An exploratory study of supervisory experiences between students and teachers at key stage 3

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Doctor in Education

Declaration

I, Jenny Clements, confirm that the work presented in my thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.

Abstract

This thesis focused on understanding the experiences had by key stage 3 students and teacher supervisors during project based learning, where students and teachers discussed research in one-to-one supervisory meetings across three months. This study took place in a specific secondary school context and focused on the Higher Project Qualification, a research qualification equivalent of half a GCSE grade, through which student and teacher experiences were explored.

Three student-teacher pairings formed the research sample, where three supervisory meetings between each student-teacher pairing were audio recorded across three months. Recordings were transcribed and read for points of interest, a process of analysis that took place across week-long incubation periods. A qualitative methodology was adopted in this exploratory research design, where three narrative accounts were created from the points of interest that emerged across the nine transcripts. The narrative accounts provided a recontextualization of the original data and an analysis of student experience that was not accessible in the original transcripts. Key themes emerged from the narrative accounts that resulted in a discussion of experiences and barriers in supervisory dialogue.

This research identifies dialogic categories specific to supervisory dialogue and challenges the assumption that in dialogic education *all* discussion environments between teachers and students demand the same skill sets from teachers and students. The dialogic categories that emerge from supervisory discussion show that there is something problematic for teachers in adopting the role of supervisor and that supervisory discussion might be seen as a unique speech genre, requiring an expansion and development of the dialogic skills used in the classroom. The conclusions from this study show that different types of discussion exist outside the classroom environment and that there are barriers in understanding between

students and teachers that needs teachers and project co-ordinators to reassess the demands of this discussion context.

Impact Statement

This qualitative exploratory study acknowledges the types of discussion experiences had between student and teacher supervisor, reassessing the assumption that one-to-one supervision provides an opportunity for school students to take the role of participant and that teachers can facilitate environments for students to share their thinking. This research highlights that intimate discussion spaces can intensify teacher dominance, showing that project learning requires dialogic skills from students and teachers that are underdeveloped, and perhaps undervalued, by teachers.

The dialogic categories that emerge from this qualitative exploratory research can be seen to challenge the value that one-to-one supervisory discussion experiences might have for students undertaking research qualifications. Data suggests that teachers adopting the role of supervisor would benefit from reviewing how students are perceived as participants in one-to-one discussions, with an impact not only on one-to-one supervision but also at classroom level, as teachers reflect more generally on how students and teachers engage with independent learning tasks.

Students and teachers in my institution will benefit directly because of my professional development arising from my exploration of supervisory dialogue, where whole-school teacher training opportunities will be taken to share findings on teacher dominance in dialogue and the impact this has on the quality of discussion experiences. There is the potential for teachers to rethink the ways that project work provision might be extended and /or included as part of subject curricula, with the view to reconsider how teachers can support students in one-to-one discussion on projects of interest beyond the statutory taught curriculum. Teachers might consider more innovative approaches towards supervision, moving towards a model of vertical supervision that allows students across key Stages 3-5 to

work together throughout the research process, thus creating opportunities for students to engage in a range of dialogues alongside that of student-teacher support.

The identification of specific dialogic categories and experiences in supervisory dialogue has the potential to influence the thinking that contributes to the authorship of course content for project-based learning. This thesis questions the value of discussion experiences for students, challenging the established model of student-teacher, one-to-one supervisory relationships, outlined by examination boards. Through conferences such as *EPQ Excellence* at The University of Southampton, attended by examination boards and institutions across the country, the findings of this research can be disseminated, with networking opportunities for professional hubs and collaboration. My research can have an impact not only for the range of project qualifications offered in schools, but also for subject areas wanting to embed project learning into their respective curricular, providing opportunities of project learning for all.

Every opportunity will be taken to publish fully pseudonymised research through the British Curriculum Forum (BERA), SecEd conferences and supplements, and The Chartered College of Teaching. These platforms can be used to promote students as discussion participants in one-to-one discussion, encouraging teachers to support students in dialogue.

Extending this work beyond the UK might come in the form of European collaboration, working with the United World College Maastricht (UWC) in the Netherlands, where project learning is at the heart of educational philosophy. This type of collaboration would provide a useful context in which to continue theoretical understanding of dialogic categorisation and to extend pedagogical understanding of project learning approaches. Collaboration with the UWC Maastricht (academic year 2023-24) could offer a valuable professional learning context in which to understand how teachers adopt the role of ‘coach’, a title not used in the UK for teachers working on research projects with students. This type of collaboration would

allow for new insights as to the approach adopted by teachers in this specific learning environment, approaches that could be disseminated in my school context, at education conferences and through publications.

This exploratory study offers a meaningful contribution to dialogic theory and professional practice. This research offers a set of specific dialogic categories that show supervisory discussion to be complex and the challenges that teachers have in seeing students as capable participants in one-to-one dialogue. This work acknowledges that supervisory dialogue places particular demands on teachers' skills and that adapting to this discussion environment requires a dialogic skill set that is not considered in literature on dialogic approaches in the classroom. This research challenges the idea that dialogic approaches in the classroom are transferrable to different discussion contexts in schools.

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Reflective Statement

Contextual overview

The foundations for this reflective statement predate my experiences on the Doctor in Education programme, with me, perhaps, best viewed as an Institute of Education homing pigeon, returning one last time to complete an academic flight that began in 2007.

My connection with the IOE began when I enrolled as a Secondary English PGCE student, which first fostered my interest in teaching as an academic and inspiring profession. Developing a critical awareness of teaching and learning approaches shaped my professional identity, resulting in a natural progression to the MA in English Education programme (2011) and a dissertation that focused on the links between creativity in the English classroom and writing.

I knew from the start of my career that I wanted to be a reflective practitioner, with research-informed practice influencing the decisions that I made in the classroom. My interest in collaborative teaching approaches grew, which I pursued by accepting the role of whole school Project Co-ordinator (2014). This role reignited my interest in research methods, fuelling a curiosity to engage with project learning approaches. I looked to be part of an academic research community, which came through the opportunity to study on the Postgraduate Diploma in Social Science Research Methods programme (PGDip) (2014). It was during this period of study that my interest in dialogue first appeared, with a coursework title focused on how gifted and talented students manage discourse in the classroom. I had a specific interest in how students considered gifted and talented by teachers might share ideas in the classroom. Feedback for this module highlighted the difficulties that I faced in drawing from relevant literature, which I now see as gaps in the literature that I needed to understand and assess more critically. The PGDip provided tentative steps in exploring the complexity of dialogue and the ways in which a qualitative methodology might provide insights into this

phenomenon. As part of the PGDip, I completed the two methods of enquiry modules prior to beginning the EdD, which meant that I could begin my Institution Focus Study (IFS) after completing Foundations of Professionalism (FoP).

This reflective statement considers the processes and learning experiences (past and present) that have helped me to arrive at my thesis question; a process of revisiting, reviewing and reconceptualising my ideas that span various programmes of study.

Foundations of Professionalism

When I embarked on the EdD programme (2016), I walked into the first seminar as one of the youngest (if not the youngest) on the course. I had been a teacher for eight years and started the EdD with an awareness that my roles and responsibilities were in their infancy; however, the first module 'Foundations of Professionalism' (FoP) acted as a great leveller, where the many years of experience that my new peers had accrued did not necessarily equate to an understanding of the professional 'I'. The module provided the opportunity to engage with political debate from thinkers such as Ball (2003), where I was introduced to 'deprofessionalisation' and 'reprofessionalised'. The political lens was an impactful medium through which to view my identity as a teacher and an opportunity to consider the quality of relationships between students and teachers that were influenced by these concepts. I became curious in exploring authenticity and teacher motivations, both of which resulted in my module essay looking at how students experience their teachers' professionalism. A critical insight from writing this essay came from reading Sachs (2016) and ideas centred on the silencing effect. On reflection, this module provoked an early interest in the ways that students and teachers talk, as I used this essay as a reflective space to analyse some of the many dialogues that I have had with students concerning project learning. My essay included a series of mini dialogues between myself and different students, indicating that teacher and student voices were important and central in understanding how relationships were forged.

In conversation with a module tutor, I also learned to take a 'helicopter view' when analysing literature, making sure that I engaged critically with a range of relevant thinkers and debate surrounding my research interesting. I needed to see the 'bigger contextual landscape' and this module facilitated that view.

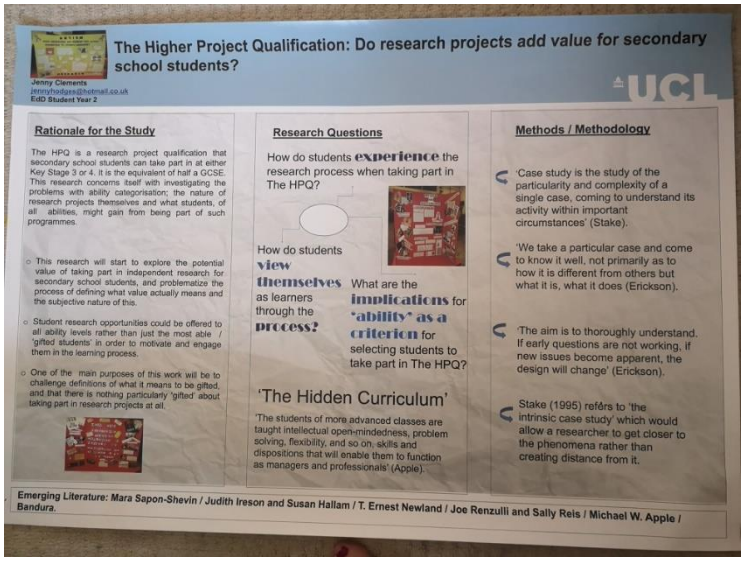
Institution Focused Study

The Institution focused study (IFS) provided the opportunity to focus on project work in my school context, where students at Key Stages 3 and 4 complete independent research projects. I was able to explore my experiences as Project Coordinator of the Higher Project Qualification (HPQ) and the Extended Project Qualification (EPQ) in ways that were deeply reflective, considering whether students found taking part in research projects valuable experiences. As Project Coordinator, I make decisions regarding the design of research programmes, which I now had the opportunity to reflect upon with theoretical criticality. I wanted to understand more about the value that project work had for students conducting research at key stage 3, where my focus was the HPQ and a group of twelve Year 9 students. This was my first opportunity to use a qualitative methodology and group interview methods from the PGDip programme, where I discovered the challenges of conducting research in 'your own backyard'. My first attempt at qualitative research provided me with the opportunity to devise an interview schedule and to work with the librarian who took the role of discussion monitor during the recording of interviews. This was the first time that I had listened to students discuss their thoughts on project learning beyond the assessment demands of project work, which provided me with new insights that I would later explore in my thesis.

Conducting research in my school context taught me about the complexities of insider research. I had to balance what was best for my research but also consider ways to avoid the possibility of student experience on the HPQ programme being compromised because of my

research interest. I felt for the first time that my researcher identity was carving itself into my professional self. I looked to ensure that my IFS would have positive impacts on future HPQ cohorts by reassessing student experience and promoting the value found in the research process. I discovered research qualifications had value for students if they were recognised by family, sixth form admissions and employers for the levels of tenacity that commitment that this type of qualification demanded of students; there was value in public recognition. I also discovered that students had a preoccupation with the final grade, the outcome, rather than the process of learning transferable skills. My desire to discover how valuable learning experiences are for students undertaking research qualifications continued to resonate at the thesis stage. It appears that I have never lost sight of the importance in knowing what students consider to be valuable learning experiences.

I took time to share my findings on the value for students taking part in research qualifications by engaging in professional dialogues at the IOE's annual poster competition. I remember being the only EdD student to present a board at the IFS stage, which I took great pride in. I believe that events such as this developed my confidence, as I was made to explain my thinking at different stages during the research process. It now serves as a reminder of my early interests in student experiences and perhaps an indication that my research would move towards student experiences in supervisory meetings. The poster board displayed my concerns in the shrinking curriculum and enrichment opportunities outside the taught statutory curriculum, an area that I would continue to explore in my thesis.



The thesis stage

From the poster conference, I started to build confidence in sharing my ideas and providing justification for my theoretical positions. I attended and presented at BERA conferences hosted by the British Curriculum Forum and found myself excited to explore research possibilities with a range of professionals. By contrast, my professional identity as a teacher was not as confident to discuss conference experiences and presentations. I found myself private and intensely modest to share my development as a doctoral student. My modesty was discovered by my supervisor, as she learned that I had been referring to my doctoral work as 'a writing course' and asked me to reflect on why. I did not have an answer. On reflection, this behaviour was perhaps a form of imposter syndrome, reflecting the weight of the title 'doctor' and that such a journey might not be for me. There was (and is still the case) no one on the staff engaging with research at this level, so the journey felt lonely in school, but I was reinvigorated when connecting with research communities beyond school; a culture that I hope to see change during my teaching career.

My interest in the value that project learning has for students continued to influence my thesis proposal. My research question, at the upgrade stage, focused on how ideas are shared between students and teachers acting as research supervisors during project based learning. The upgrade process was thought-provoking, where the panel offered new theoretical directions and suggestions to explore the ways that students and teachers forge relationships. The upgrade was successful, and I was then able to deepen my knowledge on dialogic theory and key contributors to dialogic approaches in the classroom.

I completed the upgrade two months prior beginning a nine-month period of maternity interruption, where I planned to continue researching but on a manageable schedule. During this time of personal change and adjustment, I read books with a focus on academic mothers (Pillay, 2007) all concerned with bifurcation existences for women. I was interested in my

own identity shifts during this transition, which I feel is reflected, on some level, in my research. I was experiencing a change in how people saw me, where undertaking research became an even more furtive experience as a new mother.

On return to work after a period of interruption, I was able to begin my data collection. This was a significant stage in my research as I discovered that I had been planning on the assumption that ideas were co-constructed between students and supervisors in meetings. It was a time where I needed to reassess my preconceived ideas of supervision and investigate qualitative exploratory research. On reflection, learning experiences on the methods of enquiry module (PGDip) did not fully prepare me for the possibility that my research interest might not 'fit' comfortably with a particular methodological approach. I began this research with the view that I would continue with a case study approach as adopted in my IFS, but my thesis demanded a more exploratory approach. Supervisory dialogue did not align itself with a case study methodology at this stage and discovering this was a moment of clarity; understanding came first. One of the most fulfilling aspects of this research journey has been generating theory for an underexplored dialogic context.

Conclusions

I consider the completion of this thesis the start rather the end of my interest in supervisory dialogue. As a guiding principle, I am interested in *process* rather than outcome and as such reflect of how I have developed through participation in conferences and making connections with wider professional communities. The process of completing my thesis has not only enhanced my research skills and academic writing, by has transformed the ways in which I view myself. I have the confidence now to take the role of Post Graduate Teaching Assistant on undergraduate courses and most recently to arrange collaborative opportunities with schools such as the United World College Maastricht, the Netherlands, where I look to engage in professional dialogues on project work. I have learned not to wear my learning lightly, meaning that I will be confident to share my research and the experiences that I have had, reminding myself that a doctoral student should not be working 'undercover', and that doctoral work is so much more than a writing course.

Chapter 1

1.1 Introduction

This research is an exploratory qualitative study that focuses on how key stage 3 students and teachers experience one-to-one supervisory dialogue through project learning. At my secondary school, I am the Project Coordinator for the Higher Project Qualification (offered at key stages 3 and 4) and the Extended Project Qualification (offered at key stage 5) where I coordinate student research programmes and work closely with students and teacher supervisors. I am responsible for overseeing student supervision, whereby students are paired with teaching staff acting as supervisors throughout the qualification. Research qualifications allow students to develop research skills, criticality in writing and reflective approaches in monitoring their progress throughout the independent project learning process.

During my role as Project Coordinator for nearly ten years, I have heard many students share their passions and interests on a range of research topics, listening to students wanting to extend their knowledge on topics often beyond the taught statutory curriculums. My research has grown out of wanting to know more about the ways that students discuss their research interests during one-to-one supervisory meetings with teachers, and how these discussion contexts are facilitated by teachers. The ways in which teachers and students talk about research projects during one-to-one meetings is an area of project based learning that is challenging to explore, as despite students writing notes on supervisory meetings in Project Activity Logs, *how* discussion is experienced remains difficult to understand as a coordinator due to its private nature. It is the *types* of experiences had in supervisory dialogue that guides the research question, with an interest in the value that these discussion experiences might have for students.

One-to-one supervisory dialogue as a research interest beyond the taught statutory curriculum is a less common form of interaction between teachers and students at Key Stage 3, with

supervisory relationships typically forged at key examination phases (Key Stages 4 and 5) on topics linked to specific modules on GCSE and A level courses. Even though one-to-one dialogue between teacher and student is the main learning provision for students undertaking projects, there is a paucity of research that explores the ways that students and teachers engage in dialogue as part of project learning, making this an underexplored dialogic experience at Key Stage 3. There are no subdivisions in dialogic learning theory that identifies different dialogic contexts such as supervisory meetings during project based learning. Therefore, assumptions seem to exist as to how thinking together during supervisory dialogue might be experienced, with examples of dialogic learning focusing mainly on dialogic environments in the classroom between students-students and teacher-students. Considering *all* dialogic learning environments to be the same creates the potential for misconceptions as to the nature of supervisory experiences had by students and teachers. Instead, it is collective thinking or interthinking (Skidmore, 2019, p.27), described as 'the dynamic interplay and interaction of minds in conversation' (Littleton and Mercer, 2013, p.8) that takes place in the classroom between teachers and students that dominates research undertaken into dialogic learning (Kershner et al., 2020, p.62). Despite research confirming the positive effects that dialogic approaches have on student progress, dialogic learning environments in general remain underdeveloped in the classroom due to the 'high demands that dialogic discussion places on teacher knowledge and flexibility' (Snell and Cushing, 2022). There are challenges in how teachers might engage with students' ideas in a critical and exploratory way, including whether teachers should be correcting and policing nonstandard English as part of dialogic discussion (ibid. 2020), which adds further challenges in how teachers might approach the facilitation of authentic and transformative exchanges for students as discussion participants (Metcalfe and Miele, 2014, p.1).

To introduce the research, this chapter conceptualises dialogic space (Wegerif, 2020), including theoretical underpinnings from Bakhtin (1986) and Buber (1923;1958) that provide ways of considering 'what exactly the word 'dialogic' means' (Wegerif, 2006, p.1). I then clarify project learning, where the context of the Higher Project Qualification (HPQ) is explained. The HPQ is a specific research qualification whereby students at Key Stages 3 and 4 can be awarded the equivalent of half a GCSE grade on completion of a research project of their choosing and provides the context in which supervisory dialogue is experienced. This chapter concludes by considering wider contextual influences on discussion environments including the pressures faced by students and teachers in a performative culture (Ball, 2003), and how such demands might impact supervisory relationships and dialogue during project work.

1.2 Dialogic space

The term dialogic space was first conceptualised by Martin Buber (1923;1958) and later developed to mean the 'space shared between people in dialogue together' (Wegerif et al., 2020, p.17), with specific ground rules and contextual influences that 'shape what each participant thinks and says, a spiral process of mutually influenced change' (Mercer, 2002, p.6). Wegerif refers to the 'architecture' of dialogic spaces, suggesting that there is a conscious awareness between speakers that they are *thinking* together and as such construct what might be seen as dialogue webs, weaving thoughts and ideas between a meeting of minds, 'where ideas need to move into a shared space where they can resonate together, merge in some ways, clash in others and stimulate the emergence of new ideas'(Wegerif, 2017, p.2). Wegerif extends the concept of dialogic architecture by problematising the nature of architectures as being hidden, a feature of all dialogic space between speakers that remains invisible until the ground rules at work within such designs are brought to the forefront (Wegerif, 2020, p.17). The corollary of this is that discussion environments are unique in

their dialogical construction, and more broadly that there is something to be discovered in the construction of dialogic architectures in different learning contexts. Dialogue, then, might show a relationship of co-construction and deconstruction of ideas, where perspectives are revisited and revised; however, 'If an answer does not give rise to a new question from itself, it falls out of the dialogue' (Bakhtin 1986, p.168, cited in Wegerif, 2006, p1), suggesting that dialogue is layered with opportunities to connect as well as disconnect. Supervisory discussion can be strengthened, or weakened, across encounters depending on how supervisors might engage in meaning making and draw from previous discussion experiences. There is the potential to consider dialogue as a resurrecting source that reclaims connectivity between speakers across time and place to reengage in new debate, 'Nothing is absolutely dead: every meaning will have its homecoming festival' (Bakhtin, 1986, p.170).

My research builds on the work of key thinkers concerned with the relationship between speakers, language, and thought, which is central to understanding how dialogue is experienced in close connection with project-based learning. Theoretical underpinnings and perspectives in this research draw from the works of Martin Buber (1923;1984) and Mikhail Bakhtin (1986) where 'life is dialogical by its very nature. To live means to engage in dialogue, to question, to listen, to answer, to agree' (Friedman, 2001, p.27). The notion that dialogue *is* the learning process underpins this research and is explored extensively in the Literature Review in Chapter 2. The premise for this idea is grounded in the belief that no individual exists in isolation, but instead is acknowledged only in relation to another, supported by Buber (cited in Friedman, 2001, p.27) who suggests that to be 'abandoned is not just left alone but being unheard as the unique person that one is.' Acknowledgment and confirmation of another's presence in dialogue is reflected in Vygotsky's zone of proximal development and the concept of the more knowledgeable other (MKO), which offers

sociocultural theory to explain how cognitive ability is likely to improve through another's instructional guidance (Vygotsky, 2012, p.103). My research explores whether students are afforded opportunities to take knowledgeable roles in the process of co-constructing ideas, and what is described as the 'inside and outside' of dialogue (Kershner, 2020; Sullivan, 2012; Wegerif 2019; Kershner et al.,2020; Friedman, 2001), where contextual influences shape the ways in which participants in dialogue view each other in socially constructive learning spaces. It is premised on the idea that through building on experiences with another that the development of ideas can take place, where 'pooling experiences achieves a new level of understanding beyond that which either had before' (Edwards and Mercer, 1995, p.3).

1.3 Project based learning

Project based learning of the type carried out in schools such as in the context of this research is a student-centred approach, setting personal goals and offering students autonomy over the ways in which the project is designed and progresses (Hase and Kenyon, 2013, p.153). This level of independence is underpinned by students demonstrating 'emotion and motivation to learn [which] is enhanced by greater involvement in and control … in the learning process; self-initiated learning' (Hase and Kenyon, 2013, p.26). In this research, 'supervisors' refers to secondary school teachers at key stage 3 who carry out one-to-one supervisory work with students to support them to complete projects as part of the HPQ. Student-centred learning also draws links with social constructionism, a theory of knowledge development, where knowledge is considered a sharing of experience rather than that of 'knowledge hoarding' (Ford, cited in Hase and Kenyon, 2013, p.25). Students are dynamic and active participants in the construction of knowledge rather than passive listeners, but there is little research on 'the role of interest and curiosity and the lure of discovery' (Bruner, 2006, p.54) that project work invites. Students' efforts depend on what Bruner describes as 'what the person expects to get from his efforts, in the sense of such external things as grades but also in the sense of a gain

in understanding' (ibid, p.54). The experience of supervisory dialogue during project-based learning is not a by-product of research-based qualifications, but instead the process through which learning takes place. Dialogue is the 'vehicle for teaching the important knowledge and skills students need to learn' (Buck Institute, 2023) and as such requires a particular framework that 'allows students to become experts in a field of study' (Gijbels et al., 2005, p30).

Case studies on dialogic pedagogy typically present sequences of public dialogue shared in classrooms between students and teachers or students with students engaged in group activities, but little has been researched on how students conducting independent research projects speak on a one-to one supervisory basis, over a series of months, with one teacher which is their main interactive learning experience. Discussions between students and supervisors can take place in different locations, for various lengths of time, with agendas and timings that are flexible and individualised to meet students' emerging needs. Discussion contexts 'challenge us to re-assess attendant notions of time and place' (Alexander, 2017, p.23) and draws attention to the need to explore the quality dynamics and content of talk between students and teachers in different learning contexts.

Examination boards such as Pearson endorse project-based learning under the premise that it allows students to 'learn actively: they learn by doing' and criticise 'the passive learning that happens when teaching to the test is prioritised' (Pearson, 2023). Mark schemes for project qualifications award greater overall credit to students who demonstrate high levels of self-management and reflection throughout the learning process, prioritising the learning process over the final product. AQA's mark scheme (2023), for The Higher Project Qualification (HPQ) outlines the following assessment / milestone weightings when awarding marks: Managing (20%), Use of resources (20%), Develop and realise (40%) and Reviewing project performance (20%). Collectively, 60% of the marks are awarded for how students navigate

the research process, with 40% to develop and realise different perspectives and / or alternative views to show what has been learned to arrive at a conclusion. The connection between dialogue and learning through project-based tasks seems important in achieving these assessment objectives; however, there is little research highlighting discussion experiences that supervisors and students might have moving towards these research milestones. Students are expected to monitor the research progress by completing regular Project Logs, with some examination boards offering structured subheadings such as: 'My summary of the comments and advice from my supervisor' and 'Modifications I have made as a result of my discussion with my supervisor' (AQA, 2023, p.9). This type of signposting shows some acknowledgment that students require guidance in being reflective, assuming that students and supervisors have had certain discussion experiences to reach these reflective points. Project Logs record the outcome of discussion, but not necessarily *how* teachers and students engage with one another. Engagement in discussion between students and teachers seems assumed but not articulated in research, yet there is emphasis placed on this aspect of supervision to support the sense making process for students. My research interest in supervisory dialogue became increasingly relevant as dialogic theory offered little explanation of discussion experiences between students and teachers beyond, with anticipatory dialogic exchanges assumed in examination specifications.

1.4 Inclusivity and project-based opportunities

There are preconceived ideas as to who might be suitable for project-based learning. Educational support organisations such as UCAS suggest that certain students might benefit more than others from research programmes such as the HPQ, often based on academic ability outlining that 'some centres use the project qualification as part of a Gifted and Talented programme at GCSE level to push able students beyond the requirements of their mainstream subjects and deepen their knowledge in a particular field' (UCAS, 2023).

However, examination boards such as Pearson Edexcel have recently revised this perception and started to promote project qualifications as helping 'students of all abilities and interests to acquire independent learning skills' (Edexcel, 2023). The examination board, AQA, also outlines that no prior learning is required before starting research qualifications, and that centres should design their programmes to suit the needs of their learners (AQA, 2017). The reference to 'no prior learning' seems ambiguous and open, perhaps to promote inclusivity; however, such phrasing appears contradictory as examination boards loosely stipulate that those learners identified as gifted and talented, and considered most academically able, would be best suited to navigate the autonomy of the research process (Gill, 2017). More recently, examination boards such as Pearson Edexcel have introduced a fast-track approach towards developing research skills because of the national school closures due to Covid (2019). Project work was promoted through online Project Qualification Express programmes (Pearson, 2020), with a fast-track approach towards completing project qualifications. The 'express' aspect raises questions concerning the role and value that face-to-face dialogue has during project work. Students who are fast-tracked are perhaps denied rich discussion experiences and opportunities to explore the reflective aspect of the learning process alongside knowledge development. Pearson (2020) relaunched the Extended Project Qualification aimed at post-16 students, with greater acknowledgement that project work supports both academic and professional routes post A-level, showing that project work is expanding its appeal to different pathways. There is also an expansion of project qualifications from Oxford International AQA with the International Project Qualifications (IPQ), launched in 2017 for the first round of assessment in 2019. The specification for the IPQ labels teachers as 'special consultants', where students will meet to 'discuss initial ideas, discuss progress' and see that special consultants cannot 'direct or make decisions for the student' (Oxford International AQA Examinations, 2019). The label shift from teacher to

supervisor and now to special consultant implies that teachers adopt a particular specialised role in meetings, one that is different and / or an extension of the role in facilitating classroom discussion. There is the expectation that teachers can make this transition to 'consultant' without the support of specialist training in supervision. Teachers taking a supervisory role are expected to discuss research topics and formats with their supervisees, showing an awareness of the requirements for a dissertation, field study and / or investigation, artefact and performance, bringing potential challenges for supervisors who are inexperienced and / or less confident with research projects and the role of a supervisor. *How* teachers consult and discuss on areas of student interest beyond their own personal interests and curricula is limited and underexplored.

1.5 My school context: inclusivity and participation

In my school context, where there is an average yearly intake of 250, the percentage of students that have been invited to participate in the HPQ has increased from 5% in 2013 (12 pupils) to 14% (34 pupils) in 2017 and recently to 16% (38 pupils) in 2019, resulting in wider participation but still far short of being considered the 'norm' for all. The 2019 cohort of HPQ students was a particular success as the group consisted of pupils from years 8 and 9, aged 12-14, with all students achieving grades A*- C. My role as Project Co-ordinator led to my Institution-focused study (IFS) focusing on student experiences of project-based learning for my doctoral programme. I considered whether the HPQ enriched students' learning experiences and, if so, what this might be. I was particularly interested in the student perspective, as data from the Joint Council for Qualifications (JCQ, 2018) indicated that the qualification was declining in school interest, and I wanted to know what might be lost to students if this qualification were to be removed by examination boards. At the point of writing my IFS for my doctorate, data from JCQ showed that the HPQ had decreased by 3,191 national entries between 2011-2014 where the Extended Project Qualification, worth

half of an A-level and is recognised by universities and some employers (AQA,2020), had increased by 9,146 entries in the same period. However, a change in thinking took place again in 2020, where data showed that interest in the HPQ had improved with an increase of 651 national entries between 2017 and 2018 (AQA, 2020), when at the same time there was a decrease in the number of entries for the EPQ where numbers fell from 40, 437 to 38, 852 in 2018. Although entry data for the EPQ exceeds the parameters of my research, it is relevant to consider how potential pressures on teachers could be having a negative impact on project-based learning opportunities for all students, across all Key Stages, and is often the first casualty among external curricular demands. The inconsistency of student participation in the HPQ each year has resulted in fluctuating entry statistics and the situation where the benefits of such programmes are not transparent or seemingly powerful enough to maintain a consistent entry. There is a need for further understanding of what project work contributes outside of grades obtained, and the ways in which project work provides 'shared learning experiences' and collective learning environments that support later professional, academic and personal development (Hogan et al., 2023). Research is needed to highlight the potential value of project work to incentivise teachers to coordinate research programmes. What remains consistent is that teachers' decisions concerning project work are changeable and transitory, with discussion of student and teacher experiences during supervision an area that research has almost completely neglected.

1.6 The recovery curriculum: impact on project-based learning

The social disorder of the global pandemic (2020) has affected everyone and every institution, resulting in a series of 'losses': 'loss of interaction; loss of routine and structure; opportunity and freedom' (Carpenter, 2020, p.2). This sense of loss aims to be addressed through students and teachers reconnecting in the classroom and by engaging in dialogues where both teachers and students begin to recover and rediscover these losses. Project-based

qualifications are, however, unlikely to be a priority in schools as attention is paid to the mainstream curriculum and engaging students once again. The HPQ falls outside the statutory curriculum and is unlikely to be seen as a priority by staff and students as academic and emotional development begins to recover. However, there may never be such an important time for staff and students to re-engage in dialogue and to look deeply at what motivates students to learn, making the case for project-based opportunities and supervisory dialogue a key concern in implementing Carpenter's recovery curriculum. There are also calls for senior management in schools to recognise research qualifications as vehicles to improve students' cultural capital, supporting personal and academic growth (Harrison-Moore, 2022) as there are for students to be guided by supervisors to engage in dialogues with a range of relevant experts in different contexts. In a world where 'education needs to fit people for apprenticeship to multiple meaning-making communities, wherein texts are mediated in different ways, requiring [students] to apply a variety of specific competencies to a variety of communicative purposes' (Goodfellow, 2011, p.133) project learning can develop the need to expand student learning experiences beyond the classroom. Through project learning there is the possibility that students will 'develop confidence in applying new technologies in their studies' (Pearson, 2023, p.11) but this can only happen if supervisors are skilled in knowing how to use such technologies and skilled in how to discuss this value with supervisees.

1.7 Performative cultures in schools and project-based learning

In my own practice as Coordinator for the HPQ, I have experienced students' preoccupation with the final grade and how this will be perceived. One year 9 student expressed great concern at 'only having' achieved a C grade, asking me to call his mother, as he felt unable to persuade her that a grade 4, marked at CGSE level, in Year 9, was an achievement. The student's concern was not a surprise to me. My IFS focusing on the value that the HPQ might

have for students discovered that students were preoccupied with the outcome and achieving the highest possible grades, which only intensified throughout the learning process. Rachael, Year 9 (2018 cohort), expressed views that 'the thing is, at the end of the day, it's on a sheet of paper and all that matters is the letter next to it for some reason' (Clements, 2018). Student attitudes such as these reflect wider concerns as to what is valued in terms of research and all qualifications, and perhaps is one such influence on the approaches that teachers take in the role of supervisor. If teachers, and to an extent students, find themselves experiencing the 'terrors of performativity' and in positions that 'portend inner conflicts, inauthenticity and resistance' (Ball, 2003, p.4) there are implications as to how the sharing of ideas in supervisory meetings take place. It is, perhaps, unsurprising that the grade is important to both teacher and student, but the current prioritisation of the outcome above the value of discussion as part of the learning process appears particularly striking in project qualifications. In a learning environment where 'schools and students [are] obsessed with getting qualifications and the only learning that counts [is] learning to pass examinations' (Unwin and Yandell, 2016, p.19), project-based learning could be described as high-risk for both teachers and students due to the levels of student autonomy and discipline that are required independent of the teacher supervisor. The risk factor for teacher supervisors is having to release a degree of control over a student's learning, which is something that teachers are less likely to practise in a classroom setting with examination pressures (Sachs, 2001, p.400).

Key stage 3 students and teacher supervisors are engaging in project-based learning within a performative culture, meaning that both appear to 'organize themselves as a response to targets, indicators and evaluations' (Ball, 2003, p.215), which has been well documented as having a potentially negative impact on the relationships that teachers have with students (Ball, 2003; Sachs, 2001; Bronwyn and Bansel, 2007; Goodson, 1994; Apple, 2018).

Students taking part in project-based learning do so in an educational system of learning that places blame for underachievement and failure on the student rather than the education system (Young, 2009, pp10-18). Some students perceive little point in trying at all if the top grade cannot be achieved, regardless of the opportunities to improve learning and critical thinking throughout the research process (Clements, 2018; Unwin and Yandell, 2016). My research considers the impact that performative pressures might have on discussion contexts, primarily when quantifiable outcomes of project learning are prioritised over 'the whole story' (Vygotsky, 2012, p.103), overshadowing the development of skills gained during the research process.

The HPQ does not have the same quantifiable impact on school results as the EPQ. For the EPQ, students have the possibility of benefiting from the qualification's facilitatory nature of lowering some university offers, whereby an A* achieved in an EPQ could provide a student with an alternative offer of ABB rather than AAB passes at A level to secure a place on a degree programme. The faciliatory aspect of the EPQ makes the qualification measurable, where schools include students' EPQ grades, contributing to their 16–18 performance tables (AQA, 2023). Measurability is not the same for the HPQ, as it is worth half a GCSE and is not included in Progress 8 measures, (where pupils' results are compared to other pupils nationally with similar prior attainment), which might be said to reduce performative pressures and provide more scope for reflective dialogue to occupy teaching time. The exclusion from Progress 8 measures makes project qualifications taught outside the statutory curriculum vulnerable, as schools are cutting curriculum offers in an affordability and stainability crisis (Harden and O'Farrell, 2016). If the curriculum is shrinking, project-based learning needs to adapt to survive, with project co-ordinators reassessing the ways in which project learning can nurture discussion environments and to promote the value in transferable skills across a range of curricular and stages of academic study.

1.8 Supervisors in a post-performative context

Goodson (1994) argues that it is necessary to consider the impact that teachers' own experiences have had on their teaching styles, as one's educational context shapes pedagogical thinking and professional values (Goodson, 1994, p.30), all of which might be seen to pervade and influence supervisory relationships and dialogue. Supervisory discussion may be impacted by the experiences that teachers themselves have had as students, especially the generation of educators identified as 'post-performative teachers' (Wilkins, 2011). Wilkins (2011) explores the potential impact that being schooled in a performative era can have on teachers' thinking and behaviour, where such teachers might be viewed as products of performative schools from the 1990s. Teacher supervisors emerging from a post-performative culture may attribute different values to the importance and purpose of reflective dialogue in comparison to teachers who have trained and were schooled in a different era. Wilkins's (2011) research predicts a possible divide between different groups of teachers in the future, creating a clear distinction between pre and post performative eras, with implications for the ways in which future students will engage with learning and what shapes learning values. It is suggested that teachers will have limited prior experience of a learning environment that was not dominated by grades, outcomes and 'demands imposed by external bodies' (Deuchar, 2008, 490). It is the process of sharing ideas in dialogue that underpins the focus of this research. The performative context is important in understanding the complexity of contextual factors that contribute to the interactions between students and supervisors in socially constructed environments in which both participants are situated by dominant social and educational discourses.

1.9 Conclusions

Supervisory dialogue has come to mean more to me than something that is assumed to take place between student and teacher. My interest has been guided towards *how* discussion is experienced between students and supervisor, and by knowing more about supervisory discussion experiences there is the potential to learn and improve practice. Examination boards presume teachers adopting a supervisory role is unproblematic and that one-to-one meetings are valuable and dialogic in structure; exploratory research is needed to assess this confidence.

The exploration of discussion experiences between students and teachers during supervisory discussion provides an insight into this underexplored aspect of project learning, often difficult to access due to the private meetings between student and supervisor. This research therefore sets out to answer the following question: 'What types of experiences do students and teachers have during supervisory meetings at key stage 3?' and

seeks 'new and previously overlooked explanations' (Reiter, 2013, p7) that come only from engaging with the phenomenon by posing 'new questions and new explanations by looking at reality from a new angle' (ibid. p.7). In turn, this research aligns with a social constructionist approach and the perspective that 'when people talk to each other, the world gets created (Burr, 2003, p.8). This research adopts an exploratory research design (Robson, 2015) and is underpinned by an interpretivist sensibility that 'subjectivity of interpretation is front and centre for critical consideration, rather than trying to mask or ignore it' Schwartz-Shea and Yanow, 2011, p.112).

In Chapter two, the literature review begins this exploratory approach by trying to say something new about dialogic learning environments and not just repeat what is already understood. The review sets out to 'increase knowledge of a topic that is little known, but needs to be better known' (Swedberg, 2020, p.98), which is presented through an analytical examination of three key areas: dialogism; theoretical influences on dialogic thinking and sense making processes. What follows in Chapter three is a qualitative exploratory research design that responds to the gaps in literature on supervisory dialogue, where an interpretivist research design is outlined to show that 'meaning-making … has no one, single starting point; instead meaning-making begins wherever it begins, with whatever the interpreter knows or understands at that point in time, in that place or her prior knowledge and lived experience (Schwartz-Shea and Yanow, 2011, p42). I acknowledge myself as an insider researcher, which I came to understand more critically through the process of reflexivity and checks on my own sense-making strategies in interpretive research, aligning with what Becker (1998) describes as a willingness to revise your own thinking considering different experiences.

There are also links to and challenges for insider researchers exploring the inside-outside nature of dialogue (Wegerif, 2020) where I address the challenges that I faced in coming to know this discussion context. Participant selection and data collection phases are also introduced in Chapter three. In Chapter four, the justification for creating narrative accounts is explained, with an example of a narrative account to demonstrate the significance of this process in making sense of supervisory experiences. Narrative accounts provide key thematic categories that shape the discussion and analysis that appears in Chapter five. Themes from the narrative accounts structure this chapter, allowing for specific analysis of each discussion experience and how this affects student engagement. The thesis concludes in Chapter six with

reflections on what has been learned about one-to-one supervisory experiences in this context, focusing on the limitations and contributions to knowledge and professional practice that has been achieved in this underexplored area.

Chapter 2 Literature Review

2.1 Introduction

Chapter two begins by exploring the complexity of dialogic theory, with an interest in the dialogic process of how participants not only speak together but how this can lead to thinking together (Wegerif, 2017, p.2). How ideas are shared during discussion is explored under the sections of dialogism, theoretical influences and sense making process, offering foundations in understanding supervisory dialogue. How far supervisory interactions can be deemed dialogic against established models (Mercer, 1995; Bruner, 2006; Alexander, 2020) is considered, but with a view to understanding how the co-construction of ideas emerge during supervision rather than the exchange of question types, which remains a common focus in dialogism. Vygotsky's revised thinking on Piaget's egocentric speech developmental stage (Vygotsky, 1978, p.16) is discussed beside dialogic theory and the ways through which participants in dialogue can find themselves abandoned and unrecognised for their uniqueness as participants (Friedman, 2001, pp25-26). The chapter develops with a focus on the different ways that sense making takes place during dialogue, highlighting the benefits of understanding meaning making as requiring a repertoire of dialogic skills between teacher and student. The literature review considers dialogic theory to explore 'new insights and new directions' when applied to one-to-one supervisory discussion (Kershner et al., 2020, p.71) and addresses Foucauldian interpretations that 'educational institutions control the access of individuals to various kinds of discourse' (Ball, 1990, p.3).Dialogic theory suggests that dialogue can be something that happens *to* students, whereby students are passive listeners rather than active contributors with working with teachers (Mercer, 1995, p.94), and as such this chapter considers how one-to-one supervisory contexts might intensify what is already known about the challenges faced in creating student-teacher partnerships in dialogue.

2.1.1 Literature review approach

Established models for the literature review bring to the fore researchers' perspectives in what might be considered horizontal positions by which writers analyse the work of others (Kamler and Thomson's, 2014). Contrastingly, a dialogic approach constructs collaboration between key thinkers and adopts a more holistic understanding of how writers engage with each other. There is emphasis on dialogues that might take place during a series of written exchanges between thinkers that provide accessibility to concepts that become more fully understood during dialogic debate. Kamler and Thomson's (2014) work on writing the literature review offers a metaphorical dinner party, with the author as the host, conjuring the image of collaboration; however, Skidmore (2019) would identify this as 'a monologic dialogue' or a superficial presentation of thinkers in dialogue (Skidmore, 2019, p.30). My review acknowledges this rethinking of collaborative literature as part of the analysis process by including email exchanges (Matusov and Wegerif, 2014) and transcripts of interviews (Wegerif and Kullenberg, 2020), providing a modest selection of dialogic 'appetisers' at my dinner party.

2.2 Dialogism

2.2.1 Confirmation of self through dialogue

Buber's confirmation theory asserts the fundamental principle of directly empathising with another where one can 'imagine quite concretely what another is thinking, perceiving and knowing' (Friedman, 2001, p.26) rather than the detached 'I-it' dialogic state which is self-absorbed and fictious (Friedman, 2001). The significance of connecting on a subconscious level is further supported by Holquist (2002) and his view that for Bakhtin 'it cannot be stressed enough for him that the 'self' is dialogic, a relation. And because it is so fundamental a relation, dialogue can help us to understand how relationships work' (Holquist, 2002, p.18).

The value of context and regeneration of meaning attributed by Buber and Bakhtin has connections to the philosophy of holism (Matusov and Wegerif, 2014), which identifies the importance of not compartmentalising components within a system but rather areas working concordantly. From this perspective, the cultivation of discussion experiences is like an ecological environment whereby students and staff engage in dialogue to cultivate learning circumstances, showing the value in assessing holistically *all* attributing factors that create an interconnection or specific ecology (Richardson and Healy, 2019). Project ecologies can grow, or diminish, in different contexts and across varying lengths of time (Richardson and Healy, 2019, p.1091), raising questions as to whether supervisory relationships are productive and stainable learning environments in terms of student participation opportunities. It is what happens between speakers and the sharing of minds which is vital as, 'the inmost growth of the self does not take place … through our relationship to ourselves, but through being made present by the other knowing that we are made present by him' (Friedman, 2001, p.26). Connectedness, therefore, is an implied mutual understanding and trust between speakers (Kershner et al., 2020, p.198), which in the context of supervisory dialogue may place students and supervisors in a unique position where dialogue, at its most effective, would make it impossible to distinguish between supervisor and student voices. Relations between speakers may thus constitute collective knowledge, with the most important voice being the collective one; the value is in looking at both voices rather than prioritising the differences between the two.

Dialogism provides a potentially useful lens through which to explore supervisory dialogue, focusing on the ways students and teachers might adapt to a student-centred learning environment; an environment that requires sustained thinking and criticality not only in written form but through spoken dialogue. My interest is in these discussion environments and how factors frame and help structure dialogic experiences. Dialogic theory recognises the

interplay between different perspectives and if students are to experience meaningful learning opportunities, supervisors need to 'enter into dialogue if we are to change their minds or rather, support them in changing their own minds' (Skidmore, 2019, p.36). For Matusov (2014), dialogic education is education as dialogue, and emphasises how potentially mechanical and artificial some dialogic teaching models and teaching repertoires have become. Supervisory dialogue provides a private and to some level intimate context, where teachers and students might respond more sensitively with what Matusov refers to as their hearts when sharing research interests and during project work (Matusov, 2014, p.14). Supervision relies on students to be critical of their thoughts and those of others, lending itself to models supporting the co-construction of ideas implemented on behalf of the teacher (Bruner, 2006; Mercer, 2008; Alexander, 2017). The stage at which timely interventions can appear is also a point of contestation, as dialogue is not separate from teaching, with the underlying philosophy that dialogic teaching is embedded at the start of any learning process and that, 'There are no phases: first teaching and then dialogue … or first dialogue and teaching … I define (dialogic) teaching as teacher's seriously – taken his/her mind and heart – replying to the student's genuine question of ontological interest' (Matusov, 2014, p.14). Matusov (2014) is not necessarily averse to intervention but is concerned that it is unhelpful and detached when students' questions are manipulated to suit a predetermined teaching objective.

2.2.2 Dialogic ground rules

The term 'dialogic ground rules' (Wegerif, et al., 2020, p.17) indicates the discussion expectations that exist privately between speakers, a 'microdialogue' (Skidmore, 2019, p.34), where there is a meeting of minds that recognises how to interact on a subconscious level; a silent conversation that runs alongside the verbalising of thought. Ground rules between participants are the foundations for effective dialogue before any purposeful use of

questioning can be asked or answered (Kershner et al., 2020, p.36). Wegerif (2020) describes ground rules as being in flux, where a re-designing of ground rules constantly develops and evolves to 'think together, learn together and live together' (Wegerif et al., 2020, p.17). At its most effective, 'dialogic education is education for dialogue as well as through dialogue in which dialogue is not only treated as a means to an end but also treated as an end itself' (Wegerif, 2011, p.182). Dialogue might look differently between the same two people in different contexts, implying that dialogue reflects both the physical space and contextual factors that evolve frequently. Ground rules develop across time and are also likely to be deeply rooted in teachers' own personal pedagogical choices and self-belief in themselves as a source for knowledge, where there 'are no limits to the dialogic context (it extends into the boundless past and the boundless future)' (Bakhtin, 1986, p.170). Participants might draw from personal biographies that impact the setting of ground rules, providing a setting to explore the relationship between context and dialogue in what Skidmore (2019) calls polyphonic discussion, where teachers actively remind students of past learning to encourage discussion (Skidmore, 2019, p.26). Studies where teachers have been asked to outline ground rules and introduce dialogic models such as reciprocal teaching (Brown and Palincsar, 1989), begin by showing students how to approach talk, but the setting of ground rules is more than just learning how to use talk; it is the uncovering of dialogic history between students and teachers. Previous successes between students and teachers have the potential to inhibit future successes just as failures or negative outcomes in past tasks might; a dialogic model is only as effective as the dialogic history between students and teachers that exists (Bruner,2006, p.206). There is also a 'hidden architecture that shapes what is likely to be said and what is likely to be thought' (Wegerif et al., 2020, p.17), which is influenced by contextual factors. Mercer (2019) posits that 'context is created anew in every interaction between speaker and listener' (Mercer, 2019, p.21) which aligns closely with Skidmore's concept of dialogic

teaching being a ‘live event, played out’ (Skidmore, 2019, p.34) where it is necessary to break away from restrictive monologic approaches through encouraging positive student interruptions. To what extent dialogic interruptions are either accepted or discouraged in discussions will affect ground rules and the quality of discussion shared. The act of interrupting a teacher challenges public discussion ground rules of teacher power, but to engage in a true, less fictious dialogue, such interruptions are vital (Friedman, 2001, p.26).

2.2.3 Dialogic pedagogy

Models that support dialogic pedagogy include one of the most well-established approaches, Socratic dialogue. Socratic dialogue encourages students to interact and reason with a view to listening and questioning where everyone is satisfied, ‘[helping] a group to discover what something is, as opposed to what it is not’ (Marinoff, 2019). A notable issue is the teacher’s role during this type of discussion. Although some student independence is afforded by this structure, the teacher remains ‘like the conductor of an orchestra: he [the teacher] has no explicit voice in the score but has a meta-voice in conducting the performance’ (Marinoff, 2019). Students are more likely to experience the homophonic talk that Skidmore (2019) describes where a teacher orchestrates and controls all aspects of the discussion process rather than a more polyphonic environment, or ‘many-voiced’ discourse (Skidmore, pp.28-29). Acknowledging that discussion is shaped by different types of talk means that private supervisory discussion is not necessarily a microcosm of talk experienced in the classroom; supervisory dialogue will have its own contextual influences and ground rules, with the familiarity of teacher authority and power that is likely to remain present (Brookfield and Preskill, 1999).

Supervisory discussion, perhaps when achieving the highest levels of student efficacy, should reduce, or even make redundant, the role of teacher conductor as both student and teacher might agree to arrive at equal platforms to set discussion agendas and move dialogue into

new areas. Socratic thinking, with later developments towards philosophy for children in the 1990s (Vansieleghem and Kennedy, 2011), remains one of the most dominating research interests in dialogic teaching, with an emphasis on different question types to engage students' thinking. This, however, seems to overlook and undervalue what is really happening *inside* dialogue, which is a gap that this review aims to explore with reference to supervisory discussion. It is, as Alexander (2017) suggests, that 'the so-called 'Socratic method' seems dialogic, but it is in fact a device for eliciting by question and answer what is already known' (Alexander, 2017, p.32). These ideas are influential on the development of my research focus, as I seek to develop an understanding beyond 'unthinking talk, talk which is intended to display and impress without any new thinking being present' (Wegerif, 2020, p.30).

2.2.4 Dialogic models

Popular dialogic models locate talk in predominantly classroom settings, including Brown and Palincsar's *Reciprocal Teaching* (Brown and Palincsar,1989, p.8), Mercer's *Three Ways of Talking and Thinking* (1995) and Alexander's five principles of classroom talk (2017), all of which imply a hierarchy whereby certain experiences of discussion between students and teachers are valuable to explore, and in certain contexts. Brookfield and Preskill (1999) suggest that through talk 'most material is renewed through questioning, criticism, discussion and deliberation' (Brookfield and Preskill, 1999, p.155) but this is only achievable if a dialogic culture has been established in the classroom, where the learning approach is 'a way of being in the world' (Wegerif, 2011, p.182) and a behaviour rather than a by-product of the meeting itself. Alexander's dialogic paradigm is an example of how talk can be used as part of a process in helping 'to build pupils' new understanding on their past activity' (Alexander, 2017, p.26), which he has identified as underpinning effective discussion.

Alexander's (2017) seminal work on dialogic teaching offers five underlying principles and a set of four repertoires. A pedagogical approach that is dialogic is nurtured and deliberate, creating a conducive environment for successful dialogue that is not arbitrary. Key to the research context is discussion on the reciprocal nature of teachers and students listening and discussing alternative ideas; the supportive relationship whereby students should be able to discuss without the fear of being wrong and embarrassed; and the cumulative nature of discussion where students and teachers build on each other's ideas (Alexander, 2017, p.38). These principles have the inescapable relationship with individual agency and empowerment, which has relevance to when students and supervisors work dialogically together. A teacher is no longer at the head of the classroom but rather becomes a partner in a more sustained and exploratory way, which may impact on how a student feels able to discuss with a teacher; such one-to-one discussion could be both liberating and intimidating for both student and / or teacher.

Alexander's (2020) recent revision of his dialogic teaching framework, with his five underlying principles having been extended to six, includes a review of speech repertoires moving from four to eight. One of the most valuable aspects of these revisions is in the deeper analysis of voice and whether dialogue can ever totally be open, meaning that teachers rarely embark on dialogue that has not been predetermined but rather 'steer discussion for a particular end'. In a webinar, Alexander (2020) raises questions as to whether discussion can be seen as equitable, where classrooms can be seen as 'exuberant voiceless participation' (Alexander, 2020) where opportunities to discuss freely in a one-to-one context are likely to reduce rather than increase student participation. Silence, too, plays a role in dialogue, whether the thinking time that silence brings is representative of power and agency or passiveness and accepting on behalf of students. The presence of silence is also acknowledged by Bakhtin (1986) where silences are explored under the concept of speech

genres and an individual's ability to command a range of repertoires. A speaker's level of vocabulary and understanding of a topic is not necessarily the issue as to why there can be poor communication, but instead there is a difficulty in navigating the direction of dialogue from start to finish is complex with 'the inability to command a repertoire of genres of social conversations' (Bakhtin, 1986, p.80). Supervisory dialogue might be seen to invite such challenges to students' repertoires specifically and is likely to involve a demanding speech imagination (decisions made in dialogue as to the ways that discussion might start, develop and end); however, such difficulty for students might not be due to an inability, but rather a lack of opportunity to engage. Silence as a feature of any dialogue between student and teacher is then, perhaps, an expected feature but one that needs to be understood more deeply. Effective communicative relationships can be seen in 'the dynamic interplay and interaction of minds in conversation' (Littleton and Mercer, 2013, p.8), but it is also one of the hardest positive increases and changes in discussion to account for. It is much simpler to 'measure an increase in knowledge or skills but harder to measure an increase in dialogicity' (Wegerif, 2019, p.83). While my research is not concerned with the measurability of dialogue, such considerations provide a contextual backdrop when considering the perceived efficacy of dialogue as part of a learning process and eventual outcomes. Most recently, Mercer's three ways of thinking model (Mercer, 1995, p.109) has been revisited with a view to expand established features of dialogue (Wegerif, 2011;2020). Mercer's exploratory talk, which promotes reasoning and a sense of shared purpose in collaboration, has been challenged by Wegerif (2020) who argues that this should be expanded to include more playful and creative means of shared talk, rather than just explicit reasoning (Wegerif, 2020, p.31). As research in dialogic pedagogy moves to explore 'the complex way in which different kinds of talk allow for, and even bring into existence different kinds of subjectivity' (Kershner et., 2020, p.43),

there is potential to explore supervisory discussion and the types of identities and talk that come into fruition within dialogic contexts.

Kershner et al. (2020) describes engaging in dialogue as, 'emotionally challenging for students and teachers as learning itself … it is an attitude of valuing and attending to another and entering into that relationship could be threatening as much as consolidating' (Kershner et al., 2020, p.198), which introduces the concept of value and attitude in ways that much literature on dialogue in the classroom does not recognise. More broadly, the length of time spent in supervisory sessions is a key contributing factor for successful interactions between students and teachers, which should 'last for long enough to make a difference' (Alexander, 2017, p.43). Measuring success as a form of self-improvement is complex, particularly when there is more interest in outcomes of joint activity rather the process and role that exploratory dialogue might have in the learning process (Mercer, 1995, p.94). Dialogue comes with both threats and opportunities in its unique setting where, 'You look at me and locate me within your gaze -and an inside perspective looking out – as I look out at you and try to express my truth' (Kershner et al., 2020, p.184). Identity is constructed through dialogue, showing the multifaceted nature of the ways in which understanding and meaning are experienced between participants, as 'I-for-myself' is simultaneously in dialogue with 'I-for-others and 'others-for-me' (Sullivan, 2012, p.3). There are microdialogues (Skidmore, 2019, p.34) affecting the hidden architecture of dialogue that show the self 'consisting of a number of 'I-positions' that struggle for dominance at difference times, depending on the context and relationship with others' (Hermans, 2001, cited in Sullivan, 2012, p, 17) and, as such, suggests there is likely to be some level of conflict and potential powerlessness present in contexts such as one-to-one supervision for students.

2.3 Theoretical influences

2.3.1 Presentation of the self in dialogue

Vygotsky terms ‘the true direction of the development of thinking is not from the individual to the socialised, but from the social to the individual’ (Vygotsky, 2012, p.20). There is value in expanding Vygotskian ideas ‘not [from] the individual versus social focus but monologic versus dialogic’ (Wegerif et al., 2020) and to consider, in more dialogic co-constructive terms, how ‘I communicate therefore I am’ rather than ‘I think, therefore I am’ (Gergen, 2003, cited in Stewart and Kellas, 2020, p.8). A type of internal dialogue might be seen to take place where, according to Bakhtin, dialogue is open-ended, where words remain ‘in continuing dialogue, where [they] will be heard, answered and reinterpreted … the person departs, having spoken his words but the word itself remains in open-ended dialogue’ (Bakhtin, cited in Freidman, 2001, p.25). Dialogue can continue to exist beyond the initial discussion, with reinterpretations where ‘dialogue is more of a dynamic continuous emergence of meaning than a static space’ (Wegerif et al., 2020, p.180). Buber (1958) describes the ‘I - thou’ orientation, where curiosity can be shown through more than acknowledging the presence of another in discussion but through recognising the other’s uniqueness, where ‘unmeasurability (the recognition of elements of a person’s emotion-spirit-psyche, such as feelings and emotions) responsiveness … reflectiveness … and addressability … Maximising the presence of the personal is a co-constructive, collaborative process’ (Stewart and Kellas, 2020, pp.8-10) are fundamental behaviours in dialogue that help to identify speakers through difference and consequently develop discussion relationships. Moving from monologic to dialogic (Wegerif et al., 2020) provides a useful understanding of the sense making process during discussion and offers value in considering the difference between participants and the anticipation of such difference which is likely to connect rather than disconnect speakers.

2.3.2 Egocentric speech

Vygotsky's revision of Piaget's theory on egocentric behaviours has implications for the potential of project work to increase students' autonomy and personalised decision making, where dialogue is 'an instrument in the proper sense - in seeking and planning the solution of a problem' (Vygotsky, 2012, p.16). Vygotsky's revisions include the ways in which sense making processes appear in discussion and how egocentric speech, the thoughts that are verbalised in childhood, remain with individuals but manifest differently with maturation through internalising these ideas as private thoughts. Egocentric speech, the position between direct thought that is conscious and 'directed thought' that is social (Vygotsky, 2012 p.12) continues to influence internalised speech and allows for silent problem solving to take place; the two are 'functionally equivalent' and useful beyond the age that Piaget suggests egocentric speech is no longer necessary (Vygotsky, 2012, p.18). Challenges and disruptions to a task generate an egocentric reaction, where an older child might become silent as they work through problems, whereas a younger child may share random disconnected thoughts out loud. How students at key stage 3 may work through episodes of inner speech and / or continuous dialogue within supervision becomes relevant when students and supervisors engage in dialogue, as it provides a dialogic space where students and /or supervisors could share thinking in a more egocentric way i.e. it is internalised. Both participants go through a process of sense making during meetings, which raises questions as to whether dialogic space becomes an egocentric one for teachers in supervisory roles as well as students, and how such behaviours affect relationships. Vygotsky (1962) presents egocentric speech as developing into inner speech, described as, 'something new brought in from the outside alongside with socialization' (Vygotsky, 2012, p.136). The emphasis placed on the importance of socialisation offers the potential to understand whether there is anything unique about the social speech encouraged by supervisors and the ways in which students respond to this

learning context. The concept of inner speech is the relationship between thought and speech and is also referred to as 'soundless speech', which is complex and problematic as it exists in a position between these two states (Vygotsky, 2012, p.44). Inner speech connects with self-expression and individuality and provides a starting point to understand how speakers consider ideas before socialising these thoughts, especially during supervision. It is an analysis of subjectivity that is required to appreciate what is happening in discussion as 'what we get in dialogue is not just two separated and located voices interacting but an outside and an inside reversing round each other' (Wegerif, 2019, p.85); neither view of dialogue should compromise the other but rather help expand the meaning of the other.

Discussions from Vygotskian theory on the development of children highlights the relevance of personal experience in developing shared understanding between speakers. As with dialogic theory, Vygotsky acknowledges that there is both an observable and invisible aspect to development, but such existence in Vygotskian terms is referred to as 'inner and outer conditions depending on whether they originate in classroom instruction or in the child's personal experience' (Vygotsky, 2012, p.86). Vygotskian theory on interaction between learning and development suggests that not all interactions result in an agreed understanding, 'if the thoughts of two people coincide, perfect understanding can be achieved through the use of predicates, but if they are thinking about different things, they are bound to misunderstand each other' (Vygotsky, 1978, p.139). This conceptualisation of miscommunication has relevance in how far participants understand each other in a context such a supervisory discussion where supervisors may attempt to redirect students in favoured areas of personal subject expertise and perhaps without acknowledging the student's thinking and personal experience that they bring to the discussion context.

2.3.3 Students as knowledgeable other

Vygotsky's theory of a more knowledgeable other (MKO), where a student works closely with another to solve 'harder problems than he could manage on his own' (Vygotski, 1962, p.103) has the potential to be reimagined when students work with another more knowledgeable person in some aspects of project work but not all. How supervisors engage in dialogue where subject knowledge and research skills might not be their academic strengths is an area in need of further exploration, particularly when project qualifications do not necessarily require teachers to be subject experts (Pearson, 2023; AQA, 2023) yet require teachers to discuss these areas during supervision. How teachers might approach supervision on subject areas with restricted knowledge and the approach taken to engage students in discussion through 'some honest form' (Bruner, 2006, p.56) is likely to provide challenges for teachers adopting the role of supervisor. In dialogic terms being 'taught to' should be more *shared with*, with dialogism prioritising the coming together of voices rather than prioritising a single voice (Wegerif et al., 2020); however, the coming together of students with specific topic knowledge and perhaps supervisors' lack of knowledge demands new consideration. How teachers might retain a knowledgeable status yet limit 'their knowledge and understanding in discussion only to help students gain a personal and critical perspective on what is learned, not to show off in front of them' is likely to pose unique challenges during supervision (Brookfield and Preskill, 1999, p.14). It is also the case that dialogue shows how '… our voices can definitely be out of balance' (Brookfield and Preskill, 1999, pp14-15) where working, 'with a more knowledgeable and capable partner who dominates decision making and insists on the use of their own problem-solving strategies may hinder rather than help the less able' (Mercer, 1995, p.93). This partnership might move more towards what Mercer (1995) describes as cumulative talk, where 'speakers build positively but uncritically on what the other has said … discourse is characterised by repetitions,

confirmations and elaborations' (Mercer, 1995, p.104). Dialogue can also move towards 'empty verbalism' (Vygotsky, 2012, p.83) where students become disengaged and negatively compliant in discussion (Brookfield and Preskill, 1999, p.15). Discussion expectations in supervisory contexts require sustained intimacy and perhaps opportunities for students to be 'inspired to find their own voices' (Brookfield and Preskill, p.154) and to fulfil a 'commitment to critical conversations' (ibid, p.154), but in the context of classroom discussion this is not without challenge.

Vygotsky's Social Development Theory (1978) has also influenced much research on the relationship between talk and the development of children's thinking, particularly the zone of proximal development (ZPD) where socialisation plays an integral role in a child's progression. Emphasis is placed on a child's potential to achieve when assisted by a more knowledgeable other rather than retrospective testing to determine an actual development level, '… the zone of proximal development characterizes mental development prospectively' (Vygotsky, 1978, pp. 86-87). The value of working with a more knowledgeable other, typically in collaboration with an adult, creates a prospective developmental space, where 'two people may create new meanings that neither could have achieved alone' (Littleton and Mercer, 2013, p.9). Vygotsky's (1978) zone of proximal development highlights 'the discrepancy between a child's actual mental age and the level he reaches in solving problems assisted indicates the zone of proximal development' (Vygotsky, 2012, p.103). Both Vygotsky (1978) and developmental psychologist Bruner (1976) identify the importance of students' preparedness for learning at different stages of talk, where maturation milestones in the learning process are imperative for later success. Vygotsky (1978) outlines the requirement for students to have strength in abstract understanding and personal experience to develop depth of knowledge where, 'The development of a spontaneous concept must have reached a certain level for the child to be able to absorb a related scientific concept'

(Vygotsky, 1978, p.18). How maturation stages might emerge offers a useful consideration as to the types of milestones needed to engage in meaningful dialogue during one-to-one discussion contexts, where teachers' prior knowledge on students' maturation levels in dialogue might prove valuable to explore in terms of overall student engagement. There is the potential to explore the complex relationship between maturity in discussion, project engagement and overall grade. Questions can be asked as to whether students already deemed confident in discussion by their teachers develop into confident research students and whether students less confident in discussion skills improve because of taking part in one-to-one discussions with teachers.

From sociocultural perspectives, the learning environment is at its most conducive through collaboration and interaction, where teachers can support students by 'supplying structures for the upward development of the child's spontaneous concepts towards consciousness' (Vygotsky, 2012, p.109). However, implementing such structures for students is challenging, as new concepts mature but have yet to be 'saturated by experience' (Vygotsky, 2012, p.108). Vygotsky (2012) states that 'the only good kind of instruction is that which marches ahead of development and leads it' (Vygotsky, 2012, p.104), which in the context of project work poses potential challenges as supervisors engage with students' interests that they may not necessarily have any expertise or knowledge in. A student might display strong understanding of a particular research phenomenon through learning experiences from parents, carers, siblings and / or organisations beyond the classroom (Vygotsky, 2012, p.109) that challenges traditional conceptualisations of 'expert-novice (teacher-student) relations' (Hennessy et al., 2016, p.17) and call into question how 'each speaker assumes a position towards him or herself, as well as all other participants' (ibid, p.17); do students consider themselves in knowledgeable positions and does one-to-one supervision subvert this traditional conceptualisation or reinforce this assertion?

2.4 Sense making

2.4.1 Sense making processes

Four approaches on developing dialogue and ways to support understanding between students and teachers, including Foucauldian perspectives on power dynamics in discourse, are outlined in this section. Approaches include thinking collectively; the double voiced nature of dialogue; a heutagogical approach (teachers encourage students to seek problems and questions to answer themselves) and challenge as a feature of dialogue. The process of making sense of one's own thinking and then that of other's is challenging and possibly heightened when students find themselves in one-to-one dialogue with supervisors. This section considers the known approaches of sense-making between students and teachers and then extends these ideas by recontextualising the potential challenges during supervisory dialogue. This section begins by drawing more broadly from extant literature on supervisory relationships in Higher Education and the complexities of establishing and maintaining a productive partnership in this learning context (Andriopoulou and Prowse, 2020).

2.4.2 Higher Education: approaches to supervision

There is a paucity of research that looks specifically at one-to-one supervisory relationships between students and teachers at key stage 3, but there are valuable insights into this relationship at Higher Education where the supervisory relationship is considered 'above all an interpersonal relationship within which a supervisor does not only meet the student's educational and research needs but also their emotional needs' (Andriopoulou ans Prowse, 2020, p.649). The demands on supervisors' skills are therefore complex as supervisors need to exhibit different behaviours with different students, requiring the development of a particular set of expertise and versatility to 'guide the novice student towards becoming an independent researcher' (Deuchar, 2008, p.491). Supervisory styles associated with the

highest levels of student satisfaction and completion rates include what Gruzdev et al. (2019) identify as ‘superhero’ or ‘dialogue partner’ where students felt that supervisors who were sympathetic and accessible in times of distress and academic challenge were particularly effective. The image of supervisor as saviour suggests that while demonstrating such superpowers to supervisees, supervisors should also instil a self-belief in their students that they, too, can survive on their own capabilities, making this relationship a process through which academic and emotional maturation takes place (Deuchar, 2008, p.490).

The conscious fostering of positive attachment styles draws new connections in assessing supervisory relationships through John Bowlby’s (1982) work on attachment theory, where ‘the knowledge that an attachment figure is available and responsive provides a strong pervasive feeling of security, and so encourages the person to value and continue the relationship’ (Bowlby, 1982, p.669). Although value can be found in exploring supervisory styles alongside attachment theory, current models of supervision are influenced by ‘the demands of the project itself and institutional process [and] disregard the influence of the not so obvious factors such as social position and unequal power, personality and identity’ (Andriopoulou and Prowse, 2020, p.651). Nurturing responsive relationships is therefore likely to be challenging for supervisors, within all stages of education with factors such as power dynamics, assessment pressures and policy influencing the ways in which supervisory styles are shaped (Foucault, 1982), reflecting the pressures caused by ‘increased focus on external accountability’ (Deuchar, 2008, p.490); a challenge that is unlikely to be isolated to Higher Education, even though this is where there is most research into supervisory relationships.

2.4.3 Thinking collectively

There is an established literature covering the complex relationship that language has with thinking collectively, which includes dialogic pedagogy as ‘a philosophy of language that places central importance on the reality of socio-verbal interaction’ (Skidmore, 2019, p.27). Language is a ‘tool for communication’ (Baktin, cited in Skidmore, 2019, p.27) which Merleau-Ponty describes as being at its most effective when ‘it is no longer possible to say who is thinking because we find ourselves thinking together’ (Merleau-Ponty, cited in Wegerif et., 2020, p.12). How successful teachers and students think together involves navigating complex power relationships, where such potential for the merging of minds depends on many sociocultural factors working in dialogic space (Wegerif, 2020). It is through shared experiences and collaboration that individuals start to make sense of abstract ideas in a more concrete way, achieving conceptual maturity (Vygotsky, 2012, p.7), where the importance of socialisation as part of the learning process is ‘two or more people [who] can construct, through discourse, a continuity of experience which is itself greater than their individual experience’ (Edwards and Mercer, 1995, p.6). Teachers and students ‘may use mutual knowledge to good effect or squander it’ (Brookfield and Preskill, 1999, p.6). Mercer (2008) posits that ‘talking with peers outside the visible control of their teacher … enables them to take a more active and independent ownership of knowledge’ (Mercer, 2008, p.94), which poses challenges for project-based learning, where teachers are positioned as a central resource to help develop students’ thinking. The one-to-one supervisory model may result in a threat to student curiosity, with the co-construction of ideas experienced as ‘a highly demanding task’ (Kumpulainen and Lipponen, 2010, cited in Hennessy et al., 2016, p.17). Teachers engaging with knowledge that falls outside of his or her subject expertise raises queries surrounding the ways that teachers might ‘secure [a] conceptual map of a lesson’s subject matter’ that is not necessarily in the teacher’s control (Alexander, 2017, p.31). Some

teaching contexts, therefore, such as supervisory dialogue, create a dialogic demand where 'it is not always in the hands of the teacher who determines what is to be taught and how it is to be taught' (Alexander, 2017, p.21).

Project learning is an example of what Bruner (2006) called 'egalitarian learning opportunities through *the technique of discovery,* where students have the chance to generate, collate and evaluate different sources based on independent judgement' (p.55), but consideration is needed as to whether students experience this when thinking *with* a supervisor. Bruner (2006) criticises the ways in which teaching can deny students 'what it feels like to be completely absorbed in a problem. They seldom experience this in school' (Bruner 2006, p.55). Project-based learning approaches ostensibly provide such an opportunity, with students being empowered with the opportunity to direct individual learning goals and to ask what Alexander (2017) describes as more 'authentic questions' (Alexander, 2017, p.15), shifting power from the teacher to that of the student's thinking. However, this shift towards student empowerment, from a Foucauldian perspective, is a difficult pursuit to undertake. Teachers hold power in discourse as part of a long-established tradition of unequal distributions of power and authority in educational settings, where the question 'who is speaking?' raises wider concerns in what students might be permitted to think, when and with what authority (Foucault, 1972, p.57). The teacher is a central conductor in discourse and might be seen to reinforce such power relations in this one-to-one setting, drawing attention and emphasis on how 'the schooling of the student is compiled and constructed both in passive processes of objectification, and in active, self-forming subjectification, mediated by an external authority figure -… most commonly, the teacher' (Ball, 1990, p. 4). A Foucauldian view considers the coexistence of empowerment and disempowerment, inclusion and exclusion through social relations, highlighting 'the struggles against the privileges of knowledge … the way in which knowledge circulates and functions,

its relation to power' (Foucault, 1982, p.6). The ways in which power relations impact who speaks and when in supervisory dialogue, and the potential to explore feelings of potential resistance to this intimate one-to-one discussion model, opens new areas to explore when considering what can be achieved in this assumed co-constructed learning space. Wegerif (2020) outlines the importance of looking deeper than surface level exchanges in dialogue and to focus more on depth structure, which he suggests 'is about relationships. It is what is really going on despite what people might claim about it' (Wegerif, 2020, p.35), which is underpinned by positional power. Matusov (2014) asserts that teachers can manipulate students into posing questions that are not necessarily of personal significance, resulting in students being deceived into thinking that questions raised in classroom discussions are organic when in reality questions are manufactured and premeditated by teachers, making these environments falsely dialogic in nature. This raises wider concerns when teachers have 'the dangerous responsibility … as agents of the larger dialogues of society' to nurture independent thinkers (Matusov, 2014, p. 15). In the context of my research, supervisory discussions *may* reaffirm teacher dominance and traditional monologic structures (Skidmore, 2019; Wegerif, 2019); alternatively, they may provide a dialogic space that affords students discussion opportunities to engage in sense making tasks through dialogue, moving away from simply addressing monologic views of participants (Wegerif, 2012, p14).

2.4.4 The double voiced nature of dialogue

Dialogue is the interplay between different perspectives, where meaning always assumes at least two different viewpoints and results in the self being 'double voiced' (Wegerif, 2020). Through dialogue we do not just address ourselves to the other as a physical object, but we address a projected image of them, which includes our own idea of how they are likely to respond to what we are saying. Participants 'embrace, understand and [make] sense [of] the

speaker's speech plan or speech will, which determines the entire utterance, its length and boundaries' (Bakhtin, 1986, p.77). The double voiced nature of dialogue can involve issues of power relations, specifically 'unequal communicative rights' (Edwards,1994, cited in Alexander,2017, p.14) where students take passive roles, which Bakhtin captures from an essentialist perspective of there being two voices in education: authoritative and persuasive, both being attributed to teachers. The authoritative voice where a teacher seems to ask students to 'accept or reject' ideas without fully engaging students in the exploratory discussion (Wegerif, 2012, p.14); and the persuasive voice, the most important in education, that speaks to the student from the inside, appealing to intrinsic motivations and desires; the point where dialogue becomes more transformative and departs from simple functional and imperative interaction.

Dialogue can reference distant places, past and future events, and include people who are not present in the discussion, indicating that what is observed from the outside does not truly reflect the ways in which the discussion is structured (Wegerif, 2011, p.181). One way of connecting through dialogue in a more persuasive way is through what Stewart and Kellas (2020) describe as co-constructing uniqueness through shared storytelling. Co-constructing ideas through storytelling allows speakers to share experiences and / or emotions on a topic to support the joint sense-making process, which is effective when differences and similarities between participant views are shared. Storytelling can connect speakers, but it also has the possibility to exclude, particularly if the story exacerbates differences between speakers without acknowledging the context of the story where, at its most effective, storytelling can 'help one individual in an interaction construct his or her uniqueness' (Stewart and Kellas, 2020, p.13). The role of storyteller allows participants to 'construct their own version of reality using past experience and knowledge' (Brookfield and Preskill, 1999, p.21), impacting

the way each speaker ‘sees’ one another in dialogue during this specific sense-making process.

2.4.5 A heutagogical approach

Heutagogical learning approaches affords individuals high levels of autonomy when deciding what they would like to learn, through which mediums (text, visual or audio) and specific timescales to complete key milestones and is typically referred to as self-determined learning (Hase and Kenyon, 2013). It is demanding for students to take part in dialogue with teachers, where high levels of 'learner competencies as well as development of the leaner's capability and capacity to learn' (Ashton and Newman, 2006, p.829) are required, and typically associated with adult learning. Adopting a heutagocial approach is likely to provide challenges for teachers as traditional approaches towards pedagogy acknowledges teachers' power, where learners are passive and dependent, which is subverted in heutagogical learning environments as 'new methods assume learner competence and greater independence' (ibid. 829). If adopting a heutagogical approach can empower students during the learning process, there is the possibility of disempowering teachers' confidence levels. Allowing students to self-manage and direct learning is normally 'in the hands of the teacher who determines what is to be taught' (Hase and Kenyon, 2013, p.22) which may impact the ways in which supervisors engage in dialogue and retain feelings of control as students work on topics and ideas that 'have not previously been combined' (Bruner, 1960, p.9). One key competency for project learners is an ability to share challenges and the monitoring of the research question (AQA, 2023), both in writing through project logs and during supervision, placing students at the centre of the learning process. The extent to which supervisors are prepared to engage in a heutagogcical approach where students determine the learning priority reflects issues concerning confidence and power. For instance, to what extent is dialogue used to explore students' ideas before a teacher is tempted to impose their own knowledge, ultimately missing steps to develop students' understanding?

Bruner (1960) advocates that discussion should be something that happens *between* students and teachers rather than something that is *done* to students, 'talk about it rather than at them' (Bruner, p.20), where teachers 'remain firmly in control not just of classroom events but also of the ideas [shared]' (Hase and Kenyon, 2013, p.148). The sharing of ideas is a process often manged by the teacher, seen to have dominance over dialogue as it 'reduces the risk that the limits of [teachers'] knowledge will be tested … less exposed' (Alexander, 2017, p.31). If levels of intellectual exposure are present in the classroom, such emotional reactions should be considered in different learning contexts such as one-to-one project work, where private discussions may either exacerbate or reduce this concern for the teacher, or student, as being an imposter or inadequate in knowledge.

2.4.6 Challenging as a feature of dialogue

Discussion that invites challenge has the potential for transformative effects on thinking and sense-making processes, particularly if the student and supervisor are open to criticality and new approaches. Research undertaken on hypercorrection by Metcalfe and Miele (2014) focuses on what is termed high confidence errors, where students are more likely to self-correct a strong belief and understanding rather than a low confidence error that came from a guess or erroneous sources (Metcalfe and Miele, 2014, p.1). This is important because students conducting research projects can start with a strong belief on a chosen topic, particularly as the topic may be connected to personal interests for several years. According to Metcalfe and Miele (2014) such confidence can result in potential change and conflict, where students are exposed to the possibility of revising knowledge assumptions. Project work can provoke strong emotional attachments rooted in personal experience for students, resulting in what could be deemed dialogic resistance to challenge and development; however, as suggested by Metcalfe and Miele (2014), it is much easier to correct these strong

confidence errors, as an intellectual grounding in something is better than having nothing to draw from when attempting to correct.

Language, then, also has the potential to cause both misunderstandings and pose challenges when generating new interpretations, both of which Mercer (2002) presents as inevitable, even useful, due to the 'inherent ambiguity and adaptability of language as a meaning-making system that makes the relationship between language and thinking so special' (Mercer, 2002, p.6). Successful discussion experiences can have both a positive influence and a potential hindrance to future sense-making success, where 'action, of course, tends to follow the line of previous success; past success served to distract from the ultimate goal' (Bruner, 2006, p.206). The discussion relationship that a student has with a supervisor is as much about addressing past learning and shared experiences, as it is about preparing for future challenges, where communication is fundamental to being human and as such requires a connection that is genuine and acknowledging (Stewart and Kellas, 2020, p.5) in how ideas are made sense of.

2.5 Conclusions

In this chapter, I have sought to understand dialogic theory (Wegerif, 2020), with particular interest in Buber's confirmation theory (Friedman, 2001, p.26) and connectedness in dialogue (Kershner et al., 2020, p.198). This review provides conceptual richness through Wegerif's model of dialogue as a contextually influenced experience and the self as a particular projection, with Vygotskian discussion on the more knowledgeable other and the role that egocentric speech has during sense making processes.

Dialogic theory, however, does not extend to specific discussion contexts such as one-to-one supervision during project based learning, which raises questions as to whether supervisory 'dialogue' is an experience that is authentically dialogic in nature. There are gaps in the literature to support the understanding of experiences in which supervisory dialogues take

place and as such is ‘worth discovering’ (Stebbins, 2001, p.6). Understanding supervisory experiences for students and teachers underpins the rationale outlined in the following methodology chapter for a qualitative-exploratory research design (Stebbins, 2001, p.7), where I look to discover ‘What aspects of reality this [process and activity] opens up for us?’ (Reiter, 2013, p.10). The exploration of supervisory dialogue requires a focus on experiences had by students and teachers during supervision, and as such shapes a research question that focuses on the following: What types of experiences do students and teachers have during supervisory meetings at Key Stage 3?

Chapter 3 Methodology

3.1 Introduction

The exploratory qualitative research design adopted an interpretive approach, focusing on three supervisory pairs to generate new ideas and understanding of the experiences of participants during supervisory dialogue at key stage 3 (Swedberg, 2020, p.35). The interpretive approach allowed for the exploration of my prior understanding and the re-examining of gaps in the research literature on dialogic environments that one-to-one supervision facilitates. Few frameworks explore dialogue beyond the classroom and the statutory and, as such, this research required a research design that was dynamic, open-ended, and acknowledged the discovery (and rediscovery) of puzzles and surprises as part of the analysis process (Schwartz-Shea and Yanow, 2011, p.36). The research design was underpinned by the interpretivist perspective that social realities are complex and changeable, where 'the self is a product of language and social interactions [and] constantly in flux … something that is, to some degree at least, borne out by our usual experience' (Burr, 2015, p.79); interpretations and re-interpretations needed to be systematically part of the analysis phases as new findings emerged.

Critical debate on dialogic theory is a conversation worth joining. The absence of knowledge about dialogic experiences between teachers and students in school, but beyond the classroom, revealed something puzzling, provoking an interesting in 'providing [the] missing pieces' in how this situated learning environment is experienced between student and supervisor (Schwartz-Shea and Yanow, 2011, p.100). The situated context of this study is the school where I teach and focused on three Year 9 students and their supervisors over a period of three months. The Higher Project Qualification (HPQ), where students complete an independent research project to gain the equivalent of half a GCSE, was the medium through

which project learning was explored. This purposive sample formed three mini-exploratory studies, where each supervisory pair was audio-recorded during three meetings, across three months of the six-month programme. The methodology chapter begins with an introduction to exploratory research and what it means to explore in the context of supervisory dialogue. Dialogic theory is a constant in underpinning the theoretical perspective in this research and as such permeates the qualitative exploratory research design with an interpretive and abductive approach. The chapter develops by explaining the interpretive research design and the three phases of early analysis that initiated the abductive reasoning approach that this research took to explore the 'tensions between what was expected and what was observed' (Schwartz-Shea and Yanow, 2011, p.28). Chapter 3 concludes by introducing the representative narrative accounts presented in Chapter 4, an exploratory sense-making approach used to extend the exploration of supervisory experiences; data needed to be presented in ways that provided 'insight and new ideas' (Parcell and Baker, 2018, p.2). This chapter provides the foundations from which the explorative analysis of supervisory categorisation emerges in Chapter 4, showing that through discovering complexity in dialogue there were opportunities to understand the challenges encountered in supervision in meaningful ways.

3.2 Qualitative exploratory research

This research is exploratory in design and responds to what is discovered at each stage, not 'finishing [only] when everything of importance for describing and understanding the area under study has been discovered … to be as broad and thorough as possible' (Stebbins, 2011, p.3). The iterations of discovery in the processes of reinterpretation and revision were linked to the open-ended and dynamic research design found in the interpretivist paradigm, whereby 'flexibility [and] space for its iterative, recursive and adaptable character' was central when exploring new insights' (Schwartz-Shea and Yanow, 2008, p.55). To *explore* is to open and

expand, and I was interested in how this might be applied in dialogic terms, where it is important to explore the inside and outside of dialogue (Wegerif, 2019), particularly in an dialogic context that has been rarely researched (Wegerif, 2019). Exploring supervisory dialogue as having an inside and outside added a dimension to exploratory research that acknowledges the complexity of my focus. Although looking at something from different angles can help to 'unveil previously hidden facets of reality' (Reiter, 2013, p.9) dialogic theory, in this supervisory context, moved towards needing to explore how the phenomenon might be understood internally and externally, the visible and invisible aspects of exploration. Dialogism 'illuminates and expands perspectives' (Wegerif, 2019, p.86) with the idea that 'any utterance is a link in a very complexly organised chain of other utterances' (Bakhtin, 1986, p.69).

3.3 Interpretive research

The interpretive research design allowed for the development of my exploratory approach, as I considered the importance of contextual knowledge and the role that I played as a human research instrument (Creswell and Creswell, 2023, p.202). The acknowledgement of my own situatedness, and the ways in which my interpretations might impact how I developed my understanding, meant that I saw the fluidity of social realities as part of the analysis process. I understood that there was more than one singular socially constructed reality (Wegerif, 2020) and that to understand supervisory experiences meant to view interpretation as 'dynamic as well as historically constituted and inconsistent (Schwartz-Shea and Yanow, 2011, p.94) for myself and participants.

I adopted what Braun and Clarke describe as a 'fully qualitative … Big Q' position, where I 'embraced the view that knowledge comes from a position and a disinterest in the idea of a singular universal truth to be discovered' (Braun and Clarke, 2022, p.7). I was interested in how supervisory contexts might be created in different realities and took the view that any

given reality of supervisory dialogue existed at one given time and in a particular set of circumstances. Dialogism focuses not only on what is said, but on the silent aspects of dialogue by considering contextual experiences and relationship history between speakers. It is the case that 'when people talk to each other, the world gets created' (Burr, 2003, p.8), with a context that is always created anew and is 'a mental phenomenon, [that] consists of whatever information listeners (or readers) use to make sense of what is said (or written)' (Mercer, 2002, p.20). The qualitative exploratory approach considers 'research not to reproduce reality, or even to represent it – [but] in the sense of capturing its likeness…' (Hammersley,2008, pp.50-51), which connected with the view that reality is a subjective experience and as such one that 'grows out of our own minds and not out of [one pre-existing] reality' (Reiter, 2013, p.5).

I found thinking in terms of dialogic ecologies useful, as such environments could grow, or diminish, in different contexts and across varying lengths of time (Richardson and Healy, 2019). Supervisory dialogue then has more than one reality where 'there can neither be a first or a last meaning, which in its totality is the only thing that can be real' (Bakhtin, 1986, p.146). I considered dialogic realities to be inconsistent and that there was the need to 'be critical of the idea that our observations of the world [do not] unproblematically yield its nature to us' (Burr, 2003, p.3). Contextual factors included varying supervisor experience with project work and supervision; previous and current teaching history between staff and student; the location and time of the meetings; and students' attitudes towards learning more broadly.

Interpretive research recognises that social reality is in flux, sustained or disregarded depending on the motivations and needs of those wishing to engage with it, wherein 'meaning does not exist in its own right; it is constructed by human beings as they interact and engage in interpretation' (Robson, 2015, p.24). Discussion contexts shape the quality of

dialogic environments, but environments also impact the quality of discussion, creating complexity in the ways that supervisor and student might discuss. Adopting an exploratory approach allowed me to consider the process of constructing and claiming dialogic realities of research participants, as I reflected on my own positionality in how I interpreted and perceived to be the reality for supervisory pairs. I reflected on the relationships and social realities created between participants and the ways in which participants engaged with me as the HPQ Coordinator, where I sought 'not [to] look inside for the individual, but out into the linguistic space in which they move with other people' (Burr, 2015, p.89). Reiter (2013) describes this process as conscientization, acknowledging that through engaging with our 'mental models, available categories [and] mental analytical repertoires' (Reiter, 2013, p.7), where researchers can enter reflective states that support and extend analysis processes through 'checking on my own sense-making to reduce confirmation bias' (Schwartz-Shea and Yanow, 2011, p.100).

3.4 A dialogic approach as an insider researcher

The interpretive approach meant that I welcomed complexity as the research presented itself to me, where I questioned the nature of the phenomenon throughout and how my perspectives helped to shape the analytical process. Thus the approach allowed the study to ask questions of itself with an 'interest in process and meaning, over cause and effect' (Braun and Clarke, 2022, p.7), recognising my individual context in which hypotheses were made and a platform from which to acknowledge that 'research does not start from nowhere' (Reiter, 2013, p.7) but is part of an individual's perception of the world, which as such should be explored as part of the 'multiple social constructions of meanings and knowledge' (Robson, 2015, p.25). Adopting a dialogic approach as an insider researcher did create some tensions, particularly when considering how to engage with participant dialogue as, 'words and other signs recorded and transcribed, do not give us access to the 'inside' of the dialogue or its meaning

unless we enter that dialogue as a participant' (Habermas, 1979, p.29). Kershner et al. (2020) present a research environment of dialogic absorption rather than detached observer by which the researcher becomes an active participant in dialogue throughout the study, where 'for a researcher to understand dialogue…it is not possible without entering' (Kershner et al., 2020, p.18). This raised ethical issues, particularly when I planned to explore how private dialogues are shared in naturally occurring ways between student and supervisor. I wanted to reduce 'altering the flow of social interaction unnaturally' (Bonner and Tolhurst., 2002, cited in Unluer, 2012, p.1) to protect 'the importance of the lived experience' (Unluer, 2012, p.177). I took a limited role in one supervisory meeting for each pair, where I contributed only if the student and supervisor invited me to do so. Dialogic absorption was achieved by being present in the moment, despite remaining predominantly a silent participant (see narrative accounts on the evolution of dialogic absorption, p.86).

My role as a HPQ project-coordinator is to guide and support students and supervisors through phases of project work, where students consider research interests and how to approach the reflective aspects of project work, which also included allocating students to supervisors. However, due to long periods of remote learning during my data collection, brought by school closures due to Covid, and the difficult position this created in matching students and supervisors at the early research stages, I took the remote role of caretaker supervisor for all students, meeting online on alternate weeks to discuss progress. Due to this remote working environment, I started to build early relationships with these students as a temporary supervisor, which meant that I knew students and their projects and engaged in early project dialogue. I could not have remained an outsider to students' work with the level of support they required going forward, which I knew took 'precedence over the quest for truth' (Lincoln and Guba, 1989, p.806) in my own research. My early engagement in these projects provided a dialogic context which I later drew from to support my data analysis,

adding another layer of interpretation to explore from insider participation as ‘a cultural member’ (Braun and Clarke, 2022, p.7).

I acknowledged myself as an insider researcher ‘who chooses to study a group to which they belong’ (Unluer, 2012, p.1), which led to a sensitivity in thinking about ethical issues such as power relationships, data protection and throughout-research participant consent. I reflected on the relationships between ethical frameworks in my school context, personal beliefs and my qualitative research approach, creating what Richardson and Healy call ‘a triadic ecology (Richardson and Healy, 2019, p.1090), where there was value in exploring my own pedagogical attitudes to project learning; I looked to ‘test the fruits of [my] own minds – not reality’ (Reiter, 2013, p.4). This exploratory approach resulted in ‘transparent, honest and self-reflexive’ (ibid. p.1) choices made throughout the data collection phases, as I sought to highlight the value in knowing the context in which hypotheses were generated. Conclusions from this qualitative exploratory approach are representative of one school, for this specific cohort of students, and in this specific context and time. In coming to know something well for the first time, such creativity meant that the study ‘only has the power to suggest new ideas, never to prove them’ (Swedberg, 2020, p.36) at this important stage in discovery.

3.5 Student participants

A purposive sampling approach was taken, where all three of the HPQ participants were invited to take part in my research. The purposive group allowed for a range of supervisory contextual factors to be explored, which included previous student-teacher working relationships and teacher experience with research projects. Students in the sample had similar positive attitudes towards learning as identified through my school’s behaviour points system (the system used is ‘Go 4 Schools’, where attitude towards learning, progress monitoring and attendance are triangulated to assess students throughout the year) and key stage 3 English levels at Level 6 and above. Students took part in the programme based on

having a strong research interest beyond or outside what is typically taught on the key stage 3 curriculum, opposed to just academic potential. Student participants in the HPQ are always discussed with the respective Head of Year to check for suitability, including student absence and concerns over time management, as the qualification runs outside timetabled lessons in the day and alongside demands of the school day and homework.

My research sample size of three students and three supervisors provided the opportunity to look in great depth at a small sample of dialogues, resulting in an intimate immersion in data. There was an opt-in approach for students and staff, with all participants issued with a consent form and information sheet before any data was collected. Participation or non-participation in my research did not affect the opportunity to take part in the HPQ qualification for either students or staff.

3.6 Teacher participants

Supervisors in this purposive HPQ cohort were matched with students based on the teacher's interest in the student's research topic found in Table 3.1:

Table 3.1 Supervisor and student pairings.

Supervisor (pseudonym)	**Supervisory profile** (Context provided as part of narrative accounts found in Chapter 4)	**Student and research interest**
Mr Porter	New member of staff to the English Department (2021). Responsibilities include Head of Key Stage 5 English and English Literature. No prior experience with project qualifications.	Darrell To what extent should the minimum age of criminal responsibility be raised in England and Wales?
Miss Moon	Teacher of History with responsibilities including Assistant Head of Year 7. Interim Head of EPQ to cover 9 months maternity leave. Experience in supervising projects for HPQ and EPQ across 7 years.	Phillip To what extent has Old Norse culture affected Britain?
Mr Hop	Teacher of Physical Education (PE), with responsibility for Head of Year 9. Experience in supervising projects for HPQ and EPQ across 7 years.	Steve Identify whether nature or nurture played a key role in Pelé's rare footballing ability.

Examination rubric (Edexcel, 2020, AQA, 2020) focuses on teachers supporting students to develop research skills, which does not necessarily require a teacher to specialise in a chosen research topic; however, my thinking has always been that a subject specialist, or at the very least a supervisor with a similar interest, might be able to engage meaningfully in dialogue. Through the process of matching students and supervisors, I became aware of the importance that this decision might have on dialogue and the overall supervisory experience (Creswell and Poth, 2018, p.258) The sample provided the opportunity to consider relationship contexts and how this influenced the ways in which students and supervisors interacted. This also provided the chance to explore whether teacher confidence and subject knowledge in a

student's research area was a contributing factor in forging productive dialogic experiences and to investigate 'what's really going on despite what people may claim' (Wegerif, 2020, p.35).

3.7 Ethical considerations

The familiarity of working in 'my own backyard … at home' (Malone, 2003, p.5) permitted the unique role as insider researcher (see section 3.4), but also raise what Hanson (2013) describes as 'tension between [my] role as researcher and [my] other professional roles' (Hanson, 2013, p.3). The participant consent form (see Appendix A) outlined generally my interest in wanting to know more about the HPQ to improve supervisory experiences for students and teachers. The consent form outlined the procedural processes, steps taken to secure data protection, and the right to withdraw at any stage without affecting participation on the HPQ programme. I was aware of the possibility that my research might reveal unforeseen pieces of the 'jigsaw' and 'issues that only retrospectively you can appreciate' (Malone, 2003, p.800), particularly in the knowledge that supervisory relationships between students and teachers is a 'complex form of pedagogy … which supervisors are expected to possess and utilise a wide range of skills' (Andriopoulou and Prowse, 2020, p.657) and as such could create challenging ethical issues. For example, I considered how participants might share supervisory experiences in conversation and that during such conversations I would need to maintain a supportive role as HPQ Coordinator, despite perhaps having discovered something unexpected and in contract to the views being shared. I took the approach that ethical considerations were part of the process and that issues should be 'revised throughout the research process' (Robson, 2015, p.208). For example, I was mindful that the transcripts might demonstrate issues of uncertainty from students and teachers as to certain areas of the project might be completed, meaning that as Project Coordinator I would

need to intervene to support student progress, but not necessarily to offer suggestions on how students and teachers might work through such challenges as part of supervisory dialogue. The dissemination of findings that show potential issues with supervision at home (Malone, 2003) meant that I focused on doing no harm to the profession identities of my three staff participants (Robson, 2015, p.16), protecting them from possible anxiety about their practice during my research and future project based learning tasks.

Research undertaken in this study adhered to the four elements of integrity within the concordat which UCL sees as Principles of Integrity, reflect UCL's existing Code of Conduct for Research: Honesty; Rigour; Transparency and Care. I worked within the requirements outlined in the Ethical Guidelines for Educational Research by BERA, 2018, acknowledging that 'All social science should aim to maximise benefit and minimise harm' (BERA, p.3, 2018) and the revised GDPR regulations (May 2018). The nature of a qualitative methodology encourages students to speak openly on a wide range of ideas and experiences, meaning that the students' well-being must be considered paramount at all phases in the research design (Hammersley, M. and Traianou, A. 2012; Hanson 2013).

All students and staff were offered the chance to withdraw from the research at any time and were made aware that participation or non-participation would not affect overall grades in any research qualification being taken or subsequent exam subjects. Letters to students' parents were issued to obtain parental consent, where students received a letter outlining what participation looked like in accessible language. Both parents and students indicated consent by signing a consent form (See Appendix A for research information sheet; Appendix C for Ethics Application Form).

3.8 Project timeline

Data collection took place over one academic year. Table 3.2 presents a timeline giving an overview of the project activity, which is explained in detail in sections 3.9, 3.10 and 3.11.

Table 3.2 Project timeline.

Timings	**Project activity**
Spring term Year 1 2021	Pre-data collection: • Informed consent obtained from student and teacher participants. • Meeting with students to introduce the project. • Students paired with supervisors.
Summer term (a) Year 1 2021	• Recorded first supervision meetings between the three supervisory pairs. • First week-long period of incubation and analysis took place for the first round of transcripts. • First points of interest (POIs) activity – applied deductive coding to transcripts using T-SEDA (see Table 3.4); framework later rejected. • Recorded second supervision meetings between the three supervisory pairs. • Second week-long period of incubation and analysis took place for the second round of transcripts for each supervisory pair. • POIs identified from the first round of transcripts applied to the second transcripts. • Transcripts from data collection rounds one and two shared with participants to identify POIs (Delve and Limpaecher, 2023, p.6). • Respondent validation: feedback from participants on the first two transcripts used as part of the analysis process.
Summer term (b)	• Recorded third supervision meetings between the three supervisory pairs. • Third week-long period of incubation and analysis for the third round of transcripts for each supervisory pair.

	• POIs identified from the first and second rounds of transcripts and participant analysis applied to the third set of transcripts. • POIs across all nine transcripts were recorded in comparative tables to explore similarities and differences (see Tables 3.5, 3.6, 3.7, 3.8 and Appendix E). • Next stage of analysis focused on making comparisons between key themes. A journaling space was made for reflections. Identification of the key theme teacher dominance. • Next week-long phase of incubation and return to raw data to explore the theme of teacher dominance. Annotation took place across all nine transcripts. • Four key POIs emerged under the theme of teacher dominance. Subpoints (SPOIs) were created to explore these POIs.
Autumn term Year 1 2021	• Narrative accounts produced for each supervisory pair. • Periods of week-long descriptive incubation, including the identification of quotations from the raw data to create a single narrative for each supervisory pair. • Cross referencing of original POIs by considering their relevance in a different narrative context. I returned to the original data one last time to explore the POIs from the narrative accounts. • A final set of thirteen themes from this interpretive process were identified under the key theme of barriers in supervision (see Chapter 5).

3.9 Pre data collection

At the start of the HPQ students are matched with supervisors, where students and supervisors meet to have initial meetings on research interests. However, due to national Covid isolation procedures, there was a delay in matching students with supervisors in

school, which meant that I took the role of caretaker supervisor for the three students during March. During this time, I met with students individually for two meetings via Teams, four weeks prior to meeting their supervisors. These meetings were after school and were approximately thirty minutes long. Having established an online meeting forum, I suggested to supervisors how they might wish to continue with a blended approach to supervisory meetings, offering email correspondence, face-to-face meetings and online meetings through a school Teams channel and student-teacher chat functions. This was a moment in my research where I was reminded of my insider researcher positionality, where supporting students during supervisor absence or change in circumstances was prioritised. I sought to develop the bond between teacher and student (Bibby, 2009, p.46) and understood that remaining an outsider in my research was impossible, and that by acknowledging this privileged perspective my research could also be enriched and better for this insightful knowledge. These early exchanges with the three students provided an unexpected opportunity to hear students discuss their research interests and later points of reference as my research developed and I came to read exchanges between students and supervisors.

3.10 Data collection rounds

Naturally occurring dialogue in three supervisory meetings between each student-supervisor paring was recorded using Dictaphones across a three-month data collection period (see Table 3.3, page 80). Recordings took place at four-week intervals, where supervisory pairings decided during the second week of each month when they wanted to record a supervisory meeting. The nine audio recordings in total were transcribed during each data collection round by an external transcriber. Data also included students' Project Activity Logs, which I read at four-week intervals. Logs allowed me to see whether students saw written logs as preferred reflective spaces to that of the one-to-one discussions with supervisors. Logs also provided evidence for whether students continued to think about supervisory discussion in

ways that shaped thinking and ideas going forward. The data collection timetable included week-long incubation periods, where initial readings took place for each data collection round. The incubation reading periods for initial points of interest (POIs) were fundamental in coming to know the data that was produced (see section 3.11 on incubation phases, page 81).

Table 3.3 Data collection timetable.

Data collection date	**Data collection round**	**Actions** **One meeting between each supervisory pair was audio recorded in the second week of each month, with the Dictaphones returned to me.**
April 2021	Round one	Supervisory pairs each record a meeting. I read the first three transcripts separately for points of interest during week-long incubation periods.
May 2021	Round two	Supervisory pairs decide on a time during the second week of the month where I could attend a meeting in an observational role. Meetings were audio recorded and provided the second round of data. The next three transcripts were read for POIs during week-long incubation periods. During the final week of round two, supervisory pairs were offered copies of transcripts from rounds one and two of the data collection processes to support participant validation. I considered the potential for 'new insights, perspectives and [an extension of completeness]'from earlier incubation periods (Delve and Limpaecher, 2023, p.5). Transcripts were presented in envelops with a covering letter (See Appendix B for cover letter issued), pencils and crayons were provided to encourage supervisory pairings to engage with the transcripts, either through highlighting and / or offering written reflections. Supervisory pairs had one week to complete their reflections and

		return envelops to me at the beginning of data collection round three.
June 2021	Round three	Supervisory pairs record a meeting for the last data collection rounds. Two supervisory pairs conduct their meetings via Microsoft Teams due to students being asked to isolate because of national COVID-19 restrictions. Dictaphones were used during these recordings. Students and teachers were not permitted by the school to use cameras during these sessions, with audio the only data collected.

3.11 Incubation periods

I entered three rounds of one week-long periods of incubation for each transcript, sustaining 'a focused concentration, [including] spontaneous self-dialogue and intuitive hunches' (Moustakas, 1990, p.11), which provided annotation time to consider 'noteworthiness and points of interest (POIs)' (Parcell and Baker, 2017, p.5). A linear approach allowed for the identification and monitoring of POIs across time and opportunities to track the development of recurring POIs and the emergence of new POIs. Sullivan (2012) proffers that the process of meaning making 'needs to take place at every stage of the analysis' (Sullivan, 2012, p.162) and at the earliest stage of data collection, and as such I began keeping a decision trail (See Appendix D for examples) across the three rounds of data collection (Koch, 1994). I kept a decision trail to document how my thinking changed and developed, including reflection trails that consisted of handwritten thoughts, which acted as reminders that 'ideas occur when they please, not when it pleases us' (Webster, 1946, cited in Swedberg, 2020, p.36).

The most impactful reflection trails were the ones to emerge from round one, as incubation periods highlighted the very low contribution levels from students in the meetings. The early silencing of students in the data was an unexpected finding, with signs that my original assumptions on supervisory dialogue as being dialogic needed to be reassessed. Through iterative reflexive phases, I was able to reflect on my own meaning-making processes and the surprising silences that appeared as a puzzle to be explored. Abductive reasoning directed my approach whereby I returned back and forth to literature and reflexive thinking behaviours that 'forced a self-challenging re-examination of initial impressions' (Schwartz-Shea and Yanow, 2011, p.105). This first incubation phase was significant in shaping the exploratory approach in this research, where it became apparent that supervisory dialogue was a phenomenon that required 'new insights and ideas' (Swedberg, 2020, p.36). My initial interest was to explore supervisory experiences *between* student and supervisor, but this first round of data collection had uncovered that supervision was happening *to* students, where teachers dominated (this is examined in data analysis, Chapter 5). I therefore adopted an exploratory approach that would allow for student experience to be uncovered rather than allowing the low levels of student contributions to remain unexplored and secondary as part of any findings.

I returned to the literature on dialogic theory to identify whether established analytical frameworks could support my initial readings of this first round of data. I discovered that the categorisation of the most analysed type of talk, student-teacher talk in the classroom, is challenging because of a 'lack [of] analytical framework for making sense of [dialogue's] form and function that is widely applicable to a single set of descriptors' (Hennessy et al., 2016, p.17). I was, however, guided, but not restricted by, a framework for assessing dialogue in the classroom, the Teacher Scheme for Education Analysis (T-SEDA) (Cambridge

University, Faculty of Education, 2013-2015) where ‘some of the main theoretical approaches to characterising and analysing dialogue’ have been identified, including eight distinctive clusters and 33 communicative acts (CA) (ibid, p.20). The T-SEDA framework is an inductive-deductive cycle, developing theory and testing established conceptualisations of dialogic settings. I looked to T-SEDA’s eight main clusters of communicative interactional acts (see Table 3.4), with an interest in exploring supervisory relationships and the influence that contextual influences might have beyond ‘grammatical form and intonation’ (Hennessy et al., 2016, p.18). I acknowledged that codes and categories can be expanded and reduced and not restricted to preestablished codes, which maintained my exploratory approach. The eight T-SEDA clusters provided a way to explore my data rather than provide rigid categories that my data had to conform to. I felt at this stage that such categorisations would provide a relevant starting point in coming to understand student experiences (see Table 3.4):

Table 3.4 T-SEDA Cluster names.

I Invite elaboration or reasoning	**R** Make reasoning explicit	**B** Build on ideas	**E** Express or invite ideas
P Positioning and coordination	**RD** Reflect on dialogue and or activity	**C** Connect	**G** Guide direction of dialogue or activity

Understanding what was happening in the first round of data collection required both the abandonment and reduction of codes and categories to mitigate 'the finer grained and more complex coding scheme, [that is typically] less reliable simply because there is more room for discrepancy and error' (Kershner et al., 2020, p.108). The deductive framework taken from T-SEDA provided a generalised approach to categorising dialogue in the classroom and highlighted further what I had discovered from round one of the data collection processes: current frameworks are limited in application when exploring different dialogic contexts. Supervisory dialogue had some connection with these categories but was overall dissatisfying, as the framework did accommodate for the understanding of more complex challenges that supervisory dialogue posed. I moved from a deductive approach to work inductively from this point, which allowed for a more authentic analysis of what was happening between student and teacher rather than working within restrictive models.

I found that coding and categorising alone 'tells us little about the quality of teacher-student relationships' (Boyd and Markarian, 2015, cited in Kershner et al., 2020, p.98) and [that I am] unlikely to learn something new' (Kershner et al., 2020, p.175) by reapplying dialogic codes applied in classroom settings for supervisory dialogue. I was only guided by these deductive theoretical codes as my own points of interest emerged (Sullivan, 2012, p.77). This framework allowed me to consider the potential challenges that the eight clusters (see Table

3.4) might bring for students engaged in one-to-one dialogue, but I maintained my exploratory approach of wanting to know more about experiences in supervisory dialogue and sought to discover new ways to categorise that were not currently represented in dialogic frameworks. My first round of POIs annotations provided the following categories:

Table 3.5 POIs from the first three transcripts.

Supervisory pair	**POIs from the first transcript**
Mr Hop and Steve	Grades and outcomes Teacher interruptions Teacher questioning Time Academic references Distractions
Miss Moon and Phillip	Teaching thinking time Teacher questioning Teacher checklist approach Illusionary 'we' Teacher agenda setting Teacher's use of praise
Mr Hop and Darrell	Teacher taking control Teacher and student tentativeness Teacher university experiences and references to the past Teacher interruptions Teacher's academic assumptions of student ability

3.12 Developing an analytical approach

The second and third transcripts for each supervisory pair from rounds two and three were annotated with the previously established set of POIs from round one in a second phase of incubation, which meant that I could see how these points manifested differently or remained constant. I adopted a systematic and well-planned approach where decisions were made

‘deliberately rather than opportunistically’ (Mills and Birks, 2014, p. 150). Each transcript went through a series of reading iterations, where I read for week-long periods for each transcript to ensure that I had identified and reassessed POIs, adopting an exploratory approach where I was guided by the data and different ways in which discoveries might be made. This exploratory phase was also influenced by participant observations, where students and teachers were asked independently to comment directly on the transcripts any points of interest from the first two rounds of data collection. The inclusion of participant observations alongside my own observations, allowed for interpretive validity and to continue with the fdevelopment of new ideas (Delve and Limpaecher, 2023). Each POI was linked with direct quotations from the raw data, allowing for authentic language representation of students and supervisors. The additional POIs were recorded in tables, with records kept of how these new additional POIs (extending the POIs in Table 3.5) had emerged during the reading of each transcript:

Table 3.6 New points of interest (POIs) Mr Hop and Steve.

Transcript two	**Transcript three**
Teacher’s previous learning Teacher sense making	Student knowledge Teacher indecisiveness Teacher interest in student as teacher

Table 3.7 New points of interest (POIs) Miss Moon and Phillip.

Transcript two	**Transcript three**
Teacher’s use of subject terminology Teacher positivity Teacher capabilities Teacher Interruptions Teacher sense making	Teacher’s use of functional and / or procedural questions Teacher positivity Teacher assumptions of student research capabilities

Students as written expert vs verbal expertise	

Table 3.8 New points of interest (POIs) Mr Hop and Darrell.

Transcript two	**Transcript three**
Student honesty Teacher's use of praise Teacher and student mirroring language Students as written experts vs verbal expertise	Teacher clarity Teacher's praise and support for student Teacher's focus on phrasing and editing

Having reached the point of saturation (Green and Thorogood, 2004), POIs across all transcripts were analysed and reduced to three main themes. This took place during a process of frequent revision, where themes were not neat and or easy to define. I brought my positionality and research reading to help sensitise what was most relevant to understand what was happening in the data (see Appendix D). These three themes acted as overarching concepts that subsumed the POIs identified across all nine transcripts. This process included tallying and highlighting for potential links between POIs across all nine transcripts and consideration of how each one contributed something unique in understanding these themes. The three overarching themes to emerge from the POI incubation periods were:

i. the expert / non-expert effect

ii. silencing and being silenced

iii. questioning and the illusionary co-construction of ideas.

The three themes were then applied for an analysis of the raw data during a third phase of incubation over five days, with annotations and notes to show where these themes appeared across all nine transcripts. On completion of this process, I was able to create a table that showed the ways that each theme manifested when placed in comparison to another supervisory pair. For example, I annotated for 'the co-construction of ideas' across all transcripts and found that silence was present in each supervisory pair but was achieved in different ways. I explored these differences by creating a separate column that acted as a journaling space, as I synthesised quotations across the transcripts (Braun and Clarke, 2022, p.18) (see Appendix D for examples). Similarities and differences in the manifestation of the three themes was explored between supervisory pairs by making notes and drawing patterns, allowing for themes to be understood in different contexts both between the same supervisory pair and all participants. Consequently, a dominant theme emerged from having revisited the annotated transcripts, where the three themes connected through *teacher dominance*. I then scrutinised the theme of teacher dominance in the data to identify where dominance appeared, which took place during a fourth week-long incubation phase and resulted in the following four key points of interest:

Table 3.9 Points of interest for ‘teacher dominance’.

Points of interest for teacher dominance	**Definition of the POI**
Teacher focus on writing	Teachers predominantly talk *about* and describe students’ written work rather than discussing *with* students, making students redundant as participants in how to develop writing. Teachers use supervisory meetings to verbalise their understanding of the writing process, a sense making process for teachers that stops students engaging with their written ideas. The focus on writing skills is frequently presented in unrelatable academic terminology.
Teacher interruptions	Teachers interrupt student responses throughout discussion, but also interrupt students’ thinking time. Teachers do not allow students processing time to focus on one specific topic before shifting the focus onto something different. Interjections from teachers also appear with academic anecdotes from their prior experiences with project work and university teaching, creating distance rather than familiarity in understanding for students.
Teachers’ assumptions of student research capabilities	Teachers speak to students with the assumption that what is being said is being understood. When teachers do ask whether something ‘makes sense’ the question is either for rhetorical effect or to check their own understanding. Assumed comprehension and skills in undertaking research allows teachers to monopolise meetings.
Teachers’ use of praise	Teachers praise students to offer reassurance that they are now experts in their research areas. Praise is used to compliment students’ knowledge but equally makes students less forthcoming with potential challenges and questions. Teachers imply through praise that effective supervision is when students listen, and teachers talk. Students are praised for minimal engagement in discussion as teachers focus on praising written work.

During this interpretive focus on teacher dominance, I created subpoints of interest (SPOIs) for the four POIs, supporting an exploratory approach whereby 'meaning is realised only in the process of active, responsive, understanding … [which] is like an electric spark that only occurs when two different terminals are hooked together' (Volosinov,1920, quoted in Wegerif, 2011, p.181). This process allowed for SPOIs to be fluid, meaning that interpretation and understanding of SPOIs evolved and changed as part of the exploratory research process. In interpretivist terms, I was comfortable with the different rhythms that the analysis process took, where I 'moved closer to the data and then moved further away for another look' (Schwartz-Shea and Yanow, 2011, p.55) and maintained the openness and flexibility of an interpretive research design. The SPOIs were absorbed into the four dominant points and then evidenced by returning to the original transcripts (see Table 3.10):

Table 3.10 Subpoints supporting the theme 'teacher dominance'.

Teacher focus on writing
Grades and outcomes
Questioning
Academic references / subject terminology
Distractions
Teacher's previous academic learning
Teacher sense making
Student knowledge
Teacher interest in student as teacher
Teacher thinking time
Illusionary 'we'
Teacher agenda setting
Teacher assumptions of student capabilities
Teacher's focus on phrasing and editing

Teacher interruptions
Teacher questioning
Academic references/ subject terminology
Distractions
Teacher sense making
Illusionary ‘we’
Teacher agenda setting
Teacher positivity
Teacher capabilities
Teacher assumptions of student research capabilities
Teacher and student mirroring language
Teacher clarity
Teacher experience of university
Teachers’ assumptions of student research capabilities
Academic references
Illusionary ‘we’
Teacher agenda setting
Teacher positivity
Student honesty
Teacher focus on phrasing and editing

Teachers’ use of praise
Grades and outcomes
Interruptions
Distractions
Illusionary ‘we’
Teacher positivity
Teacher interruptions
Teacher assumptions of student research capabilities

Table 3.11 Examples of subpoints.

Subpoint interest	**Examples from raw data**
1.Grades and outcomes	1. Mr Hop: 'It's definitely going to pass in my opinion'.
2.Questioning	2. Mr Porter: 'Is that right? Or 'research phase' maybe I should call it?'
3.Academic references / subject terminology	3. Mr Porter: 'Something you're going to want to learn for university'. 'This is a little bit like how a Master's would work', 'So what's interesting then is, at university, it's more interesting and like what you're doing now'.
4.Distractions	4. Mr Hop: 'Yeah? (crunches) Whereas … (finishes crunching). (Eating more crispy overlaps) Uh Hmmmm'.
5.Teacher's previous academic learning	5. Mr Porter: 'You go off into an area of research – maybe a dissertation- and find out loads and loads and loads and you write up a literature review in what you might call a thesis – your own idea'.
6.Teacher sense making	6. Miss Moon: 'Does that make sense?' '(Laugh) Ha! I'm writing it down for myself as well… Erm, so, yes, we will do that (muttering as she re-reads her notes speaking the words she writes)'. Extract from Miss Moon's soliloquy: 'So ermm … yeah I think that would be really good. Ermm …so I think first step do that. And then, once we've done, we can think about what order you can put it in and how you are going to show these themes, you know?'
7.Student knowledge	7.Mr Hop: 'Remember that you're the expert, she's not going to have as much knowledge about it as you … always remember that you hold all the information'… 'she wants to learn from you'.
8.Teacher thinking time	8. Miss Moon: (Writing and speaking the words) 'So you've got erm you know, some three very key words there. And so maybe when you …your other targets are (still writing) our first target is to think about identifying the factors and themes'.
9.Illusionary 'we'	9. Miss Moon: 'Don't be afraid to actually come prepared with how [you] think [you're] going to structure it next week'.
10.Teacher agenda setting	10. Miss Moon: 'So in terms of today then, what we can do is -if it's alright by you. I'll ask you where you're at and you can tell me how you're getting

	on and then we can talk about your group session and then next steps going forward'.
11.Teacher assumptions of student capabilities	11. Miss Moon: 'So I would maybe merge everything, put it into one document, just nice and easy copy and paste it and then insert. I mean, you've done page numbers before'. Phillip: 'No, not really.' Miss Moon: 'You know all of this as I'm stating the obvious'.
12.Teacher focus on phrasing and editing	12. Mr Porter: 'So it should be nice and easy when you come to your discussion'. 'Obviously just small clarity of wording and things which I think you will have no problem amending'.
13.Teacher questioning	13. Miss Moon: 'Are you thinking you're going to use your table to help with the structure? Or have you got another way of structuring it? Have you thought about how you go about that?'
14.Teacher and student mirroring language	14. Steve: 'Yeah'. Mr Hop: 'Yeah? So what do you think? Yeah…' Steve: 'Yeah' (overlaps).
15.Teacher clarity	15. Mr Porter: 'Is that right? Or research phase maybe I should call it?' 'Does that make sense?'
16.Teacher experience of university	16. Mr Porter: 'So what is interesting then is, at university it's much more like that (with emphasis) than anything related to school'.
17.Teacher interruption	17.Mr Porter: '(Overlaps) Did you look up …urm (pause) the things we talked about last time I saw you?' Steve: 'Yeah, I don't think that Derek Bentley thing is going to …' Mr Porter: (Overlaps) 'Okay, that's' fair enough'. Darrell: 'The James Bulger person, he was more useful, that fits. Mr Porter: 'Yeah.'
18.Student honesty	18. Phillip: 'How do I …like…go into it? Do I like argue both points or like do half and half, or do I like base it off the sources and that? I'm sort of struggling with how I'm going to write the discussion … what should the paragraphs look like?' I don't really know what I'm doing to be fair'.
19.Teacher positivity	19. Mr Hop: 'Absolutely to the standard, I mean, you're 14 discussing epigenetics, that's a big complex topic for a young student to get their head around', 'You have been amazing'.

The process of coding and extracting the three main themes showed dialogue as complex, requiring further creative opportunities to explore connections without imposing restrictions or classifications on what I still considered early sense making processes. I maintained a reflexive context in which I sought 'nuance, complexity and even contradiction, rather than finding a neat and tidy explanation' (Braun and Clarke, 2022, p.7). I avoided a strict sense of hierarchy in the SPOIs and allowed consideration on how each SPOI underpinned and shaped teacher dominance.

3.13 Conclusions

This methodology chapter has outlined a qualitative exploratory research design, underpinned by dialogic theory and interpretive phases. The chapter presents the importance of incubation stages in coming to know supervisory experiences and what dialogic means in this discussion context (Wegerif, 2006, p.1). The exploration of experiences in dialogue took place through a period of POI saturation (Green and Thorogood, 2004). Identifying POIs at different reading rounds provided an understanding of dialogue and an approach to categorisation that is later used to structure narrative accounts (see Chapter 4) for further research and discussion (Sullivan, 2012). This chapter has identified the complexity of categorising dialogue (Hennessy, 2016, p.17) and that thematic codes can manifest differently between supervisory pairs and during the same supervisory pair in supervision. Through the process of POI exploration, it became clear that teacher dominance was, in terminology used by T-SEDA (2013), a key *cluster* name in understanding the types of experiences had during supervision. The narrative accounts introduced in Chapter 4 provide further exploration of teacher dominance as a feature of dialogic experience and another opportunity to understand dialogue through the continuation of emerging POIs.

Chapter 4 Narrative Accounts

4.1 Creating the narrative accounts

The identification of POIs and the key theme of teacher dominance required further exploration, which took place in the form of three narrative accounts for each supervisory pair. Narrative accounts supported the sense making process, where I considered the ways that stories could be used to explore teacher dominance as part of the supervisory experience and the 'identities [that] are at stake in telling a given story' (Parcell and Baker, 2018, p.5). Highlighting the ways that teacher dominance contributes to a particular supervisory experience meant also being open to new possibilities in understanding dialogue and emerging themes.

I adhered to what Sarangi describes as 'thick participation' (2006, cited in Leeds-Hurwits, 2019) where 'immersion in the research became a necessary condition' (ibid. p.204) for the creation of three narrative accounts. Thick description was a process that supported the sense making process and further exploration of the transcripts. I embarked on week-long drafting periods for the narrative accounts through, 'the process of active, responsive, understanding' (Voloshinov, 1920, quoted in Moustakas, 1990, p.13). I annotated the original transcripts for each supervisory pair, referring to the SPOIs for teacher dominance (3.9), considering how I could present a sense of student experience, and to some extent identity, in supervisory meetings that was currently hard to uncover in the original data. Thick description also allowed for the re-exploration of the SPOIs, where I could add detail and depth through narrative accounts to show the relationships between previously identified POIs.

I engaged in 'a process of constant comparison to identify commonalities and / or differentiate elements' (Parcell and Baker, 2017, p.5) in creating the narratives, with the

approach that meaning making continued to take place throughout all interpretative periods. This process is linked closely to what Leeds-Hurwitz (2019) outlines as the significance of a cultural insider as part of thick description, where one's role is to provide significant explanation behind relevant words, ideas and behaviours to generate meaning, particularly to outsiders discovering a culture for the first time (Leeds-Hurwitz, 2012, p.3). I adopted an interpretive emic approach (Geertz, 1973) where I took the role of ethnographer based on my own in-group experience with research-based projects, using my insider status to achieve an expansive contextual frame of reference, with 'emphasis on … self-searching and intuition' (Moustakas, 1990, p.12).

4.2 Created dialogue

Periods of week-long descriptive incubation were followed by identifying quotations from the raw data that could represent students' voices in these supervisory meetings. I adopted aspects of Sullivan's (2012) created dialogue approach, where I highlighted for quotations and made recordings of POIs directly onto the transcripts (Tuckett, 2005, p.81). I considered ways that the three transcripts for each supervisory pair could be revised to reveal a single narrative for each supervisory pair. Sullivan describes created dialogue as being like a carnival, providing an exploration of discussion that can be underrepresented and:

> '… best thought of as a tool that opens up the possibility for engaging with the different sides of a concept, idea or person. Sides that are normally shut away from us … where authority and power are reconfigured in a different way, then we can sense and feel the unofficial side of the hierarchy of power (Sullivan, 2012, p.111)

Sullivan's (2012) conceptualisation of created dialogue shows that 'different voices [can come] together that address each other as part of their perception of time and place' (Sullivan, 2012, p.113). Created dialogue provided an analytical approach to explore underrepresented

student participation and an opportunity to rewrite participants into the dialogue through using soundbites and short quotations from original data (ibid, p.161). I was able to present students' contributions in a way that focused on their experiences. I prioritised student contributions by clustering their comments across all three transcripts (including reflections in project activity logs), where I systematically entered 'into a dialogue with the phenomenon, allowing the phenomenon to speak directly to one's experience, to be questioned by it' (Moustakas, 1990, p.3). I made myself the third person narrator of three separate accounts, which provided a creative opportunity to enter the original dialogue in a way that made me feel like I was part of the discussion; I was able to occupy an aspect of dialogic space that allowed me to observe without active participation.

As narrator, and the teller of a particular set of stories, I was able to take part and understand the study from what I considered to be a form of insider dialogic presence and a different dimension to dialogic absorption (Lester and O'Reilly, 2019, p.6). Through constructing narrative accounts, I was able to 'enter that dialogue as a participant' (Habermas, 1979, p.29), which was necessary to understand what was happening in dialogue (Wegerif, 2020, p.188). It afforded a reflective distance as to what was underpinning the discussion, which I could not have achieved without participating in this way (Kershner, 2020, p.18). Each narrative account contributed an understanding that could not have been obtained from the transcripts alone, with 'identification of gaps in the logic and questions still requiring answers' (Mills and Birks, 2014, p.43). The process of writing these accounts provided opportunities to explore why students may have found participation difficult and what 'aspects of reality this word [dialogue] opens up for us, and what specific word allows us to see, or what aspect of reality it refers to' (Reiter, 2013, p.10). I was able to demonstrate through the narrative accounts that there was 'something to be learned from these studies' (Swedberg, 2020, p.18) that warranted a separate meaningful chapter in the research study. The narrative accounts

were foundational in generating ‘new ideas and hypotheses’ (ibid, p.34) and allowed me to voice the ‘spaces in between’ and creatively explore experiences in dialogue.

I also took the view that ‘an audience can understand more greatly and identify with an example of real-life dimensions rather than an abstract statistical conclusion’ (Allen and Preiss, 1997, p.126). I adopted an annotation approach that was highly interpretive to capture ‘narrative threads and plotlines’ (Luhrmann, 2001, p.1) as students and supervisors ‘talked-in-interaction’ (Lester and O’Reilly, 2020, p.29). I looked at the ways POIs had emerged previously from incubation reading periods (see Tables 3.5, 3.6, 3.7, 3.9) and constructed narrative accounts to reveal subplots for each supervisory story; this process deepened reflections on supervisory experiences for both teachers *and* students, providing a creative lens that was equitably exploratory.

4.3 Representative narrative accounts

The three narrative accounts form a substantial contribution to the data generation and analysis, and as such reflect a stage that was fundamental in understanding how students experienced supervisory dialogue. Miss Moon and Phillip and Steve and Mr Hop are representative narrative accounts that appears in this chapter, demonstrating the creative narrative approach presented in this chapter. For reasons of space, the narrative account for Mr Porter and Darrell appears as part of the appendices (see Appendix F) and was equally significant in identifying student experiences through the analysis that took place upon completion of the narratives.

Each narrative begins with contextual information that outlines a particular partnership, with details of previous learning experiences and relationship history that may have shaped the supervisory discussion. There is a brief outline of the project journey for each student before undertaking one-to-one supervision, followed by narrative that was constructed to reflect supervisory dialogue across three meetings. The narratives show the ways in which the theme

of teacher dominance manifests and that through this theme came new interpretations of supervisory experiences, which was achieved by bringing quotations from across all three transcripts for each pair. These representative narrative accounts are structured under three phases, representing the data collection round that these experiences reflect. Quotations appear in bold to emphasise and identify key themes emerging in the constructed narrative.

4.4 Narrative account one

Phillip and Miss Moon

Phillip is a Year 9 student under the supervision of Miss Moon. The school's system reports[1] Phillip's attitude to learning as impressive, with behaviour never falling below an A grade; he is regularly referred to as an excellent student with an outstanding work ethic. Miss Moon has several years of experience with project learning and has supervised students in Year 9 and at A level. As Phillip's history teacher, Miss Moon sees Phillip for regular lessons each week. In Miss Moon's private written reflections on transcript one, she comments that she has her own classroom where she would meet Phillip every two-three weeks on a Monday, after school. Phillip's reflections on the same transcript also include comments on venue, including, 'I usually sit in the middle to give Miss space for Covid 19'. The Covid conscious layout of the room creates an extended physical space between student and teacher, which seems to have reinforced the hierarchical presentation of teacher at the front of the classroom, with Phillip sat as if he were in a lesson.

During a fortnightly HPQ group meeting with myself and his two HPQ peers, Phillip shared a story about his experience with a teacher as a Year 4 student, where his teacher had inspired him to explore a topic that he has since developed a passion for. This is an influential voice that has never left Phillip, showing how past voices can become internalised and resurfaced

[1] Staff reporting on a student's attitude to learning and process tracking on an internal system called G0 4 Schools; allowing access to up-to-date data for students, parents and teachers.

in different contexts and time and, more generally, how educational dialogue can impact and shape thinking long after initial engagement. Phillip reminisced about his Year 4 lessons on Norse mythology and that his motivation and interest in this area had led him to research this period of history independently. Phillip's research question was an extension of this intrigue: To what extent has old Norse culture affected modern Britain today?'

Phillip's activity Logs had started to emerge, including his early thoughts and ambition to network beyond meetings with his supervisor in school, 'I am beginning to think about contacting universities and experts on the subject to find information I can use – it would be a huge challenge for me do,

but it will help my project a lot.' Phillip expresses a desire to discuss beyond the resources and dialogues available in school. Phillip understands that dialogue can be specialised and, perhaps, beyond the expertise that a teacher supervisor at secondary level might be able to provide. How students view teachers as supervisors in subject interests beyond the taught curriculum surfaces from Phillip's early reflections.

4.4.1 Phase one

This first recorded meeting took place after school in Miss Moon's classroom, with a strong sense of positivity and warmth from her, '(brightly) Brilliant … Amazing stuff … Awesome.' Phillip is welcomed by Miss Moon, who outlines a discussion agenda to which Phillip quickly agrees, 'So in terms of today then, what we can do is -if it's alright by you. I'll ask you where you're at and you tell me how you're getting on … also next steps going forward to when we meet next.' Miss Moon asks, 'So how you feeling you're getting on? How is everything going?' suggesting that although an agenda has been outlined, there is a flexibility to meet Phillip's needs. Phillip responds in a causal and level-headed manner, allowing himself pauses to be reflective in his replies, 'Ummm (pause) I think …(pause) since I've finished … I think I've got all my stuff sort of together and I understand what I'm writing'.

Miss Moon asks Phillip specific probing questions on project structure, 'Do you feel that there's any more need for further research, or do you feel you actually – you've got enough to start writing the discussion part?' Phillip responds in a similar way, allowing himself thinking time as the formulates tentative replies, 'Umm. …(pause) yeah I…I think from what I've seen of the discussion example that Miss gave us … I think I've enough information to write my …(pause) ummm … discussion (small pause) part.' It is through Phillip's written comments on this first transcript (see Table 3.2) that he reflects on his response, showing how students can identify difficulties in dialogue, 'I hesitate a lot, hard to formulate what I want to say … trying to get my words out as I'm nervous and unprepared.' Phillip considers himself 'unprepared' suggesting that there is something pressuring about this type of student-teacher dialogue for him. Phillip is not unprepared regarding his written responses and effort, but he feels unprepared to talk about his research verbally. Phillip's reaction to the dialogue suggests that perhaps there is something intimidating about supervision that requires a different type of verbal expectation from students, but this anxiety is also created by Miss Moon's bombardment of ideas rather than Phillip's lack of understanding.

However, Philip does show some confidence to direct dialogue. He shares issues he is having on the discussion section of his project, a chapter where he must present debates emerging from his research findings, 'Ummm … (pause) well … (pause) for my discussion, it made me sort of like, a bit confused about it … I'm sort of struggling with how to I'm gonna write the discussion like … what's the, how the paragraphs are going to be.' This concern was not impulsive but one that had troubled Phillip pre-meeting, which was outlined in Phillip's project activity log, 'I am unsure if I should write the paragraphs like those we are taught to write in English and history or whether it should be more abstract with a certain fluidity.' Phillip is thinking not only about what his project should look like but shows an awareness that there is likely to be something different about project work in writing style. Phillip's

comparison to English and history is not shared with Miss Moon in their dialogue, which may have provided a more exploratory discussion on the nature of research writing and the challenges and opportunities that this writing style provides; Miss Moon's comment, 'you've got enough to start writing' is much more complex than first presented, as Phillip seems to want more information about the style of research writing. Miss Moon does not anticipate this concern and potential connection with essay-based subjects and instead focuses on structuring coherent sections, 'Oh okay we can think about that then … we could add … er, … and we could maybe put about the factors that they are focusing on'. The ellipses suggest some supervisory hesitancy with little sense of 'we' as Miss Moon attempts to work through Phillip's concern herself, with support offered in the form of a series of questions:

> Miss Moon: 'Are you going to do one paragraph on war? One on culture? One ermm mythology, maybe one on language … although you're not going source by source, it might look at the sources and say what they're talking about and it might lead you to the factors that you then want to discuss.'

It is only at the end of this list is Phillip asked, 'Does that make sense?' There is little opportunity for Phillip to engage with any of these ideas during a series of quick successive questions that act as a checklist for Phillip, 'Maybe a really simple column could be added to say what is their main focus? What is the main factor that they are dwelling on? Are they looking at war? Are you going to do one paragraph on war? One on culture?' Phillip's, 'Hmmm' in response to this barrage of questioning might suggest feeling overwhelmed, as the list continues without checking whether this is a 'simple' process.

Miss Moon appears to dominate the meeting once Phillip has outlined his concerns on structure, with the potential for Phillip to participate disappearing. Instead, what starts to emerge is a stream of consciousness where Miss Moon shares a range of different thoughts:

> Miss Moon: ‘And then, once **we** have done that … so, what **we** will do in our next meeting …Then **we** might want to think about what order **you** put it in and how **you** are going to do those themes, **you** know? … **you** start with the area **you** think is most important or is it going to be more complicated than that?’

There is an interchange of pronouns between ‘we’ and ‘you’ perhaps showing how Miss Moon’s thinking precedes acknowledging Phillip’s ability to respond, prioritising her thoughts over Phillip’s sense making; Miss Moon dominates the conversation with an illusionary change to ‘you’ that implies Phillip is actively participating in a dialogue. Phillip becomes almost absent in this period of shared internalised dialogue by Miss Moon, where Phillip is neither an engaged student nor emerging expert: he listens passively. Miss Moon ‘(rustles paper and pauses … starts writing and speaking the words she writes … muttering as she re-reads her notes speaking the words she writes … sound of writing and silence … Laughs) Ha! I’m writing it down for myself as well.’ Miss Moon renders Phillip incapable of managing his own learning through her good intentions of support, with a momentarily epiphany of her own dominating actions.

Miss Moon finishes her point with emphasised praise, ‘Brilliant’ which appears more frequently after her long monologues. There are moments where Miss Moon refers to Phillip’s ‘Hmm (agreeing)’ as ‘Cool! Brilliant’ and that he has been ‘amazing … brilliant stuff and, erm, hopefully that should be everything.’ There is the possibility that ‘brilliant’ reflects Miss Moon’s own relief at having seemingly arrived at an answer, *her* answers. The nature of the discussion resolves around closed questions, which helps to mask some possible anxiety in tone from Miss Moon as well as Phillip. Miss Moon can also be seen to use praise as a filler, which can appear empty and meaningless in its repetitive presence. Miss Moon may, at times, be seen to inadvertently self-praise rather than offer meaningful praise for anything that Phillip has contributed. Phillip is likely to leave the meeting with the

impression that excellent behaviour is found in passivity; how and when Phillip could be deemed ‘amazing’ in discussion is difficult to identify.

Miss Moon does, however, suggest to Phillip that although she has outlined different questions and possible approaches, he must make the overall decision as to how to progress, ‘And of course you can come with your own idea, and it might be that you think it’s obvious to me that’s how it’s going to flow. That’s the stand-out way I want to do it. We can discuss it. Don’t be afraid to actually come prepared with this is how I think I’m going to structure it.’ Miss Moon encourages a freedom in writing that is not reflected in the dialogue between them. Although Miss Moon seems to encourage independent thinking, there is no opportunity for Phillip to engage critically with Miss Moon’s suggestions, suggesting that the reality of allowing students to adopt autonomy in structuring work is much harder in dialogic reality. This offer of autonomy also appears towards the end of Miss Moon’s suggestions, only helping to emphasise that any approach that Phillip might adopt is less likely to be as comprehensive as Miss Moon’s plan; being helped seems synonymous with being verbally restrained.

4.4.2 Phase two

I arrived at Miss Moon’s classroom to take part in the last 10 minutes of the discussion. As I approached Miss Moon’s classroom, I saw Phillip standing outside without Miss Moon: Miss Moon arrived 15 minutes late due to a delay on bus duty. I left Miss Moon and Phillip to have the first part of the meeting together and returned, as planned, 15 minutes later.

The meeting began with praise for Phillip’s first draft of his discussion chapter, where he needed to draw from different debates and arguments to arrive at a conclusion, ‘I was really impressed … a really high standard … you’ve got some brilliant stuff.’ Miss Moon is non-specific as to what exactly in Phillip’s writing has resulted in such positive comments, but rather moves quickly on to setting the agenda:

> Miss Moon: '**I wanted to talk about** warfare and technology as the main thing that **I wanted to get to grips with** because I thought sometimes our meaning of warfare might be different to what I think you might mean. **Does that make sense?** 'You say about how 'it's evident that this is a huge impact, but it was only possible through warfare and without Vikings influencing warfare in Britain it would not have been possible.' No I think you mean invasion there. **If that makes sense?** … Just cut the 'fare' bit actually because actually just through war and invasion they influenced how the way Britain's landscape was**. Does that make sense?**

Although Miss Moon's monologue shows a strong interest in wanting to understand more on warfare, Phillip remains silent even though Miss Moon has acknowledged him as a more knowledgeable other on this topic. Miss Moon frequently uses the phrase 'Does that make sense?' during the early stages of the dialogue, raising the question for whom sense making is important for in meetings. These questions seem more for Miss Moon, an involuntary act of self-reassurance as she checks her presentation of ideas rather than Phillip's understanding. The frequency of this phrase renders the good intentions to be arbitrary, with Phillip in a situation where he is, in his own written reflections on this transcript, 'feeling like I have to *show* I am listening … I try to *show* that I am concentrating.' The idea of seeming to be doing what Phillip feels is respectable and conforming behaviour suggests that Miss Moon is facilitating an illusionary dialogic experience where teachers are in dialogues with students, but they do not appear to s*ee* them at all. One-to-one supervisory dialogue may heighten pressures on students to behave in a passive and perhaps stereotypical way of remaining silent when a teacher is talking; however, this context is not just teacher talking but also teacher thinking for the student, reducing student autonomy rather than provide space to enhance it.

There is, however, one example where Phillip does respond to 'does this make sense?' where Phillip offers some useful information, '(confidently) Yeah, /I was … I thought about that when I was writing it, that last bit … I was kind of like that's that's not really exactly warfare because warfare is actually the strategic bit …'. Miss Moon interjects with, 'Yes! Yes! Oh I'm glad that you … that's brilliant! Because actually you noticed it too. So I think … because although the way they, their warfare was and the way that their techniques were in battles and stuff, was ultimately what led them to be victorious and successfully invade and things.' Phillip shows he is capable of considering strengths and ambiguity in his own writing, and that he is reflective and developing some mature awareness of personal style. At this point, though, Miss Moon uses positive interjections to stop and limit Phillip's time to explore self-editing and instead offers a series of mini conclusions where she usurps the developing expert role from Phillip; Miss Moon draws on her analytical abilities rather than develop skills required to help Phillip arrive at his own conclusions.

Towards the end of the meeting, Miss Moon took the opportunity to praise Phillip for all his efforts and reflects particularly on how she has learned much from his research, 'I really enjoyed it, and I felt like I learnt a lot from it as well and I just love the range of it as well … Amazing stuff and I feel like I've learnt more about the Vikings than I knew before (Laughs). It appears that in Phillip's written research he is seen as an emerging expert and can adopt a teaching position that moves Miss Moon to student; however, Phillip's development of knowledge is not transferred into dialogue, where there is something problematic about dialogue that does not seem to be an issue in writing, with it being harder to adopt an expert role with a teacher verbally than it is on the page.

4.4.3 Phase three

Miss Moon does not use this final meeting to revise her supervisory approach, which is perhaps unsurprising as dialogic behaviours appear fixed and established from early

exchanges with speakers. I had provided, however, what I saw as a dialogic mirror to Miss Moon through returning the transcript from the first round of data collection but, although she had been shown her reflection, she could not see and / or was not able to change her role in the dialogue as easily. A much longer stare is needed, as Miss Moon shows there are obstacles in teachers developing self-reflective behaviours to actively affect change in dialogic skills during supervision.

Miss Moon continues with positivity and praise throughout, '(cheerful upbeat)' with a strong desire to express how thorough Phillip had been in his evaluation, 'I thought it was really really good. There was nothing that I had …because also - evaluation is really your bit.' There is also joint laughter here as Miss Moon comments on how 'it felt weird to give feedback on your bit responding to feedback (Laughs)' with Phillip commenting that 'I thought I was pretty happy about it to be honest.' Phillip is confident to share what has gone well but is less forthcoming in sharing worries about arriving at this point, which he documented in his project activity logs, 'I am overwhelmed with the things I have left to do.' The purpose of supervisory dialogue for Phillip does not appear to be to discuss emotional challenges, but instead is more functional with questions on how to approach new layouts and project requirements, 'It's just the bibliography bit, I don't really understand … where do I put the websites?' Miss Moon's responses continue to be long with 'Does this make sense' permeating long and quite dense replies:

> Miss Moon: 'So you can know how you put that in the bibliography and then **it's nice and easy** – you know the trick on Word, when you can write it in any order, and then you just go A-Z and you can alphabeticalise without actually having to type it in alphabetical order'.
>
> Phillip: 'Yeah I think so … yeah'.

Miss Moon's response shows assumed skills and experience, with presumptions about what Phillip is likely to find 'easy' offering to wider debate such as what 'easy' means in a project context for Phillip, 'So I would maybe merge everything, put it into one document, **just nice and easy** copy and paste it … I mean you've done page numbers before…?' At this question Phillip shows his uncertainty, 'No not really.' Miss Moon is supportive in her response, 'No that's absolutely fine' she continues to offer very quick and detailed demonstrations, supporting Phillip by using her computer to model this format. Miss Moon, however, continues to assume Phillip's computing competence, '**clearly you know** title in a big font as well. I suppose you don't want teeny tiny – **you know all of this** but stating the obvious! … obviously you can say once you've put it all together.' Miss Moon's tone assumes a competence and understanding from Phillip that may be misplaced, optimistic and ambitious, leaving Phillip with a sense that he *should* know these things and perhaps concern when he does not. There is also the possibility that Miss Moon presents this stage of the research process to be 'easy' to mask something that she herself finds complex or assumes that research students do not necessarily need to be taught certain skills, which makes Phillip an untaught research student; Miss Moon seems to think that a research interest is synonymous with capability.

Phillip prefers to reflect in his written Project Activity Logs rather than supervisory dialogue, where he shares, 'I have loved improving my research skills and learning more about the subject' and ends with the capitalised statement, 'I HAVE FINALLY COMPLETED THIS PROJECT AND I AM SO HAPPY AND PROUD OF MYSELF FOR DOING SO.' This sense of accomplishment is something that Phillip feels acutely, with an emphasis on what he feels he has achieved independently.

I return, though, to one of Phillip's early aspirations at the beginning of the project where he was excited for a different type of dialogue, one where he could engage in debate with subject specialists:

> Phillip: 'I am struggling to find information about how Norse mythology has affected British culture; I have found experts I can email for more help, but they are all Scandinavian. While I presume they speak English, due to their prestige, I doubt that they have time to help me. I am going to continue research in hope to find more information and I will mention this in the next meeting'.

Miss Moon confirmed to me verbally that Phillip never raised his interests in reaching out to European universities, leaving these potential dialogues silent and undiscovered. It seems that Phillip was unable to fully demonstrate his passion and understanding of Norse mythology by contacting experts, and perhaps raises questions as to whether the role of a supervisor is also to facilitate discussion beyond supervisory meetings and how such experiences might impact supervisory dialogue.

4.5 Narrative account two

Mr Hop and Steve

Steve is a Year 9 student under the supervision of Mr Hop, a P.E teacher who teaches across Key Stages 3-5. Mr Hop had previously taught Steve for P.E in Year 8 so there is some level of shared experiences between them. As newly promoted Head of Year 8, Mr Hop is based in the shared Heads of Year Office, where all supervision took place. During supervision, Steve sat opposite Mr Hop at his desk, a busy space, with some students needing behavioural and emotional support during Mr Hop's and Steve's meeting time. The functionality of this meeting space meant that, according to Steve's project logs, that some sessions had to be 're-scheduled or cancelled on certain weeks due to inconveniences.' Meetings were scheduled during the

teaching school day, with Mr Hop collecting Steve during different lessons and meeting for a varying length of time.

Steve's attitude towards learning is recognised as being excellent, at an A grade across a range of subjects, with one subject reporting a B. Steve's strong work ethic and dedication to his studies can leave him extremely anxious and nervous, which is something that his Head of Year monitors with support from home; however, Steve was always very positive about being part of the research group both at home and in school and efficient in meeting deadlines.

Most meetings took place face-to-face in school, however, due to Covid cases increasing towards the end of the 2020/2021 academic year, Year 9 students found themselves in isolation periods, including Steve. This resulted in Steve having to conduct his final meeting with Mr Hop via Microsoft Teams from home.

Prior to his first meeting with Mr Hop, and four weeks into the programme, Steve had decided on a research area and refined his question: 'Discuss whether nature or nature played the most significant role in Pele's rare footballing ability'. Steve attended regular fortnightly tutor time research sessions, led by me, for 30 minutes, once a week, throughout the research process.

Steve's early project activity logs showed how the fortnightly research skills group was 'beneficial and helped to give me a good outline … great because it helped me to understand'. These early project logs show Steve's initial thoughts on supervision where, 'my supervisor will provide support throughout the time I complete my project. I think having a supervisor will be helpful as Mr Hop will offer necessary support when needed.' Steve reflects that 'my supervisor will be able to offer feedback to my work if it is needed', suggesting that feedback will be important to meetings, but with the understanding that he may not always need guidance as he uses 'if' showing some awareness of the independent learning required.

4.5.1 Phase one

This first recorded meeting takes place in Mr Hop's office, with Steve trying to show his understanding of how a literature review is different to that of the discussion. Steve is now in the position of having researched and evaluated his sources on nature vs nature and is about to start the discussion chapter that will support his conclusions. The discussion takes place either at Mr Hop's lunch or break, reflected in the hurried and rushed approach from the start. Mr Hop opens the meeting by asking Steve with assertive purpose, 'Right what have you got so far?' Steve's response is stunted, and hesitant, 'Erm … (pause) …erm I got. Erm I'm not really (*loud bang and crunch on recording)* much since I seen you last because …' Although Mr Hop begins with purpose, this is contradicted by his distracted behaviours that show little dedicated focus on Steve's responses. The meeting is punctuated with the sounds of 'rustling a bag … crunching …eats more crisps … a mouth full of crisps', which results in a scuttling of short abrupt replies from Mr Hop, 'Yep. Good … Yep. Good. Right. Er great … Uh Hmmm. Yep'. Mr Hop is also quick to interrupt with fragmented minor sentences, 'Fine. Yep. Good' showing a closed response that seems perhaps dismissive in tone, 'So yeah … I think that probably what the feedback might be about … (chewing and drops something like a pen …then there's a long pause.) Err great! Yeah so'. When Mr Hop does demonstrate greater engagement and verbal modelling, this is often through hurried examples, 'literature review might be 'Mr Jones in 2018 wrote this paper which is a really incredible source …Erm whereas Miss Clements in her 2019 paper said that er actually. Er your discussion is kind of like, so although Mr Jones has found this, and Miss Clements has found this. I think that.'' There is a rushed expectation that Steve knows what is being implied with fillers such as 'blah blah blah blah!' which increases the rapidness of sentence changes and creates an assumption and expectation of easiness as to what is being outlined. The short sentence shifts allow for little opportunity for Steve to interject with any questions.

However, the continuous eating and short replies do not completely stop Steve from demonstrating some understanding, 'so it's kind of linked with the literature review … so you're sort of like using the information from the literature review and creating like a discussion from it … Okay', which shows Steve's ability to engage in some tentative meaning-making. Mr Hop does pose questions that allow Steve to reflect on experience and knowledge, 'So do you think you are genetically sporty or do you think reflecting back on (pause) you know all your training and that. You reckon it was cos' you learnt it?' Steve responds by offering some early attempts at evaluative thinking, allowing for temporary collaborative discussion, 'I think it's naturally because I think … my sister's …naturally (crisps being crunched) quite athletic as well … But I would say yeah it was natural, rather than nurture.' These emerging evaluative responses show that Steve can, when offered the opportunity to do so, draw on personal experience to arrive at conclusions. Despite Mr Hop repeating, 'do you think' there are few opportunities to discover what Steve thinks, as there is an illusionary sense of 'we' in the meaning making process, with teacher directing discussion, asking questions and student responding to some extent. When Mr Hop asks Steve's 'What do you think?' and 'Okay explain that', offering some opportunity for the co-construction of ideas, this is temporary as Steve is again interrupted:

> Mr Hop: 'Do you think that he was born to be as good as he was? Or do you reckon he learned it? (*Crisp goes in mouth*).
>
> Steve: 'I think that, I feel that he [Pele] was born erm like a natural athletic gift. But if erm he wasn't to have played football as much as he did he wouldn't have enhanced it as much, or developed it. So I feel like there is…'
>
> Mr Hop: (Interrupts) 'What do you mean by enhanced? Erm.' 'Because this is the sort of question that I'm going to ask you in your when I'm marking it'.

Mr Hop starts to engage more meaningfully with Steve's replies by asking for greater clarification. Steve attempts to generate a sense of early debate, but such debate is closed when Mr Hop reminds Steve of the performative outcome and assessment requirements. There seems to be a dismissiveness of developing student knowledge that is replaced with performative concerns. Mr Hop does not seem concerned with knowledge beyond that of the assessment requirements, suggesting that examination and time pressures can have a pervasive effect on dialogue, creating restrictions and messages to Steve that learning exists within the boundaries of a mark scheme.

There is a continuation of interruptions during Steve's contributions, but this time by the phone ringing, which is persistent during this meeting. The busy pastoral context that Mr Hop finds himself in not only interrupts his thinking but also that of Steve's, as he hesitates once again as the phone rings while trying to articulate his thoughts ,'Yeah …erm (*phone rings)* …(pause) but I just (phone rings) know that … (pause …sound of shuffling, phone rings again)'. Mr Hop appears distracted by the demands of the day, which results in short replies such as, 'UmHmm (mouth full) … Yeah … Yep …carry on …Yep … Mmmm'. There are few examples of Mr Hop teasing greater depth from Steve, but there are examples of Mr Hop using open questions to pursue Steve's thoughts, 'So do you think you are genetically sporty or do you think reflecting back on (pause) you know all your training and that. You reckon it was 'cos you learnt it? Or reckon you were naturally pretty good?' Steve draws from his family experiences of coming from a sporty family with, 'I think its's naturally because I think … my sister's naturally (crisp being crunched) quite athletic as well. But I feel like both of us doing sport as we've progressed and done it more, as we've got older. I feel that we have yeah I got better from it. I would say yeah it was natural, rather than nurture.' Mr Hop's only response is, '(Mouth full) Mmmm…okay' with no further exploration or development of Steve's thinking.

4.5.2 Phase two

Mr Hop begins by acknowledging the cancellation of a previous meeting, 'I know we tried to meet last week, but always good to see such a superstar', praising to show a sense of appreciation for Steve's efforts. As a Head of Year, Mr Hop's time is often focused on pastoral issues, with an unpredictability to his day and meetings. Steve is aware of Mr Hop's whole school position and perhaps approaches these meetings with an acceptance of inevitable disruption. Steve could never be sure if meetings would take place on the day and would have very little time to prepare for his meetings, not knowing for sure if they would take place. This unpredictability allowed for little mental preparation and may have inhibited Steve's processing time; a power dynamic and uncertainty that perhaps is also behind the frequent mirroring of question-and-answer pairing between the two of them: Mr Hop 'Yeah?' Steve: 'Yeah'. In Steve's written reflections from the first two transcripts, he highlights this 'Yeah? Yeah' pattern and that he, 'used the word 'yeah' very frequently throughout … I am thinking and indecisive'. Mr Hop initiates a discussion where Steve is asked a series of questions, to which Steve often struggles to answer, making the dialogue less about Steve being supported to think through ideas and more about finding answers. Mr Hop emphasises the importance of interpretation and that Steve is contributing to a much bigger debate, 'we're not trying to read your ermmm … HPQ and think 'Ha yeah, Steve has cracked it'. Yeah. So it really is your discussion is – a discussion!' Mr Hop spends little time exploring the concept of discussion in writing yet recognises that he is contributing to ongoing wider debates; the idea of what it means to contribute to research is an area that comes to the discussion surface momentarily only to disappear again.

Mr Hop also praises Steve for his engagement in epigenetics research, 'this bit's very good. This bit's very good, it is very scientific. Lots of research gone in there which is excellent.' Mr Hop's praise is non-specific, with Steve perhaps unsure as to what exactly 'very good' and

excellent' might reflect. Is it unclear as to what makes something 'excellent' as a piece of research and whether Steve understands how he has achieved this level. This enthusiasm is followed by a thought-provoking question, asking Steve 'how does that link to your question of Pele?' Steve, however, is not offered the chance to respond, with Mr Hop accepting a 'Yeah' from Steve without any further teasing of ideas. Mr Hop appears to have missed an opportunity for Steve to demonstrate his knowledge, as Mr Hop seems to have taken the view that Steve needs help answering his question rather than allowing him thinking time. In Steve's project logs, prior to this meeting, he comments, 'this is my favourite source, as I find the idea of epigenetics fascinating. Epigenetics may prove to be a key factor within my project; therefore, I want to take my time when I highlight and annotate this source.' Steve valued this reading experience, but such value was not transferred into dialogue with Mr Hop, with Steve finding himself in the position of assumed silenced novice rather than developing thinker; there seems little opportunity for student researcher excitement and enthusiasm for new knowledge in dialogue. Mr Hop does not facilitate opportunities for Steve to reflect on researcher experiences, with possible missed opportunities to empower Steve upon acknowledging 'that's really interesting' and 'You've tied that in brilliantly about the DNA and genetics.' It is through Steve's project logs that he shares enthusiasm for his developing knowledge, suggesting that there is something inhibiting for Steve in supervisory dialogue. Mr Hop, instead, changes his focus to the outcome, 'that's really interesting, and that's the sort of thing in a discussion as an examiner, an assessor and mentor I want to be reading. Yeah?' 'Yeah.' Mr Hop firmly navigates discussion to the outcome, where in this list of three that 'mentor' appears at the end, with the two more outcome-based roles prioritised.

Mr Hop continues to refer to academic skills and is mindful to reassure Steve that this type of feedback is what happens in terms of academic writing and that, 'You get someone to unpick it and then you work on it'. This didactic approach to feedback places Steve in a very passive

role, with little opportunity to collaborate with Mr Hop during this ‘unpicking’ process and acknowledgement that Mr Hop could help to construct ideas with Steve. Steve alluded to feedback as an expected aspect of supervision at the start of the qualification, but this approach to formative feedback is in conflict to the nature of co-constructive project work and shows more broadly how students might typically experience feedback by teachers.

Mr Hop continues to comment on the academic nature of project learning, as he discusses his previous challenges with academic writing as a student, but does not ask Steve what he finds most challenging; there appears an assumed agreement that Steve and Mr Hop will find the same aspects of project learning difficult, finding assumed similarities in experiences rather than exploring differences between himself and Steve:

> Mr Hop: ‘So this is really, really good first attempt at a discussion, which I find the hardest bit. Yeah?’

There is an academic vulnerability emerging from Mr Hop, where he reveals that he, too, found aspects of research write-ups challenging, but this appears not to be communicated with the view to explore Steve’s difficulties but instead there is a misplaced similarity between supervisor and student that creates barriers in understanding, with Steve responding with, ‘Hmmmmmmmmmm’.

Mr Hop also reminds Steve that he is presenting a modest claim to knowledge as he cannot compete with the experts in his research area:

> Mr Hop: ‘If you were X X multiple PhD, world-leading authority on Pele and a sport to geneticist and you said "this proves this", people would think probably yeah because Dr X X is really clued up worldwide on this kind of thing. But at the moment I’ve got a year nine pupil doing a project that is certain that - is certain that Pele is born with it. He is certain he’s proved in his project that one gene has changed the world for Pele.

Yeah?' '… You've got this tiny, tiny project that has read one source that proves one source about genes, alright.'

Mr Hop's tone is one that suggests an interesting paradox, where Steve knows yet knows nothing at all. Mr Hop asks Steve to consider himself a PhD writer with no sense that Steve can imagine taking such a role and reminds Steve that any claim of certainty is problematic. Steve is also being asked to consider something quite complex: he knows the answer to his research question, yet he is told he knows little that can be judged at a serious level with his 'tiny, tiny project'. Mr Hop seems to unintentionally reduce the impressive research achievement by placing his work in a larger research context that Steve is unlikely to fully comprehend, reflected in his final contributions of, 'Yeah, Yeah and Err…No, no' before the meeting ends.

4.5.3 Phase three

The final meeting between Mr Hop and Steve took place via Microsoft Teams, as Steve was isolating due to COVID guidelines. Steve confirmed that he was well and happy to continue with this meeting and to discuss his viva later that afternoon. The change to remote supervision resulted in more opportunities for Steve to discuss, with Mr Hop asking more open questions and a greater sense of dialogic partnership, 'What do you think?' and 'We'll see if we can tie them both in'. Steve is more responsive to this, 'I think I have …for strengths … I think about … like knowledge and facts.' Steve seems to take pride in his subject knowledge, which is the first time that he has been given the chance to reflect on this. Steve is also more persistent to continue with his sentences when Mr Hop tried to interject,

Steve: (interrupts) 'Yeah I'

Mr Hop: '… the scope of my project'

Steve: ' Yeah I put that in I don't know why I took it out to be honest'.

Steve is able to voice his experiences and decisions in a way that shows an emerging confidence, with Steve declaring, ‘ Errr… No, I’m feeling okay, I feel I’m quite prepared. I know what I want to say’. Steve *does* know what to say, which suggests that on some level remote supervision appears to lessen some aspects of the power dynamic that is created in the physical context of meetings in school, with students like Steve showing greater contribution levels. Although, the nature of reaching the completion stage of the project could have increased confidence inconsequential of where the discussion took place.

A recurring motif throughout supervision is the belief that project work is highly academic, with Steve being reminded that completion indicates a future university application, ‘ – so when you go to university and you do your dissertation around 10 years’ time or whatever, or you do your next qualification in the 6th Form’ which shows a projected academic image and that Mr Hop’s preconceived ideas of Steve’s future ambitions.

Mr Hop places emphasis on Steve being an expert and knowledgeable throughout, ‘you just need to remember that you are the expert … Miss C is not going to have as much knowledge about it as you … you’re really passionate and really knowledgeable …’ Mr Hop builds Steve’s confidence before his viva, but the concept of student as expert is not demonstrated throughout the supervisory relationship, with little opportunity for Steve to experience this expert position that Mr Hop advocates at this final stage in supervision. Mr Hop acknowledges intellectual growth but does little to facilitate this during dialogue. At the end of the meeting, Mr Hop reminds Steve:

> Mr Hop: **‘**When you start presenting to Miss C you’re the expert. Although Miss C is very very intelligent and really really good – you are the expert in ‘Pele – Nature versus Nurture … she wants to learn from you.’

This final reflection is striking, as Mr Hop appears to reinforce the established model of teacher knowledge hierarchy, but also places Steve to an elevated position by suggesting he is more

knowledgeable in his research topic than that of the viva assessor. Steve, however, has had very little experience as student as teacher with Mr Hop, the very thing that he appears to offer reassurance on. Mr Hop refers to a previous meeting to praise Steve for his subject knowledge, 'I mean, you're …as a 14-year-old are discussing epigenetics Steve …which is a massive topic, and you've tied it into your case for Pele, really, really, well done.' A sense of accomplishment is encouraged in the knowledge that not all students could take pride in this type of work in Year 9, to which Steve responds in the same way with, 'Yeah.' A default response to praise, instruction and most questions.

It is also only at the end of supervision that Mr Hop refers to the process element of research, where he reminds Steve that he needs to show 'the process that you have gone through. And how you have kind of learnt and developed to go … to go through it. And what you ended up as yeah?' What Steve has 'ended up as' remains undervalued as he is deemed an amateur in discussion yet emerging expert in writing, showing that a student's dialogic development is not at the same level of importance as the written outcome.

4.6 Theme development

On completion of the narrative accounts, I returned to a final fifth phase of incubation for four to five days where I began annotating these narratives for POIs. This developmental process was undertaken in the knowledge of previous POIs from initial transcripts (see Tables 3.4, 3.5, 3.6 and 3.8), which meant that I was guided but not restricted by a set of preestablished codes. I was able to cross reference the strength of these original POIs by considering their relevance in a different creative context originating from the same transcripts.

On completion of this phase, I was able to i. identify initial POIs that remained constant ii. develop and extend meaning of some POIs and iii. identify new POIs. The development in understanding of the POIs took place because of constructing the narratives and subjecting

them to scrutiny. Four POIs extended in meaning; questioning and co-construction remained constant themes and storytelling emerged as a new experience (see Table 4.1):

Table 4.1 Development in POIs.

POIs from initial transcript reading (see Table 3.9)	**Development of meaning found in the narrative accounts**	**Evidence of development from raw data**
Academic references Teacher assumptions of student research abilities	Underestimation of challenge by the supervisor	Mr Porter: 'When you write about it, write about it as if you're right. (Laughs) So that's all you gotta do, sort of academic tone, you know. "All my research has shown" and "In this proposal I have found that …"' Mr Hop: 'Same info, same sentence, but you phrase it differently. Yeah?'
Teacher sense making Teacher interruptions Teacher indecisiveness Teacher as storyteller Illusionary 'we'	Soliloquising experiences Ego-centric behaviour	Miss Moon: 'I think what you mean is when you're talking about the landscape and the fact that they invaded by war … I suppose …by battle and by war …that's what it is. But I think warfare can …Yeah, that's the phrase'. Mr Porter: 'The reason is, I'll give you an example, when I teach my …erm A level classes I always start off with this activity … I'm not going to make you do it, but I'm just going to tell you what happens'.

POIs from initial transcript reading (see Table 3.9)	**Development of meaning found in the narrative accounts**	**Evidence of development from raw data**
Praise and support for learning Teacher positivity	Enthusiasm for learning	Miss Moon: 'I just love this phrase. Yeah. Unless your studying Viking culture or you're an archaeologist, it doesn't really mean anything to anyone day-to-day life and I thought that was brilliant'. Mr Hop: 'Your mini project is proving a massive thing. Steve, for an academic piece of work, you know as a Year 9 pupil, it's really good. You should be really proud of yourself'.
Teacher interest in student as teacher	Student as expert presenter	Mr Porter**: '**So it's really just you talking through it. You might knock a couple of quotes out you found interesting, that pushed you're reading through.' Mr Hop: 'Miss C is very, very intelligent and really, really good but you are the expert in 'Pele-nature versus nurture'. She wants to learn from you, that's what the viva is'.

This developmental stage in understanding POIs was part of the exploratory process whereby each interpretive stage built upon the previous one. Through the narrative accounts, I 'intentionally placed [myself] in a position to make discoveries, rather than …passively awaiting the moment when they are struck, as it were, with serendipity' (Stebbins, 2011, p.5). I went back to the raw data where I applied these POIs as analytical codes, with the expectation of having to review, develop or collapse depending on how each theme satisfied my research focus of supervisory experiences. I drew from principles outlined in Braun and

Clarke's (2022) thematic approach to analysis, which included clustered patterning that allowed for analysis ‘across the dataset and within a single data item' (Braun and Clarke, 2022, p.79). I was mindful of Lincoln and Guba (1985) who posit that ‘testing referential adequacy can be accomplished by returning to the raw data and comparing it to the developed themes … All conclusions firmly grounded in data’. These analytical codes were generated from incubation phases across the three narrative accounts, a ‘creativity [that was] central to the process, situated within a framework of rigour’ (Braun and Clarke, 2022, p.8) and as such had to be revised in raw data, allowing for a process of scrutiny and readdressing. The three transcripts for each pair were read simultaneously, where I analysed POIs that had emerged from the narrative accounts. I tracked my thoughts as to how my interpretation of the POIs from the narrative accounts were evolving in the analysis of raw data, carefully considering how POIs moved between dominant to being subsumed, frequently reinventing hierarchy. There were occasions where POIs were amended, which either increased the significance of the POI or acknowledged greater complexity and expanded the conceptual process (Braun and Clarke, 2022, p.81). POIs later collapsed as overarching themes were established, and equally extended, as the complexity of a theme expanded to consider the connections underpinning the concept (See Appendix F). The themes from this process are discussed in Chapter 5, where analysis focused on how these themes reflect supervisory experiences.

4.7 Conclusions

The final set of themes were created from returning to the original data (see Chapter 5 Analysis and Discussion), where I offer an analysis of the different experiences had during supervisory meetings for both students and supervisors. The narrative accounts were fundamental in understanding how students were silenced by teachers dominating dialogue, which contributed to the overarching theme of barriers experienced during supervisory dialogue; it appeared that barriers subsumed all previously considered POIs. This exploratory

methodology provided an opportunity to investigate how barriers in dialogue constituted a deeper understanding of supervisory experiences, providing a thematic lens through which analysis could take place (Nowell et al., 2017 p.11). I took the opportunity to understand my research from the view of a hidden path or a road less travelled (Braun and Clarke, 2022, p.11). The next chapter analyses and discusses the final set of themes in connection to understanding different ways in which barriers manifest in discussion experiences.

Chapter 5 Analysis and Discussion

5.1 Introduction

This chapter explores the ways in which barriers shape discussion experiences between students and supervisors. The role that barriers play in shaping dialogic experiences is explored by analysing what constitutes a *barrier* and how these manifestations influence supervisory dialogue and relationships. Understanding barriers became an overarching interest in interpreting the raw data. I maintained an exploratory approach whereby I read the original transcripts to understand how themes developed, stayed the same and connected, with thematic lenses that opened further complexity and opportunities to discover supervisory experiences and barriers in different ways. This final exploratory process resulted in the following themes (See table 5.1) that structure the wider analysis and discussion of this chapter:

Table 5.1 Table of final themes.

Teacher use of academic references and student capabilities
Teacher as storyteller
Student as unrecognised participant
Soliloquising experiences
Ego-centric behaviour
Underestimation of challenge
Persuasive and authoritative voices
Enthusiasm for learning
Speech imaginations
Supervisor questioning
‘I feel – I think’ paradigm
Interruptability
Student as presenter

The ways in which these themes were defined can be found in Table 5.2, where the process of defining these themes from the narrative accounts became a key part of the interpretive process. Table 5.2 outlines the ways in which the final themes were understood and the challenges that these themes posed for students during supervisory dialogue. These themes can be viewed as barriers in achieving a valuable discussion experience for students and an example of supervisory repertoires that create participant silencing rather than participation.

Table 5.2 Definitions of final themes.

Theme	**Defining the theme in this context**
Teacher use of academic references and student capabilities	Teachers assume that students plan to attend university and presume an understanding of higher educational phrasing including 'dissertation, Master's and lectures' in connection with project learning. This phrasing is used as part of wider comments made on academic expectations, showing how teachers project assumed academic identities onto students rather than acknowledging students as unique participants and different to themselves. Academic projections create an aspirational tone but a distance in dialogue as this context is unrelatable, and perhaps unnecessary to explore at this stage.
Teacher as storyteller	Teachers return to their own academic experiences of project learning in the form of autobiographical storytelling. Storytelling creates distance rather than connection between student and teacher, as teachers appear to see students as being 'like me' rather than being different in their research journeys and challenges.
Student as unrecognised participant	Supervisory dialogue is something that seems to happen *to students* rather than happening *with students*, as teachers dominate dialogue and restrict student participation. Teachers project assumptions of understanding onto students, which frequently silences students in sharing their challenges. Students are not recognised for how they could contribute to dialogue beyond what the teacher wants to discuss.
Soliloquising experiences	Teachers address oneself by sharing thoughts out loud without acknowledging the student as a participant in the dialogue. Teachers make their own thoughts known without inviting students to comment or engage; students become audience members and adopt the performative role of listener.
Ego-centric behaviour	Teachers share their sense making processes as part of soliloquising experiences, which excludes students from engaging in dialogue as supervisors think through the research process in isolation. Teachers acknowledge academic challenge in project work, yet students remain 'untaught' in that supervisors prioritise their own sense making processes rather than supporting students to develop their ideas.

Underestimation of challenge	Teachers underestimate the challenges faced by students during the write-up stages. Teachers use dismissive reassurance including, 'nice and easy', 'simple', 'blah, blah, blah', 'that kind of stuff' showing that students navigate challenge away from supervisor dialogue, highlighting a reluctance and / or inability by teachers to engage in the teaching and understanding of what project writing demands. Dismissive reassurance closes dialogue by projecting misconceptions as to how 'easy' project work is for students.
Persuasive and authoritative voices	Teachers do not use dialogue to appeal to students' intrinsic motivations, with emphasis on authoritative and instructional features of dialogue dominating. Teachers take little time to ask how students *feel* and *think* about their research topics, instead teachers choose to instruct students' thinking rather than seek to understand thoughts and ideas.
Enthusiasm for learning	Teachers show an excitement for student learning, 'I really enjoyed it, and felt like I learned a lot from it as well and I just love the range of it as well … amazing stuff.' This excitement is in response to the student's written work, which is not nurtured as part of supervisory dialogue. Supervisors express how impressed they are, but this is not reflected in the ways in which students are invited to share project achievements as participants. There are also moments that praise and enthusiasm act as empty fillers. Students are praised for voiceless enthusiasm, which reinforces the power dominance that teachers have in dialogue.
Speech imaginations	Teachers appear to struggle with maintaining momentum during supervisory dialogue, showing limited awareness as to how to start discussion, develop and share ideas and then conclude meaningfully. There is a reliance on rhetorical devices that may appear to invite student participation but instead serve to close discussion.
Supervisor questioning	Supervisors pose questions that are predominantly for their own sense making and clarification. Questions such as 'does this make sense?' are directed more at students confirming supervisor clarity rather than students having the opportunity to explore their thoughts. Questions are

	typically superficial in that they are asked with rare anticipation of a response from students (see Table 5.2). Questions allowing students to reflect on personal experiences as part of the discussion process results in more discussion opportunities, 'What do you think? Are your parents sporty? How do you learn?' Questions rarely focus on the uniqueness as student as participants, with teacher questions asked with the purpose to confirm rather than challenge assumptions, assumptions that typically belong to the teacher.
'I feel – I think' paradigm	Students begin with wanting to explore how they *feel* about their learning before confirming to a more confident *I think* response. Students hesitate with a more confident 'I think' sentence start, 'I think it's naturally because…erm… because' and 'I think, but, could …' which is contrasted to a more confident start with a 'I feel that because my whole family do sport we improve all the time' and 'I feel that sporting talent can be improved like my sister did.' Students find themselves moving between these sentence structures, showing that students need guidance in developing a confident and committed voice in dialogue, a nuanced structure that supervisors do not mirror in their own responses. Barriers in discussion can appear at sentence level as well as contextual understanding.
Interruptability	Supervisors regularly interrupt students' thinking and interject when attempts are made to reply in dialogue. Students are unable to interrupt as the traditionalism of the teacher being uninterrupted is maintained.
Student as presenters	Supervisors do not afford opportunities for students to share knowledge as part of the research *process* but instead seem to consider this skill an outcome of having listened (perhaps only in a performative role). Teachers are confident in allowing students to take leading roles on completion of projects, seeing students as verbally capable as presenters rather than participators.

The discussion now explores how these themes contributed to the creation of different types of barriers between students and supervisors during supervision. There is an extended

introduction to this analysis that includes an overview of barriers in understanding, which then moves to examine the specific types of barriers that correspond with the order of themes presented in Table 5.2.

5.2 Barriers in understanding

Barriers in understanding between supervisors and key stage 3 students are frequent and, as such, seem to create illusionary discussion experiences (Alexander, 2017, p21). At the start of this research, I anticipated one-to-one meetings as dialogic spaces whereby teachers could enter dialogue *with* students, exploring concepts in ways as to speak 'in some honest way' [and] into his own subjective terms' (Bruner,2006, p.56). However, the act of translating ideas, the process by which supervisors adapt discussion in an appropriate and relatable way, is frequently not achieved due to supervisors' assumptions of students' capabilities. There is difficulty in shifting an approach that is didactic to a more dialogic and co-constructive environment (Alexander, 2004). There are few opportunities for meaningful co-construction that engaged directly with students' interests (Barr,2022), with little space afforded to students' emerging identities as researchers (Young,1999, p.61). A key challenge for supervisors is not only to invite students meaningfully into discussion, but for students in the first instance to be recognised as unique participants. Students are not offered opportunities to share individual reflections in a socially constructive way or to engage in meaningful socialisation that might be realised for later development (Vygotsky, 2012, p.19). Supervisors seem to facilitate few opportunities to collaborate or for students to exchange ideas, formulate and reformulate ideas, as teachers dominate both individual contributions and close moments to discuss. Discussion is neither for nor with them, and as such supervisors and students struggle to understand each other fully (Vygotski, 2012, p.102). Teacher-dominated discussion is not uncommon in classroom talk, but one-to-one supervisory contexts are important to bring further understanding to this phenomenon. Supervisory contexts

demonstrate the pervasiveness of this type of talk in what should be a student-centred opportunity to discuss research interests, guided by students' needs.

Supervisors struggle to perceive students as being a potentially more knowledgeable other, as supervisors in this study rarely allow students to show their emerging knowledge. Students' superior development in relevant knowledge does not equate to greater participation afforded in dialogue. The opposite can be found in a type of student mutism, as students find themselves in a type of knowledgeable silence. Even though students are knowledgeable in content, there is a reluctance from supervisors to engage with students on equal terms, and teachers maintain 'power to allocate the right of other participants to speak' (Skidmore, 2019, p.29) protecting, perhaps, their own intellectual vulnerability by dominating the dialogue. Supervisors appear uncomfortable and reluctant to engage on equal levels and have few strategies to change such authoritative and non-dialogic experiences, with teacher-centred knowledge dominating meetings (Juuti, et al., 2019). Barriers in understanding students' needs appeared in teacher-dominant questioning, and difficulties in supervisors understanding the role of listener and struggling to nurture an intellectually inquisitive 'climate of welcome, safety, vulnerability and encouragement' (Stewart and Kellas, 2020, p.19) for students. The silencing of students' voices highlighted the question of what purpose is served by dialogue if not to understand and motivate students throughout the project learning process.

Barriers as part of the supervisory experience appear due to supervisors projecting high academic capabilities onto supervisees; complex power dynamics affecting discussion dominance by supervisors; and an overly dominant sense of supervisor self in setting discussion agendas, with high levels of control inhibiting discussion. I discovered that supervisory experiences can be seen as a unique speech genre, with specific challenges for supervisors in accessing a repertoire of dialogic skills to encourage students to be active contributors to discussion (Bakhtin, 1986, p.80). The discussion presents dialogic barriers

experienced during project supervision and the illusionary ‘we’ as used by supervisors, indicating a mutuality between supervisors and students that is in fact, not present in the dialogue.

5.3 Teacher use of academic references and students’ capabilities

Dialogue is shaped by assumptions that supervisees can craft extended writing tasks, with project work considered on a par with independent study at undergraduate and postgraduate levels. Mr Porter asserts aspirational plans with, ‘Right, this is a little bit like how a master’s would work. Like when you go to university’ and again in Mr Hop’s comments where ‘it’s a really good reflection to have thought about this and hopefully doing the EPQ in the Sixth Form and any other project work you do in the future.’ Darrell and Steve respectively return closed responses of ‘Yeah,’ with no indications that the boys have considered future academic identities or graduate study. It is only through Darrell’s reflections of himself as a Year 9 student that Mr Porter discovers Darrell’s perception of himself as a learner, ‘Ah … ha I’ve been told that I have the facilities to go to university. But (long pause) some days I have good days in school, some days I have bad days at school.’ Darrell provides Mr Porter with an invitational opportunity to explore deeper aspects of his experience of being a ‘high attainer’ and his experiences of school, but he does not respond to this important cue. Mr Porter appears reluctant to engage with Darrell’s experiences, perhaps signalling that Mr Porter has become desensitised to hearing students describe learning in this way or at worse considers it irrelevant in his role as supervisor to engage with Darrell as a learner beyond the project that he has been assigned to support. Mr Porter may also be anxious in his role as a newly appointed supervisor and as such places his focus and time in sharing what he can offer Darrell, resulting in a preoccupation with what Mr Porter is doing rather than actively listening to supervisees.

It is a sense of satisfaction in ‘Ah … ha’ that suggests a familiarity in receiving such high teacher aspirations, but also reflects how teachers can project academic identities onto students that can be misjudged (Stewart and Kellas, 2020, p.8). This assumed academic reply from Darrell creates what might be seen as dialogic trapping, placing Darrell in conflict between what is expected of him and what he might like to do differently. Although supervisory meetings can act as an aspirational discussion space, Mr Porter has promoted the idea that project learning is academically exclusive and is for a ‘type’ of student. A supervisor’s projection of an advanced academic identity creates the potential for misunderstandings and potential barriers between student and teacher (Mercer,2002,p.3), with missed opportunities to pursue the more nuanced and complex ‘academic identity’ experienced by the student in everyday life at school. The context of project work should increase student ownership over the learning process, which should arguably create less pressured learning experiences where the nature of project work is student-centred and generates ‘emotion and motivation to learn … by greater involvement in and control … [of] the learning process; self-initiated learning’ (Hase and Kenyon, 2013, p.26). High levels of academic expectation and avoidance of nuanced aspects of these expectations in reality on behalf of supervisors creates less inclusion in discussion for students, with students verbally inhibited with teachers (Mercer, 2008, p.94).

Mr Porter asks whether Darrell is enjoying ‘the stuff you’re doing right now?’. Darrell replies with surprised enthusiasm, ‘…it’s honestly like, I don’t know how I’m going to get an extra GCSE out of this ‘cos I would just do this in my spare time.’ Darrell expresses excitement that personal curiosity is rewarded in the form of a qualification, suggesting that research is valuable for more just than academic development but for general motivation to learn. Mr Porter seems to suggest the uniqueness of this researching opportunity in key stage 3 and that such personal fulfilment is unlikely to return until higher education, ‘yeah, so what is

interesting then is, at university, it's much more like that (with emphasis) than anything related to school.' Mr Porter's response colludes with the idea that learning at key stage 3 is tiresome and raises concerns for students' learning experiences if teachers are also unmotivated and uninspired. Mr Porter's frequent comments on university study also includes academic terminology such as 'lectures, thesis, dissertations' which Darrell describes as being 'off task talk' in his written reflections on the transcripts. Darrell does not appear to understand Mr Porter's links between project work and university study and cannot see the relevance of this. Darrell feels unable to contribute during Mr Porter's reflections.

5.4 Teacher as storyteller

Project learning provides opportunities for teachers to reconnect with their own learning experiences, which at points makes dialogue a creative, fictitious experience. In this context, teachers create narratives in which they are the main characters, 'a monologic state of 'I-it' which is detached, self-absorbed and reductive' (Friedman, 2001, pp25-26) as stories are nostalgic rather than illustrative of project writing skills. Mr Porter recalls aspects of his own learning in what I came to call 'supervisory autobiographies', where stories from Mr Porter's undergraduate experience of a particular lecturer demonstrate a humorous nostalgia; however, this creates contextual distance in doing so, as there is weak 'contextual information [for students] or hints provided by a speaker on any remembered past experience that seems relevant' (Mercer, 2002, p.44). Contextual distance appears when Mr Porter moves to places and experiences that are not easily connectable for Darrell (Stewart and Kellas, 2020, p.10):

> MR PORTER: ''Just let me say, when I was at university, there was this American lecturer and she was intimidating to everyone … she would begin this lecture and she was this really big figure both physically and literally …she always had this diet coke

in one hand, and this belt that didn't fit round her waist… If you came in the lecture late and you walked in front of her. Oh my God!'

I suggest that Mr Porter's use of storytelling is misguided and misplaced, providing little support for Darrell as he reflects, 'we got side-tracked here.' Mercer (2002) suggests that when 'participants share relevant past experiences and information and then use this as the foundation, the context [then] combined intellectual efforts [can come to fruition]' (Mercer, 2002, p.2). However, Mr Porter's anecdotes emphasise a difference in experience that creates distance rather than connection in thinking and limits the co-construction of uniqueness through storytelling (Stewart and Kellas, 2020, p.13). Uniqueness involves acknowledging difference as well as connection, but there is a predilection for supervisors to assume that students are 'like me' rather than acknowledging the difference between themselves and the student and '[recognising] how he or she is also distinct, not like me in specific ways' (Stewart and Kellas, 2020, p.10), creating challenging situations to connect authentically. Mr Porter's storytelling reconnects him to his past rather than Darrell's present. Storytelling, rather than co-constructing 'identities, relationships and meaning' (Stewart and Kellas, 2020, p.14) creates distance between speakers, as Mr Porter asserts dominance through retelling his own experiences. Dialogic ground rules and behaviour in discussion are deeply rooted in teachers' pedagogical choices and self-belief across time and through a variety of influences (Bakhtin, 1986, p.170), which can be seen in how Mr Porter draws on his own university experience that excludes Darrell who is not offered an entry point into the remembered world of the supervisor. Mr Hop draws anecdotally from his experiences of project learning at undergraduate level rather than approaching discussion with examples more recognisable to Darrell. This could have been a springboard for shared views, but instead closes discussion as Mr Porter uses humour to distract from the possibility that he is unsure himself as to how to support Darrell at this stage. Mr Porter reflects, 'I'm not sure what feedback would help' he

has engaged with his own familiar past learning experiences when unsure as to how to support the student researcher. Mr Porter demonstrates how supervision can create reflective spaces for supervisors but also render students as passive listeners through what might be termed uncompassionate listening (Stewart and Kellas, 2020, p.15). Mr Porter talks *about* learning rather than actively engaging Darrell in a learning experience:

> Mr Porter: 'I'll give you an example, when I teach my A level classes, I always start off with this activity and say… I'm not going to make you do it but I'm just going to tell you what happens… I say to them, 'Draw me a house, you've got one minute!' And they all, they all start drawing a house, everyone draws a house. It's if I brought you in to watch you'd think, 'What? They are just, they are just doing it?' Then I count down a little bit of pressure you know … '10 seconds left'. Then I go, 'Right, okay…'

Anecdotal and task storytelling create barriers in understanding rather than facilitate purposeful connections (Stewart and Kellas, 2020, p.14). Mr Porter starts a story by stating, 'I'm just going to tell you'. Here storytelling becomes something that it done *to* the students rather than with them, with examples of 'telling' that are seen as more useful than constructing understanding by discovery. Mr Porter believes retelling to be a purposeful experience; however, Mr Porter's annotations show that, 'This analogy doesn't work for Darrell as he says 'Ahhhh, right', suggesting Darrell's dismissiveness as to how this might help him. Teacher storytelling is an attempt by Mr Porter to help him in understanding the nature of project work rather than addressing Darrell's concerns. This becomes a type of supervisor soliloquising that silences the student (see page 124 on soliloquising). Mr Porter's approach suggests that he is also a learner in this supervisory role and is reliving his own experiences of project learning (Ashton and Newton, 2006). Storytelling is also spontaneous,

homophonic and dominating in nature, and becomes a subsequent barrier in understanding (Skidmore, 2019, pp.28-29).

5.5 Student as unique participant

Valuable discussion relies on participants acknowledging the uniqueness of individual contribution, speaking less with anticipation and expectation and more with an intention to explore individuality and to understand ‘what is really happening to and in the other’ (Buber, quoted in Freidman, 2001, p.27). It is the recognition of one’s uniqueness where both can ‘imagine quite concretely what the other is feeling, thinking, perceiving and knowing’ (Buber, 2001, p.26), where a combining of thinking is likely to emerge. A paradoxical situation appears here as there is an over-estimation of student development as researcher and in other aspects an under-estimation of how much the students know and can contribute to discussion. This complexity shows the knowledge and skill required to manage dialogue and that supervisory practice is perhaps a taken-for-granted role that teachers can easily assume. There seems to be a difficulty for the teachers in assuming the role of 'learner' about the student and what they know, so they make assumptions. Dialogue requires being genuinely curious about the interlocutor, which is an aspect of dialogue that is underexplored, particularly when considering the interest shown by teachers in their students' learning. Bruner (2006) posits the importance of allowing students to feel 'completely absorbed in a problem' (Bruner, 2006, p.55), which might also be said to be true for supervisors, as without this mutual interest supervisors cannot engage in meaningful dialogue. Supervisors might also be knowledgeable on the student’s research interest, but this does not always equate to enthusiasm when sharing and the willingness to co-construct knowledge with a supervisee. In consequence, a feeling of discussion abandonment is felt, with students’ perspectives silenced. Phillip reflects on his annotated transcript that ‘supervision paragraphs [of conversation transcript] are much longer; she’s the one helping… [they] flow a lot better than

the transcript of mine as Miss Moon is more experienced.' Phillip's perception of supervision is one where the teacher maintains verbal dominance, with an implied understanding not to question or challenge such 'help'. Miss Moon 'abandons' Phillip in this part of the sense-making process, allowing him little thinking time to self-correct or consolidate a belief or understanding, as he is corrected without exploring the nature of the original idea (Metcalfe and Miele, 2014, p.1). This results in an illusionary 'we', a lost mutuality in thinking that rarely takes place, as although Miss Moon uses 'we' interchangeably with 'you' the voice dominating the discussion is always that of Miss Moon's, 'we might want to think about which order you put it in … you'll then start writing.' Supervisors verbalise their own thoughts in place of supervisees, as it appears that supervisors and students find project dialogue 'emotionally challenging … [where] entering into that relationship could be threatening as much as consolidating' (Kershner et al., 2020, p.198), resulting in a supervisor's need to remain in control. The need for control is seen in Miss Moon and Phillip's meetings, where there are frequent teacher-centric points of interest (Hase and Kenyon, 2013, p.153), 'So I was thinking, I just think, I think it will be easier'. This repetitive 'I think' structure creates a type of supervisor soliloquising that leads students into an aphonic dialogic existence, facilitating another state of abandonment in discussion.

5.6 Soliloquising experiences

Supervisors appear to engage in externalising their own thoughts in place of students' ideas (Piaget, 2010, p.18). The externalisation of thinking excludes students from taking part in discussion (Bruner, 2006, p.54), which results in students being effectively silenced. The data suggest that supervisors can adopt states that are self-absorbed (Friedman, 2001) and enter what Piaget (2010) calls monologist behaviour, with frequent soliloquising features. Soliloquising states are created when one speaker dominates, often through the sharing of spontaneous and perhaps disconnected thoughts, as students listen to the meaning making

process that belongs frequently to the supervisor. My initial interest was in students' experiences in supervisory dialogue, but such soliloquising behaviours raised value-based concerns as to whether meetings were occupied primarily by supervisors engaging with their thoughts rather than those of the student. It appeared that teachers and students had stopped talking *with* each other as supervisors engaged more inwardly than socially (Alexander,2004, p.31); students were offered few opportunities to contribute meaningfully, if at all. I had anticipated students' voices to be afforded greater freedom than in many classroom contexts, not less, in terms of participation, but it appeared that students are less likely to be heard in a situation with one teacher due to issues of positional power (Wegerif, 2020).

5.7 Ego-centric behaviour

A type of egocentric speech also takes place, which, rather than supporting a supervisee to think, becomes alienating for students. It is not only talk that happens *to* students (Bruner, 1960, p.20) but thinking is also projected *onto* students rather than experienced as a co-constructive experience; dialogue assumes not two but one perspective in this one-to-one supervisory context (Wegerif,2020). Vygotsky describes egocentric speech as random and often disconnected thoughts out loud where, '[there is] a disruption in the smooth flow of activity … it becomes an instrument of thought in the proper sense - in seeking and planning a solution to the problem' (Vygotsky, 2012, p.16); however, the solutions to problems are typically in response to supervisor concerns and not those of the student. Although ego-centric speech is typically found to be part of younger years development theory, it is interesting that Miss Moon seems to display a maturation of this thought sharing state, suggesting that task and context may provoke ego-centric behaviours in certain dialogic contexts. There is a pragmatic tone to ego-centric behaviour, with the only thoughts shared being those of the supervisor (Wegerif, 2020). Long periods of teacher monologic dialogue take place in the case of Miss Moon, as she delivers a 40-line monologue creating what Hase

and Kenyon (2013) describe as a teacher-centric learning experience (Hase and Kenyon, 2013, p.20), where Miss Moon monopolises speech:

> Miss Moon: 'I think that actually, as a more general term, you can say war and technology, as the way that they influence. Yeah? Or even you could maybe even put invasion? You know invasion and technology, or war, invasion and technology, that might be a way round it. Or … I'm going really crazy and you can have invasion and warfare because I think … because that's part of their tactics … and their tech … yeah!'

Phillip is rendered mute as he reflects on his annotated transcript how he 'feels like I have to show that I am listening' as he performs the role of listener during Miss Moon's sense making, despite Miss Moon's repetition of the question, 'Does this make sense?' at the end of long monologic episodes. This might be viewed as an example of Vygotsky's empty verbalism, where although Phillip appears to be the addressee, he is only ever an audience in a predominantly supervisor meaning-making process (Alexander, 2017, p.31). Supervision appears unprepared and spontaneous, as a 'live event, played out' between supervisors and students (Bakhtin, 1986, cited in Mercer et al., 2019, p.34) and as such makes the sharing of ideas difficult for students to follow. There appears to be an elusiveness in achieving understanding in co-constructive opportunities, which in Bakhtinian terms is where discussion moves away from a 'duet but [more to] a trio, the third person being the particular image in which they model the belief they will be understood' (Friedman, 2001, p.28). Supervisors frequently project images of discussion dominance rather than inviting students to contribute, closing participatory opportunities where students cannot evaluate or share ideas (Juuti et., 2019). It is the unpredictability of thinking being played out by the supervisor and not the complexity of project learning itself that results in moments of student silencing.

Miss Moon's soliloquising shows evidence of ego-centric behaviour such as talking about herself and for herself and, whether consciously aware or not, speaks and questions with little need of requiring Phillip to reply (Vygotsky, 2012, p.15); a state that Phillip found to be random as he reflects that 'questions are really common, and we forgot that we wanted to add more to our point and went off topic'. There is also a sense of uncertainty in Miss Moon's long monologic deliveries, 'I was unsure of what or how much input the student needs or wants … I overcompensate by repeating to be sure they have understood and are clear. This is probably unnecessary, but at the time felt necessary to help the student.' This is an example of how supervisors believe that they are checking student understanding, but it is their own understanding of the research process that is a main concern. This feeling of uncertainty is also reflected in Mr Porter's comment, 'I'm not sure what feedback would help. I interrupt excessively – I wonder if this is to establish rapport to steer discussion.' Both Miss Moon's and Mr Porter's reflections show that supervisor soliloquising is likely to be the result of some anxiety and unpreparedness, resulting in a paradoxical situation where to avoid silence supervisors unintentionally talk to silence rather than talk to invite participation as '[the supervisor] talks aloud to himself in front of others' (Piaget, 2010, p.18), creating a more didactic experience. There are illusionary states of discussion that appear to 'reduce the risk that the limits of [teachers'] knowledge will be tested … less exposed' (Alexander, 2017, p.31) creating a monologic voice that reflects supervisor vulnerability.

5.8 Underestimation of challenge by the supervisor

Supervisors suggest that their respective students will find project learning difficult, where a learning paradox seems to emerge as projects are highlighted as being academically ambitious yet simple to master. Mr Porter creates the impression that project learning is '… a lot to take on for a year 9 student. This kind of like higher level academic writing does not normally happen on this scale … you haven't really done a project on this scale before … It's

not so often that we do that [write a bibliography] in our ordinary lessons.' Phrases such as 'not normally' and 'our ordinary lessons' suggest that that the taught curriculum is not only narrow in its approach in supporting project learning skills but is non-existent. This also indicates the novelty of the context for both parties and the challenge of adjusting to the new conditions. The comments 'not so often we do that' implies that creates misconceptions as to what students are capable of and what teachers might be confident in teaching. This language becomes almost cautionary, where supervisors project the belief that students will struggle and enforces the message that students must listen to supervisors as supervisors know more than students, an assumption that is also challenged in this research. It seems that supervisors can be reluctant in being 'courteous enough to translate material into logical forms and challenging enough to tempt [students] to advance' (Bruner, 2006, p.55), resulting in an emptiness in discussion as supervisors might be reluctant to reveal their own gaps in knowledge. Mr Hop reiterates the notion that project work is something intellectually challenging:

> 'I mean you're … as a 14-year-old discussing epigenetics Steve … which is a massive topic, and you've tied it into your case for Pele, really, really well… that's a big complex topic for a young student to get in their head.'

Mr Hop's praise indicates a sense of student achievement; however, this appears contradictory in meetings, where a complex relationship emerges between addressing difficulty and ease of writing research projects. Mr Hop acknowledges project learning as extending student thinking beyond the taught curriculum, 'I mean, you're … as a 14-year-old discussing epigenetics Steve … which is a massive topic', but the guidance offered to support the development of Steve's knowledge is limited. In practice, Mr Hop does little to mitigate the difficulties of these new challenges throughout supervision. Mr Hop's dismissive reference to the ease of structuring found in '…blah blah' shows little time is taken to

consider the challenges of learning to write in this new style for Steve, with a similar assumption that Steve can rephrase ideas without difficulty, ‘Same info, same sentence, but you present it differently. Yeah?’ The repetitive ‘same’ shows an expectation that Steve will be able to revise phrasing with proficiency and without Mr Hop checking that Steve understands, ‘Right! Moving on then.’ The imperative language implies an urgency, reflecting both time pressures and a reluctance to engage with the possibility of misconceptions and alternatives, despite the optimistic approach; ineffective dialogue can be positive in tone yet unmotivating at the same time.

Supervisor belief in students’ abilities and brief explanations seems to stop students from checking understanding, creating the illusion that project work is something that should come with ease and draws students into complicitness that nothing needs to be discussed. Miss Moon unintentionally silences Phillip through her reassurances by claiming, ‘it should be nice and easy when you come to your discussion … perhaps a really simple column could be added’ and ‘So a quick proofread and you’ll spot all the errors’. Miss Moon anticipates that Phillip can identify what ‘errors’ mean in the context of research, without establishing if the error is in understanding, structuring or language communication. This assumption that students can self-correct and acknowledge strengths in writing is an ambiguous assumption. Mr Porter’s flippant tone in, ‘That kind of thing … You can just pick up on those, they are just silly things … I think that’s fairly straight forward really…You’ll smash that out no problem’ also shows a rhetorical trapping and that discussion can be closed down to avoid more difficult aspects of project learning, maintaining a type of misplaced positivity through supervisor power (Wegerif, 2020) where teachers remain unchallenged about the ways ideas are developed through use of praising students’ self-belief.

Rhetorical trapping offers no space for challenge, ‘… Nice and simple. Alright?…’ as the tag question serving to reinforce such beliefs. There is an assumed expectation that writing for

project learning is something that these students are shrewd enough to manage: ‘will be easy, nice and simple’, showing that project work receives limited modelling and fewer teaching opportunities; there is the sense that project learners, on some level, are untaught during the learning process. For Wegerif (2020), these assumed capabilities are the result of teachers projecting an academic image onto students, a double-voiced self, where through ‘the interplay of dialogue we do not just address ourselves to the other as a physical object, but we address our own idea of how they are likely to respond to what we are saying’ (Wegerif, 2020, p.20). Discussion based on presumed ideas of student understanding creates a fictious dialogue (Friedman, 2001, p.26), resulting in a loss of student identity as discussion partner and learner; supervisors and students do not fully understand each other on an emotional or academic level. Supervisors appear reluctant to engage in the type of research rich dialogue that is assumed to be taking place, acting instead as knowledge providers rather than allowing students to see themselves as their own teachers (Hattie, 2014); feedback is something that happens *to* students rather than with them (Bruner, 1960, p.20) and therefore becomes an assumption of student understanding.

5.9 Persuasive and authoritative voices

Supervisory dialogue is frequently dominated by both functional instructions and pre-emptive speech, particularly when Miss Moon tells Phillip how he might want to think rather than asking Phillip about his thinking, ‘or you know that kind of thing and then you will have identified … and then you'll know which ones to refer to … you might want to think about ... so I think this is going to be really helpful.’ Miss Moon seems to suggest Phillip must think for himself yet concurrently tells him how he should be thinking. In Bakhtinian (1986) theory, there are two key voices in education: authoritative and persuasive, with both always attributed to teachers. The persuasive voice is viewed by Bakhtin (1986) as the most important, as this voice speaks to the student from the inside, appealing to intrinsic

motivations and desires, which is the point where dialogue becomes most transformative and departs from simple functional and imperative interaction. The persuasive quality to supervisors' suggestions reduces students' abilities to make independent research decisions. Miss Moon seems to advocate for flexibility in thinking but does not allow for this space in dialogue, 'I think I'm probably thinking this…You know? I doubt that would be the case... probably? But you never know.' Miss Moon invites Phillip to guess her thinking and, on some level, seems to assume that he understands. A meeting of minds is denied in the dialogue itself, with invitations to join dialogue that rarely manifest as authentic (Littleton and Mercer, 2013, p.8). This moves towards pre-emptive thinking, which contributes to student silencing not only by allowing teachers to dominate discussion, but by inhibiting students from being able to co-construct ideas, 'You then need to think about how you are going to order these themes, you know? We just need to think about our structure, which will be easier when we finish this… So I was thinking … maybe you could rephrase it or something?' Miss Moon's thoughts reflect the complexity in thinking taking place, with movement from the collective 'we' to the first person 'I' and then the second person pronoun 'you'.

There is a subconscious acknowledgement of the different thinking tiers operating in discussion and some awareness of how challenging it is to present the conscious self in acknowledging these different thinking considerations during supervision. One such impact seems to be instructional and authoritative talk rather than co-constructive and transformative opportunities, moving towards what Alexander (2017) deems as talk whereby 'the teacher retains [in] absolute control over the direction of the interaction of which individual questions and answers are a part' (Alexander, 2017, p.15). This can be detected in Miss Moon's need to record her thinking, '(Laughs) Ha! I'm writing it down for myself as well … so I'll type it up and email it to you … so …yes… we will do that … so I think that's going to be really

helpful'. Miss Moon's behaviours show that supervision can result in an overly invested sense of teacher and a reduction in student agency.

5.10 Enthusiasm for learning

Supervisor enthusiasm and wonderment for students' researching experiences appear reduced perhaps due to what might be seen as time pressures and performativity demands (Unwin and Yandell,2016), which reduces a 'sense of excitement about discovery' (Bruner, 1960, p.20). When moments of praise and joy are shared, they typically appear towards project completion rather than a maintained aspect of student motivation. In Mr Hop's final meeting with Steve, Mr Hop demonstrates praise for Steve's passion and knowledge, 'how you've linked that in with genetics, which linked into your epigenetics and about his family, and his environment is just a fantastic final paragraph.' Steve's expertise and passion are confined to the written word. Time for passion and links to knowledge development are suppressed verbally, remaining only in Steve's reflective log entries, where he appears to find opportunities to make sense of his thoughts, 'This is probably my favourite source, as I find the idea of epigenetics fascinating. Epigenetics may prove to be a key factor withing my project, therefore I want to take my time. Before discovering this article, I was unaware of what epigenetics were, but now I have read this article, I know understand what they are.' It appears that a reflective written voice emerges more freely and that there is perhaps a type of 'exuberant voiceless participation' (Alexander, 2020) as he has few opportunities to share passion in discussion.

When such opportunities are given for students to speak passionately, Phillip emphatically shares how much he has learned during the project, 'Oh yeah, definitely. Mainly I did not know anything about the war, the nature of how they [the Vikings] came here. And lead England becoming a full country.' Steve's and Phillip's enthusiasm for their respective topics show a sense of intrinsic motivation to discover new knowledge (Bruner, 2006, p.54), which

is not directly concerned with project outcome and is different to how Mr Hop reminds Steve that ‘it’s definitely going to pass in my opinion and score really highly’ and ‘this is the sort of question that I’m going to ask you in your, when I’m marking it.’ Supervisors would benefit from re-considering the importance of generating enthusiasm, to be excited about students’ thinking more explicitly as it is ‘not what goes on within the minds of the partners in a relationship but what happens between them’ (Friedman, 2001, p.25). There is an emotional space existing between student and supervisor, one where the importance of connecting through the love of learning remained undervalued and unrecognised; understanding one another comes from sparking both an emotional and academic interest between participants (Volosinov, 1920, p.181), which would provide greater opportunity for students’ interests and enthusiasm to be heard through dialogue. Instead, however, students and supervisors demonstrate little enthusiasm and curiosity in what seems to be an intimidating space.

5.11 Speech imaginations

Supervisors appear to find navigating the direction of dialogue from start to finish complex, with ‘the inability to command a repertoire of genres of social conversations’ (Bakhtin, 1986, p.80), and to recognise that there is a language of co-constructive talk necessary as a specific genre of project-based discussion. Navigating discussion in this way requires a speech imagination, where supervisors encourage students as participants capable of shaping and influencing the direction of discussion throughout. It is not necessary for supervisors to be experts in students’ research topics and as such supervisors would benefit from a repertoire of different ways to engage in imaginative discussion, which requires more than asking a series of questions (Bakhtin, 1986, p.81). In Bakhtinian terms, speech imagination goes beyond the use of question types, by reassessing discussion holistically and how dialogue is structured from start to finish. Difficulties in communication might be less about knowing question types and more with supervisory ‘inability to command a repertoire of genres of social

conventions' (Bakhtin, 1986, p.80). Mr Hop shows what can happen if there are limited discussion strategies as he tries to navigate Steve's closed repeated responses of 'yeah' without imaginative steering, which results in there being an overall loss of command over discussion (Alexander, 2020, p.14). Across all three transcripts, Mr Hop and Steve demonstrate frequent mirroring of his 'Yeah? Yeah' structure, creating a sense of closure or shut down where Steve responds by returning Mr Hop's phrasing in a way that verbally captures them both; neither student nor teacher develop thinking from this point, despite Mr Hop often beginning this sequence with 'Does this make sense?'

Steve: Yeah.

Mr Hop: Yeah?

Steve**:** Yeah!

Bakhtin (1986) propounds that navigating the course of a conversation requires a particular repertoire, whereby students and supervisors develop strategies to move from the start of discussion successfully to the end; however, Mr Hop shows that movement can be stunted in discussion as closed patterns of speech trap speakers into difficult positions. Steve answers with only closed replies to this short non-question when Mr Hop may have intended to draw out Steve's thinking. The word 'yeah' can be used in different ways, perhaps connotating a type of illusionary understanding as to what the other is thinking, as the minor sentence moves to the interrogative and then to the exclamatory, but what is being understood in terms of developing understanding is not pursued.

The ambiguity of frequent 'yeah?' perhaps increases the possibility of misunderstanding where, as Mercer (2002) suggests, 'joint activity does not always lead to success … people frequently misunderstand each other, and that joint activity can generate confusion' (Mercer, 2002, p.3). This becomes an anticipated dialogic pattern between Mr Hop and Steve,

suggesting that neither student nor supervisor can imaginatively move beyond this entrenched structure. Dialogic modelling and knowing how to navigate discussion from start to finish, is missing from Mr Hop's approach, which is reflected in the limited 'yeah' patterns as this closes discussion and Steve's chances to show his knowledge or uncertainty. This fixed 'yeah' pattern is a feature of closed questioning where in the second recording Mr Hop asks a total of 72 questions in 17 minutes, with no questions asked by Steve. Phillip also offers many brief replies of 'yeah', which he reflects in his own annotations as meaning more than just indicating a lack what to say, but rather a sense of not knowing *how* to respond. Phillip has stopped actively listening; it appears that he is silenced by the intensity of the discussion. The brief 'yeah', according to Phillip's transcript annotations, shows that the listening is illusionary, 'I feel like I have to show that I am listening …I try to show that I am concentrating … I say 'yeah' lots and I'm brief.' Unchallenged and unimaginative 'yeah' responses stop Phillip and Steve from communicating purposefully and creates passive performative roles where students play the role of listener. The data suggest that one-to-one supervisory dialogue has exacerbated student passivity and is non facilitatory, failing to accommodate microdialogues that could support 'the development of consciousness [and] an intervention in the mind of the learner' (Skidmore, 2019, p.34), and the potential for more imaginative navigation in discussion. Mr Porter comments, 'Oh, okay, you're not thinking about that! (laughs) Okay you're thinking you've got PE … you're not thinking about this' showing that students unable to sense clear discussion paths are likely to mentally excuse themselves from the discussion. Darrell's distracted mind also suggests that meetings at the start of the day are more likely to be interrupted with the demands of upcoming lessons and that discussion outside timetabled lessons can be difficult to commit to. There are also physical distractions found in Mr Hop and Steve's early meetings, where Mr Hop shows non-verbal signs of being distracted and hurried in meetings, as meetings were often punctuated

with the telephone ringing and food being eaten, ‘crunch, crunch … eating more crisps overlaps … crunching, chewing … eats more crips… puts crips in mouth … phone rings.’ This signals not only a distraction in focus between supervisor and student, but also within Mr Porter’s thinking (Brookfield and Preskill, 1999, p.15). Eating creates an informality to the meeting and might suggest a lack of preparation and at worst implies a devaluing of the time allocated for Steve. Mr Hop might assume that he is showing genuine interest but instead, at times, presents an uninvested self that is inauthentic in discussion (Richardson and Healy, 2019, p.1100) and is uncreative and uninterested.

5.12 Supervisor questioning

There is a sense that supervisors are acting out the role of genuine questioner in dialogue just like the students appear to play and act the role of listener, as supervisors ask questions that often appear undirected. Steve, Phillip and Darrell are frequently unresponsive to an excessive number of questions, showing how questioning in isolation can be detrimental to the quality of dialogue. Bakhtin suggests that one of the most 'important lessons that a teacher can pass on is the right to question' (Bakhtin, 1986, cited in Mercer et al., 2019, p.36) and as such brings the need for students to question and interrupt the flow of discussion to make the experience more meaningful (Bruner, 1960, p.4). Allowing students to interrupt by asking questions might be one way to encourage a more imaginative discussion experience, but supervisors do not necessarily facilitate effective dialogue or encourage students to ask questions, as illustrated in Table 5.3:

Table 5.3 Number of questions asked.

Participant	**Transcript 1**	**Transcript 2**	**Transcript 3**	**Total recorded meeting time (approx.)**	**Total questions asked by teacher**	**Total questions asked by student**	**Combined number of questions**
Mr Porter	33	21	32	55 minutes	86	27	113
Darrell	3	9	15				
Miss M	36	21	23	57 minutes	80	9	89
Phillip	0	4	5				
Mr Hop	30	72	22	39 minutes	124	2.5	126.5
Steve	1	0	1.5				

Miss Moon describes Phillip as having,' so many lovely things that you have talked about, which I thought was brilliant,' but in practice this is both illusionary and unimaginative in exchange as Phillip has discussed very little. Miss Moon refers only to Philip's writing here and does not acknowledge the verbalising of knowledge in the same way that writing is monitored, which is reflected in the 57 minutes of dialogue where 89 questions were asked and only nine come from Phillip. Miss Moon's consecutive barrage of 11 questions appear as part of a monologic delivery, where questions are used to generate her thinking, 'Do you think it's credible? When have they written it? What is the writer's standpoint?' and 'You know you are cross-referencing with your own knowledge and wider reading and **obviously** other sources.' Questions asked presume knowledge and appear almost checklist-like in presentation, moving from one point to another in quick succession that provides Phillip with no thinking time and the chance to respond. There is a profound misunderstanding of questioning from Miss Moon, as questions are illustrative of what *could* be explored, but instead shows a type of non-question, acting only as a form of rhetorical function. Miss M is not creating dialogue with these dummy questions, but instead shows how supervisors can ask questions without seeking any real answers. There is an illusionary aspect to 'questions' posed to invite participation, with high volume questioning suppressing discussion and reaffirming teacher dominance and traditional monologic structures (Skidmore, 2019; Wegerif, 2019).

Monologic structures are also strengthened by quoting Phillip directly, 'I just love this phrase: 'also the small impacts it had on archaeology have very little impact on the average person who is neither a Viking enthusiast nor an archaeologist.' I just love that.' While quoting from a student's work could be a springboard to explore ideas, language again becomes rhetorical here, 'I just love that', which reinforces her own position and authority of her view as a judge of the writing; Miss Moon has made the judgement that there is nothing

more for Phillip to say, 'I'm right.' Thinking together is often an illusionary goal when students are presented with one version of knowledge and truth which is that of the supervisor (Wegerif et al., 2004, p. 144):

> Miss Moon: 'you said 'this means that technically if it were not for the Vikings we would not have got the things we got from the Norman conquest'. I thought that you could take more explanation there, and maybe **you could say** Norman culture very much based in Viking culture, or had lots of prevalence in Norman culture, because actually ermmm … I think that you could argue either wise historically but like surely that Normans were the Normans and the Vikings were the Viking? It might be just worth saying that link and **saying how you know** that Norman culture was very much based on Viking culture.'
>
> Phillip: Yeah
>
> Miss Moon: (talks over) oh on your paragraph on language – all very brilliant by the way – link back to where you say, 'therefore that was a big impact on language and undoubtedly. But it was not as big as the other factors such as invasion, and how invasion then impacted landscape and so forth.' **Does that make sense?**
>
> Phillip: Yeah.

Miss Moon concludes her monologue with a question that is almost rhetorical, where she is not expecting Phillip to disagree or modify these thoughts. Phillip's ideas are presented in ways that undervalue the opportunity to discuss what is felt and meant, despite the references to 'you' which are frequently an acted-out perception of another in discussion. Miss Moon's feedback is authoritative in nature, as she tells Phillip what to think rather than helping him through a more exploratory approach (Wegerif et al., 2004, p. 145). Wegerif (2020) claims that there is a relationship between speakers at work within dialogue that goes beyond what can be heard, 'despite what people might claim about it' (Wegerif, 2020, p.35), as Miss M

dominates with her subject knowledge that is used to monopolise discussion to 'reduce the risk that the limits of [teachers'] knowledge will be tested' (Brookfield and Preskill, 1999, p.155). Phillip is told what to think rather than learning how to communicate critically and reflectively, 'I think that's what you might be thinking … maybe you want to think about that'. Mr Porter shows a more cautionary approach towards getting started, where he shows his own uncertainty as to how to proceed with the project:

> Mr Porter: '…the reason why I'm saying about the erm, literature review, is that Miss will share is because **when we see** it, **we see** what the house looks like. Then **us** building the house is quite straight forward. Or you building the house should I say, is really straight forward because **you** know what it looks like.'

Mr Porter starts by acknowledging the co-constructive nature of working on the project together and then self-corrects his phrasing to show that Darrell's understanding should be at the forefront as the architect of his project; a sense of needing to work together but at the same time meaning making must be independently achieved. Mr Porter, like Miss Moon, asks, 'Does that make sense?' to which Darrell replies, 'Yes, it's just like you – so you know exactly what you have to do …' Mr Porter then interrupts with, 'Exactly.'

Mr Porter continues to invite Darrell to clarify his (and Mr Porter's) own understanding of project learning as Mr Porter asks, '…so at this point you're just, you're still in the sort of reading phase if you like. Is that right? Or research phase maybe I should call it? … Two thousand five hundred words is the …just the literature review? Or the whole thing?' Darrell's response is light-hearted, with a sense that Mr Porter is new to the qualification, '(laughs) it's like five or six hundred words for the literature review.' Mr Porter also finds himself asking Darrell, 'Does that make sense?' when he typically does not explain or offer the answers Darrell was really searching for. Darrell's questions often remain unanswered in

Mr Porter's relief that Darrell may have answered his own question without having discovered anything:

> Darrell: 'How are you going to incorporate like all your sources, and if they're reliable…?
>
> Mr Porter: (interrupts) yeah, well what you would do is you would basically write each bit separately.'
>
> Darrell: 'So you kind of just work through section by section?
>
> Mr Porter: 'Exactly! And then…
>
> Darrell: 'Yeah that's … yeah it's just writing it down innit?
>
> Mr Porter: 'Exactly! Exactly like that.'

Mr Porter's repetitious and enthusiastic 'Exactly, yeah!' appears to deflect from a more detailed explanation, as Mr Porter tries to build confidence in his understanding and closes down any further opportunity to question. Mr Porter shows an awareness that Darrell might be more informed than he might imagine him to be, which creates a more empowering position for Darrell, 'You have to tell me if you already know this? … Have you heard about this before? … Is this anything specific that you have concerns about?' Knowledge is also checked by Mr Porter, which is different to Miss Moon and Mr Hop who let Phillip's and Steve's respective quoted voices dominate, 'Could you tell me when it changed again? When was it changed, a long time ago? 1998?' Darrell responds with '1998 was when it was overlooked. It was changed to 10 in 1963.' This confirmatory approach appears to increase student confidence levels and allows Mr Porter to check understanding and direct discussion in more purposeful ways. Mr Porter allows Darrell to appear knowledgeable without appearing vulnerable in his own skills, a position in which Darrell responds positively as he asks the highest number of questions, 27 across all three recordings, gradually increasing

from three, nine and then fifteen, suggesting that this confirmatory approach increases confidence levels.

The increased freedom of project work brings greater not fewer risks to students achieving and as such requires supervisors to support in new ways when navigating this approach to learning. Questions asked by Steve that are more structural and overall organisational in nature, seem to be responded to less imaginatively and are often closed or interrupted, hindering the answer in any depth:

> Mr Hop: 'Can you see what I'm saying?
>
> Steve: (unclear) 'It's like one …'
>
> Mr Hop: (talks over) 'This example could go some way in proving how genetics can affect the way we operate in our environment.'

Mr Hop's almost dismissiveness in listening to Steve's ideas moves towards Vygotskian empty verbalism, where discussion can become illusionary (Vygotsky, 2012, p.83) as Mr Hop speaks for Steve in ways that might not take place in the classroom (Brookfield and Preskill, 1999, p.15). When supervisors do attempt to explore aspects of project writing, it is done so with little modelling, 'But you can do whatever you like obviously, it's your style, it's your formatting. That's how you do it.' The repetition of personal pronouns 'you' and 'your' places decision making solely with the student and not Mr Hop, reducing a sense of personal accountability and making discussion a solitary experience that does not help with such decisions needed on behalf of the student. This is an illusionary sense that supervisors are giving ownership to students, yet the dialogic experience is not giving power, which creates a dilemma and is paradoxical in nature.

5.13 'I feel – I think' paradigm

The concept of co-construction in a supervisory context is underpinned by what I came to understand as an 'I feel – I think' paradigm. This paradigm has links to Buber's (Wegerif,

2019) ‘I-It’ and ‘I-thou’ model, with a focus on strategic and detached discussion vs communicative and connecting responses respectively. Buber’s model was later extended by McGilchrist (2009) and his reimagining of the same concept through a neurological, scientific and culture lens: the impersonal vs the personal (McGilchrist, 2009, cited in Stewart and Kellas, 2020, p.6), with the latter I came to apply to supervisory contexts. There were patterns in dialogue where students attempted to express a more personal ‘I feel’ response and subjectivity that supervisors frequently undervalued in place of ‘What do you **think**?’. Supervisors neglect the need for familiarity gained by personal experiences to aid understanding, denying the ‘interpersonal experience [that] confirms the uniqueness [of] human contact’ (Stewart and Kellas, 2020, p.6). Across all three meetings between Mr Hop and Steve, Mr Hop asks questions seeking opinion-based answers requiring Steve to demonstrate his evaluative knowledge, ‘So like what **do you think?** So what **do you think? Do you think** he was born to be as good as he was? Or **do you think** he earned it? Okay explain that.’ Steve’s responses to these questions show that connection to personal experience comes before stating a claim to knowledge, and that there is something dialogically challenging and unfamiliar for students to participate in the sharing of knowledge without sharing a more personal and subjective view in the first instance, ‘So **I feel** I might have to tweak it … **I feel** like they are very similar … **I feel** that I’ve gone into too much detail here… ‘Yeah, I think it’s. So **I feel… I feel** like…’ Steve’s ‘I feel’ sentences reflect a tentativeness and modification of views while testing them and speaking aloud, showing how responses from personal experiences can stimulate soliloquising experiences that precede knowledge-based responses such as ‘**I think that**, **I feel that** he was born with erm like a natural talent’. Asking students how they feel about a topic lays foundations in achieving later confidence to commit to knowing, achieving a ‘mutually, direct, and open [discussion] with another’ (Friedman, 2001, p.25) Mr Hop initiates questions that offer Steve the chance

'to choose rather than react' (Stewart and Kellas, 2020, p.8) and therefore allows Steve a perspective in dialogue, moving between both feelings and knowledge:

> Mr Hop: 'So do you think you are genetically sporty, or do you think reflecting back on (pause) you know all your training and that. You reckon it was because you learnt it? Or reckon you were naturally pretty good?
>
> Steve: '**I think it's natural because I think** … my sister … naturally quite athletic as well. But I feel like both us doing sport and as we've progressed and done it more, as we've got older, **I think that we** have yeah, I got better from it so more nurture.'

Steve begins to move away from the 'I feel and I think' pattern of response to more assertive and knowledgeable statements, as he is asked more specifically to link his own experience to the topic, resulting in a more confident engagement:

> Mr Hop: 'So what's that done to your own football career if you're Pele?
>
> Steve: '**I think it was** when I read in the bibliography, he played a football match in the stadium and the fans started like throwing money on the pitch. And that's when he mentioned, that as well as just playing football he wanted to become famous because of all the attention he got. **I think he** wanted both'.
>
> Mr Hop: 'So what **do you think** first of all? What **do you think** is like the strongest part of your project? And what **do you think** you struggled with?'
>
> Steve: '**I think I have** … for strengths – **I think about** … like knowledge and facts. **I think** that I included a lot of information that helped me.'

Steve's responses show some development has taken place from 'I feel' to 'I think' structures and that supervisors like Mr Hop who rely on the 'think' only type of questioning can inhibit students at the start of project work who are not yet confident in presenting developing knowledge. Project work might allow students to realise the potential for academic achievement in research, making this more an actualisation rather than an illusionary image,

but only if supervisors provide such opportunities (Wegerif, 2020). It is through Mr Hop's more imaginative attempts at asking Steve to, 'imagine you live there … can you even imagine being over there … And imagine the talent of the people that he is playing with' that entice a more confident Steve to respond. The efficacy of Bruner's 'I-thou' theory in one-to-one supervision might only prove successful if students and supervisors can engage on an emotional and academic level, if speakers can 'embrace, understand and sense the speaker's speech plan or speech will, which determines the entire utterance, its length and boundaries' (Bakhtin, 1986, p.77). There is a problem if supervisors and students cannot anticipate such discussion responses, resulting in 'people frequently misunderstanding each other, and that joint activity can generate confusion' (Mercer, 2002, p.3). Miss Moon also asks more subjective-based questions, appealing to what Phillip might 'feel' about a topic, but these questions are met with objective responses by Phillip, showing that students can also find reflective-based responses challenging in the first stages of supervision. Students would benefit from supervisors developing a speech repertoire that moved between 'I think' and 'I feel' sentence starters:

> Miss Moon: 'So how are you feeling you're getting on?' and 'So you are feeling okay, do you feel that there's anymore need for further research, or do you feel you actually – you've got enough now?'
>
> Phillip: 'I think … (pause) since I've finished … umm, I've started, I started writing my literature (pause), I think I've been like a lot more organised with the whole thing … I think from what I've seen of the discussion, it is going well.'

Phillip's private reflections on this transcript show his interest in these replies, with comments on how he found these types of questions challenging, 'I hesitate a lot, hard to formulate what I want to say. I am struggling to get my words out and I am nervous and unprepared.' Phillip struggles to respond using 'I feel' structures' which Miss Moon

frequently resorts to, which although might be seen to reduce a less artificial and more exploratory (Matusov,2014), becomes an approach that creates an early barrier in communication.

5.14 Interruptability

Friedman (2001) posits that 'The act of interrupting a teacher challenges public discussion ground rules, but to engage in a true, less fictious dialogue, such interruptions are vital' (Friedman, 2001, p.26), which is perhaps aspirational as supervision is confounded by an imbalance of power for key stage 3 students (Alexander, 2017; Skidmore, 2019). The imaginary aspect of dialogue that Friedman (2001) warns of seems to be of greater risk in one-to-one supervision, as students experience dominant supervisory monologic states, where students not only struggle to take ownership of what Bakhtin calls 'the word in language [that] is half someone else's' (Bakhtin, 1986, cited in Mercer et al., 2019, p.34) but find it difficult to connect in the first instance; students in this case study do not appear to have ownership. Dialogue creates improvisation issues that are problematic on several levels, with difficulty found in connecting both emotionally as well as dialogically for supervisors and students. Decoupling the notion of interruption and disrespect from students, particularly when Phillip becomes an audience to Miss Moon's soliloquising is a challenge. It is the supervisor's role to facilitate moments of interruption as 'comprehension must precede production … a learner cannot benefit from such assistance otherwise' (Bruner, 2006, p.199) but interruptions are likely to be perceived as a form of disrespect, with silence associated with conformity. These students are, however, developing experts, as evidenced in their written work, but it seems that supervisors are unconsciously routinised in silencing students during discussion. A perception shift in how students and supervisors view interruption would likely make communication more open and honest, as the notion that silence equates to effective learning and that interrupting is disrespectful and unproductive would be

dispelled. Although students seem to consider passive listening as respectful, supervisors frequently interrupt students, perhaps showing a power dynamic that is maximised in one-to-one discussion. It appears that supervisors interrupt not only to change a student's train of thought but also perhaps to reduce possible questions that supervisors might struggle to answer.

Interrupting and overlapping appears across all meetings, with patterns of interruption that stop students from formulating a response and thinking more reflectively. Mr Porter, particularly at the beginning of supervision, interrupts the flow of dialogue by closing the possibility of exploring Darrell's evaluative thinking, prohibiting Darrell to complete his thinking. Early interruptions at the coming-to-know each other stage suggests a nervousness from Mr Porter, with an increase in pace that shows his need to move towards control and familiarity with the topic. Darrell tries to complete his sentences against a range of interruptions, as Mr Porter interrupts to either rush points or change focus:

> Darrell: 'Yeah … (pause) I looked into the …ummm both the cases. I think the one with the …
>
> Mr Porter: (Talks over) There was the James Bulger and then Derek Bentley.
>
> Darrell: 'I don't think that the Derek Bentley things gonna …
>
> Mr Porter: (Overlaps) 'Okay that's fair enough.
>
> Darrell: … much. The James Bulger person, he was – that was more useful'.

Darrell reflects in his private annotations that, 'I never noticed the overlapping. In real life it also felt more intense and quieter in real life.' Darrell's unawareness may be due to the normalised experience of students being silenced by teachers and that lived moments in discussion are 'quieter' and more silent beyond what the written transcript suggests.

In contrast, Phillip reflects less on interruptions and more on the length of Miss Moon's speech, which limits potential for Phillip to interrupt, 'supervisor paragraphs are much

longer; she is the one helping … flows a lot better than my transcript. Miss Moon is more experienced.'

Phillip's comments imply that to be an expert means to dominate discussion, which is perhaps something considered by both students and supervisors, and that students are silenced in front of those perceived to be more knowledgeable and experienced. The perception that knowledge is fixed and belonging to the supervisor appears throughout and that ideas are pre-formed and can be produced; however, co-constructive discussion enables conceptual development, the provisional nature of knowledge, which does not appear in what is a didactic experience. Didactic experiences then dominate as students are reluctant to interrupt discussion, showing that 'talking with peers outside the visible control of their teacher … enables them [students] to take a more active and independent ownership of knowledge' (Mercer, 2008, p.94). Mr Hop also implies an almost normalisation of silencing in supervision, but also undervalues the importance of listening as a form of active and engaged response rather than remaining passive and uncalled upon to reply when, 'you've worked really hard, and it is really good alright. But in terms of academic writing this is what happens. Yeah? You get someone to unpick it and then you work on it', with Mr Hop providing a didactic experience of supervision and closing opportunities for possible transformative influences on Steve's thinking. Research undertaken on hypercorrection by Metcalfe and Miele (2014) focuses on what is termed high confidence errors, where students are more likely to self-correct a strong belief and understanding rather than a low confidence error that came from a guess or erroneous sources (Metcalfe and Miele, 2014, p.1). However, one-to one supervision seems to make such self-correction less likely, particularly when students do not have the skills needed to interrupt.

Frequent supervisory interruptions from Mr Hop, Mr Porter and Miss Moon perhaps show a supervisor's desire to maintain control (Skidmore, 2018, p.34). Supervisors might be more

inclined to talk over students when faced with the less predictable one-to-one supervisory discussion, keeping the focus on their own sense making rather than that of the students. All supervisors use the phrase, 'does this make sense?' which is often met with short replies or 'yeah' by students. Miss Moon's quick trios of 'does this make sense' and 'if that makes sense' shows a sense of self-interruption, perhaps checking more her own understanding than that of Phillip's (Piaget, 2010).However not all interruptions are to shorten student replies, as Mr Hop interrupts positively to extend his ideas with Steve stating, 'So I feel like … 'and Mr Hop interjecting with, '(interrupts) What do you mean by enhanced?' Steve, however, finds this interruption a challenge with, 'Errrm … ummm say he enhances natural talent or …' to which Steve is then stopped from offering a response. A more imaginative way of positively interrupting dialogue might be found through humour where, rather than necessarily challenging or co-constructing ideas, there is a natural light heartedness between Darrell and Mr Porter providing a more playful interaction. Here Mr Hop tries to find a particular section of Darrell's work to focus on:

Mr Porter: 'Do you know what I'm talking about when I say lack lustre media coverage?'

Darrell: 'What? What I wrote?'

Mr Porter: 'Yeah, you've written it.'

Darrell: 'Yeah (jokes) 'cos I wrote it!'

Mr Porter: (laughs) 'Yeah, where is that?'

Darrell: 'I don't actually know …'

Mr Porter: 'I thought you wrote it?'

Darrell: (Laughs) '… Well I thought you meant do I know what it means? I was … like thinking…'

Mr Porter: 'No, sorry, I know what you mean!'

Darrell's and Mr Porter's informality relieves some pressure in discussion and shows that humour can help a student to be heard in conjunction with a supervisor's voice. This light-hearted relief from more challenging content is rarely found in Steve and Phillip's respective meetings and, when it does appear, Phillip acknowledges in his private reflections how such moments provided some welcomed repose from 'just boring formality with some humour too'. Phillip reflects on a moment where he could not articulate how he had planned for the final section of his project, 'I was just like … I'd done it once and then I was just like okay … and then I done … I don't really know what I did (everyone laughs)'. It seems that a more playful and creative voice over 'explicit reasoning' (Wegerif, 2020, p.31) is possible but it is a rarity and not explicitly modelled.

5.15 Students as expert presenters

The final theme identified in this discussion is teachers recognising students as knowledgeable presenters. It is through taking the role of final presenter that students seem to be permitted the expert role, as when students reach completion, projects conclude with a short summative oral assessment, and it appears that supervisors encourage students to take the role of expert. The oral assessment allows students to share changes and challenges throughout the research process, and justification for structuring and final conclusions, with Mr Hop reminding Steve that, 'Although Miss C is very very intelligent – you are the expert in 'Pele – nature vs nurture'. She wants to learn from you, that's what a viva is.' Mr Hop is careful to maintain a sense of teacher hierarchy through the repetition of 'very' but at the same time places Steve in a knowledgeable expert position. The concept that Steve could adopt a teaching role in this process has been underestimated, with the final assessment prioritised over the process of becoming expert and what this means for future knowledge development. Steve's assumed expert knowledge has, however, developed in almost complete silence, as within 39 minutes of recorded supervision there are 126 questions asked

with Steve asking only 2.5 of those (see Table 5.2), with the .5 showing a false start, which is not pursued. Having been supervised in almost silence, Mr Hop builds Steve's confidence by positively indicating that he can achieve the final task of presenting, despite Steve having been offered few opportunities to share his thinking throughout the research process: 'Remember that you're the expert, yeah! Miss wants to hear everything you know about your topic because she's not going to have as much knowledge about it as you … always remember that you hold all the information … you know everything you need to know … something you're really passionate about'. Knowledge appears finite, suggesting that Steve's knowledge is qualification bound and that he has a knowledgeability advantage over Miss C, a position in discussion that Mr Hop has been reluctant to place himself in as a supervisor teacher. It appears comfortable for Mr Hop to place colleagues in less knowledgeable positions than it is to play this role in supervisory discussion because he is not in position whereby his knowledge could be challenged (Vygotsky, 2012).

It is also true of Miss Moon who acknowledges that Philip has taught her, allowing herself to be seen as a less knowledgeable other but only in some instances, 'I felt I learned a lot from you' and 'I feel like I've learned more about the Vikings than I knew before (laughs)'. Despite Phillip having had had little opportunities to show such expert knowledge, it seems that students can take the role of teacher but only on paper. It appears that supervisors recognise student learning but offer little opportunity to discuss this knowledge as part of supervision, indicating how supervisors are concerned with trying to 'scholarise' student encounters, moving away from the subjective to the objective voice, before valuing the role that experiential experiences could play in the meaning making process for students (Mayall, 2010, cited in Alexander, 2020, p.26).

5.16 Conclusions

This exploratory research study began with an interest in how students and supervisors experience supervisory dialogue during project supervision and a belief that there were 'elements worth discovering' (Stebbins, 2011, p.6). Coming to know these elements took place through interpretative processes where I captured and observed rare information about the context and lived experiences of students and teacher supervisors during one-to-one meetings. The exploratory methodology provided opportunities to analyse the mini cases during interpretive processes of incubation and annotation, helping to reveal the realities of this discussion context for these students and supervisors (Reiter, 2013, p7). This process of discovery meant that the research question evolved by recognising different *types* of experiences, allowing for thematic development across the original transcripts. The research question began with an interest in what 'experiences' meant in the context of one-to-one dialogue, which revealed how supervisors can dominate discussion that results in different types of barriers. A range of different barriers influenced the discussion experiences between student and supervisor and as such provided an analytical lens through which to understand the nature of one-to-one dialogue for these students and teachers. By analysing the one-to-one supervisory experiences of three key stage 3 students and supervisors, this study has shown that there are barriers in participation that decrease student involvement in discussion. One-to-one supervisory models do not always provide a valuable discussion environment for students and that supervisors can take performative roles of questioner and soliloquiser and students the deceptive listener. Data showed that behind the dominating voices of supervisors were long periods of student silence, as supervisors prioritised their own sensemaking experiences over that of supervisees. One-to-one supervision facilitated a transmission model whereby teachers talk, and students listen, with students taking the role of audience to supervisors' monopolising of thinking processes and generation of often undirected

questions. Supervisory discussion was neither for nor with students, which brought less freedom to explore student ideas and restrictions in dialogue. It is the illusionary ‘we’ that appeared to be the strongest relationship to emerge from these supervisory meetings. The intensity of such experiences makes it hard to see how students in attentive silence (Stewart and Kellas,2020, p.8) can develop an understanding of what it means to co-construct, deconstruct and develop ideas in collaboration.

Discoveries, reflections, and ideas

6.1 Introduction

The final chapter focuses on discoveries, reflections and ideas on the nature and reality of supervisory dialogue in this specific school context. The chapter begins with a focus on contributions to contextual and professional knowledge, followed by reflections on the qualitative exploratory approach and narrative accounts. It progresses by outlining the value that this qualitative exploratory study has in understanding specific challenges that supervisory dialogue provides for students and teachers in this dialogic context. The chapter concludes with the impact that this has for professional practice and future considerations for project work.

6.2 Contribution to professional knowledge

This research offers insights into dialogic barriers as part of supervision at key stage 3 between students and teachers and has highlighted the importance of discovering the nature of supervisory dialogue before assuming that a particular reality is experienced. This research provides a foundation for deeper understanding of how supervisory contexts contribute meaningfully to established dialogic categories found in T-SEDA (2013-2015). One-to-one supervision is an underrepresented context in dialogic categorisation and, as such, this work presents a unique exposé of barriers in supervisory dialogue (Swedberg, 2020, p.44). This research calls for project coordinators and supervisors involved in project work to consider the claim that supervisory dialogue offers specific challenges beyond what is already known about classroom dialogue between students and teachers (Reiter, 2013, p.10), and to consider ways in which barriers might be mitigated through raising awareness of this type of relationship.

This work contributes to knowledge concerned with dialogic environments, particularly illuminating ways that supervisors might be seen to abandon students in dialogue, resulting in maintained positional power creating 'detached, self-absorbed, reductive' discussion relationships (Friedman, 2001, pp25-26). Abandonment seems to be the result of students and supervisors experiencing barriers in understanding, with the most challenging, perhaps, being that of supervisors' preconceived academic identities and capabilities projected onto supervisees. Projection, in this context, refers to supervisor assumptions that students are more 'like me' than acknowledging the uniqueness of the supervisee perspective (Stewart and Kellas, 2020, p.10). However, despite supervisors finding 'likeness', students were not treated as equal participants in terms of dialogic potential but were instead spectators, observing the sense making experience of their supervisors. It seems that supervisors engage in a type of matured egocentric speech where '[one] talks aloud to himself in front of others' to think through challenges (Piaget, 2010, p.18). This type of speech dominance manifested in personal and professional anecdotal episodes, both seemingly used to help supervisors make sense of the research process. Egocentric speech was often anecdotal, with supervisors revisiting experiences of higher education that implied project learning is synonymous with academia.

High projections of ability onto students often resulted in a lack of learning and disengaged research students in this discussion context. Frequent references to higher education and supervisor experiences of writing dissertations seemed to create the impression that project learning is only for the most academically able students and references to undergraduate and postgraduate work increased discussion barriers, perhaps to protect supervisors' intellectual vulnerability and subject relevant knowledge (Alexander, 2017, 31). Supervisors presented project learning as academically ambitious, which made the nature of project work appear

unnecessarily daunting and as such reinforced the idea that students needed to listen and were less likely to interrupt.

Project learning seemed emotionally challenging for both supervisors and students, with a key barrier being supervisor reluctance to allow students to initiate discussion (Kershner et al., 2020, p.198), an approach that would have helped to place students in knowledgeable positions (Vygotsky,1978). The private one-to-one discussion environment did not create opportunities for students to respond personally, but rather instead served to limit student reflectiveness. There were few opportunities for students to engage meaningfully on interpersonal levels; supervisors undervalued the relationship between personal experience and developing interpretations during sense making processes. For students, it appeared that the familiarity of sharing personal experience came before making knowledge assertions, where 'I feel' preceded 'I think' sentence structures (Stewart and Kellas, 2020, p.8). Teacher supervisors in this research context can show a lack of deeply authentic curiosity when asking students about their thinking and personal experiences, with teachers offering few opportunities for students to be emotionally reflective, a foundational stage in supporting knowledge building and dialogic relationships. The culture within this research setting would have influenced the outcomes of this study, with teachers working within a particular set of values and curriculum decisions and, as such, provides probing questions as to how culture and priorities in schools more generally can affect the quality of dialogue between teachers and students. The existence of potential barriers between teachers and students as part of supervision at key stage 3 should encourage teachers to 'think 'better' or 'differently' about [dialogue] and to consider how things hang together or highlighting previously hidden aspects' (Sandberg and Alvesson, 2021, p.491).

This research aligns with debate and concerns surrounding effective supervision in Higher Education, highlighting the need to recognise 'the style of supervision being adopted and the

candidate's needs' (Deuchar, 2008, p.494); an area of teacher training that is not exclusively applicable in higher education, and may result in future generations of teachers unable to adapt effectively to supervisory roles. Past supervisory experiences in Higher Education might have later implications for project work, evoking 'strong feelings – of gratitude, resentment, frustrations, disappointment, love – because of these remindings' (Grant, 1999, cited in Deuchar, 2008, p.491). This research can be seen as al an important stage in exploring these concerns at key stage 3, with consideration of how dialogic barriers might be overcome, or at the earliest stage recognised, and how supervisory dialogue can be predisposed by an invisible projection of expectation and understanding before the first word is said in certain contexts.

6.3 Reflections on a qualitative exploratory approach

The qualitative exploratory approach allowed for the generation of categories concerned with dialogic barriers experienced during supervisory dialogue. I considered dialogue to be impacted by contextual factors that facilitated a type of unique reality (Sullivan, 2012) and as such required a methodology that was designed to 'maximise the discovery of generalizations leading to description and understanding' (Stebbins, 2011, p.3). A dialogic ontology recognises that there is more than one single perspective in dialogue that needs to be analysed, a 'third voice', in the form of projections from speaker to speaker, whereby each may trap the other by defining their role before the first utterance (Wegerif, 2019). The complexity of projections required an approach that was valuable and 'plausible [in] ways of thinking about reality' (Reiter, 2013, p.22).

I became hooked on exploration during incubation periods (Stebbins, 2011, p.16) and welcomed the flexibility of a qualitative research design and the sense of discovery that this phenomenon demanded, which I came to understand as the 'soul of good research' (Swedberg, 2020, p.17). The first round of data collection revealed an absence of student participation during supervision that I was not expecting and made me reassess what I realised were my preconceived ideas as to how students and teachers experienced supervision. I realised that I had started this research with a degree of assumed professional knowledge, that supervisors, as experienced teachers, would 'know' how to conduct productive one-to-one supervisory dialogue. I discovered that there was a disconnect between what the literature had led me to expect from supervision and the reality of supervisory experiences for these students, which also provoked a sense a personal disappointment as I had hoped to discover students adopting a participatory role rather than passive listener. I considered myself an insider of supervisory dialogue, believing that I understood what it was like during supervision for students and teachers, but through this exploratory process I was

made to feel like an outsider, attempting to look inside at something that was familiar yet suddenly looked very different and new. The qualitative exploratory methodology allowed for supervisory dialogic to be viewed uniquely, allowing for contexts *and* codes to be seen in partnership. There were clear patterns and categories that emerged across the nine transcripts, which has wider implications for research concerned with teacher-dominating talk. This research also offers the foundations for early generalisability for supervisory dialogue as a specific discussion genre.

A strength of using a qualitative exploratory approach is that the *process o*f understanding in the first instance is prioritised and that categorising *is* the process through which understanding takes place. It is just as important as the final conclusions and definition of categories, much like dialogic teaching that emphasises the process through which learning takes place over the outcome. The necessary exploratory nature of this research means that generalisability is limited and that there is a need to apply these emerging categories as dialogic barriers to a wider context and larger sample size for analytical scrutiny.

Conclusions were also drawn from data that could have been analysed more dialogically in approach, allowing for more engagement between participants. For example, in an extended study, students and teachers in their respective groups could have been tasked with creating their own narratives, identifying quotations from the transcripts that were meaningful to them, providing cross-references to my final narrativesand further insights into a complex social reality where ‘meaning does not exist in its own right; it is constructed by human beings as they interact and engage in interpretation (Robson, 2015, p.25)

6.4 Narrative accounts

The main POIs and SPOIs from the narrative accounts allowed for the identification of patterns and meanings ‘that worked together to tell an overall story’ (Braun and Clarke, 2022, p.264) and showed the value in reflexive analysis to deepen understanding before returning to

the raw data. The three narratives provided the opportunity to engage in in-depth analysis of an under researched phenomenon, with a small sample size that allowed for creative interpretive processes to emerge through the narrative accounts. Final themes were the result of constructing narrative accounts that enabled deeper exploration of the raw data that were 'vivid and compelling' (Braun and Clarke, p.264). This research offers a theoretical understanding of the complex nature of supervisory dialogueand introduces a research design that provides a framework for ordering the ways in which dialogic barriers might be interpreted (Sandberg and Alvesson, 2021).

. I was able to achieve some level of emic knowledge status, but I was unable to go further in the systematic integrating of exploring the inside and outside of dialogue 'to gain insights and make meaning' at deeper levels (Wegerif, 2019).

6.5 Insider researcher reflections

My role as an insider researcher meant that my discoveries impacted my assumptions that supervisory dialogue was valuable and student-centred; this research has challenged me to think differently about the ways in which teachers talk with students. Round one of the data collection was a significant discovery in shaping how the exploratory research approach developed. The transcripts revealed the absence of student participation and raised questions including how teacher supervisors had facilitated such silencing experiences. There was a sadness in discovering that students were rendered almost mute in supervision, as I learned something profoundly important about a programme that I had coordinated for nearly ten years. I felt responsible for these discussions and wanted to improve this aspect of supervision, supporting students and teachers to talk and make sense of concepts together. Despite knowing that students and teachers were struggling to communicate effectively in one-to-one discussion spaces, I was unable to intervene during this process, which made this

aspect of the study challenging on professional and emotional levels. When asked by one of my teacher participants how he was doing, I was unable to engage in a professional dialogue regarding my findings, as I wanted to remain non-judgemental throughout the process. I remained neutral, which I felt necessary to protect supervisors from potential feelings of uncertainty about their roles as supervisors. Equally, it was challenging to hear teacher participants comment on how 'good' the last meeting had been, and to listen knowing that what had been considered 'good supervision' was a misconception of dialogic engagement and needed to be addressed.

I had developed new knowledge of supervisory dialogue that I needed to disseminate, but the sharing of this knowledge could not be spontaneous and appear in informal conversation, but instead required time and a purposeful meeting space to think about the ways in which teachers talk to students. Discussion is a daily practice for teachers and students, but how the change in learning context may impact the ways in which teachers and students discuss is an underexplored professional development area. There are few whole-school and department level opportunities for teachers to reflect on the quality of discussion experiences that underpin the relationships between students and teachers, both for students conducting independent research projects or project work as part of classroom tasks.

My position as an insider researcher now means that I can revise the quality of training and support that supervisors receive, but in ways that remain respectful to the teacher and student participants in this study. Supervisory pairs will remain pseudonymised during professional development opportunities, where discussion experiences will be the focus rather than the individuals. Different types of discussion experiences and barriers will be scrutinized with a view to raise awareness of supervisory dialogue as a specific discussion environment, requiring a set of dialogic skills that would benefit all staff.

6.6 Contribution to professional practice

This research connects with wider research interests concerning teachers' concepts of how students learn and the construction of knowledge during supervisory meetings, contributing more broadly to understanding the ways in which supervisory relationships between supervisors and supervisee are established and maintained in supervision (Andriopoulou and Prowse, 2020). It appears that for the supervisors in this study, pedagogies based on social construction of knowledge are unconsciously unfavoured (Hase and Kenyon, 2013, p.153). Supervisors showed a preference for a more didactic approach to supervision and raises broader questions as to how schools consciously explore constructivist use of talk as part of professional development. This exploratory study provided the opportunity to understand dialogue in this specific one-to-one context and the chance to recognise and reassess the value that these discussion experiences provide for students. Didactic approaches reinforced power dynamics between student and teacher that exist in all institutions, highlighting the unequal power structure which can interfere with the quality of communication between [supervisor and supervisee]' (Deuchar, 2008, p.491).

The small sample meant that I could gain an insight into *how* supervisory dialogue was experienced, with a flexibility in how I analysed and categorised themes. This exploratory phase in understanding the phenomenon meant that I could adopt a creative approach in how to interpret data, allowing for the development of narrative accounts for deep analysis. By recontextualising supervisory experiences in a series of narratives, I was able to consider student experiences in ways that the transcripts alone did not, which became an integral part of the analysis and sense making phases; a small study provided creative and interpretive opportunities.

The three mini qualitative exploratory cases might also be seen as representative of the microcosm for learning between teacher and student more widely in classrooms: discussion

that is monologic rather than dialogic (Wegerif, 2020). This research proposes that one-to-one discussion meetings can create a type of silence for key stage 3 students, shown through supervisors '[moving] rapidly from one … question to another to maintain pace, and therefore rarely develop sustained or incremental kinds of thinking or understanding' (Alexander, 2020, p.27). This research also raises questions for project coordinators when considering the types of training opportunities offered to teachers who support students in a supervisory capacity. More specifically, the value and emphasis placed on developing supervisory dialogue when ,despite didactic and silencing experiences, students' can achieve top final grades. The three students in this study achieved two A* and one C grade, showing that irrespective of ineffective discussion realities, and contradictory to the view that 'the more the student becomes the teacher and the more the teacher becomes the learner, then the more successful are the outcomes' (Hattie, 2009, cited in Alexander, 2020, p.25) grades can be impressive. Performative outcomes show Phillip and Steve achieving A* grades and Darrell a C grade; students at key stage 3 achieved highly despite limited opportunities to co-construct knowledge with supervisors. Such outcomes raise fundamental questions as to the role that dialogue has in research projects if outcomes and overall performance are not negatively affected by the quality of supervisory dialogue. The importance of discussion will continue to be undervalued if Ofqual and government policy acts in the interest of performative value rather than fostering intrinsic motivation to learn meaningfully with another throughout the research process (Stacey, 2013), with potential long-term impacts of how students see themselves as learners. Students rarely have opportunities to 'demonstrate what they know and do not know and understand' (Alexander, 2020, p.27) in this situated example and consequently appear to take part in discussion that is masked as a form of mutual enquiry. The role of supervisor, and what it means to empower students in discussion, can be problematic and uncomfortable for teachers, as teachers appeared ineffective in

reducing and / or unwilling to consider the potential challenges for students and thus unable to identify students' learning needs (Hattie, 2014). Research coordinators and subject teachers involved in overseeing project work would benefit from considering supervision as a specific type of pedagogy, requiring training and support to develop valuable discussion environments. Staff development sessions could also begin by exploring what might constitute enablers in supporting supervisory dialogue, and thus mitigating discussion barriers. What has happened to these teachers to make discussion so closed may also have links to performative pressures, as teachers talk at students making them frequently silent participants as teachers dominate with their thinking and interruptions (Ball, 2003).

Phillip shared his motivation to communicate with an expert on Norse Mythology, perhaps thinking that such dialogues would be personally and academically interesting beyond those in school; however, he was unable to achieve this aim, as such aspirations remained in his project activity logs, unknown to Miss Moon. It seems that the reflective nature of project logs could provide opportunities to engage in meaningful concerns and interests that students might have. My research was unable to extend and explore how students might discuss research projects with different knowledgeable others beyond school situated supervisors and what impact this may or may not have had on student-supervisory relationships and engagement. This may also draw wider debate surrounding perceptions of *expert* and extend exploration on how students engage with different groups of more knowledgeable others as project resources outside of school, and whether a different silence or a more confident dialogue emerges. More could be captured in terms of how students at key stage 3 might talk with each other and research students conducting projects at key stage 5 at EPQ level, perhaps providing a different student-student supervisory dynamic outside the presence of teacher positional power (Friedman, 2001).

6.7 Conclusion

This research presents a set of dialogic categories that expose the barriers encountered during one-to-one supervision in this situated study. This set of categories provides a contribution to the theoretical understanding of this specific dialogic environment, challenging the assumption that teachers can easily adapt to the demands of sustained dialogue to support the development of student researchers at Key Stage 3. These findings indicate that there is something troubling regarding the difficulties that teachers have in adapting to the role of supervisor and that a new speech genre, specifically for supervisory dialogue, should be explored in different secondary school settings.

This research supports existing knowledge that the categorisation of dialogue is complex, but also challenges the assumption that in dialogic education *all* discussion environments between teachers and students demand the same skill sets from teachers and students. This research shows the importance of student-teacher relationships behind dialogic categorisation, which is an aspect of dialogic education that is largely overlooked yet seems to underpin the quality of dialogue. The findings from this study show that the types of discussion that exist outside the classroom require specific dialogic skills. For dialogue to be understood in all its complexity, an awareness of different dialogic contexts, such as supervision, need to be considered by teachers as requiring specific interpersonal relationship skills that are worth further exploration across all key stages.

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Appendices

Appendix A

Parental consent letter

Dear (insert name)

I am writing to ask if you would be willing to give permission for me to ask your child if they would like to take part in my doctoral research during the six-month duration of the Higher Project Qualification.

My position as the Head of Project Qualifications in the school has allowed me to support over a hundred students to achieve a research qualification at AS and GCSE level, so my personal investment in this area of our provision is a considerable passion of mine. Students having completed research qualifications often reflect on how proud they are of their achievements, and I strive each year to make students' research experiences rewarding, enriching and fulfilling. My interest in supervisory relationships between staff and students has resulted in my doctorial work focusing on how supervisory dialogue is experienced between key stage 3 students and teacher supervisors throughout project-based learning.

As a doctoral student at The UCL Institute of Education, part of my research includes gathering experiences of students engaged in discussion with teacher supervisors. Your child would not be expected to contribute any additional time beyond the qualification requirements to take part in my research. This will, however, involve 3 supervisory meetings being audio recorded across the 5-month qualification period, where teacher supervisors and students will decide on when to conduct the recordings and or how long.

As the Coordinator or the Higher Project Qualification, I am well positioned to respond to the questions that you or your child may have about the research process and would be happy to discuss any questions that you may have regarding participation.

This research has been approved by The UCL Institute of Education Ethics Committee.

I would appreciate it if you could complete the attached permission slip on return to school with your child by (insert date)

Regards,

Mrs J Clements

EPQ and HPQ Coordinator

Dr Robertson

Head of Sixth Form
Assistant Head Teacher

Parental consent form

I understand that my child's participation in this project will involve:

- Audio recordings of three supervisory meetings across the six-month HPQ research period;
- Audio recordings will be fully anonymised when transcribed. The audio files will be also then be destroyed upon students receiving the GCSE qualification in September 2021;
- I understand that my child's participation in this study is entirely voluntary and that they can withdraw from this study at any time without giving a reason;
- I understand that my child's participation will be treated confidentially and all information will be stored anonymously and securely. All information appearing in the final report will be anonymous. My child will have the option of withdrawing their data from the study up until their transcript has been anonymised.
- I understand that I am free to ask any questions at any time.
- I understand that I am free to contact my research supervisor at The UCL Institute if I have any additional questions.
- I also understand that at the end of the study I will be provided with additional information and feedback about the purpose of the study.

I, _____(NAME) consent to Mrs Clements proceeding with this study during the 5-month Higher Project Qualification period. Signature of Parent or Guardian: ……

Date: ……

Name of Child: ……

Appendix A

Research Information Sheet

RESEARCH TITLE

How is supervisory dialogue experienced between key stage 3 students and teacher supervisors through project-based learning?

This is an information sheet for key stage 3 Higher Project Qualification students, parents and teacher supervisors taking part in the programme this year. Key stage 3 students and teacher supervisors are being invited to take part in a research study. Before participants decide to take part or not, it is important to understand why the research is being done and what it will involve. Please take time to read the following information carefully.

RESEARCHER ROLE AND INTEREST

I am fortunate in my role at Sweyne Park to teach English across key stages 3-5 and to have the responsibility of co-ordinating student research qualifications in school. I am the co-ordinator for two research qualifications: The Extended Project Qualification (AS level, offered in the Sixth Form) and the Higher Project Qualification (GCSE equivalent, offered in Key Stages 3-4). I spend much time thinking about how I might make research qualifications more accessible and enjoyable for students and teachers, which is something that I do at doctoral level. As part of the HPQ programme this year, you are being asked whether you would like to take part in my research project that is being conducted under the supervision of The UCL Institute of Education, which is the education faculty of University College London. I am leading this research, which is based on exploring how students and teacher supervisors experience dialogue over a project that lasts for five months.

WHAT IS BEING ASKED OF PARTCIPANTS IN THIS RESEARCH?

This year the Higher Project Qualification (HPQ) is being offered to three Year 9 students and three teachers. All participants in the HPQ will be asked if they would agree to take part in my research. Possible participants in my research should know the following:

- Three supervisory meetings will be recorded;
- A dictaphone will be provided for three of your supervisory meetings between December and May: one at the start, one in the middle, one at the end of the project;
- I would request to join one of the supervisory meetings, where a recording will take place at a time convenient for you and your supervisor;
- No additional time will be required for this research as all recordings would take place in planned meetings;
- Your written activity logs will be used along with any email exchanges that you have with myself or your supervisor.

HOW WILL I BE AFFECTED IF I CHOOSE TO PARTICIPATE (OR NOT)?

Any decisions you make about this research will have no impact in any way on your participation in, or success on the HPQ. Specifically, I will not tell anybody else who is participating, whether participants change their minds at any stage, or anything that is said by individuals. Your choice about whether or not to participate in the research is entirely separate from your progress on the programme. This is an opt-in study so you will not be included in it unless you actively say you would like to take part. You may decide to withdraw from the study at any point.

I will take all appropriate steps to protect participants' identities by anonymising data, which means that anything said during the audio recordings will be given a pseudonym, where the speaker's name next to comments will be replaced; no one will be recognisable in the transcripts by name. I will give participants a code name and remove or alter any details from

stories that could identify individuals (e.g. the name of your school or supervisor). All participants can withdraw their data from the study at any time, without giving a reason for doing this.

All data collected during this research will be stored on a personal password protected computer and all written data will be stored privately in separate folders and stored in a locked office space.

This study has been approved by the IOE's ethics process for postgraduate research activity.

Local Data Protection Privacy Notice: The controller for this project will be University College London (UCL). The UCL Data Protection Officer can be contacted at data-protection@ucl.ac.uk.

The information that is required to be provided to participants under data protection legislation (GDPR and DPA 2018) is provided across both the 'local' and 'general' privacy notices. The lawful basis that will be used to process your personal data is: 'Public task' for personal data. Your personal data will be processed so long as it is required for the research project. If we are able to anonymise or pseudonymise the personal data you provide we will undertake this, and will endeavour to minimise the processing of personal data wherever possible. If you are concerned about how your personal data is being processed, or if you would like to contact us about your rights, please contact UCL in the first instance at data-protection@ucl.ac.uk.

Participant Consent

If you would like any further information on the above, please do come and see me or email at: JeClements@sweynepark.com

Please return to Mrs Clements during your next research meeting.

I give my permission / I do not give my permission (please delete as appropriate) for the following to be used as part of the research outlined on the Research Information Sheet:

- Project Activity Logs
- Email correspondence between students and supervisors / email correspondence between myself and Mrs Clements
- Transcripts of supervisory discussions
- Notes made on points of interest in discussions

Student Signature ……. Parent Signature ……

Many thanks for taking the time to consider this.

Appendix B

Points of interest covering letter to participants (round two data collection)

Dear

Thank you again for taking the time to support my research this term.

Please find enclosed the following for you to read and offer your thoughts on:

- **Two transcripts:** first and second audio recordings
- **A pencil and two crayons:** please use these to share your thoughts and reflections on the transcripts themselves. You do not have to use both crayons, but if you feel that using colour is useful then please do. You might find a pattern that is interesting for example…

You will see that these transcripts do not contain any comments from me, which is purposeful.

Task 1

Please read through the transcripts with the following in mind:

What is it like to be part of these conversations? Tell me what you notice.

You can focus on anything that appears in these transcripts.

Task 2

Please answer the following questions in the space provided below…

1. How regularly do you meet?

2. Where do these meetings take place? How is the room normally arranged? Where do you sit?

3. Do you have conversations about research outside of your scheduled meeting times? For example, in the corridors or at break?

4. Describe how you engaged with these transcripts. Did you read through once, made notes, finishing everything after the first read or did you keep coming back, adding more notes over a few days? Did you read through these at home, school or both?

Appendix C

Ethics Application Form

Anyone conducting research under the auspices of the Institute of Education (staff, students or visitors) where the research involves human participants or the use of data collected from human participants, is required to gain ethical approval before starting. This includes preliminary and pilot studies. Please answer all relevant questions in simple terms that can be understood by a lay person and note that your form may be returned if incomplete.

Registering your study with the UCL Data Protection Officer as part of the UCL Research Ethics Review Process

If you are proposing to collect personal data i.e. data from which a living individual can be identified **you must be registered with the UCL Data Protection Office before you submit your ethics application for review**. To do this, email the complete ethics form to the UCL Data Protection Office. Once your registration number is received, add it to the form* and submit it to your supervisor for approval. If the Data Protection Office advises you to make changes to the way in which you propose to collect and store the data this should be reflected in your ethics application form.

Please note that the completion of the UCL GDPR online training is mandatory for all PhD students.

Section 1 – Project details

a. Project title: How is supervisory dialogue experienced between Key Stage 3 students and teacher supervisors throughout project-based learning?
b.
c. Student name and ID number (e.g. ABC12345678): Jenny Clements CLE14130135
d. ***UCL Data Protection Registration Number:** Enter text
    a. Date Issued: Enter text
e. Supervisor/Personal Tutor: Caroline Daly
f. Department: Department of Culture, Communication and Media
g. Course category (Tick one):

    PhD ☐
    EdD ☒
    DEdPsy ☐

h. **If applicable**, state who the funder is and if funding has been confirmed.
i. Intended research start date: December 2020

j. Intended research end date: December 2023

k. Country fieldwork will be conducted in: UK

l. If research to be conducted abroad please check the Foreign and Commonwealth Office (FCO) and submit a completed travel risk assessment form (see guidelines). If the FCO advice is against travel this will be required before ethical approval can be granted: *UCL travel advice webpage*

m. Has this project been considered by another (external) Research Ethics Committee?

Yes ☐

External Committee Name: Enter text

Date of Approval: Enter text

No ☒ ***go to Section 2***

If yes:

- Submit a copy of the approval letter with this application.
- Proceed to Section 10 Attachments.

Note: Ensure that you check the guidelines carefully as research with some participants will require ethical approval from a different ethics committee such as the National Research Ethics Service (NRES) or Social Care Research Ethics Committee (SCREC). In addition, if your research is based in another institution then you may be required to apply to their research ethics committee

Section 2 - Research methods summary (tick all that apply)

☐ Interviews
☐ Focus Groups
☐ Questionnaires
☐ Action Research
☒ Observation
☒ Literature Review
☐ Controlled trial/other intervention study
☐ Use of personal records
☐ Systematic review **– if only method used go to Section 5**
☐ Secondary data analysis **– *if secondary analysis used go to Section 6***
☐ Advisory/consultation/collaborative groups
☒ Other, give details: Audio recordings / Project Activity Logs / Email correspondence

Please provide an overview of the project, focusing on your methodology. This should include some or all of the following: purpose of the research, aims, main research questions, research design, participants, sampling, data collection (including justifications for methods chosen and description of topics/questions to be asked), reporting and dissemination. Please focus on your methodology; the theory, policy, or literary background of your work can be provided in an attached document (i.e. a full research proposal or case for support document). *Minimum 150 words required.*

This proposed research is for a *qualitative case study* exploring how supervisory dialogue is experienced between Key Stage 3 school students and teacher supervisors through project-based learning. This is in the context of the school where I teach, focusing on three Year 9 students and their teacher supervisors over a period of five months. The context for the study is the student-teacher dialogue that takes place in 'supervision' sessions to support learners to carry out an independent project to gain the equivalent of half a GCSE. This research aligns itself with Stake's (2006) case study approach as wanting to 'study the experience of real cases operating in real situations' (Stake, 2006, p.3).

Mercer (2008) and Alexander (2004) describe popular dialogic teaching approaches, but do not explore dialogue from the perspective of those engaged with the dialogue and how it positions them in relation to the co-construction of ideas. Mercer (2008), for example, identifies three kinds of talk: disputational, cumulative and exploratory, which focuses more on the ways that different question types and responses might manifest in dialogue, whereas my study highlights the importance of relationship context and dialogic rules that exist often visibly in dialogue. This raises questions as to how dialogue exists on many levels concordantly where a greater depth of understanding can be sought into how dialogue is experienced by those who are constructing it.

Underpinning this qualitative approach is an alignment with social constructionism, which advises researchers to be cautious of the reality that is taken for granted and supports a more dialogic approach to qualitative research; social constructionism, 'invites us to be critical of the idea that our observations of the world unproblematically yield its nature to us' (Burr, 2003, p.3). The acknowledgement that 'when people talk to each other, the world gets created' (Burr, p.8) supports a dialogic stance where context is always created anew and is 'a mental phenomenon, and it consists of whatever information listeners (or readers) use to make sense of what is said (or written)' (Mercer, 2002, p.20).

The primary aim of this research is to explore the following:

How is supervisory dialogue co-constructed between Key Stage 3 students and teacher supervisors through project-based learning?

Participants

Over a period of five months, three students and three teacher supervisors will take part in the Higher Project Qualification, a GCSE equivalent qualification where students complete a research project of their choosing. These will form three mini-case studies. Each pair will be

audio-recorded having three supervisory conversations. The audio recordings will be transcribed (nine transcripts in total) allowing for a focused and close analysis of dialogue from three mini-case studies. There will be a purposive sample of three students comprising the whole group taking the qualification. There will be an opt-in approach for students and staff. One previous HPQ supervisor will be asked to participate in identifying key moments from the transcripts for analysis, which creates a further dialogic approach towards data analysis and provides further perspectives to contribute to ongoing interpretation of the data.

Types of data

Audio recordings of supervisory discussions will be the main source of data, with naturally occurring evidence coming from Student Project Activity Logs and email exchanges between students and staff discussing challenges and ideas during the project process. Audio data will be transcribed professionally. The transcripts will be transferred through a secure data transfer service (File Transfer). I will apply a deductive approach to coding using provisional headings derived from literature and previous IFS research. Transcripts will be coded in the same way as Project Activity Logs and emails, where set headings will be applied across all data during the coding process. Transcripts will also include noting of non-verbal communication such as pausing, emphasis, silences, overlapping and laughter.

Types of data will include:

1. Project Activity Logs
2. Email correspondence between students and supervisors / email correspondence between myself and supervisors / myself and students
3. Notes from discussions with former HPQ tutor
4. Transcripts of supervisory discussions

Identifying key moments

All audio recordings submitted by students and supervisors will be transcribed by an external transcriber. When returned for analysis, I will look to work through a process of reduction by selecting key moments from the transcripts. Key moments will be defined as those linking closely with the research questions and any unusual ways in which supervisors and students might express ideas (Sullivan, 2012). I will work with one previous HPQ teacher supervisor not taking part in the supervisory process this year to help identify these key moments. My thinking is in line with a dialogism where 'new perspectives do not replace previous perspectives but augment them leading to an expanded repertoire' (Wegerif, 2019, p2). It is the opportunity to connect with different supervisory voices that extends the level of collaboration in this small sample size and supports a more dialogic approach to text analysis.

Created dialogues

One aspect of data analysis will include using Sullivan's creative representation of dialogue, where time, space and speakers can be repositioned in a new context. A professional transcriber will produce the series of transcripts from the audio discussions and from these I will look to create what Sullivan describes as soundbites, where separate notes will be made when identifying key moments for the potential of a created dialogue. Soundbites will be used as moments of interest that do not necessarily answer the set research questions

directly, but provide an interesting area that is of value when understanding how dialogue is co-constructed as 'soundbites from different areas can be used to create a dialogue among participants and points of view that would not otherwise be in direct dialogue' (Sullivan, 2012, p.74).

Another strength in created dialogues is being able to position dialogue normally unavailable to project coordinators in unique ways, as supervisory dialogue can be explored by 'bringing indirect engagements with others through … head-to-head dialogue [using] fillers to help this coherence' (Sullivan, 2012, p.160). What can be contrasted in created dialogue are the ways in which supervisors respond to students' ideas, with the aim of 'not to reproduce what is real, but to actively create an experiential (emotional, moral subjective) text that facilitates understanding of what and who is being studied' (Sullivan,p.119). Sullivan's 'created dialogue' allows for interaction between speakers to be viewed in ways that are not ordinarily available within one-to-one supervisory dialogue. Created dialogues will be used as well as transcripts that are contextually accurate, meaning that original speakers and words spoken were all said during particular supervisory meetings.

Section 3 – research Participants (tick all that apply)

☐ Early years/pre-school
☐ Ages 5-11
☒ Ages 12-16
☐ Young people aged 17-18
☒ Adults please specify below
☐ Unknown – specify below
☐ No participants

Teaching staff

Note: Ensure that you check the guidelines carefully as research with some participants will require ethical approval from a different ethics committee such as the National Research Ethics Service (NRES) or Social Care Research Ethics Committee (SCREC).

Section 4 - Security-sensitive material (only complete if applicable)

Security sensitive research includes: commissioned by the military; commissioned under an EU security call; involves the acquisition of security clearances; concerns terrorist or extreme groups.

a. Will your project consider or encounter security-sensitive material?
   Yes* ☐ No ☐
b. Will you be visiting websites associated with extreme or terrorist organisations?
   Yes* ☐ No ☐

c. Will you be storing or transmitting any materials that could be interpreted as promoting or endorsing terrorist acts?
Yes* ☐ No ☐

* *Give further details in* ***Section 8 Ethical Issues***

Section 5 – Systematic reviews of research (only complete if applicable)

a. Will you be collecting any new data from participants?
Yes* ☐ No ☐
b. Will you be analysing any secondary data?
Yes* ☐ No ☐

* *Give further details in* ***Section 8 Ethical Issues***

If your methods do not involve engagement with participants (e.g. systematic review, literature review) ***and*** *if you have answered* ***No*** *to both questions, please go to* ***Section 8 Attachments.***

Section 6 - Secondary data analysis (only complete if applicable)

a. Name of dataset/s: NA
b. Owner of dataset/s: NA
c. Are the data in the public domain?
Yes ☐ No ☐
If no, *do you have the owner's permission/license?*
Yes ☐ No* ☐

d. Are the data special category personal data (i.e. personal data revealing racial or ethnic origin, political opinions, religious or philosophical beliefs, or trade union membership, and the processing of genetic data, biometric data for the purpose of uniquely identifying a natural person, data concerning health or data concerning a natural person's sex life or sexual orientation)?
Yes* ☐ No ☐

e. Will you be conducting analysis within the remit it was originally collected for?
Yes ☐ No* ☐
f. **If no**, was consent gained from participants for subsequent/future analysis?
Yes ☐ No* ☐
g. **If no,** was data collected prior to ethics approval process?
Yes ☐ No* ☐

* *Give further details in* ***Section 8 Ethical Issues***

If secondary analysis is only method used ***and*** *no answers with asterisks are ticked, go to* ***Section 9 Attachments.***

Section 7 – Data Storage and Security

Please ensure that you include all hard and electronic data when completing this section.

a. Data subjects - Who will the data be collected from?
Student researchers and teacher supervisors

b. What data will be collected? Please provide details of the type of personal data to be collected

1. Audio-recordings of student-supervisor dialogue during three supervisory meetings, which will be transcribed by a professional transcriber. This will include one meeting where I observe and join the conversation;
2. Notes made during my participation in supervisory discussion;
3. Notes made during conversations between myself and a previous HPQ supervisor when considering key moments to analyse from transcripts;
4. Students' Project Activity Logs
5. Email exchanges between students and supervisors. Students and staff would normally include me when in email correspondence, so this would be a standard procedure in my school when asking HPQ questions. Email exchanges will be copied to me throughout the HPQ programme.

Is the data anonymised? Yes ☒ No* ☐

Do you plan to anonymise the data? Yes* ☒ No ☐

Do you plan to use individual level data? Yes* ☐ No ☒

Do you plan to pseudonymise the data? Yes* ☒ No ☐

** Give further details in **Section 8 Ethical Issues***

c. **Disclosure –** Who will the results of your project be disclosed to?

1. My supervisor and thesis examiners
2. Universities and examination boards expressing interest to improve project qualification provision.
3. Conference opportunities such as The British Curriculum Forum and SecEd.
4. Journals such as the International Journal of Innovation in Education.

Disclosure – Will personal data be disclosed as part of your project?
No.

d. Data storage – Please provide details on how and where the data will be stored i.e. UCL network, encrypted USB stick**, encrypted laptop** etc. UCL Research Logs / encrypted USB stick and password protected personal laptop. All paper documentation including observational notes from supervisory meetings; meetings

with staff; all printed email exchanges and Project Activity Logs will be kept in separate folders in a lockable office and in a key safe draw.

*** Advanced Encryption Standard 256 bit encryption which has been made a security standard within the NHS*

e. **Data Safe Haven (Identifiable Data Handling Solution)** – Will the personal identifiable data collected and processed as part of this research be stored in the UCL Data Safe Haven (mainly used by SLMS divisions, institutes and departments)?
Yes ☐ No ☒

f. How long will the data and records be kept for and in what format?
All data will be stored in two forms: individual paper folders and computer documents. Data will be stored be stored until the completion of my thesis which will be December 2023 at the latest.

Will personal data be processed or be sent outside the European Economic Area? (If yes, please confirm that there are adequate levels of protections in compliance with GDPR and state what these arrangements are) NA
No

Will data be archived for use by other researchers? (If yes, please provide details.)
No

g. If personal data is used as part of your project, describe what measures you have in place to ensure that the data is only used for the research purpose e.g. pseudonymisation and short retention period of data'.
NA

** Give further details in **Section 8 Ethical Issues***

Section 8 – Ethical Issues

Please state clearly the ethical issues which may arise in the course of this research and how will they be addressed.

All issues that may apply should be addressed. Some examples are given below, further information can be found in the guidelines. *Minimum 150 words required.*

- Methods
- Sampling
- Recruitment
- Gatekeepers
- Informed consent

- Potentially vulnerable participants
- Safeguarding/child protection
- Sensitive topics
- International research
- Risks to participants and/or researchers
- Confidentiality/Anonymity
- Disclosures/limits to confidentiality
- Data storage and security both during and after the research (including transfer, sharing, encryption, protection)
- Reporting
- Dissemination and use of findings

Ethical Considerations

Research undertaken in this study will adhere to the four elements of integrity within the concordat which UCL sees as Principles of Integrity, reflect UCL's existing Code of Conduct for Research: Honesty; Rigour; Transparency and Care. I will work within the requirements outlined in the Ethical Guidelines for Educational Research by BERA, 2018 (Fourth edition), acknowledging that 'All social science should aim to maximise benefit and minimise harm' (BERA, p.3, 2018) and the revised GDPR regulations from May 2018. The nature of a qualitative case study methodology encourages students to speak openly on a wide range of ideas and experiences, meaning that the students' well-being must be considered paramount at all phases in the research design (Hammersley, M. and Traianou, A. 2012; Hanson 2013).

All students and staff will be offered the chance to withdraw from the research at any time, with no adverse consequences as a result of non-participation. Letters to students' parents will be issued (see attached research information sheet) to obtain parental and student consent outlining what participation requires. Both parents and students indicate consent by signing a single consent form. No additional work will be asked of the students or teacher supervisors during this research, as all meetings and Project Activity Logs are compulsory for the qualification.

Emails and transcripts will be stored in a separate folder, encrypted, and given a private password on a personal computer. All audio records and transcripts will be stored securely on the IoE Moodle Site, in the Research Log facility.

Insider researcher

I am aware that my role as project coordinator, and one of the students' two English teachers this year, that power relations need to be considered sensitively. I will work hard to establish trust and avoid coercion, as the participants may find it difficult to say no to me. I will allow students time to consider any concerns that they might have and ask participants individually if they have any questions. Although written consent will be obtained in advance from both students and teacher supervisors, I will also ask supervisors to ask participants during supervisory meetings if they are happy to be recorded before such data collection takes place. Teacher supervisors will also be offered the opportunity to decline being recorded before each session, with staff being reminded that they are valued with no chance of their place as a HPQ supervisor being removed on this cohort or future cohorts.

A dialogical approach poses challenges for practitioner researchers like myself, as 'the words and other signs recorded and transcribed, do not give us access to the 'inside' of the dialogue or its meaning unless we enter that dialogue as a participant' (Habermas, 1979, p.29). Kershner et al. 2020 also present a research environment of dialogic interaction rather than detached observer, which raises ethical issues, particularly when I plan to explore how private dialogues are shared in naturally occurring ways between student and supervisor. I will make students and supervisors aware that I will leave a conversation if I feel that my presence in some way causes anxiety or discomfort. Protecting 'the importance of the lived experience' (Unluer, 2012, p.177) remains fundamental. I plan to take an active role in one audio recording of a dialogue between each supervisor and student in the middle of the HPQ programme. I plan to actively participate in one supervisory meeting between student and supervisor, which I am aware may cause a degree of worry for those involved. I will make it clear beforehand that I am there in a researcher role and that my participation is entirely aimed at gaining a deeper understanding of the supervisory dialogue, that I respect the views of participants and, if necessary, I will withdraw from such an observation and work solely from audio recordings that are controlled by the pair. I will make it clear that there are no consequences whatsoever for the student or teacher if they do not wish for me to be present.

Dissemination

Fully pseudonymised work from this study will be shared with Project Coordinators nationally via school supportive hubs and networks, where good practice and innovation is shared as part of my normal professional activity. Beyond teacher networks, connections with examination boards will be maintained and / or established by contributing to improving the provision for student researchers, teacher supervisors and overall programme delivery in schools. Opportunities will be taken to publish fully pseudonymised research through the British Curriculum Forum (BERA), SecEd conferences and supplements and The Chartered College of Teaching (connections already established and publications have already been achieved).

Please confirm that the processing of the data is not likely to cause substantial damage or distress to an individual

Yes ☒

Section 9 – Attachments. ***Please attach the following items to this form, or explain if not attached***

a. Information sheets, consent forms and other materials to be used to inform potential participants about the research (List attachments below)
   Yes ☒ No ☐

   Research Information Sheet

b. Approval letter from external Research Ethics Committee Yes ☐
c. The proposal ('case for support') for the project Yes ☐
d. Full risk assessment Yes ☐

Section 10 – Declaration

I confirm that to the best of my knowledge the information in this form is correct and that this is a full description of the ethical issues that may arise in the course of this project.

I have discussed the ethical issues relating to my research with my supervisor.
Yes ☒ No ☐

I have attended the appropriate ethics training provided by my course.
Yes ☒ No ☐

I confirm that to the best of my knowledge:

The above information is correct and that this is a full description of the ethics issues that may arise in the course of this project.

Name Jenny Clements

Date 16th December 2020

Please submit your completed ethics forms to your supervisor for review.

Notes and references

Professional code of ethics
You should read and understand relevant ethics guidelines, for example:
British Psychological Society (2018) *Code of Ethics and Conduct*
Or
British Educational Research Association (2018) *Ethical Guidelines*
Or
British Sociological Association (2017) *Statement of Ethical Practice*
Please see the respective websites for these or later versions; direct links to the latest versions are available on the Institute of Education Research Ethics website.

Disclosure and Barring Service checks

If you are planning to carry out research in regulated Education environments such as Schools, or if your research will bring you into contact with children and young people (under the age of 18), you will need to have a Disclosure and Barring Service (DBS) CHECK, before you start. The DBS was previously known as the Criminal Records Bureau (CRB). If you do not already hold a current DBS check, and have not registered with the DBS update service, you will need to obtain one through at IOE.

Ensure that you apply for the DBS check in plenty of time as will take around 4 weeks, though can take longer depending on the circumstances.

Further references

Robson, Colin (2011). *Real world research: a resource for social scientists and practitioner researchers* (3rd edition). Oxford: Blackwell.
This text has a helpful section on ethical considerations.

Alderson, P. and Morrow, V. (2011) *The Ethics of Research with Children and Young People: A Practical Handbook.* London: Sage.
This text has useful suggestions if you are conducting research with children and young people.

Wiles, R. (2013) What are Qualitative Research Ethics? Bloomsbury.
A useful and short text covering areas including informed consent, approaches to research ethics including examples of ethical dilemmas.

Departmental Use

If a project raises particularly challenging ethics issues, or a more detailed review would be appropriate, the supervisor must refer the application to the Research Development Administrator via email so that it can be submitted to the IOE Research Ethics Committee for consideration. A departmental research ethics coordinator or representative can advise you, either to support your review process, or help decide whether an application should be referred to the REC. If unsure please refer to the guidelines explaining when to refer the ethics application to the IOE Research Ethics Committee, posted on the committee's website.

Student name:

Student department:

Course:

Project Title:

Reviewer 1

Supervisor/first reviewer name: Caroline Daly

Do you foresee any ethical difficulties with this research?

No. Jenny has considered the issues around being an 'insider' researcher and the power relations that are involved in her being a teacher researching with students. We have discussed this at length and I think she has planned carefully to ensure the research is conducted in an ethical manner.

Supervisor/first reviewer signature: [redacted]

Date: 16.12.20

Reviewer 2

Second reviewer name:

Do you foresee any ethical difficulties with this research?

Second reviewer signature:

Date:

Decision on behalf of reviewers

Approved ☐

Approved subject to the following additional measures ☐

Not approved for the reasons given below ☐

Referred to the REC for review ☐

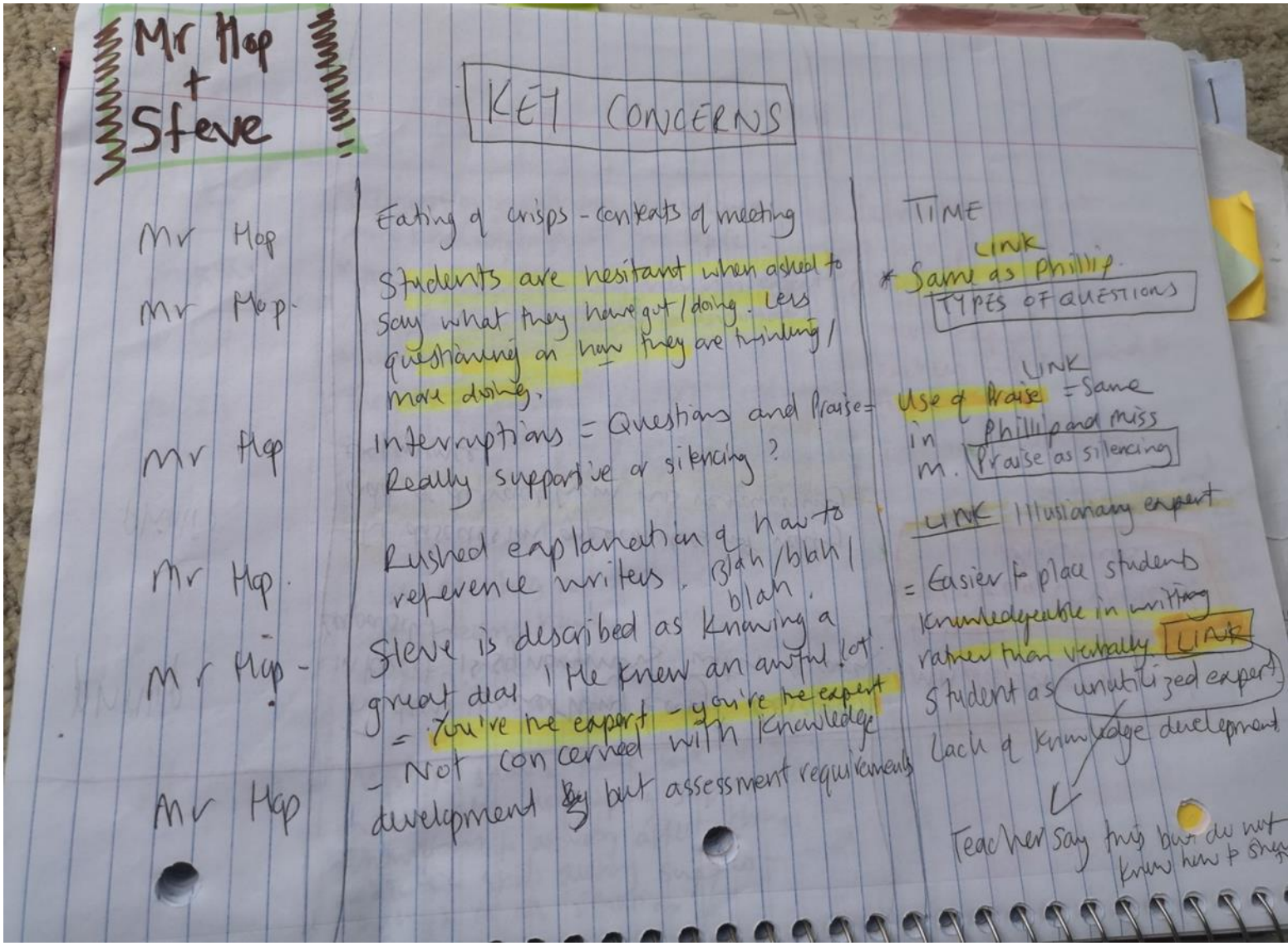
Points to be noted by other reviewers and in report to REC:

Comments from reviewers for the applicant:

Once it is approved by both reviewers, students should submit their ethics application form to the Centre for Doctoral Education team: IOE.CDE@ucl.ac.uk.

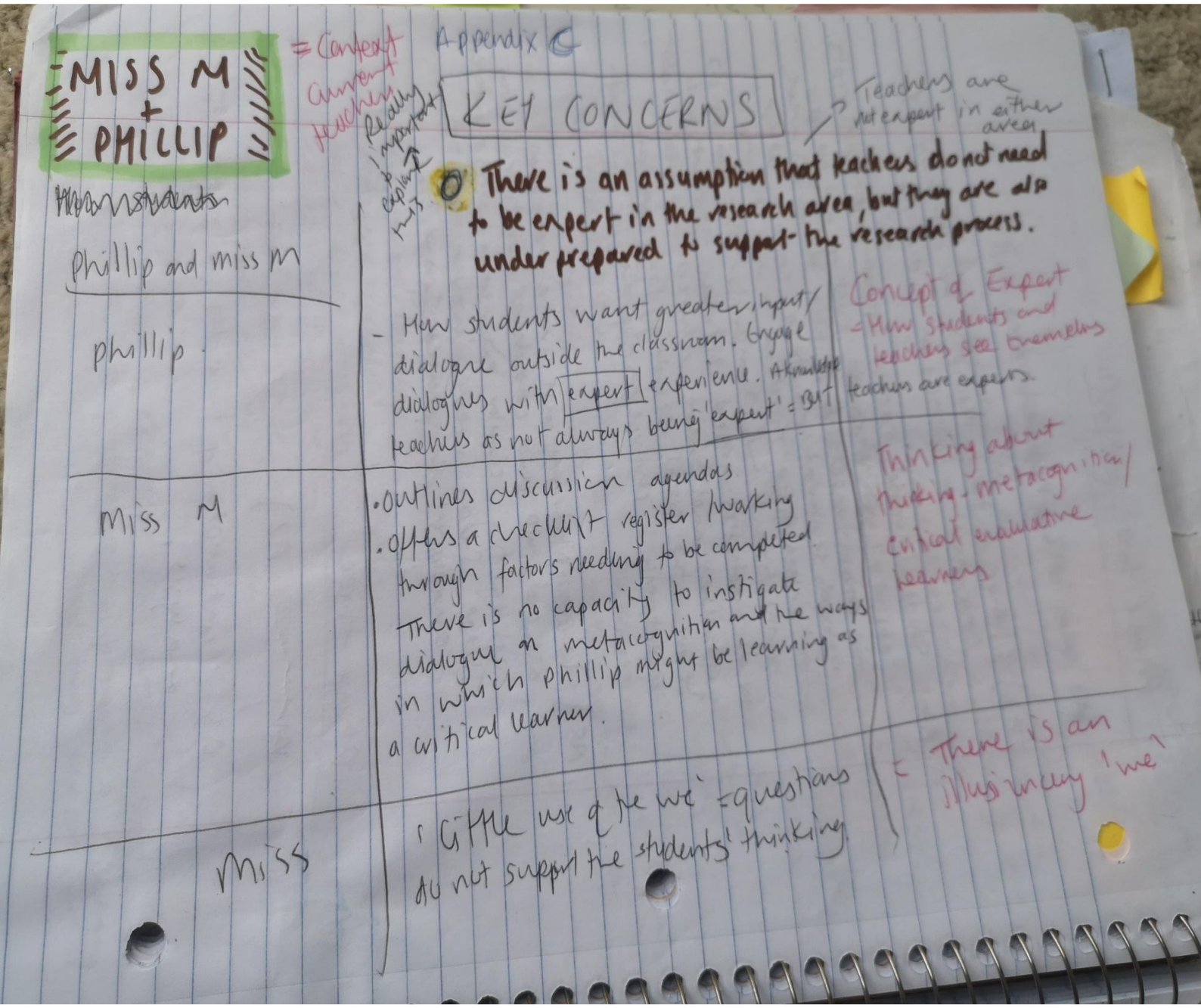
Appendix D

Decision trail



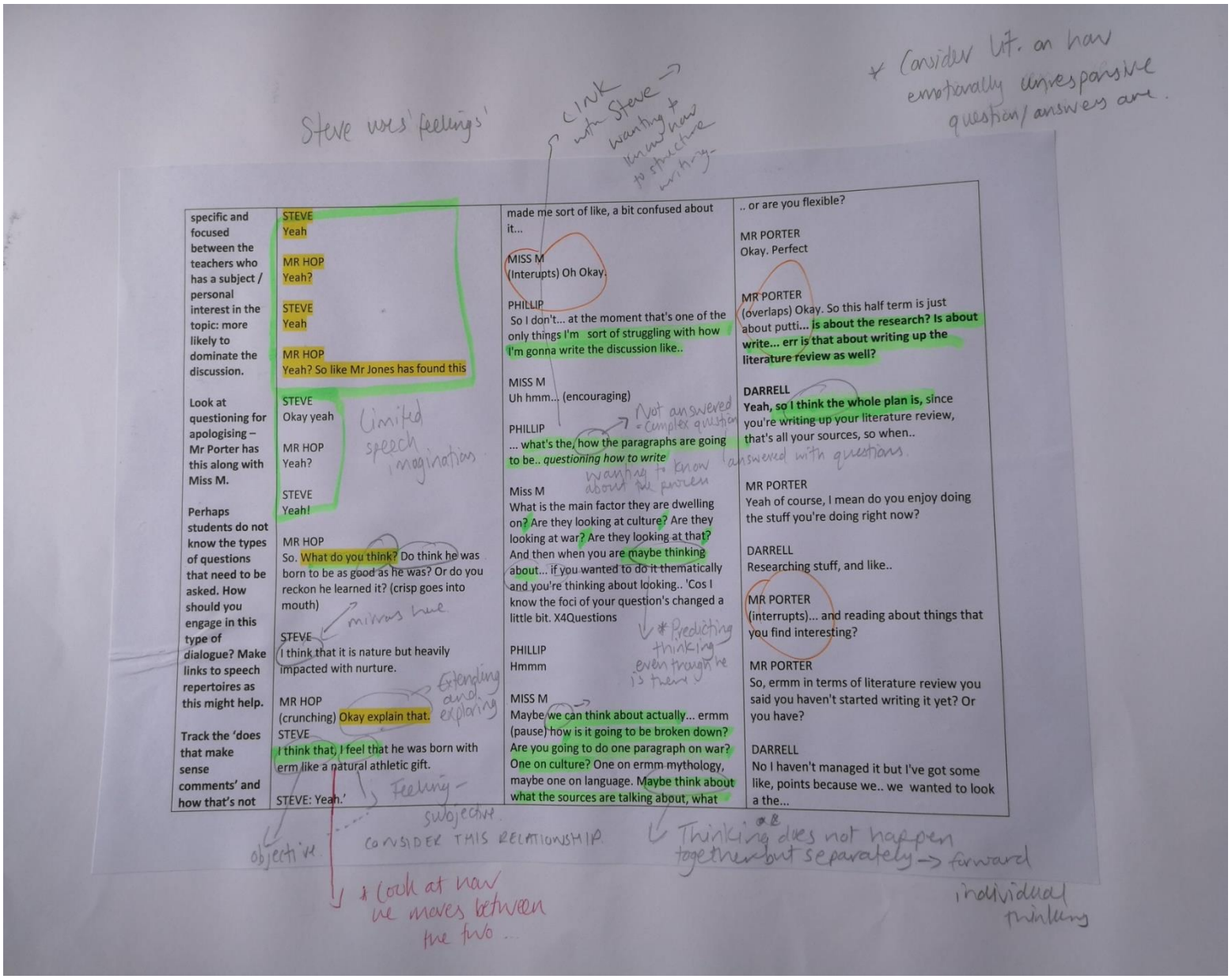
Appendix D

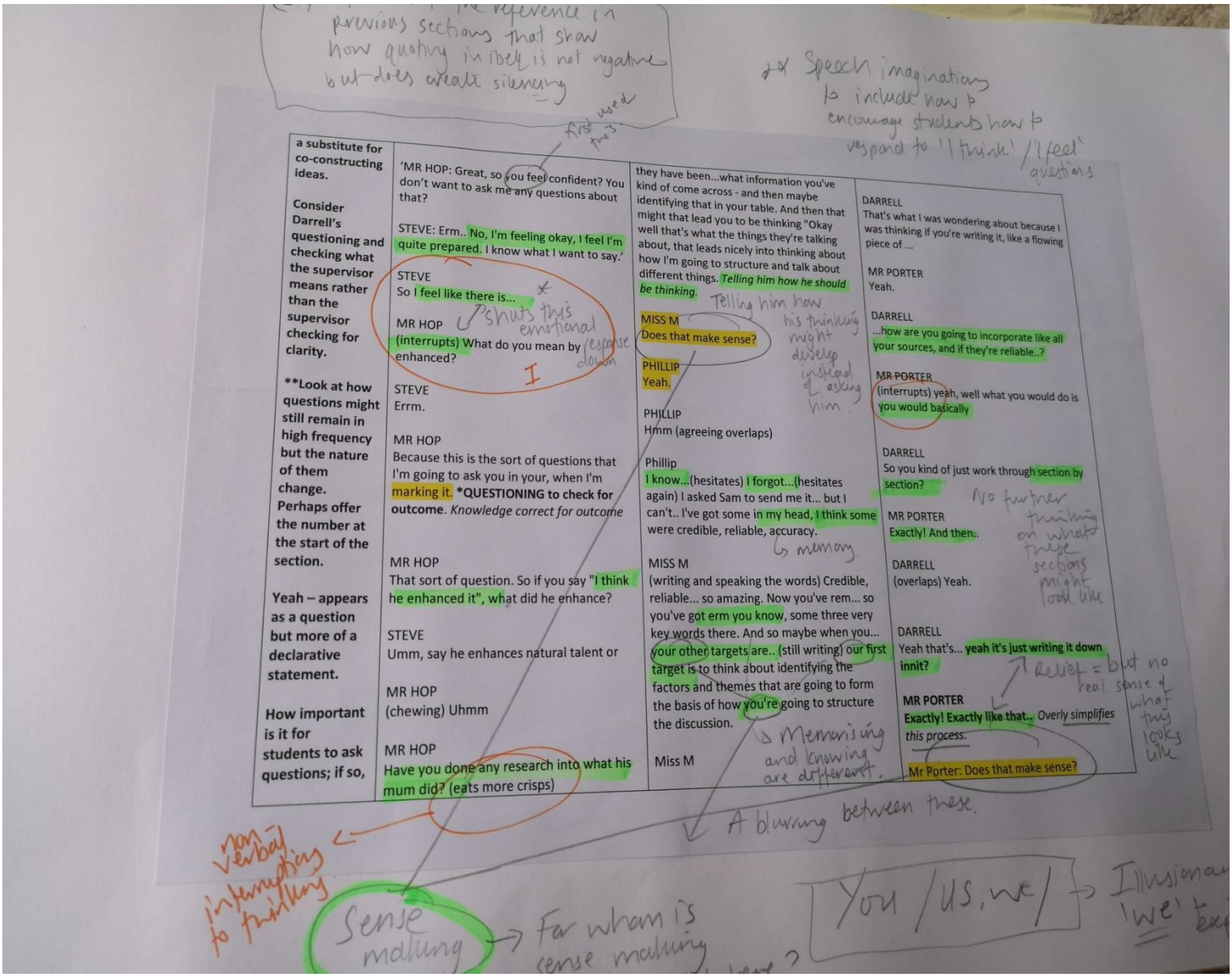
Decision trail



Appendix E

Comparison POIs across the three supervisory pairs




previous sections that show how quoting in itself is not negative but does create silencing
Speech imagination to include how to encourage students how to respond to 'I think' / 'I feel' questions
first used this
a substitute for co-constructing ideas.
Consider Darrell's questioning and checking what the supervisor means rather than the supervisor checking for clarity.
**Look at how questions might still remain in high frequency but the nature of them change. Perhaps offer the number at the start of the section.
Yeah – appears as a question but more of a declarative statement.
How important is it for students to ask questions; if so,
'MR HOP: Great, so you feel confident? You don't want to ask me any questions about that?
STEVE: Erm.. No, I'm feeling okay, I feel I'm quite prepared. I know what I want to say.'
STEVE
So I feel like there is...
MR HOP
(interrupts) What do you mean by enhanced?
shuts this emotional response down
STEVE
Errm.
MR HOP
Because this is the sort of questions that I'm going to ask you in your, when I'm marking it. **QUESTIONING to check for outcome**. *Knowledge correct for outcome*
MR HOP
That sort of question. So if you say "I think he enhanced it", what did he enhance?
STEVE
Umm, say he enhances natural talent or
MR HOP
(chewing) Uhmm
MR HOP
Have you done any research into what his mum did? (eats more crisps)
they have been...what information you've kind of come across - and then maybe identifying that in your table. And then that might that lead you to be thinking "Okay well that's what the things they're talking about, that leads nicely into thinking about how I'm going to structure and talk about different things. *Telling him how he should be thinking.*
Telling him how his thinking might develop instead of asking him
MISS M
Does that make sense?
PHILLIP
Yeah.
PHILLIP
Hmm (agreeing overlaps)
Phillip
I know...(hesitates) I forgot...(hesitates again) I asked Sam to send me it... but I can't.. I've got some in my head, I think some were credible, reliable, accuracy.
memory
MISS M
(writing and speaking the words) Credible, reliable... so amazing. Now you've rem... so you've got erm you know, some three very key words there. And so maybe when you... your other targets are.. (still writing) our first target is to think about identifying the factors and themes that are going to form the basis of how you're going to structure the discussion.
Memorising and knowing are different.
Miss M
DARRELL
That's what I was wondering about because I was thinking if you're writing it, like a flowing piece of ...
MR PORTER
Yeah.
DARRELL
...how are you going to incorporate like all your sources, and if they're reliable..?
MR PORTER
(interrupts) yeah, well what you would do is you would basically
DARRELL
So you kind of just work through section by section?
No further thinking on what these sections might look like
MR PORTER
Exactly! And then..
DARRELL
(overlaps) Yeah.
DARRELL
Yeah that's... yeah it's just writing it down innit?
Relief = but no real sense of what this looks like
MR PORTER
Exactly! Exactly like that.. Overly simplifies this process.
Mr Porter: Does that make sense?
A blurring between these.
non-verbal interrupting to thinking
Sense making
For whom is sense making
You / us, we /
Illusion
'we'

Appendix F

Narrative accounts for Mr Porter and Darrell

Darrell and Mr Porter

Darrell is a Year 9 student under the supervision of Mr Porter. Mr Porter is Head of Key Stage 5 English Literature and Language and, although he has previously worked with students to produce extended writing, he has not supervised project learning before. Mr Porter does not teach Darrell English, and this is the first time that they have worked together in any capacity. Mr Porter has his own English classroom where he conducts his meetings before tutor time at approx. 8.30 until 8.50. School reports show Darrell's general attitude towards learning as mainly A and B grades, with some Cs, some staff comments show polarising behaviour such as excellent verbal contributions and then refusal to complete class tasks on occasions; Darrell's work ethic is changeable.

Darrell started his HPQ journey with a preliminary research area, inspired by conspiracy stories around a child disappearance in the media and an interest in crime. Darrell quickly decided, however, after a meeting with myself and the school Librarian that, 'I am beginning to question if I should possibly change my topic … there is a lack of resources when it comes to the case due to the speculative nature, so I am hoping to stay on the topic of crime and justice.' Before meeting Mr Porter, Darrell had decided to refocus and look at whether it is ethical to raise the minimum age of criminal responsibility: 'To what extent should the minimum age of criminal responsibility be raised in England and Wales?'

Phase one

The first meeting begins with Mr Porter asking Darrell how he has been getting on, with Darrell attempting to share his progress, 'I'm doing alright, I've started carrying out my activity log on my … on the computer thing.' Mr Porter then eagerly interrupts by reminding Darrell of a previous meeting:

> **MR PORTER**: (Overlaps) Did you look up …uhm (pause) the things we talked about the last time I saw you?
>
> **DARRELL**: Yeah (pause) I looked into the …umm both the cases. I think the one with the day …
>
> **MR PORTER**: (talks over) There was the James Bulger and then Derek Bentley.
>
> **DARRELL**: I don't think the Derek Bentley things gonna …
>
> **MR PORTER**: (overlaps) Okay that's fair enough.
>
> **DARRELL**: …much. The James Bulger person, he was – that was more useful.

Darrell is offered no time to reply but strives to finish his sentence despite interruptions. Mr Porter is quick to accept Darrell's decision to dismiss a certain research avenue and goes no further in asking Darrell to justify and explain his reasoning for this. There seems to be a nervousness in the repetition of 'overlaps' and 'talks over', showing perhaps hurried inexperience in this type of meeting. Throughout the 12-minute meeting, there are 19 examples where Mr Porter either overlaps or talks over Darrell, but in Darrell's private reflections on this transcript, he comments that he, 'did not realise this in the moment … I never noticed the overlapping in real life and also it felt more intense and quiet in real life.' Darrell's comment implies that interruptions between a student and teacher are not easily identifiable in the moment, perhaps due to the common place nature of them and the familiarity in having a teacher dominate dialogue. Mr Porter's written reflections of this meeting also suggest a lack of awareness when actively participating in dialogue, 'I'm surprised by how controlling I am

in the conversation. I steer the conversation heavily. I do try to establish a rapport, but this perhaps doesn't 'add value' to the HPQ … my language is alienating.' Mr Porter's choice of 'alienating' is perhaps what Darrell describes as creating the quietness that he felt, resulting in distance between student and supervisor. There is also little awareness as to how dominating Mr Porter can be in dialogue, as he appears to monopolise both thinking and discussion time. Mr Porter refers to adding 'value', offering a criticality of his approach that shows an indication that supervision can be unproductive on certain levels. Constant overlapping and interruptions create the quietness that Darrell describes but so, too, does what I refer to as pedagogical storytelling:

> **MR PORTER**: 'I'll give you an example, when I teach my …erm A level classes I always start off with this activity … I'm not going to make you do it but I'm just going to tell you what happens. The erm … I say to them 'Draw me a house, you've got one minute!' and they all, they all start drawing a house, everyone draws a house. It's … if I brought you in to watch you'd think 'What? They're just, they're just doing that.' Then I go, 'Right, now ermmm point if you've got windows … Then I say 'Right a chimney'. Only half usually you know have done that, but I never ask them to do that and then I say 'What about a driveway?' And they're like 'What? How obscure! That's not fair.''

Although this is a retelling of a creative classroom task, it silences Darrell as he becomes a passive listener; this is an example of not only talk happening to Darrell but also missed opportunities for Darrell to engage in tasks and thinking, making him a spectator in talk and task. Darrell replies intermittently with 'Yeah, Hmmm, Ahhh right, Yeah, Yeah,' with short replies that show less engagement and Mr Hop finishing his analogy with: 'it is better to start building a house knowing all the details first rather than improvising and guessing what is required'. This analogy may also subconsciously link to Mr Porter's insecurities regarding

project progression and how he feels unprepared in how to support Darrell; this comparison goes someway in Mr Porter revealing his hesitancy and need for greater clarification, showing how project learning is also a learning process for supervisors and students. Mr Hop alludes to how building a house is, 'quite straightforward' and the awareness that it is Darrell's house to build, 'Or **you building** the house should I say, is **really straight forward** because you know what it looks like. Does that make sense?' Mr Porter also refers to project construction as being easy while at the same time outlining complexity. Mr Porter makes a clear attempt to make project writing appear accessible to Darrell, but perhaps this might be masking Mr Porter's own lack of confidence in supporting research, which may create greater anxiety if Darrell does not find aspects of project work simple. The writing process is new to students at this stage as emerging writers, with a sophistication required to organise a range of ideas into a coherent structure. Supervisors may be engaging in dialogue based on a misconception that motivated and capable students do not necessarily need the same level of support as students in the classroom. Students with research interests does not necessarily mean student capability, as Mr Hop appears to do less rather than more to understand Darrell's needs, resulting in barriers in understanding. The figurative house that Mr Porter builds to make sense of the research process is more for himself than Darrell.

Mr Porter uses academic terminology, with an assumption that Darrell wishes to pursue higher education, '(overlaps) Great yeah. Right, this is a little bit like how a master's would work. Like when you go to university … have you thought about whether you'd like to go to university?' Mr Porter does not outline how project work in Year 9 would resemble a master's, or in fact what a masters is but he does appear to revise his question slighting by addressing his assumption that Darrell will go to university. Mr Porter seems to consider project work a sign of academic capability and after some thinking time Darrell shares, '(long pause) Ahh...ha I've been told that I have the facilities to go to university. But (long pause) some days I have

good days in school, some days I have bad days at school. Some days I walk in ready to do everything … Other days I'd be sitting in a maths classroom just like 'how do you do this?' Darrell's honest reflection of himself as a leaner, pausing to share personal experience, suggests that he has a complex relationship with what it means to be a learner, but rather than exploring the notion of student as researcher at Key Stage 3, Mr Hop champions project learning through higher education; Mr Hop presents the image that Key Stage 3 curriculums do not foster the same freedom in intellectual curiosity that universities do:

MR PORTER: Yeah of course, I mean do you enjoy doing the stuff you're doing right now?

DARRELL: Researching stuff, and like..

MR PORTER: (interrupts)... and reading about things that you find interesting?

DARRELL: Yeah, I don't ... it's honestly like. I don't know how **I'm going to get an extra GCSE out of this this 'cos I would just do this in my spare time.**

MR PORTER: Yes. So what is interesting then is, **at university it's much more like that (with emphasis) than anything related to school.** Because of course you choose every... like you don't just choose your course, you choose errr... the lectures you go to and stuff like that to some extent.

Darrell shows an element of surprise that his personal interest can result in a qualification, suggesting that there is some tension between enjoyment and learning in school. Darrell appears focused on the here and now aspect of project learning in Year 9, whereas Mr Porter does not address the impressive achievement that is completing half a GCSE in Year 9. Mr Porter looks forward in time to the potential detriment of not acknowledging the accomplishment in the present. Mr Porter continues to share his knowledge and experiences of undergraduate work, disregarding the comments that Darrell made on his difficulties in

focusing in some lessons. There is an assumed understanding of terminology, ‘modules… undergraduate degree … maybe a dissertation … you might call it a thesis.’ Darrell responds with ‘yeah’ and does not show any further interest in asking Mr Porter about this subject, even though Mr Porter says to Darrel, ‘**When you get the degree** you're then a graduate and then you do a Masters. **What you're doing now is like a Masters**. You go off into, sort of an area of research - maybe a dissertation almost - you go off into an area of research, you know about it loads.’ Darrell’s private written reflections on this transcript show that he considered these moments as distractions, with comments such as, ‘Throughout the transcript I noticed that we got side-tracked a lot which I never noticed before’ and ‘Didn’t realise we went so off topic so much.’ Mr Porter shares his personal history with extended writing in a way that perhaps that might impress Darrell and to validate his own position as a supervisor, which is one of being highly academic. This approach might be seen as overcompensating for an academic vulnerability and raises questions concerning the history of project work in Mr Hop’s own educational context. It appears that there is an academic expectation in all that Mr Hop says, which may reflect his own encounters with this learning approach. Alternatively, such pressures might also come from Mr Hop’s current context where students undertaking project work are typically assumed to achieve top grades, which might also be the expectations felt by students due to supervisory pressures. Mr Hop assumes similarities in between him and Darrell rather than considering differences, as this is easier to engage with.

Towards the end of the meeting, Mr Porter and Darrell discuss next steps and how Darrell will plan his time between now and their next meeting, with Darrell sharing his word count successes, ‘I was thinking 2,500 words – sounds like a lot but I was writing up this and I was writing for like 30 minutes and then I already, managed to stack-up 500 words … It might get to the point where Miss (laughs) actually might have to like say you might have to cut it down.’ Darrell shares his personal achievement shows a sense of progression in writing and self-

confidence. Mr Porter extends his support to Darrell by suggesting that he can lead the next meeting. Mr Porter does this by suggesting a physical change in seating, 'And you can sit here, and I'll sit there, and we'll swap around, and you can – you can drive. And we can talk about…' The notion of swapping suggests that the current meeting format does not offer Darrell a level of project ownership that Mr Hop believes he should have, but the implied simple change in seating to readdress the power dynamic is an underestimated challenge for Mr Porter. Although Mr Porter suggests that Darrell is capable of successfully driving the metaphorical project car, Darrell remains stationary until Mr Porter allows Darrell thinking time to devise a route that he would like to follow rather than showing him a road yet to be taken.

Phase two

Darrell and Mr Porter meet before tutor time, at 8.30 until 9.00. Mr Hop continued to sit in his seat, with Darrell sat in the front row having to turn to face Mr Hop; the format remains unchanged and the seat swap untested. Mr Hop starts by asking Darrell, 'how are you finding it? How did you find the literature review in general?' to which Darrell responds positively, 'It was alright actually … I kinda did the first one and then after the first one I kind of understood what I was doing.' Darrell's progress leads Mr Porter to move towards the next stage of the project: the written discussion, which Darrell replies, 'I don't know what I'm doing to be fair.' Rather than address any ideas with the written discussion, Mr Porter decides to stay with the literature review, seemingly building Darrell's confidence before moving towards a new section of the project, 'really, really good … I think this is absolutely fine really.' Mr Porter is non-specific in what is being praised in Darrell's writing, but Darrell appreciates the positive feedback with an informal and relaxed, 'Cheers.' Mr Porter is more specific when engaging with thought-provoking points from Darrell's literature review, 'that's really interesting … using tasers on children!' Mr Porter moves from reading Darrell's written ideas to addressing the point again in conversation, with a sense of drawing Darrell into discussion rather than just

reading his work aloud. This starts a sequence where Darrell and Mr Porter engage in a more co-constructive way:

> **DARRELL**: 'Yeah I can't remember exactly but... it was something like 16-year-olds have been tased.'
>
> **MR PORTER**: 'Tased?'
>
> **DARRELL**: ... 'In Wales and in England'
>
> **MR PORTER**: That's a really interesting piece of evidence. You'll have to think carefully about how you're going to use that. Is there some sort off excessive use of force taking place … It's about the treatment of or the **arresting of ...**
>
> **DARRELL: or of the** safety of the children.
>
> **MR PORTER**: Yeah absolutely. Should there be different law about how you arrest a child? **What do you think?**
>
> **Darrell: I think unless** there's like clear, like evidence found like in the moment that they're going to physically harm or endanger someone's life, I don't think a taser should be used because that's a bit **brutal innit?**
>
> **MR PORTER**: Oh definitely. I've never been tased but I mean it looks it doesn't look good does it? I mean I know it looks very**, very brutal**.

Darrell responds by showing his knowledge and completing Mr Porter's sentences, showing a confidence to engage further. Mr Porter also adopts Darrell's phrasing to extend a sense of inclusion, with 'brutal' being mirrored to keep the dialogue on Darrell's terms. It is Mr Porter who mirrors Darrell rather than Darrell modifying his responses to adopt to Mr Porter's language, perhaps helping to make Darrell feel more at ease. Mr Porter is more confident in finding similarities in views rather than challenging and generating debate.

My planned arrival to the meeting appears to change the way in which Mr Porter and Darrell continue the dialogue, with Darrell asking more specific questions such as, 'Do I like argue

both points or like do half and half, or do I do it based off the sources and that?' Mr Porter takes time to outline the importance of including both arguments, 'It's just about you supporting your argument **basically**, stealing other people's bits and saying this is how I do it. That's **really all that it is**.' Mr Porter adopts a tone of simplicity, with a potentially ill-advised comment of 'stealing' leading Darrell to plagiarise unintentionally. The expectation of this being easy is a recurring theme, as all aspects of project work seem to be considered simple,' I think that's all fairly straightforward. I think you're good to go. Have you … you've got your bibliography?' Darrell replies with, 'What's a bibliography?' Mr Porter speaks in a presumptuous way, where Darrell must show a lack of knowledge. The idea that Darrell may be less or more knowledgeable in certain areas is considered by Mr Porter in his written reflections on this transcript, where he comments that Darrell's 'sentences are short. Does he know what to say? Is he just used to me talking and now just 'plays' the role of 'listener'? The idea that Darrell may not be presenting himself as an active listener is a concern for Mr Porter, where the idea of listening as a performance starts to emerge. Mr Porter looks to Darrell as a listener but does not seem to recognise himself as second listener in this supervisory relationship and what listening to students might look like for teachers in this role. Listening in a one-to-one supervisory context for students and teachers is not necessarily the same experience as that in the classroom. Mr Porter also leaves questions as part of his written reflections on the transcripts including, 'how much of this is Darrell taking in? Does he see these comments as valuable or tiresome?' which seem very important on reflection, but not acted upon during the dialogue at the time.

Towards the end of the meeting, Mr Porter interrupts Darrell's final point on how he might write a summary, with Darrell starting his sentence with, 'Summary is like just the …' but finds himself cut off before being able to clarify his understanding:

MR PORTER: '…when I was at university there was, this American lecturer and she was intimidating to everyone. Because what would happen is... in a lecture she would begin the lecture and she was this really big figure both physically and literally. And she would start a lecture off and she'd be at the front and she always had this diet Coke in one hand, and this belt that didn't fit around her waist... it was all sort of... I don't know what it did. It was like a waist necklace. Anyway, she was really lovely. Anyway, she used to say when you write an essay "**Tell me what you're going to tell me, tell me, then tell me you told me." So that's all you've got to do here** Tell me what you're going to tell me in the introduction then we'll worry about you telling me, then we'll worry about telling what you told me. That conclusion won't have anything new in it, think of it that way**. Nice and simple. Alright?**

To this Darrell responds with, 'Yeah'.

This monologic response shows how one-to-one dialogue provides Mr Porter with an anecdotal and nostalgic space to review his own learning experiences, including some potentially inappropriate humour. This level of informality may have been to build rapport, as he offers a caricature of a teacher, the very role that he has for Darrell. There is also the same confident tone here as heard earlier in the dialogue, where Mr Porter assumes that an anecdote will be enough to help Darrell understand how to write all that he wants to present.

Phase three

This meeting was conducted via Microsoft Teams, which Darrell and Mr Porter had been using during remote learning and isolation periods. This was a familiar mode of communication at this point in the academic year and was the best way to continue the meeting before Darrell's viva, an oral assessment of Darrell's research. Darrell had been asked to isolate so conducted

the meeting from home, with Mr Porter taking part in his classroom. Due to online safety guidance, cameras were not permitted during this meeting.

Both Darrell and Mr Porter had read and recorded their thoughts on the first two transcripts before this meeting, which was clear in the way that Mr Porter was more focused on what Darrell wanted to discuss, 'Is there anything you want to talk about? Is there anything specific you have concerns on?' and 'if you want me to check something then I'll just make sure it's targeted right?' Mr Porter makes a conscious effort to remain focused on Darrell's agenda, asking Darrell to lead with no digression into areas of potential irrelevance. Mr Porter offers more specific praise, with an informality that shows an effort to create rapport, 'You've done some really good work on this mate; I'm really impressed with it … I think it's really well put together.'

Mr Porter continues with a focus on language, where he asks Darrell whether he had intended to use a particular word choice. This section becomes more open, with Mr Porter asking Darrell to think more carefully about implied meaning, 'So you've put here 'for a 10-year-old to grasp this concept and forced to decide their options is absurd. That's very interesting phrasing, but I wonder if what you're actually saying in your discussion is that it's unjustified as opposed to absurd.' Darrell replies with, 'Yes, that makes sense actually … that's what I'm trying to say.' Mr Porter also focuses on effective phrasing in Darrell's written discussion:

> **MR PORTER**: 'I really like phrase the 'lacklustre media coverage'. Do you know what I'm talking about when I say lacklustre media coverage?
>
> **DARRELL**: 'What? What I wrote?'
>
> **MR PORTER**: 'Yeah, you've written it.'
>
> **DARRELL**: 'Yeah (jokes) 'cos I wrote it.'
>
> **MR PORTER**: '(laughs) Yeah, where is that?'
>
> **DARRELL**: 'I don't actually know…'

MR PORTER: 'I thought you wrote it?

DARRELL: '(laughs) …Well I thought you meant do I know what it means? I was …like thinking…'

MR PORTER: 'No, sorry. I know what you mean.'

There is a light-heartedness and informality to both Mr Porter and Darrell as they work together to explore this concept. Darrell and Mr Porter respond positively to each other during short ripostes of quick wittedness and good humour. There seems to be a partnership emerging where personalities harmonise with a relaxation in the formality; both use language playfully to break the formality of the moment.

The online nature of the meeting seemed to make Darrell more proactive in recording key ideas, 'Yes sir, I'm just writing that down', as he can be heard actively editing and proofreading his work, 'I found it, I found it … first paragraph of the discussion.' Through the medium of online supervision, Darrell was able to look at a Word document making him more active in the discussion. Darrell continues with his use of humour as he shares, ' …Yes it's my sister's laptop and it's like a tortoise!' Mr Porter laughs as they both continue to look through examples online, with each other looking together yet separately, 'Yeah okay so on your laptop Goggle Harvard referencing style examples, bibliography or something like that and see what comes up … What's the first thing you get?' Darrell is not sitting down watching Mr Porter in the classroom, but instead is at home responding to guidance, checking understanding in the moment rather than going home to try and access documents later; this approach shows a more active engagement in discussion.

It is Darrell who seems to conclude the meeting by planning his own time management and being clear on what he needs to do before he takes his viva, 'Tonight I've got everything, I've done everything, all the changes and evaluation and all that … Okay, I will do the activity log, proposal form and the viva, and I'll send it over to you just for some feedback.' Darrell leaves

the meeting focused on the tasks ahead, showing that he is now finally in the driving seat as Mr Hop suggested at the end of meeting one.

Appendix F

Final themes to emerge from the raw data