	Jasmine	
2	2	Lucas	
2	3	Chloe	
2	4	Daniel	
2	5	Grace	
2	6	Anna	
2	7	Francesca	
2	8	Evie	
2	9	Karen	
Interviews: Lecturers			
Semester	**Interview number**	**Lecturer**	
1	1	Florence	
1	2	Tasha	
1	3	Alice	
2	1	Alice	
2	2	Tasha	
2	3	Florence	
Interviews: Mentors			
Semester	**Interview number**	**Mentor**	
2	1	Margaret	
2	2	Ruth	
2	3	Theo	
2	4	Paul	
2	5	Sophie	
2	6	Nick	

Records			
1	Beth		
2	Chloe		
3	Daniel		
4	Evie		
5	Francesca		
6	Grace		
7	Ian		
8	Jasmine		
9	Karen		
10	Lucas		

Appendix J: Sample of Analytical Notes on Data

Obs Session	Comments	Evidence[4]	Keywords	Codes - domains and components	Codes - AT, COP, Well-being	Links to theory/ theoretical constructs
3A	Lecturer: no right answers, only discussion. When discussion in pair flags, asks questions to stimulate continuation.	8-15 She gave out cards which showed different individuals and different ways of assessing. She asked them how they would adapt assessment to suit these individuals. Karen and Beth checked if they were to do this in pairs, which Alice confirmed. She explained and repeated later that there are no right answers, they were for discussion... Karen and Beth had gone quiet, others were still talking to each other, and Alice asked if they recognised any of these types. They said yes, Beth giving an example which Karen agreed.	No right answer; dialogue supported	TL2 TL3 I2 I3 I4	T	
3B	Students shared their teaching experience when discussing hypothetical scenarios. When lecturer made a suggestion of	27-33 Evie described an assessment she had done recently and how she had adapted for a learner who had missed a couple of lessons, allowing her to do just the part of the test which covered	equality - all part of same community	TL2	C D Di	

[4] All names in this sample are pseudonyms.

	an alternative to one student, she explained how she had considered this and why had taken a different approach: felt like an equal balance between them.	the lessons she had attended. Alice reflected back that this was differentiation on the spot. She suggested that it is possible to do an assessment after minimal teaching, just to see what they know. Evie said she would do this with some learners, but not this one as she was already anxious, had panicked just at the idea of the test, and Alice affirmed this.				
3C	When a student described an approach he takes, others said they liked this approach and might try it themselves: this confirmed the comments made in the marketing interview. Much affirmation of colleagues, both their suggestions for teaching practice and at a personal level.	33-35 Spoke about something he had done with his learners (an 'end assessment' at the start of module) which drew positive comments from peers some of whom said they would try that. 105-109 Evie asked if she could just record it and submit a video, although it seemed she was not expecting this to be taken seriously. Karen said as they had witnessed earlier, she cannot be videoed (she had fluffed her lines first time round). Evie said that the second time it was like she had a script, she was brilliant.	learning from peers; affirmation	TL2 TL3	C	

3D	Different reactions to lengthy comments by one vocal student – some apparently very engaged, some not appearing to be listening after a while.	46-47 ...was listening attentively as were some of the others, but some were not looking in his direction, down at other materials or around the room.	peer contributions not always valued	TL2		
3E	Teacher refers to two students who have specialist knowledge they can share and affirms contributions.	59-62 "But another area we need to bear in mind, Ian and Karen will know this, is adapting for SEN needs." She pointed out that some of the others won't have this experience. X immediately said "I've got one." Alice: "Go on then." He described the learner and what he does to adapt to his needs. Alice: "that's a good example. You and he have come to an understanding."	Lecturer recognises student expertise/ authority	TL2 TL3	C D	
3F	Alice asks these two to give feedback to peer, to confirm if he is right. The one who does is normally quite quiet: the invitation and devolved authority drew him in.	63-69 X gave another example, explaining that he has several learners who are on the autistic spectrum and what he does to support a particular learner as well as the other learners in that group. Alice: "Ian, Karen: Does that sound about right?" Ian said yes and Karen agreed, commenting "structure is key…I use quite a lot of visuals as well as the text, just to back it	Devolved authority in dialogue	TL2 TL3 I3	T D Di	

		up." X chipped in with another comment. Ian: "I make the work more personal to them" giving an example of a game he had adapted, with pieces personal to them and differentiated questions suited to the individual learner.				
3G	I was surprised to see hands up with a question – this group seemed so in the teacher role that student behaviour suddenly seemed out of place.	96 - 97 X and Evie each put their hand up (each had a question they wanted to ask).	Back in student mode?		D Di	
3H	Discussion of the assessment and how it works/could be done, was a model of what the lecturer was encouraging them to do in their practice and to explain their presentation.	85 - 109 (embedded in lengthy sections)	modelling by lecturer			
3I	Note students using some teaching terminology such as scaffolding.	137-138 X agreed commenting that they start with surface learning then use scaffolding to build up	language adopted	TL3		
3J	Aim to do wider reading for top grade.	125-128 Alice commented that the presentation involves the	Aiming for high grade: requires theory	I1	O	

		embedding of theory: “we’ve only really looked at Black and Wiliam – for a top grade you need wider reading.” Evie asked if there was a number of theories they need to refer to. 3? 5? Alice said that it was not the number of theories but the evaluation of them, explaining why.				
3K	When this module was done with pre-service, the focus of the discussion was on the type of learners that these students are; with in-service it moved quickly from themselves to the learners that they teach. Pre-service have a bigger leap to make in application.	147 - 215 She went through cue conscious and cue oblivious, explaining each and there was some discussion when she asked if they recognised any of these in their classroom. Evie said they have a lot of cue oblivious. X1 suggested you could have cue indifferent, which X2 agreed. X1 also suggested that you change between them. Evie disagreed: “I’ve always been cue seeking.” But Beth said “and things change in your life” explaining that you therefore can have a different view towards your studies. X1 continued what he was saying. Beth said she has a lot of students who are just not interested. Some will say ‘what do I need to do to	examples from practice: see selves primarily as teachers	TL3	Di	Identification as teacher

		pass?' They are really good, but just not motivated.				
3L	Invitation of lecturer and course director to their over break chats suggests sense of equality in the relationship.	163-166 Alice said she had to remind them that it is time for break and that they could go now. Evie said: "you can come with us" but Alice said she wanted to look through the drafts that students had sent her. Evie commented that Tasha came with them the other week, adding "I think she was happy to be invited as she's not teaching us at the moment.	equality - all part of same community	TL2	C	COP