A Mixed Method Study Which Explores the Effect of ‘Talk Moves’ on Whole Class Discussion

Student Dissertation

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“A Mixed Method Study Which Explores the Effect of ‘Talk Moves’ on Whole Class Discussion”

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Abstract

(114 words)

The importance of talk in education has been heavily researched. Many believe that dialogue between teacher and pupil or between pupils is crucial. This mixed method study investigates the use of teacher ‘talk moves’ to develop ‘learner talk’ during class discussions in primary school. Teacher and pupil perceptions were gathered alongside observations to gain a deeper understanding of the topic. The action research design enabled me, as a class teacher and insider researcher, to collaborate with teaching colleagues and Primary 1 pupils to implement ‘talk moves’. This paper suggests that ‘talk moves’ can be used across age groups in a range of curricular areas to improve participation, lengthen pupil responses and develop learner talk.
Chapter 1 – Introduction

(770 words)

Talk is an essential tool for students. It is necessary for learning and thinking and helps students to flourish in their everyday lives. Vygotsky (1978, quoted in Snell and Lefstein, 2018) understood learning as a social communicative process where social interaction was ‘intimately related to learning and cognitive development’ (p42). Alexander (2020) adds to this understanding, justifying the importance of talk for mastery of a subject and teaching. Furthermore, he insists that talk is necessary to communicate and relate to others, for democratic engagement and acculturation.

However, many still understand the function of talk as primarily social; the power and importance of talk is not always recognised and valued. The expectation of teachers to deliver an overloaded curriculum and administer national assessments can constrain the use of talk intensive pedagogies (Snell and Lefstein, 2018). Finding time and space to engage all pupils in oral activities, to extend their talk, is challenging. In primary classrooms talk is often enlisted to support other areas of the curriculum, and less often pursued as a goal in its own right.

Nevertheless, pupil voice is recognised as a human right, outlined in the United Nations Convention on the Rights of the Child (1989), and schools are being encouraged to give learners the opportunity to voice their opinions, be heard and listened to in line with this agreement. Furthermore, employers value the
social and economic importance of the skills of articulate communication in speaking, alongside other areas of Literacy.

The topic is of great interest to me as an infant teacher. Some pupils are starting school with limited vocabulary and oracy skills. I provide learners with opportunities to talk, and engage with others, in an attempt to improve pupil talk. However, in my experience, allowing more time for learners to talk with others in school is not enough. Increasing the frequency of talk in classrooms is not guaranteed to improve the quality or content of ‘learner talk’ (Alexander, 2020, p142); as the teacher, I believe my role is to facilitate dialogue, so that pupil talk can be enhanced.

My research study took place in a medium sized state primary school in Scotland. Pupils participating in the inquiry were aged from 5-11 years old. The school encompasses a headteacher, depute headteacher, eight primary classes and a nursery class. Twelve full and part time teachers, nursery practitioners and several support staff work in the school. Teachers plan teaching and learning using the ‘experiences and outcomes’ outlined in Curriculum for Excellence (2004). As a Primary 1 teacher I am responsible for teaching, learning, and assessing my class of 4/5 year olds across Early Level in all eight areas of the curriculum.

My literature review investigates the importance of talk, then examines a range of pedagogical practices which promote pupil participation and develop
talk. It identifies ‘talk moves’ as a framework that can be used by teachers to enhance ‘learner talk’.

The inquiry has been designed to investigate how effective the ‘talk move’ framework is in developing pupil talk. By trialling ‘talk moves’ with pupils in my own class and inviting teaching colleagues to test out the ‘moves’ with learners in their class, I set out to alter my pedagogical approach, give others the opportunity to change their practice and hopefully develop student’s talk. Whole class, rather than group or one-to-one discussion, was chosen since dialogue is organised frequently in this way across different stages in primary schools. Furthermore, it allows all children within a class to be involved without privileging preferred groups or individuals.

A mixed method research project was selected to address perceived gaps in previous studies of the topic. I aimed to understand the phenomenon in question from different paradigm positions. My aim was that the findings from both would complement each other and build a bigger picture of the ‘talk moves’ approach; offering a more holistic view of the topic and its effectiveness.

An action research design frame enabled me, as an insider researcher and class teacher, to integrate a small-scale inquiry into my day-to-day teaching and learning with my pupils, whilst also working with colleagues in my setting.
If talk is important for pupils to flourish, and ‘learner talk’ is to be developed, then teachers need to value talk, provide opportunities for students to talk in their classrooms, and understand how they themselves can facilitate whole class discussion within their day-to-day teaching and learning. The implementation of ‘talk moves’ may offer teachers a way forward. My study sets out to evaluate how this approach impacts on learners in my setting, whilst respecting and valuing the views of both teacher and pupil participants.
Chapter 2 – Review of the Literature

(2524 words)

Reviewing the literature gave me background knowledge and understanding of my topic. It allowed me to gain an understanding of the research which has been carried out in my field with primary age pupils. I identified themes from the literature which fed into the formulation of my research question and sub-questions. These are defined at the end of this chapter.

The Open University library databases and Google Scholar were used to locate journals and books. Searches initially involved: - whole class dialogue and dialogic talk, but as the process developed, I used the terms learning talk, teacher talk, talk moves and extended talk to narrow my search online for relevant material. The journals and books all originated from research carried out in England, America, Australia, and Italy.

The review focuses on the importance of talk for learning then outlines the significance of pupil participation, teacher questioning and the role of the ‘third turn’, in pupil-teacher interactions, to build sequences of talk and extend learner talk to develop thinking and learning.
2.1 Talk for Learning

Vygotsky triggered the proposition that cognitive development occurs in children when they engage with others. By learning to talk children can then talk to learn. Vygotsky viewed learning as a social process; children construct meaning from the verbal interaction with others. The child acquires knowledge on a social level then on a more individual level. It is the job of a ‘more knowledgeable other’ to ‘scaffold’ the child across Vygotsky’s ‘zone of proximal development’ moving them from ‘what is known’ to ‘what is not known’ (McLeod, 2019). It is both the acquisition of and the use of language that develops children’s thinking and learning.

If a teacher’s role is to facilitate learning, in order that pupils gain new knowledge, and extend their thinking and learning, then it is the teacher who must create experiences and opportunities for students to talk. In Scotland’s Curriculum for Excellence (2004), talk is not prioritised in Literacy; reading and writing are given greater weighting. Talk is not assessed in Scottish National Standardised Assessments in primary schools. Teachers are constrained by the increased emphasis on other areas of Literacy and standardised assessments.

Despite this, Alexander (2020) insists that talk is prevalent in classrooms. However, he argues it is led and dominated by the teacher; talk is monologic rather than dialogic. Dialogue is the ‘exchange of ideas’ (Alexander, 2020, p36), a joint two-way interaction between teacher and pupil, where knowledge is co-owned and co-constructed. He suggests that teachers and learners need to
build talk together to extend thinking and learning. If ‘learner talk’ is to improve, and children are to acquire and extend their use of language, then pupils need to have the opportunity to participate in dialogic rather than monologic talk.

2.2 Pupil Participation

Articles 12 and 13 from the United Nations Convention on the Rights of the Child (1989) has strengthened the power of pupil voice in schools. However, Flanders (1960, cited in Alexander, 2020) refers to the ‘law of two thirds’, insisting that ‘two thirds of classroom time is devoted to talk, two thirds of this time is occupied by the teacher and two thirds of teacher talk is direct instruction.’ If talk is to become more dialogic, then pupils need to be given the opportunity to exert their pupil voice and participate in talk, not just teachers.

Alexander (2020) argues for a shift in emphasis; teachers need to move away from using rote, recitation, instruction, and exposition to modes which are more dialogic. He advocates discussion, deliberation, argumentation, and dialogue. He insists these ‘repertoires’ are less restrictive and more open. They allow for ‘learner talk’ to develop and flourish.

Developing dialogue during whole class discussions, where pupils and teachers work together to build ‘elaborated responses and an interactive dynamic’
(Alexander, 2020, p145), formed the basis of my inquiry. I needed to understand and value pupil perceptions from the start to engage my learners and encourage participation.

Pupils’ viewpoints and beliefs inform how they behave and act in the classroom (Black and Varley, 2008). The authors argue that a pupil’s perception of themselves and their level of ability may not always match their teacher’s viewpoint. Pupil participation, during discussion periods, may be affected if teacher and pupil perspectives are not aligned. Gathering pupil perceptions throughout my inquiry was crucial.

Black and Varley (2008) investigated children’s perceptions of talk. They interviewed twenty-four 9 and 10-year-old pupils across three English primary schools to gather their views. The authors highlighted the pace of a lesson as an important factor in determining whether pupil voices were heard. They claim that the fast pace of a whole class discussion can be difficult for some children who find it hard to ‘keep up’. Offering learners ‘wait time’ (Rowe, 1986) between a teacher’s initiation question and a response can give pupils space to slow down and think. Alexander refers to this as ‘thinking time’ (Alexander, 2020, p147); arguing that the pupil must use the pause to think not wait.
Managing students’ participation during whole class discussions, to ensure all pupils had equal opportunity to use their voice, was necessary in my small-scale inquiry. Allowing learners initial ‘thinking time’, as well as time to share their thoughts with a partner, gave learners space to think, and the opportunity to have their voice heard before a whole class discussion commenced.

Black and Varley (2008) claim the learners they interviewed, who spoke positively about talk, were taught in classrooms where teachers created an environment ‘where everybody’s ideas were valued and listened to’ (Black and Varley, 2008, p220). Alexander (2020) supports this claim and takes it further by defining six principles, which he insists must be adopted if dialogue is to prosper in classrooms. The first three principles: - collective, supportive, and reciprocal, link to the classroom environment, its ethos and sense of community, that is necessary for dialogue to occur. Collective refers to the joint learning that occurs between teacher and pupil, or pupils within a group; supportive allows pupils to feel they can use their voice freely. Reciprocal ensures pupils listen to each other, share ideas, and ask questions. Creating classroom environments that were collective, supportive, and reciprocal was necessary in my inquiry to build dialogue between pupils and teachers.

Alexander’s final three principles: - deliberative, purposeful and cumulative address the content and orientation of the talk. Deliberative involves learners presenting and evaluating different viewpoints, and purposeful reminds us that talk must move learning forward towards specific learning objectives.
Cumulative talk involves teachers and pupils building on contributions to create longer chains of talk.

However, Hardman (2019) argues that while pupil participation is necessary to extend ‘learner talk’, it is ultimately the teacher who needs to trigger such talk to occur. It is this theme that I will examine next.

### 2.3 Teacher Questioning

Alexander (2020) insists that the Initiation, Response, Evaluation or Feedback (IRE/F) pattern still dominates classroom practice. Teachers pose most questions during talking periods. A teacher ‘initiation’ is followed up by a pupil ‘response’ or answer before the teacher offers a ‘third turn’ (Alexander, 2020, p115) in the pattern by giving an ‘evaluation or feedback’ comment.

The continuing dominance in classrooms of the IRE/F pattern, or ‘recitation script’, limits pupil participation in talking activities. The prevalence of this script has triggered interest in teachers questioning. Therefore, the questions that teachers use to initiate talk are crucial to the responses learners give.

Hardman (2019) insists that a teacher’s question can open or close a space for students to talk. Closed and test questions have a closed structure so are useful for checking pupil’s recall; answers tend to be brief and are right or wrong so cannot always be built upon. Open questions provide opportunities
for pupil participation by valuing multiple answers. These ‘authentic questions’ (Nystrand et al., 2003, p145) signal to pupils that the teacher is genuinely interested in what learners think and know. They require students to ‘think, share and reason’ (Hardman, 2019, p6).

Despite this, closed and test questions still dominate most teacher talk repertoires. Paatsch, Scull and Nolan (2019) argue that teachers must expand their own talk behaviour, so that they can support and scaffold their pupil's oral language. They investigated the interplay of teachers’ talk and student responses across pre-school and first year school pupils in an Australian primary school. Drawing on data gathered from a large study, they transcribed thirty videos of small group oral interactions from nine pre-school and foundation year (first school year) teachers across a variety of curriculum areas. They analysed the dialogue between teacher and pupil. When teachers used a closed question, pupils responded using ‘immediate talk’; talk relating directly to the task. However, when ‘how’, ‘where’, ‘when’, ‘what’ or ‘why’ questions were posed, learners were cognitively challenged. Pupil responses involved ‘non-immediate talk’; talk was extended and ‘outside of the immediate experience’ (Paatsch, Scull and Nolan, 2019, p83).

Molinari, Mameli and Gnisci (2013) support the use of authentic questions to extend talk. They analysed student talk from twelve whole-class activities across three Italian primary schools. They explored the different pathways that a talk sequence could take after a teacher posed an authentic or closed question. While their study was relatively small scale, they concluded that a
teacher’s use of open questions can lead to different sequences or patterns of talk.

‘Dialogic sequences’ of talk involve teachers ‘launching’ an open question, which is followed up by a child responding with an elaborate answer. The teacher often ‘re-launches’ the question to other pupils, learners offer ideas and give extended responses and students know they will have their turn to speak as the teacher moves around the class. This pattern allows for numerous voices to be heard and maximises pupil participation. Multiple perspectives of a topic are explored, but students are not required to listen to other perspectives and develop or extend them. This is a common pattern of teacher-pupil talk. The pace of the lesson is maintained, and learners who have something to say are given a turn to voice their ideas. However, Molinari, Mameli and Gnisci (2013) insist that ‘dialogic sequences’ do not construct ‘chains’ of talk. Sequences, that build on ideas across learners, are not constructed. *Cumulation*, one of Alexander’s six principles of dialogic teaching that I outlined earlier in this chapter, is not achieved.

‘Co-constructive sequences’ of talk are structured and controlled by the teacher; the teacher does not dominate the talk but scaffolds and supports the child’s ‘reasoning and thinking’ (Molinari, Mameli and Gnisci, 2013, p425). The authors argue these sequences are more beneficial to learners. They are achieved by altering the ‘third turn’ in the IRE/F pattern.
Molinari, Mameli and Gnisci (2013) insist it is this part of the ‘recitation script’ that is vital. They argue an authentic initiation question on its own is not enough; it is the teacher’s orientation at the ‘third turn’ that has the most power to transform learner talk, construct knowledge and encourage pupil participation in episodes of talk.

### 2.4 The Third Turn

Altering the ‘third turn’, the evaluation or feedback move, in the IRE/F pattern is believed by many to be fundamental in developing pupil dialogue in the classroom (Alexander, 2020; Hardman, 2019; Molinari, Mameli and Gnisci, 2013). Alexander (2020) states it is that moment, when teachers react to learner’s responses, that students thinking can be shut down or opened up. He insists ‘feedback can be replaced by feed-forward’ (Alexander, 2020, p150).

Alexander (2020) recommends teachers use ‘teacher talk moves’ at the third turn to develop pupils thinking and extend dialogue. Teachers can revoice or rephrase what a learner states, seek evidence and challenge their reasoning or invite justification of them. However, Alexander (2020) does not define what teachers should say. Furthermore, he does not explain when teachers should use these ‘moves’. Alexander (2020) draws on the work of O’Connor and Michaels (2019) who take these ‘teacher talk moves’ further.
O’Connor and Michaels (2019) observed teachers, who were skilled in using ‘teacher talk moves’, as part of a dialogic discourse with 11 and 12-year-old pupils in Maths. Using “academically productive talk”, a combination of ‘teacher talk moves’ and talking activities with partners and groups, benefitted content learning in Maths, not just learner talk.

Despite this, transcripts of these lessons showed that not all teachers used ‘teacher talk moves’ correctly, and many used them ‘robotically’ (O’Connor and Michaels, 2019, p171). As a result, O’Connor and Michaels designed a conceptual framework to give teachers a reason for using a ‘talk move’; a ‘goal’ which served as a purpose in the dialogue. Attached to each ‘goal’ was a list of defined ‘talk moves’ that teachers could use in ‘strategic sequence’ (O’Connor and Michaels, 2019, p172) to develop learner talk.

Hardman (2019) refers to the ‘Dialogic Teaching Intervention’ which Alexander implemented. This random control trial involved training teachers in Alexander’s ‘teacher talk moves’, then supporting them to implement them across English, Maths and Science lessons in their schools over a period of 20 weeks. In the control group schools, it was ‘business as usual’ with teachers continuing with their current pedagogical approaches. In total, approximately 5000 Year 5 (10-11 years old) pupils took part; lessons were observed and analysed. Hardman (2019) concluded that the implementation of ‘teacher talk moves’ resulted in a greater number of students participating in talk; talk exchanges were extended and sustained, whilst learners in the control group gave mostly brief responses. There appears to be some ethical issues here,
with only pupils in the intervention group experiencing this new approach, which aimed to improve learner talk. There may also be some methodological issues too. While Hardman’s findings from observations are substantial, pupil perceptions of the ‘teacher talk moves’ were not gathered. Furthermore, only Year 5 pupils participated in this study. There is no evidence to show whether these ‘teacher talk moves’ were effective with other year groups.

Despite this, Hardman (2020) insists it was the combination of features that had the biggest impact on student talk. When teachers used open questions and responded to pupils using a repertoire of ‘teacher talk moves’, students became more expansive in their contributions. Content learning improved and there were higher levels of pupil participation.

After reviewing the literature, I realised that implementing the ‘talk moves’ approach on its own was not enough. If pupils were to participate in dialogical forms of talk, the classroom environment and ethos needed to be collective, supportive, and reciprocal. Teachers would need to use authentic questions to trigger ‘learner talk’, allowing for multiple student responses. ‘Thinking time’ and the opportunity to share ideas with a partner are also preferred practices. Only by implementing them prior to altering ‘the third turn’ and offering a ‘talk move’, can teachers aim to extend ‘learner talk’ and create deliberative, purposeful, and cumulative talk that Alexander values.
Therefore, the main research question that guided my study was …

*How effective are teacher ‘talk moves’ in developing learner talk during whole class discussion?*

My sub-questions were...

- *How do learners in Primary 1 perceive their own participation in whole class discussion?*
- *What are teacher perceptions about the effectiveness of ‘talk moves’?*
- *What effect do ‘talk moves’ have on pupil responses?*
Chapter 3 – Research Design

(3183 words)

I set out to improve ‘learner talk’ by implementing ‘talk moves’ (Appendix A) during whole class discussions.

Hall and Wall (2019) insist that when researchers plan an inquiry it is the research questions that are the ‘hook on which all other stages and decisions are hung’ (p39). A case study would have allowed me to analyse talk in classrooms, perhaps through observations, and to gather perceptions of talk from teachers and pupils, using interviews and questionnaires. However, the mitigations in school, which were in place due to the COVID-19 pandemic, made this approach challenging. Furthermore, implementing and measuring the effectiveness of ‘talk moves’ would not have fitted with a case study approach.

Since my main research question ‘seeks to test something out’ (Hall and Wall, 2019, p38) I chose to adopt an action research (AR) design frame for my inquiry. As a practitioner researcher I was engaged in both the research and the practice. As a class teacher I aimed to ‘test something out’ in my classroom and gather data throughout the process to understand its effectiveness. Therefore, AR fitted well with my topic and my position within the school. I hoped it would enable me to improve learning by improving practice (McNiff, 2017).
3.1 Philosophical Framework

A clear articulation of the ontological and epistemological perspective should be given at the start of an inquiry in relation to the nature of the topic being investigated.

From an ontological position I understand knowledge to be constructed through shared experiences and interactions with others. The epistemological position of interpretivism can be understood by Bryman (2001, quoted in Grix, 2002) as a view that ‘respects the differences between people and the objects of the natural sciences and therefore requires the social scientist to grasp the subjective meaning of social action’.

It follows that this study was predominantly situated in the interpretive paradigm. Gathering perspectives of talk throughout my inquiry, by engaging in dialogue with learners and teaching colleagues, enabled me to answer the sub-questions: -

• How do learners in Primary 1 perceive their own participation in whole class discussion?
• What are teacher perceptions about the effectiveness of ‘talk moves’?
• What effect do ‘talk moves’ have on learner responses?

However, the topic was also investigated from a more positivist stance, as the final sub-question listed above also requires a more measured response. The
question focuses on the nature of the learner responses. Perceptions of the ‘moves’ on pupil responses were gathered from dialogue; the frequency of the ‘moves’ and their effect on the frequency and content of the learner responses were drawn from numerical data extracted from observation transcripts.

Burton and Bartlett (2005) insist that using both observations and interviews improves the depth of research. By adopting a more holistic, mixed method approach I added rigour to my inquiry. Only by observing dialogue and interviewing participants could I gather a thick description of data to fully address my main research question: -

- How effective are teacher ‘talk moves’ in developing learner talk during whole class discussion?

3.2 Participants

As a Primary 1 class teacher in a medium sized Scottish primary school, I knew my setting, the twenty learners in my class, and my teaching colleagues well. Negotiating access with my gatekeeper, the headteacher, allowed me to work collaboratively with learners and a team of committed teachers.

Attaining consent from learners was necessary. Following ethical guidance outlined in BERA (2019), I gained ‘opt out’ consent from parents (Appendix B). This was appropriate as it avoided the need for consent slips during a pandemic. I also outlined the inquiry to my young learners. They used the
formative assessment tool ‘thumbs up’, that was already familiar to them to give their assent. However, at the start of my inquiry I felt that my learners may not have understood what they were giving assent too. I monitored their behaviour throughout; learners were asked at the start of an interview or observation if they wished to continue, non-verbal behaviours were observed throughout the data gathering process. Oates (2019, p8) suggests that showing ‘sensitivity to a child’s visible signs of assent or dissent’ is necessary to maximise the benefit and minimise the harm of research.

I selected a sample of pupils from my own class to interview at the start and end of my inquiry. This allowed me to gather pupil perceptions of ‘talk’ and assess if perspectives alter. As an insider researcher I had to be aware of bias. I discussed with a close colleague, who also knew the learners well, which pupils to select. Due to time constraints, I interviewed four learners; two articulate, confident talkers who contributed frequently to discussions, and two reluctant talkers who rarely contributed. This sample of participants offered representation of different ability subgroups in my field. It was ‘purposive rather than random’ (Miles, Huberman et Saldaña, 2020, p27). I interviewed the reluctant talkers together; inviting both children to share their ideas. This avoided singling out the less confident talkers and ‘excluding hard-to-reach pupils’ (Oates, 2019, p4). Each pupil had the support of the other. I interviewed the competent talkers together to avoid bias. This decision ensured an equitable process with multiple learner voices heard.
As an insider researcher I valued the opinion of my colleagues. I aimed to ‘pull’ interest in my topic by inviting them to an online presentation. I shared the knowledge from my literature review; outlined my inquiry and set out expectations, should they choose to be involved, explaining their right to withdraw at any point. Some could not make the initial presentation. Equality was shown and no colleague was discriminated against. I repeated the presentation on an alternative date before distributing information and consent forms to the seven colleagues who attended (Appendix C). School workload was already high, with added pressure due to the global pandemic. Care was taken to ensure colleagues did not feel pressured, or obliged, to be involved. In total, six teaching colleagues who taught across a range of year groups in my setting, gave ‘opt in’ consent, agreeing to participate in the inquiry.

3.3 Research Methods

In Hardman’s (2019, 2020) evaluation of Alexander’s ‘Dialogic Teaching intervention’ most of the data was collected from observations; video analysis and coding systems were used to analyse large amounts of quantitative and qualitative data. At the end of the intervention, teacher perceptions were gathered but pupil perceptions were not considered.

AR is a ‘data driven approach’ (McAteer, 2013, p63). Qualitative data, from interviews, allowed me to gather participants’ perceptions. Transcripts of
videoed observations provided qualitative and quantitative data in my inquiry (See Figure 1).

3.3.1 Interviews

Skinner (2018) argues that it is only by hearing children’s perspectives alongside adult’s perspectives that effective interventions can be developed. I interviewed four learners at the start and end of my inquiry.
I used a semi-structured interview schedule (Appendix D) with questions linked to the sub-question: -

*How do learners in Primary 1 perceive their own participation in whole class discussion?*

Wall (2017) argues that using too structured an interview with young learners can limit responses. I allowed learners to have their voice, repeating questions or offering prompts when participants were unsure, to avoid inadvertently influencing or leading their responses (Burton and Bartlett, 2005). Smiley/sad face pictures, and thumbs up/down visuals, were used to help learners access their thinking and offer their perspective with increasing independence (Wall, 2017). Knowing the learners helped with rapport and the pacing of the interview. I recorded pupil comments and read back what I had written to authenticate the data.

At the beginning of my inquiry all four pupils agreed to take part; only one pupil agreed to be interviewed at the end of the inquiry, another was absent, and two others chose not to participate. The learner responses were transcribed for analysis.

All learners were involved in whole class interviews and were given the opportunity to offer their perspective. Pupils watched the videoed observations (outlined in 3.3.2) then were invited to share their perceptions using a ‘two stars and a wish’ tool which they were familiar with. Their
comments were written on the interview schedule (Appendix E). Multiple voices were heard in a short period of time. This added depth and credibility while avoiding bias.

Facilitating structured focus groups with colleagues allowed me to gather teacher perspectives. Hall and Wall (2019, p161) insist focus groups can ‘showcase a range of views’ but also offer a space to reach a shared understanding. The focus groups took the format of an informal meeting. This created a relaxed atmosphere where participants could engage in a conversation style of dialogue, sharing ideas and perceptions. Meetings took place fortnightly on three occasions, adhering to school pandemic mitigations.

I was concerned that some teacher voices may dominate the dialogue. Questions from the interview schedule (Appendix F), linked to the main research and sub-questions, were sent out in advance by email so colleagues were familiar with the topic being discussed. Questions were openly displayed on a flipchart throughout the meeting. To ensure equal participation, I voiced each question, then ensured each participant was given a turn to speak. I transcribed individual comments on the flipchart to ensure transparency and avoid bias. These were minuted and sent to participants for verification and authentication.
3.3.2 Observations

Videoed episodes of whole class discussion provided a visual stimulus for pupils to observe and reflect on. Using visual approaches to facilitate dialogue with younger children offer many positives for researching young children’s perspectives (Wall, 2017). In my inquiry the videoed observations helped with learner engagement and participation. They reduced the power dynamics between teacher and pupil as learner talk was mediated through the visual tool.

The videos also enabled me to capture the use of the ‘talk moves’ and measure their effectiveness. I intended to video colleagues implementing ‘talk moves’ but this was not feasible due to pandemic restrictions. However, a student teacher videoed two episodes of talk during the inquiry. Both videos captured myself implementing ‘talk moves’ with my learners. Initially an iPad was trialled to record the discussion, but the sound quality was poor. A video recording facility on the school camera proved more successful; during the trial learners appeared unphased by the recording. Each video episode lasted approximately 10 minutes.

I decided to transcribe the first three minutes of each videoed observation; following the transcription conventions outlined by Cohen, Manion and Morrison (2017). Transcribing the whole recording would have been time consuming and was not necessary for my small-scale inquiry. The short transcripts provided samples of data for analysis, whilst helping to further reduce bias by providing an ‘accurate verbatim record of the interview’
(Cohen, Manion and Morrison, 2017, p647). Geertz (1973, cited in Miles, Huberman et Saldaña, 2020) states they add to the ‘thick description’ (p8) of data collected, bringing rigour and validity to my research.

The videos also allowed me to reflect on my own practice. By replaying the session to become more familiar with the content, I was able to reflect on my own performance as a participant (McAteer, 2013). These reflections were shared during focus groups.

All participants were frequently thanked for their continued involvement and reminded that data would be stored safely, and password protected. Videoed observations were deleted after transcription. Participants were assured that anonymity would be applied in the final report. This helped build trust. Lincoln and Guba (1985, cited in Cohen, Manion and Morrison, 2017) indicate that trust is foundational to effective and credible research.

3.4 The Action Research Cycle

The AR cycle involves a spiral process of planning, acting out, observation and reflection. Cohen, Manion and Morrison (2017) put reflection at the heart of AR. They insist reflection and evaluation must occur throughout the cycle. Participants are required to both ‘feedback and feed forward’ (Cohen, Manion and Morrison, 2017, p448) as they reflect on what has happened and how it may inform subsequent cycles. McAteer (2013, quoted in Cohen, Manion and
Morrison, 2017, p449) states that through reflection ‘action steps’ can be identified. ‘New interventions’ can be implemented in future cycles. I implemented two cycles of research.

AR is collaborative, participative (McNiff, 2017) and individualistic (Whitehead, 1985, cited in Cohen, Manion and Morrison, 2017). I worked collaboratively with teaching colleagues and learners throughout the inquiry. I was a participant researcher, working collaboratively with teaching colleagues, and worked simultaneously with learners in my class participating in a separate ‘spin off’ AR cycle. The AR process became a ‘generative transformational process’ (McNiff, 2017, p49; see Figure 2) whereby the initial AR spiral generated further spin off spirals of learning.

Figure 2 - A generative transformational evolutionary process (McNiff, 2017, p49)
Teaching colleagues worked with their own class of pupils, implementing the ‘talk moves’ to suit the stage and needs of their learners. They demonstrated individual responsibility for the ongoing process of learning and action, reflecting and evaluating.

I have outlined both cycles of AR with my teaching colleagues and learners. A summary of the process is shown in Figure 3.
Initial AR Cycle

Teaching colleague participants

Focus Group 1
Planning session- ‘next steps’ identified and ‘new interventions’ agreed

Focus Group 2
Perceptions shared, ‘next steps’ identified and ‘new interventions’ agreed.

Focus Group 3
Perceptions shared; future implications discussed.

‘Spin off’ Cycle

Learner participants

Interviews
4 learners

Primary 1 Learners create ‘Talk Charter’. I scaffolded two whole class discussions using ‘talk moves’.
One discussion was videoed

Whole Class Interviews
Learners watched videoed observation, perceptions shared using ‘two stars and a wish’ tool, ‘wishes’ trigger formulation of ‘new interventions’.

I scaffolded two whole class discussions with a different stimulus.
One discussion was videoed

Whole Class Interviews
Learners watched videoed observation, perceptions shared using ‘two stars and a wish’ tool.

Interviews
1 learner

Figure 3 – The action research cycle with teaching colleague and learner participants
3.4.1 – The Action Research Cycle with Teaching Colleague Participants

My position altered when I became a participant in my own inquiry. When working with teaching colleagues to implement the ‘talk moves’ approach I moved from being a researcher, ‘I’, to working alongside teaching colleagues, ‘we’. The balance of power shifted from leading the inquiry, into a role that was more equally positioned.

During the first focus group meeting we planned the implementation of the ‘talk moves’ approach. We agreed to establish talk rules with our own classes before starting the inquiry. Some classes created a ‘Talking Charter’, reinforcing Alexander’s principles of collective, supportive, and reciprocal (Alexander, 2020). Alexander insists that creating this ethos is necessary for dialogue to occur. As discussed in ‘Chapter 2 – Review of the Literature’ we gave pupils ‘thinking time’ and space to ‘think pair share’ before whole class dialogue commenced. This allowed for equal participation. We created a list of resources that could be used to stimulate discussions with our learners and agreed to initiate talk using an open question linked to the stimulus. During discussions, the ‘talk moves’ were positioned in front of us so that we could refer to them throughout.

Two further focus group meetings were held. The second meeting took place at the end of cycle 1. We formatively assessed the ‘talk moves’ approach, through reflection, guided by the research questions. ‘New interventions’ were taken forward into cycle 2. We agreed to continue using ‘talk moves’ but to trial them in different areas of the curriculum using alternative stimuli.
During the final focus group, we reflected on the approach and interventions. Themes from the research questions were used to guide the content and direction of the meeting.

3.4.2 – The Action Research Cycle with Learner Participants

As a participant researcher I implemented the ‘talk moves’ with my class. I worked collaboratively with all pupils, engaging in a new cycle of AR. All learners were invited to improve their ‘talk’ by engaging in whole class discussions. Learners were given autonomy, choosing what they wanted to ‘talk’ about before a discussion commenced. Pupils dragged their name on the interactive whiteboard to their preferred stimulus i.e., a short film or photograph. The stimulus with the most ‘votes’ was selected. I posed an authentic question about the chosen stimulus, then scaffolded the learner responses using ‘talk moves’. Two discussions were carried out during cycle 1; one was videoed. Involving learners in selecting their own focus for discussions empowered pupils.

Learners watched themselves participating in discussion in the videoed observation. Pupils offered their perspective on their performance. Their reflections or ‘wishes’ informed ‘new interventions’ for cycle 2.

Different choices of stimuli were offered during cycle 2 and the pupils selected their preferred option as before. Two discussions were again undertaken; one was videoed for reflection. Learners selected their stimulus, took part in a
whole class discussion initiated with an authentic question linked to the stimulus, observed the videoed observation, and then reflected on their participation. With support, learners had planned, acted out, observed, and reflected upon their own learning. Pupils played a significant role in participating in their own AR cycle.

Throughout my inquiry I followed the relevant ethical guidance outlined in BERA (2019). I used the ethical appraisal form (Appendix G) and Stutchbury and Fox’s (2009) ethical framework to question and interrogate my decision making to uphold ethical practice and ensure integrity throughout my inquiry.

3.5 Triangulation

McNiff (2017) insists triangulation demonstrates and establishes authenticity while Miles, Huberman et Saldaña (2020) add that triangulation of data across participants and methods can bring credibility to a study. During data collection, the methods generate different ‘facets of data’ (Miles, Huberman et Saldaña, 2020, p294). They piece together, like a jigsaw, to build a picture of the subject being investigated.

In my inquiry I used triangulation across different sources and methods. Learners and teaching colleagues participated. Pupil interviews, teacher focus group interviews and transcripts of videoed observations generated data that was both qualitative and quantitative in nature. While this triangulation
process was crucial to data gathering it was also vital to data analysis and interpretation.

3.6 Data Analysis

Taylor and Gibbs (2010, quoted in Cohen, Manion and Morrison, 2017) state that data analysis ‘concerns how we move from the data to understanding, explaining and interpreting the phenomena in question’ (p643).

I chose to adopt an inductive approach to analysis as it is data driven, like AR. It is also reflective; the researcher analyses the process. The approach looks for patterns in data, and groups them using themes generated from the data itself.

Brannen (2005, quoted in Scoles, Huxham and McArthur, 2014) states that analysing data gathered in a mixed method study can be carried out in several ways; it does not necessarily have to be analysed as a ‘single, rounded reality’. In my study, the qualitative analysis came first; quantitative numerical data was then used to ‘provide analytic texture’ (Miles, Huberman et Saldaña, 2020, p36) to my research.

Most of my methods generated qualitative data. Thematic analysis was used to analyse my interview comments, and reflective jottings from transcripts of videoed observations. Boyatzis (1998, quoted in Braun and Clarke, 2006, p78)
states thematic analysis is a ‘tool to use across different methods’. This fits well with my methodology.

Comments and jottings were uploaded to the CAQDAS program Quirkos (2021). Each unit of data was assigned a number to ensure anonymity i.e., T4 for teacher 4 or L3 for learner 3. Learner names were blanked out in pupil and teacher comments; pseudonyms were used in observation transcripts to ensure anonymity.

Quirkos (2021) was used to code and group data into themes. Themes or ‘quirks’ were displayed as coloured bubbles on the screen. Quirks could be merged or partitioned to create subthemes. The program was very visual and intuitive.

Quantitative numerical data was generated from the observation transcripts. Learner responses were coded, grouped, and counted. Totals and frequencies were displayed as a matrix grid for analysis.

By drawing on both qualitative and quantitative data sets, I aimed to strengthen my analytic findings (Miles, Huberman et Saldaña, 2020) and bring rigour and transparency to my inquiry (McNiff, 2017).
Chapter 4 – Data Presentation and Analysis

(3439 words)

4.1 Analysis of Qualitative Data

Braun and Clarke (2006) outline a step-by-step process which researchers can work through to conduct a thematic analysis of qualitative data. I have outlined how I used this approach to show transparency and authenticity in my data analysis.

Phase 1 states the importance of familiarising yourself with the data. Reading interview comments and watching video observations before transcribing them into written form helped me interpret the data. Lapadat and Lindsay (1999, quoted in Braun and Clarke, 2006) suggest transcribing is as much an ‘interpretative act, where meanings are created’ (p87) as a mechanical one. When transcribing the data, it was important that I retained the exact wording from participants. Transcripts were re-checked for accuracy against video recordings of observations.

Phase 2 involved the production of initial codes. I annotated the observation transcripts with jottings to show my initial reflections, then highlighted groups of words or phrases. Interview transcripts were also highlighted. These chunks of highlighted text were then coded using language from the data record itself. Miles, Huberman et Saldaña (2020, p65) refer to ‘in vivo coding’ as one of the most common qualitative coding methods. By honouring the participants
voice and using their perceptions to generate codes, I noticed repeated words or phrases; patterns began to emerge from the data.

The third phase involved grouping the codes into themes. Data from each source was uploaded into Quirkos (2021) and coded. Coded data from across sources were tagged together under ‘quirks’ within each cycle of action research. Themes were then aligned with the research sub-questions. The data was examined; some of the data was then grouped into smaller sub-themes.

Themes were evaluated in Phase 4. Each data extract within each ‘quirk’ was re-read to confirm its place. The themes were reviewed under each research sub-question, within each cycle, and then together as a whole data set. This brought validity to the individual themes in relation to the entire set of data (Braun and Clarke, 2006). Some ‘quirks’ were merged with others on Quirkos (2021); some were renamed. A final ‘thematic map’ was created showing all the themes and subthemes (Appendix H).

In Phase 5 themes were defined and refined by re-analysing the data within them (Braun and Clarke, 2006). This enabled me to have a clear understanding of what each theme was about before writing the ‘story’ it told. The final themes linked to each sub-question are outlined in Figure 1.
4.2 Analysis of Quantitative Data

The analysis of qualitative data recognised that ‘talk moves’ affected the length of pupil responses. ‘Extended responses’ was a theme identified in cycle 1 which linked to sub-question 3. The observation transcripts were re-analysed to examine pupil responses in greater detail. Learner responses were coded by length and quality; an ‘extended contribution’ was defined as one that provided non-specified information and thinking that offered a developed response through, for example, explanation or expansion. A ‘non-extended contribution’ provided pre-specified, brief information with no development, often a word, phrase, or simple clause (Hardman, 2019).

In addition, the qualitative analysis failed to identify any themes regarding the effect of ‘talk moves’ on the type of learner response given during discussions. Both observation transcripts were further analysed. ‘Extended contributions’
were coded by the kind and nature of the talk. An existing coding scheme (Hardman, 2019) that aligned itself with O’Connor and Michaels ‘talk moves’ was used. This is outlined in Table 1 (Appendix I).

Once the data had been coded, it was converted into numeric representation. This process is referred to by Miles, Huberman et Saldaña (2020, p36) as ‘quantitizing’. It enabled the data to be measured and then counted. Totals and frequencies were then analysed alongside the qualitative analysis.

4.3 Data Presentation

The data is presented and analysed for each cycle of action research under each sub-question.

**SQ 1 – How do learners in Primary 1 perceive their own participation in whole class discussion?**

**Cycle 1**

At the start of the inquiry, three out of the four learners that were interviewed felt ‘happy’ when it was time to talk together at school. Both competent talkers liked to ‘talk’. They commented that participating in discussion improved their learning, which in turn they could then share with others.
“I feel happy because it’s so exciting talking about palaeontologists because my brother likes dinosaurs so much and I thought I could teach him after I've learnt.” (L1)

“I want to know about palaeontologists so my dad...no my sister...I don’t have a brother...just a sister called ***** and I want to teach her so that she can help me look for some (dinosaurs).” (L2)

The benefits of ‘talk’ were immediate and short term; both learners viewed talk as a ‘mechanism or tool in the learning process’ (Black and Varley, 2008, p213). However, one of the reluctant talkers insisted he liked talking activities because he may ‘get a turn’ to speak.

_T - How do you feel when we all talk together on the carpet?

_L3 - (points to happy face picture)

_T - Why do you feel like this?

_L3 - mmmmm...I might get a turn.

_T - Do you like getting a turn?

_L3 - (nods)

The other reluctant talker felt ‘sad’ when it was time to talk together as a class because he didn’t ‘get a turn’ to talk.

_T - How do you feel when we all talk together on the carpet?
L4 - Sad...I don’t really get a time to talk.

T - Some people put up their hand to talk.

L4 – I do that...I don’t get a turn.

This pupil was upset about the lack of opportunity to talk rather than the ‘talk’ itself. The implication is that by ‘getting a turn’, talking together may possibly become a more positive experience.

‘Getting a turn to talk’ triggered contrasting feelings with both reluctant learners but it remained an experience they both valued and wanted. Having their voice heard appeared to be necessary for their enjoyment of talk.

These learners also saw frequent participation in whole class discussion as a sign of an effective talker. The quantity or frequency of talk was referred to more than the quality of talk.

T- Who is a good talker in our class?

L3 - I’ve got two, ***** and *****...I think because they can never stop talking.

L4 - Eh...***** he never stops talking...and over and over and over...

However, Learner 2 perceived a ‘good talker’ as a pupil whose voice was aligned with the official voice of the teacher; someone who states what the
teacher expects, when the teacher asks, rather than one who expresses their own ideas on their own terms.

“...they just speak when the teacher says...when the teacher tells you something you can tell them what the teacher wants you to speak. When the teacher tells them (the good talker) to talk and put your hand up that's when you need to put your hand up and talk.”

Segal and Lefstein (2015, quoted in Alexander, 2020) refer to this as ‘voiceless participation’.

During the whole class interview, which allowed pupils to reflect on performance, many pupils believed following ‘ground rules’ was key to being successful.

“I wasn't messing about when other people were talking.” (L6)

“We have to speak more louder.” (L7)

“You need to put up your hand to talk.” (L1)

It is not surprising that learners measured the effectiveness of talk using these rules since pupils themselves identified them, when creating the class ‘talking charter’, at the start of the inquiry. Black and Varley (2008) add to this, insisting it is unsurprising that pupils associate key ‘ground rules’ with
effective talk ‘given the current emphasis on rules and behaviour in many primary classrooms’ (p213). Yet, Alexander (2020) argues that creating a classroom ethos that is collective, reciprocal, and supportive from the outset is necessary for dialogue to occur. Agreeing ‘ground rules’ jointly with pupils, before dialogue commences, supports these principles.

**Cycle 2**

Learners continued to emphasise the importance of rules, when measuring their performance during talking activities, and reflecting on their own talking competences in Cycle 2.

“Look at the person who is talking.” (L5)

“Mrs A on Monday or Tuesday or Wednesday or Thursday or Friday took me and ***** and ****** up cause she knew that we were very loud and we did some talking for the nursery.” (L1)

However, one pupil commented on the nature of the talk that others were using.

“Everyone was adding on not saying their own thing.” (L10)
The teacher ‘talk move’ question “Who could add on to that?” may have given rise to this comment. It aligns to what Rezniskaya and Wilkinson (2017, quoted in Alexander, 2020, p138) refer to as the ‘cognitive norms’ of dialogue, rather than previous comments linked to ‘ground rules’ which recognise the ‘social norms’ of dialogue. Alexander (2020) argues that both are necessary; ‘dialogue unites the social and cognitive’ (p138).

SQ 2 – What are teacher perceptions about the effectiveness of ‘talk moves’?

Cycle 1

Most teachers spoke about the ‘goals’ that served as a purpose to the ‘talk moves’ as well as the ‘talk moves’ themselves.

O’Connor and Michaels (2019) recommend teachers work through the ‘goals’ in ‘strategic sequence’ (p172) when engaging in whole class discussions. Many teachers in my inquiry stated that they did not use all the ‘goals’, nor use them in order. Instead, they selected those relevant to their pupils’ needs and responses then moved between different goals within a lesson.

“I didn’t use all the goals.” (T7)

“I jumped between goals.” (T3)
“I felt I was jumping about the goals depending on children’s responses.” (T4)

“I jumped between the goals particularly when I moved to engage a new pupil. I found myself using Goal 2 when children became distracted.” (T6)

‘Talk moves’ were also used flexibly depending on learner needs and responses, as well as the demands of the class as a whole.

“I moved up and down the 'moves' depending on the response of the learners and also the focus of the rest of the class.” (T6)

“I used different 'moves' with different learners. It depended on their ability.” (T7)

“I am more likely to dip into a 'move' now.” (T4)

Teachers commented on their ‘need’ to practise the ‘talk moves’ and another was concerned about her framing of the ‘moves’.

“I need to practise the 'moves' more.” (T2)

“I didn’t always frame the moves correctly. During my second discussion I felt I was better at framing the questions.” (T6)

The exact ‘moves’ were not specified but these perceptions implied the ‘moves’ were difficult and required time and practise to master; O’Connor and Michaels (2019) argue that some ‘moves’ are easier to use than others.
However, Teachers 2 and 7 were keen to continue practising the ‘moves’, trialling them in different curriculum areas.

“I’m going to practise them in different areas of the curriculum.” (T2)

“I thought I could use them alongside Making Thinking Visible strategies like ‘See Think Wonder.” (T7)

Identifying this ‘next step’ led to all participants implementing the ‘talk moves’ in different contexts in Cycle 2.

**Cycle 2**

‘Talk moves’ were used across various curriculum areas. Teachers used the ‘moves’ in Health and Wellbeing lessons, and Science and Social Studies projects.

“I’ve used it with the class work on the Rights of the Child.” (T4)

“I used it in Health and Wellbeing for ‘Keeping Myself Safe’. I used it for more sensitive issues to encourage deeper thinking during whole class discussion. I used it after watching Newsround to discuss news topics.” (T1)

“I used it for ‘zoom in’ (Making Thinking Visible strategy) with images linked to the rainforest.” (T7)
‘Moves’ continued to be used flexibly by teachers. They spoke about using multiple ‘moves’ together and selecting specific ‘moves’; they became tools that teachers selected from.

“I’ve started to combine the moves: - Goal 1 and Goal 4 phrases. Which means I can re-in force a point and then dig deeper.” (T6)

“Agree or disagree links well with the Rights work. I’m dipping in and out of the ‘moves’ in all areas of the curriculum.” (T4)

Using the ‘moves’ in this way aligns with the approach that O’Connor and Michaels (2019) suggest. They refer to ‘talk moves’ as ‘...the forks, spoons, and spatulas. Like the tools that skilful cooks must use, they are not the meal itself. The meal is the intellectual content...’ (p172). In my inquiry, teachers were picking ‘moves’ to suit their pupils, then relating them to the subject that was being taught.

Teacher 4 comments above that she used ‘agree or disagree’. Other participants also favoured this ‘move’.

“I am finding that I use agree or disagree all the time!” (T6)

“When I used agree or disagree the children went off on their own tangent.” (T7)
Hardman (2019) implies this ‘move’ is popular with teachers as it requires students to listen attentively, think and build on others’ contributions. It serves multiple purposes or aims.

Several teachers perceived ‘talk moves’ as effective in increasing the number of learners contributing; more children participated in lengthier discussions. Teachers commented that ‘reluctant’ talkers were also contributing more frequently.

“There are a lot more pupils contributing than previous discussions. ***** and ***** who don't normally contribute are offering responses and contributing.” (T6)

“Discussions were longer, and the moves allowed more children to contribute.” (T2)

“Everyone was involved. Reluctant talkers are beginning to contribute. Reluctant talkers are 'hooked' in more. The 'moves' help to scaffold the talk for reluctant talkers. The more confident talkers are leading the less confident.” (T7)

However, increased participation, leading to extended discussions did not guarantee improved pupil responses.
SQ 3 – What effect do ‘talk moves’ have on pupil responses?

**Cycle 1**

A few teachers commented on how ‘talk moves’ had triggered lengthier pupil responses during whole class discussions.

“Responses were extended.” (T4)

“Extended responses were given by the pupils.” (T6)

This was also evident in the transcript of video observation 1. Learners in Primary 1 watched the short film ‘Bubble’ and then were asked where else the character in the film may travel to on the giant bubble. Extract 1 is taken from the transcript. In Extract 1, I used a ‘move’ (Turn 7) and the pupil responded with an extended answer (Turn 8). Further uses of ‘talk moves’ (Turn 9 and 11) also triggered lengthy responses. Consequently, when I replied with a closed question (Turn 13), the pupil responded with a single word answer. Similarly, when I framed a ‘talk move’ incorrectly (Turn 1), the pupil’s response was brief.
Extract 1

Video observation 1 - Whole class discussion in response to the short film ‘Bubbles’ (Key: T - teacher)

<table>
<thead>
<tr>
<th>Turn</th>
<th>‘Move’ linked to ‘Goal’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you agree or do you have another idea Louise?</td>
</tr>
<tr>
<td>2</td>
<td>Yes...I have another idea.</td>
</tr>
<tr>
<td>3</td>
<td>Tell me about your idea then, good girl.</td>
</tr>
<tr>
<td>4</td>
<td>My idea was she might have went to school.</td>
</tr>
<tr>
<td>5</td>
<td>She went to school, okay. Andrew did you hear what Louise said?</td>
</tr>
<tr>
<td>6</td>
<td>To school.</td>
</tr>
<tr>
<td>7</td>
<td>Louise thought the little girl was going to school. Could you add anything to that?</td>
</tr>
<tr>
<td>8</td>
<td>I think she could go somewhere else when she went back.</td>
</tr>
<tr>
<td>9</td>
<td>Where do you think she could go?</td>
</tr>
<tr>
<td>10</td>
<td>I think she might go to the desert.</td>
</tr>
<tr>
<td>11</td>
<td>And why do you think she might go to the desert?</td>
</tr>
<tr>
<td>12</td>
<td>Because she might like it there because there'll be lots of sand.</td>
</tr>
<tr>
<td>13</td>
<td>Do you think she might like the sand?</td>
</tr>
<tr>
<td>14</td>
<td>Yeah</td>
</tr>
</tbody>
</table>

Quantitative analysis of the observational data added further evidence. In the full transcript, seven correctly framed teacher ‘moves’ were launched by the teacher; six of the ‘moves’ triggered an extended pupil response, only one ‘move’ triggered a single word answer, a non-extended response.

Teacher-pupil dialogue was also perceived to occur during discussions.

“There was definitely two-way teacher-pupil dialogue.” (T6)
Jottings from the video observation also highlighted periods of teacher-pupil dialogue.

*Teacher-pupil dialogue was built but it wasn't across different pupils.*

Building dialogue across pupils is addressed in my interpretation of data in cycle 2 and further in ‘Chapter 5 – Conclusion and Implications’.

However, in Extract 1 teacher-student dialogue between myself and Andrew, a Primary 1 learner, lasts from ‘Turn 5’ to ‘Turn 14’. During this period three ‘talk moves’ were used:

- Turn 7- ‘Could you add anything to that?’ (Goal 4 ‘move’)
- Turn 9- ‘Where do you think she could go?’ (Goal 3 ‘move’)
- Turn 11- ‘Why do you think she might go to the desert?’ (Goal 3 ‘move’)

The Goal 4 ‘move’ invites Andrew to work with Louise’s idea and add on to it. The first Goal 3 ‘move’ encourages Andrew to dig deeper into his own reasoning; connecting with what Louise has said, then sharing his own ideas about going to the desert. Finally, in Turn 12, Andrew expands on his ideas explaining that the girl in the film may like the sand in the desert. Each teacher ‘talk move’ offers Andrew the opportunity to reply with an extended response, which in turn triggers further opportunities for another ‘move’ to be initiated. In doing so, dialogue between teacher and pupil is built.
Cycle 2

The theme of building dialogue continued in cycle 2. Building dialogue across pupils, not just between teacher and pupil, was commented on.

“Pupils are starting to build on each other's responses...” (T6)

Reflective jottings from the second video observation suggested ‘chains’ of talk were being constructed between learners; pupils built on other pupil's comments.

Children are building on talk from others who spoke earlier. This shows they are listening to others’ contributions.

Dialogue across learners was evident during video observation 2. In this observation, pupils examined a wooden spurtle and were discussing what the object could be. Extract 2 is taken from the transcript. In this extract James, Hannah and Oona add to what others have previously said using the phrase ‘I disagree’ (Turn 2, 4 and 8). In Turn 4 Hannah disagrees with James, who spoke previously. In Turn 8 Oona disagrees with Hannah, insisting she agrees with James’ idea from earlier in the dialogue.
Extract 2

Video observation 2 - Whole Class discussion about what a wooden spurtle could be used for.

<table>
<thead>
<tr>
<th>Turn</th>
<th></th>
<th></th>
<th>‘Move’ linked to ‘Goal’</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>T</td>
<td>So you are saying that you would use this and hold the handle like Harvey and Iona said but you would use it to conduct. Does anyone agree or disagree?</td>
<td>Goal 4 ‘move’</td>
</tr>
<tr>
<td>2</td>
<td>James</td>
<td>I disagree because I think it is a table leg.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>T</td>
<td>You think it could be from a little table. Does anyone agree or disagree with James?</td>
<td>Goal 4 ‘move’</td>
</tr>
<tr>
<td>4</td>
<td>Hannah</td>
<td>I disagree because I think it is a wand.</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>T</td>
<td>Tell me why you think it could be a wand?</td>
<td>Goal 4 ‘move’</td>
</tr>
<tr>
<td>6</td>
<td>Hannah</td>
<td>Because that’s the handle and the magic comes out that other bit. (Pupil points to different parts of the object)</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>T</td>
<td>Would anyone like to agree or disagree with Hannah?</td>
<td>Goal 4 ‘move’</td>
</tr>
<tr>
<td>8</td>
<td>Oona</td>
<td>I disagree because I think it’s the same what James said. A table holder.</td>
<td></td>
</tr>
</tbody>
</table>

Learners in this extract listened to both the teacher and other pupils. Pupils built on each other’s ideas while the ‘talk moves’ (Turn 1, 3, 5 and 7) facilitated pupil responses.

Extract 2 also offers evidence that pupils began to use the ‘talk move’ language during cycle 2. The question, “Do you agree or disagree and why?” is used in Turn 1, 3 and 7. Although the ‘why’ is omitted in Turn 1, 3 and 7, all three pupils used the language from this particular ‘talk move’ in their response.

Teachers also acknowledged that pupils were using vocabulary from some of the other ‘moves’ in their responses.
“The children have started using these terms (I agree/disagree) and also ‘I have something to add.’” (T7)

“They are saying ‘I agree with...’” (T4)

“The children were using the language ‘I see that differently’ when they spoke.” (T1)

Teachers were modelling appropriate language and vocabulary as part of the ‘talk moves’ approach and pupils were re-using the language during whole class discussions. This finding links with the views of Mercer and Dawes (2008). They suggest that during whole class discussions teachers can ‘take an active role, guiding their pupils’ use of language and modelling the ways it can be used for thinking collectively’. By developing vocabulary during whole class discussions pupils can then use the language themselves when engaging in whole class talking activities or small group discussions with their peers.

As stated earlier, ‘talk moves’ triggered six extended contributions during the observation in cycle 1; in cycle 2 eight extended contributions followed a ‘talk move’. Table 2 shows the frequency of each type of response within each cycle.
In cycle 1, contributions from pupils mainly involved learners expanding or adding on to an idea or making a connection to one; two responses involved learners explaining or rephrasing their position. By contrast, in cycle 2, more learners continued to expand or add on to their own or others’ ideas. However, some argued against others’ thoughts or evaluated others’ opinions. This may have been due to my increased use of the question “Do you agree or disagree and why?”; which gives learners the opportunity to argue and evaluate. This ‘talk move’ was not used at all during the discussion in cycle 1. This evidence implies that different ‘talk moves’ appear to trigger different types of pupil response.

### Table 2

The Frequency of Each Type of Extended Contribution across both Cycles

<table>
<thead>
<tr>
<th>Types of extended contribution</th>
<th>Cycle 1 – Number of extended responses in video observation transcript 1</th>
<th>Cycle 2 – Number of extended responses in video observation transcript 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand/Add</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Connect</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Explain/Analyse</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Rephrase</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Evaluate</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Argue</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total = 6 extended responses</strong></td>
<td><strong>Total = 8 extended responses</strong></td>
<td></td>
</tr>
</tbody>
</table>
RQ - How effective are teacher ‘talk moves’ in developing learner talk during whole class discussion?

Both the qualitative and quantitative bring different benefits to an inquiry; each add value to the research investigation (Miles, Huberman et Saldaña, 2020). Interview data was analysed to gain insight into the perceptions of ‘talk’ and the ‘talk moves’ from pupils and teachers. Observational data, which was videoed and transcribed, was interpreted to offer a more direct calculation of the effectiveness of the ‘moves’. By bringing a quantitative component to my qualitative study I aimed to achieve a richer and more holistic understanding of the effectiveness of the ‘talk moves’ approach.

I perceive ‘talk moves’ to have been effective in developing ‘learner talk’ in my inquiry. This has been illustrated throughout my analysis and is discussed further in the conclusion.
Chapter 5 – Conclusion and Implications

(1151 words)

The research topic provided an opportunity to investigate the effectiveness of teacher ‘talk moves’ in developing ‘learner talk’ during whole class discussion. The literature review highlighted the significance of ensuring a positive classroom ethos, alongside practices to ‘open up the floor’ to talk and increase participation. The literature suggests, that only then can teachers use ‘talk moves’ to scaffold pupil responses with the aim of developing ‘learner talk’.

Evidence from the study indicates that pupils value the opportunity to contribute during whole class discussions. More children participated when a greater number of ‘talk moves’ were used. While teacher participants perceived ‘talk moves’ themselves to be the crucial factor, the increase in participation may have been due to the choice of stimulus, or the improved use of authentic questions to initiate discussion. Involving learners in the planning and reflection process may have also contributed. In my study the impact of these individual themes was not measured. Howie et al. (2019) insist that it is the implementation of all these practices collectively that are most effective.

Teachers agreed to trial ‘talk moves’ in different curricular areas. Alexander’s implementation of the ‘Dialogic Teaching Intervention’, discussed in ‘Chapter 2 – Review of the Literature’, found ‘talk moves’ effective in improving classroom talk and increasing test scores in English, Maths and Science. In my
research ‘talk moves’ were not used to develop talk in specific curricular areas. While teachers trialled the ‘moves’ in Health and Wellbeing, Social Subject and Literacy lessons, the effectiveness of the ‘moves’ within each subject was not measured. This was due to the focus and methodological approach of my inquiry. While using ‘talk moves’ generically across a range of curriculum areas may be achievable, their effectiveness in building knowledge within each subject still requires further study.

At the start of the inquiry, students perceived successful talkers as those who followed ‘ground rules’; the quality or content of what was voiced was not commented on. During cycle 2, a Primary 1 learner praised her peers for starting to ‘add on’ comments to others. This may indicate that the tide was beginning to turn. Learners were noticing a change in others’ responses, they were starting to recognise and value the ‘cognitive norms’, not just the ‘social norms’ of talk. This may suggest that teacher talk, and pedagogic practice can shape learner perceptions.

Furthermore, student talk altered during cycle 2 as pupils started to use the ‘talk moves’ language. This could imply that teacher talk can also alter learner talk. In addition, at the start of the inquiry, teachers commented that they used the ‘moves’ flexibly to meet their learners needs. As the study progressed, there was evidence that certain ‘moves’ triggered different learner responses. It could be suggested that with practise and experience, teachers could become skilled at selecting specific moves to ‘trigger and shape’ (Alexander, 2020, p144) particular types of learner talk.
Teachers stated they needed time to master the implementation of ‘talk moves’. Hardman (2019) concludes that teachers need time to work collaboratively and should receive training in new approaches if they are to embed an effective pedagogy. While time and training were limited in my research, scalability and sustainability continue to be issues of concern when implementing dialogic approaches.

Building dialogue across pupils to create ‘chains’ of talk was evident in my study. These sequences of talk were highlighted in research carried out by Molinari, Mameli and Gnsici (2013), as discussed in ‘Chapter 2 – Review of the Literature’. In their study, the ‘co-constructive sequence’ was recognised as a more ‘fruitful occasion’ (p425) than a ‘dialogic sequence’ between teacher and learner. Findings from my research may suggest that ‘talk moves’ can facilitate ‘co-constructive sequences’ of talk in addition to ‘dialogic sequences’.

Uncertainty brought about by the COVID-19 pandemic, caused anxiety during the planning and implementation stage of my inquiry. After planning my research and gaining consent from my gatekeeper, schools across the country closed and learning moved online. Schools fully re-opened to pupils shortly before my inquiry began. My initial presentation to colleagues outlining the inquiry was held virtually. Mitigations that were in place prevented teacher observations across classes, limiting the data gathering process. Focus groups were held socially distanced in spacious ventilated classrooms. Some teachers reported how much they had enjoyed these meetings. While the pandemic restricted the scale of my inquiry it benefitted teacher participants who gained
the opportunity to engage in face-to-face professional dialogue with colleagues, an experience that had been absent for fourteen months due to the pandemic.

McNiff (2017) insists that ‘influencing learning for improving practice’ (p248) is an important part of being an AR practitioner. My methodology enabled teaching colleagues and pupils to extend their learning. They gained knowledge from myself about ‘talk moves’, which enabled them to alter their practice and try out a new approach. They came together to share their perceptions, and learn from each other, so that they could continue to move forward and influence learning. Involving learners in their own cycle of action research engaged and empowered my Primary 1 pupils, giving them their voice, as outlined in the UNCRC (1989). Learners participated in discussions and shared perceptions of their own and others performance, learning from their peers and extending their understanding.

This final module has afforded me time and space to develop my knowledge whilst gaining an understanding of the research process itself. These insights have brought new understanding to my practice but were also necessary for undertaking this inquiry as part of my masters qualification.

Developing talk in my classroom was what I hoped to achieve. It has been suggested in this paper that ‘talk moves’ are effective in developing learner talk. Some teaching colleagues, including myself, were keen to continue using
the ‘moves’ beyond this study. Sharing the ‘talk moves’ with pupils, so that they themselves can use the language when engaging in group discussion was suggested by one teaching colleague. I plan to continue practising the ‘moves’ with pupils to develop my own proficiency and skill to further extend learner talk and increase participation. Understanding their effectiveness to develop talk, to extend pupils ideas when story writing, also interests me.

Carrying out a systematic enquiry as an insider researcher enabled me to ‘create education by asking questions and searching for evidence’ (Bassey, 1992). By choosing to carry out an action research project, I was empowered to take on a new role working respectfully and ethically with colleagues to lead and extend learning. Working collaboratively strengthened staff relationships and enhanced mutual respect and trust.

This small project was undertaken to trial the ‘talk moves’ approach and examine its effect on learner talk. The study was limited by time and scale and further observations across a range of stages would have provided more data for analysis. A larger study, across a range of schools over a longer period, could be beneficial. Furthermore, there is still much to explore about the effectiveness of ‘talk moves’ across different curriculum areas and with different stimulus.

Previous researchers had favoured particular stages of primary education for trialling different dialogic approaches. However, my inquiry suggests that ‘talk
moves’ can be implemented by teachers across a variety of primary school age groups.

In addition, by gathering data using a mixed methods approach, I achieved a more holistic understanding of the topic being studied. The AR design frame enabled me to share my knowledge and thinking with participants. By showing others how to change their situation, I have hopefully strengthened insights into classroom dialogue and contributed to new practices in my setting (McNiff, 2017).
Postscript – Narrative Critical Reflection

(597 words)

As I reflect on my dissertation journey there are many skills that I have developed. I have summarised key moments in my Reflection grid (Appendix J) and analysed two significant events below.

After gathering data during my inquiry, I was ready to start my analysis. This process was new to me; I was unsure how to put the theory gained from the module and literature into practice. In my PDP I aimed to ‘understand how to analyse my data to address my research questions’ (Appendix J, Example 11). After transcribing and coding my data, I needed a way of bringing patterns together. Cutting and pasting different documents was time consuming, messy, and difficult to track and manage.

I knew my data needed to be organised, to make it accessible for analysis. A student colleague recommended the computer package Quirkos, which I had read about. This program enabled me to input, code, then group together data under specific themes. I distanced myself from my dissertation to develop my understanding and fluency of this software. This was time consuming. On reflection I perhaps should have familiarised myself with the software earlier. As a novice researcher, I was unsure what my data would look like, or how much I would gather. Familiarising myself with Quirkos increased my workload. However, this experience extended my knowledge of the analysis
process and developed my understanding of the tools required. Furthermore, I have enhanced my learning for future practice.

My inquiry emphasised the importance of reflection. When planning my research, I read about a visual tool called a ‘fortune line’ (Hall and Wall, 2019, p82); a useful instrument for participants to use to reflect on a process. During the initial meeting with teaching colleagues, I offered participants a template for completion. None of the participants however used the tool. I debated whether I should insist on this instrument being used, question the participants to understand their reluctance, or step back from the issue and not investigate it further (Appendix J, Example 8).

I decided not to pursue the problem for several reasons. Participants were already voicing their reflections at our focus group meetings; data obtained from the visual tool may not have added anything more to the already thick description I had. Colleagues were implementing the ‘talk moves’ approach and attending focus group meetings; I did not want to add to their workload or make more demands on their time. Furthermore, cases of COVID-19 in the school were rising; end of term pressures were impacting on stress and workload. As an insider researcher I did not want to damage the trust and respect that had been established.

This experience developed my understanding of the importance of respect. By showing humility and taking responsibility for the welfare of the participants,
I aimed to show integrity and reflexivity as a researcher (*Code of Human Research Ethics*, 2014). Nevertheless, I am left wondering why this tool was not used and question how researchers can encourage participants to use unfamiliar tools to gather data? Perhaps gaining participants perceptions through dialogue is enough!

Reading module and independently sourced materials throughout this dissertation process has added to my knowledge and impacted on my teaching practice. Gaining insight into the process of conducting an inquiry, and experiencing how to plan, implement, and write up my own SSI first-hand allowed me to take on a new role as a researcher. Leading learning within my setting was an empowering experience. I have developed both professionally and academically. The journey has triggered my desire to gain new knowledge which I intend to build on.
**References**


Quirkos (2021) Quirkos (Version 2.4.1) [Computer programme]. Available at https://www.quirkos.com


Appendix A – ‘Talk Moves’ framework

‘Moves’ for teachers to use to scaffold and extend learner talk during whole class discussions. Each ‘move’ is assigned to a ‘Goal’ or purpose for using a ‘move’.

Goal 1. Moves that encourage students to contribute, or to clarify their contribution.

- “Say more about that.”
- “So, are you saying...?” (revoicing)
- “OK, let’s turn and talk to the person next to you about that...” (when faced with silence!)

Goal 2. Moves that encourage students to listen to one another.

- “Who could repeat that or put it into their own words?”
- “We didn’t hear that. Can you say it again?”

Goal 3. Moves that encourage students to dig deeper into their own reasoning.

- “Why do you think that?”
- “Can you explain your thinking about that?” (press for reasoning moves)
- “Does it always work that way?” (challenging students responses)

Goal 4. Moves that encourage students to work with one another’s ideas.

- “Who could add on to that?”
- “Do you agree or disagree and why?”
- “Does anyone see it in a different way and why?”
- “Why do you think he/she said that?”
Appendix B – ‘Opt out’ parental information and consent form

Primary 1 Observation and Interview Information Letter for Parents

I am currently studying for a Masters degree in Education with the Open University and carrying out observations and interviews to gather data are part of my studies.

I would like to observe the Primary 1 class taking part in whole class discussions and interview pupils to gather their perceptions of ‘talk’.

What is the aim of the observation?

The aim of the observation is to understand how ‘teacher talk’ effects what pupils say during whole class discussion. By recording the whole class discussions on video the pupils will then be able to observe themselves and reflect on their own performance.

What is the aim of the interviews?

The aim of the interviews are to gain your child’s view on what they think about ‘talk’ in Primary1 at (Name of School).

Who is conducting the research and who is it for?

This interview is part of my studies on a masters-level course at The Open University in which I am carrying out a small-scale investigation. I am using a range of ways to collect information to answer the question.

How do learners in Primary 1 perceive their own participation in class discussions?

This is aimed to help me better understand and develop ‘talk’ as part of the Literacy curriculum and to share my findings with others for whom the findings will be relevant to changing practice.

Why has my child been invited to participate in this research?

All the children in P1 have been invited to take part because their views will be valuable in answering the question set for the study. All pupils will be involved in the video observation and will be invited to reflect on their performance during a whole class interview. Some children will also be invited to participate in solo or paired interviews with myself during our school day. These will be carried out at the start and end of the research process during class time to gather individual perceptions of ‘talk’.

What will be involved?

The video observation will last for approximately 10-15 minutes in our classroom as part of our literacy work. I will facilitate the whole class discussion and a colleague will video the activity. It will not change the activity for the pupils. I will transcribe parts of the video for analysis.
The follow up whole class interview should take no more than 15 minutes and will involve the pupils watching the video recording while I make notes about what individual pupils say. The interviews may be audio recorded, with assent from the pupils, so that I can refer to what was said more accurately than would be possible just from my notes. Permission has been given from (HT Name) for me to do this.

Only I will have access to any video and audio recordings. I do not need to share this with those at the University or other staff in (Name of school). If any part of the observation transcript or interview is shared with my tutor or used to form part of the final dissertation report, your child’s name will be referred to by a false name (pseudonym).

Will what I say be kept private?

Your child’s participation will be treated in strict confidence in accordance with the Data Protection Act (2018). No personal information about them will be shared. In the case of the video/audio recording and my notes of the interview, these will be kept private only to me and typed up as soon as possible. However, if your child lets me know anything during your interview which I consider means that they might be unsafe or have been involved in a criminal act, because this is a safeguarding concern, I will need to pass this information to (HT Name).

When I make anonymised records of the interview, as outlined above, these will be stored securely on password protected devices and the original notes and recording will then be destroyed. I can confirm that neither your child as an individual nor the school will be identifiable in my submissions to the University or any presentations, I make of my findings to interested audiences.

What happens now?

If you are happy with everything that you have read, then you do not need to do anything. This means that you are giving consent for your child to be involved in my research. If you would like your child not to take part and so ‘opt out’ of this study, then please email me via the school email address by Monday 26th April.

You can change your mind later and withdraw from the study by letting me know and I will destroy the information I have created. This will be possible up until the end of this term, Friday 25th June 2021.

What if I have other questions?

If you have any questions about the study, I would be very happy to answer them. Please contact me by email via the school email address.

Thank you in advance for your support.

Janey Henderson

(Primary 1 Class Teacher)
Appendix C - ‘Opt in’ teacher information and consent form

E822 Information letter/Consent for teacher participants

What is the aim of the Focus Group meetings?
The aim is to gain your perspective on an aspect of education, as part of a small-scale investigation for my Masters qualification. It is designed to contribute to knowledge and practice in my chosen area of specialism, ‘talk’. The focus group meetings are designed to help answer: -

How effective are teacher ‘talk moves’ in extending whole class discussions?

• What are teacher perceptions about the effectiveness of ‘talk moves’?
• What effect do ‘talk moves’ have on pupil responses?
• How do learners in Primary 1 perceive their own participation in class discussions?

Who is conducting the research and who is it for?
These meetings are part of my studies on the Open University Masters module E822 ‘Multi-disciplinary dissertation: Education, Childhood and Youth’. On this module I have had an opportunity to design a small-scale investigation which will generate findings relevant to and of value to practice settings. The meetings have been agreed with my tutor to be an important part of this design to allow me to include the perspectives of selected participants in addressing the above research questions. I will be analysing the data collected and reporting my findings in the dissertation I submit to the University as my final assessment for my Masters qualification.

Why am I being invited to participate in this research?
You have been chosen as your experiences and opinions would be highly valuable in helping me to address my research questions.

If I take part in this research, what will be involved?
The focus group is intended to last no longer than 45 minutes in a place which I will negotiate with you and others in the setting to be mutually convenient.

I will openly record written notes during our focus group. Only I will have access to the notes and any record sheets you wish to share. I do not need to share these with those at the University or in this practice setting. If I need to refer to your comments during my final dissertation your contribution will be recognised by a pseudonym to protect your identity.

What will we be talking about?
The focus of the interview will be to find out your perspectives on ‘talk moves’. I will share the questions we will discuss in advance of the focus group meeting.
**Will what I say be kept confidential?**
Your participation will be treated in **strict confidence** in accordance with the Data Protection Act (2018). No personal information will be passed from me to anyone else. Your consent forms will be stored safely in our professional setting. Notes from our focus group meetings will be kept confidential and typed up as soon as possible. However, if you disclose anything during the focus group which I consider means that you might be unsafe or have been involved in a criminal act, because this is a safeguarding concern, I will need to pass this immediately to the organizational Designated Safeguarding Officer.

The anonymised records of the meetings will be stored securely on password protected devices and the original notes will be destroyed. I will be submitting an analysis of the data collected from the meetings as part of my dissertation submitted as the end-of-module assessment. I also plan to present my findings to relevant audiences. I can confirm that neither you as an individual nor the setting will be identifiable in any of these reports and presentations.

**What happens now?**
After reading this information sheet, please review and complete the questions below and sign your name to give consent. Participation is voluntary and you can withdraw your consent at any point by letting me know. As soon as you let me know you wish to withdraw, this information/consent form and any data collected will be destroyed.

**What if I have other questions?**
*If you have any other questions, I am happy to answer them.*

I am looking forward to working with you on my research project.

Janey 😊

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**Consent Form**
Please indicate YES or NO for each of the questions below and return the completed form to me by **Wednesday 28th April.**

<table>
<thead>
<tr>
<th>Question</th>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you read the above information about the focus group meetings?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Has someone explained it to you?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Do you understand what it is about?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Have you asked all the questions you want?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Have you had your questions answered in a way you understand?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Do you understand it is OK to stop taking part at any time?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Are you happy with how your data will be stored?</td>
<td>YES</td>
<td>NO</td>
</tr>
<tr>
<td>Do you understand that your name as well as any identifiable information will be removed from what will be shared after the meetings?</td>
<td>YES</td>
<td>NO</td>
</tr>
</tbody>
</table>
Are you happy to take part? YES NO

If any answers are 'no' you can ask more questions.

If you want to take part, please write your name and today's date.

Your name ___________________ Date ___________________________

Please also select when you would prefer to attend the first focus group meeting of the research project.

- Thursday 29th April
- or Thursday 6th May
- or either date suits me!
Appendix D - Research instrument – Semi-structured interview schedule (Learner)

Name of Pupil…………………………………    Age………    Time/Date……………   Location………………………………

Research Question- How do learners in Primary 1 perceive their own participation in class discussions?

1. Tell me about a time when you talked to someone else in P1. (Prompt – maybe today in the classroom or outside)

2. How do you feel when it is time to ‘talk’ in school? (Prompt–Maybe at Circle Time or when we all talk together on the carpet or when you talk to a partner).

   😊  🙁  😞

   Why do you feel like this?

3. How do you feel when we all talk together on the carpet?

   😊  🙁  😞

   Why do you feel like this?

4. What sorts of things do you like to talk about? (Show photos of different ideas or anything else?)

   a picture  a story I have listened to  a short film or film clip  a question (what topic?)

5. How good are you at ‘talking’ in school? (Really good/sometimes I'm good/not very good)

   👍  🙁  😞

   Why do you say this?

6. What makes a good ‘talker’? (Prompt; - Is there someone in our class that is really good at talking when we are altogether talking about things? Why are they good?)
Appendix E - Research instrument – Semi-structured interview schedule (Whole class)

Interview date…………………………… Discussion date……………………. Discussion of……………………………………

Research Question- How do learners in Primary 1 perceive their own participation in class discussions?

- Share ‘talking charter’ again with pupils.
- The class are invited to watch the video that shows them engaging in a whole class discussion. They are asked to watch for things they do well (award a ⭐️ for) and for things they didn’t do or could try and do next time to make our talk even better (‘wishes’ or ⭐️️⭐️️).

Watch video and share ‘stars and wishes’ with a partner.

Comments from pupils written below...

- What went well in the discussion?

⭐️️⭐️️⭐️️⭐️️

- Is there anything you could have done better in that discussion to improve our ‘talk’?

⭐️️⭐️️⭐️️⭐️️
Appendix F - Research instrument – Focus Group 2 interview schedule

Focus Group Meeting 2 – Thursday 13th May 2021 – 3.30pm

Focus Group Meeting Interview Schedule

participants present: - ..................................................................................................................

• Thank everyone for attending and for ongoing support and interest and welcome participants.
• Recap purpose of this ‘focus group’ i.e., a ‘safe space’ to share our thoughts on ‘talk moves’ as teachers, how we found the moves and how it impacted on the pupils in our class.

Q1 - How did acting out the moves go? Positives and negatives!

Q2- What effect do ‘talk moves’ have on pupil responses?

Q3 - Reflecting on this what are our ‘next steps’? Where do we go from here?

• Arrange Next Focus Group Meeting date - participants to decide.
Appendix G – Ethical Appraisal Form

JE822 Ethical Appraisal Form
Masters: Education, Childhood and Youth

NB: it should be noted that The Open University is unable to offer liability insurance to cover any negative consequences students might encounter when undertaking ‘in-person’ data collection. It is therefore very important that you follow appropriate research protocols not least in seeking Gatekeepers’ permissions to undertake any data collection within your setting and adhere to ethical principles for the safety of yourself and your participants.

Because ethical appraisal should precede data collection, this form should be included with TMA02 for those developing a Small-Scale Investigation and included as part of the submission for the EMA for those submitting an Extended Literature Review and Research Proposal.

Fill in section 1 of this document with your personal details and brief information about your research.
For section 2, please assess your research using the following questions and click yes or no as appropriate. If there is any possibility of significant risk, please tick yes. Even if your list contains all “no” you should still return your completed checklist so your tutor/supervisor can assess the proposed research.

<table>
<thead>
<tr>
<th>Section 1: Project details</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. Student name</td>
</tr>
<tr>
<td>b. PI</td>
</tr>
<tr>
<td>c. Project title</td>
</tr>
<tr>
<td>d. Supervisor/tutor</td>
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<tr>
<td>e. Qualification</td>
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<td></td>
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<tr>
<td>f. MA pathway (where applicable)</td>
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<tr>
<td>g. Intended start date for fieldwork</td>
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<tr>
<td>h. Intended end date for fieldwork</td>
</tr>
<tr>
<td>i. Country fieldwork will be conducted in</td>
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</tbody>
</table>

If you are resident in the UK and will be conducting your research abroad please check www.fco.gov.uk for advice on travel.
## Section 2: Ethics Assessment

<table>
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<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Does your proposed research need initial clearance from a ‘gatekeeper’ (e.g., Local Authority, head teacher, college head, nursery/playgroup manager)?</td>
<td>✓</td>
</tr>
<tr>
<td>2</td>
<td>Have you checked whether the organisation requires you to undertake a ‘police check’ or appropriate level of ‘disclosure’ before carrying out your research?</td>
<td>✓</td>
</tr>
<tr>
<td>3</td>
<td>Have you indicated how informed consent will be obtained from your participants (including children less than 16 years old, school pupils and immediate family members)? Your consent letters/forms must inform participants that they have the right to withdraw from the study at any time.</td>
<td>✓</td>
</tr>
<tr>
<td>4</td>
<td>Will your proposed research design mean that it will be necessary for participants to take part in the study without their knowledge/consent at the time (e.g., covert observation of people in nonpublic places)? If so, have you specified appropriate debriefing procedures?</td>
<td>□</td>
</tr>
<tr>
<td>5</td>
<td>Does your proposed design involve repetitive observation of participants, (i.e., more than twice over a period of more than 2-3 weeks)? Is this necessary? If it is, have you made appropriate provision for participants to renew consent or withdraw from the study halfway through?</td>
<td>□</td>
</tr>
<tr>
<td>6</td>
<td>Are you proposing to collect video and/or audio data? If so, have you indicated how you will protect participants’ anonymity and confidentiality and how you will store the data?</td>
<td>✓</td>
</tr>
<tr>
<td>7</td>
<td>Does your proposal indicate how you will give your participants the opportunity to access the outcomes of your research (including audio/visual materials) after they have provided data?</td>
<td>✓</td>
</tr>
<tr>
<td>8</td>
<td>Have you built in time for a pilot study to make sure that any task materials you propose to use are age appropriate and that they are unlikely to cause offence to any of your participants?</td>
<td>✓</td>
</tr>
<tr>
<td>9</td>
<td>Is your research likely to involve discussion of sensitive topics (e.g., adult/child relationships, peer relationships, discussions about personal teaching styles, ability levels of individual children and/or adults)? What safeguards have you put in place to protect participants’ confidentiality?</td>
<td>□</td>
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1. You must agree to comply with any ethical codes of practice or legal requirements that maybe in place within the organisation or country (e.g., educational institution, social care setting or other workplace) in which your research will take place. If required an appropriate level of disclosure (‘police check’) can obtained from the Disclosure and Barring Service (England and Wales), Disclosure Scotland, AccessNI (Northern Ireland), Criminal Records Office (Republic of Ireland), etc.

2. This should normally involve the use of an information sheet about the research and what participation will involve, and a signed consent form. You must allow sufficient time for potential participants to consider their decision between the giving of the information sheet and the gaining of consent. No research should be conducted without the opt-in informed consent of participants or their caregivers. In the case of children (individuals under 16 years of age) no research should be conducted without a specified means of gaining their informed consent (or, in the case of young children, their assent) and the consent of their parents, caregivers, or guardians. This is particularly important if your project involves participants who are particularly vulnerable or unable to give informed consent (e.g., children under 16 years, people with learning disabilities, or emotional problems, people with difficulty in understanding or communication, people with identified health problems). There is additional guidance on informed consent on the Masters: Education and Childhood and Youth website under Project Resources.

3. Where an essential element of the research design would be compromised by full disclosure to participants, the withholding of information should be specified in the project proposal and explicit procedures stated to obviate any potential harm arising from such withholding. Deception or covert collection of data should only take place where it has been agreed with a named responsible person in the organisation and it is essential to achieve the research results required, where the research objective has strong scientific merit and where there is an appropriate risk management and harm alleviation strategy.

4. Where participants are involved in longer-term data collection, the use of procedures for the renewal of consent at appropriate times should be considered.
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<thead>
<tr>
<th></th>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Does your proposed research raise any issues of personal safety for yourself, or other persons involved in the project? Do you need to carry out a ‘risk analysis’ and/or discuss this with teachers, parents and other adults involved in the research?</td>
<td>☑️</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Will financial inducements (other than reasonable expenses and compensation for time) be offered to participants?</td>
<td></td>
<td>☑️</td>
</tr>
<tr>
<td>12</td>
<td>Will the study involve recruitment of patients or staff through the NHS or the use of NHS data?</td>
<td></td>
<td>☑️</td>
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</table>

If you answered ‘yes’ to questions 12, you will also have to submit an application to an appropriate National Research Ethics Service ethics committee ([http://www.nres.npsa.nhs.uk/](http://www.nres.npsa.nhs.uk/)).
Appendix H – ‘Thematic Map’ created on Quirkos (2021)
Appendix I – Extended Learner Contribution – Coding Scheme

An **extended contribution** is defined as a contribution that provides non-specified information and thinking. The contribution is developed to some extent.

The ‘Types of extended contribution’ present in the data have been **highlighted yellow**.

<table>
<thead>
<tr>
<th>Types of extended contribution</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expand/Add</td>
<td>Student says more by building on, adding to or extending own or other’s contribution.</td>
</tr>
<tr>
<td>Connect</td>
<td>Student makes reference to something else, e.g. another idea, experience.</td>
</tr>
<tr>
<td>Explain/Analyse</td>
<td>Student explains something in some detail or examines own or another student’s contribution (but not to convince or persuade).</td>
</tr>
<tr>
<td>Rephrase</td>
<td>Student repeats, reformulates or summarises own or another student’s contribution</td>
</tr>
<tr>
<td>Recount</td>
<td>Student gives an account of an event or experience.</td>
</tr>
<tr>
<td>Evaluate</td>
<td>Student makes a judgement.</td>
</tr>
<tr>
<td>Argue</td>
<td>Student states a position/opinion/argument (to convince or persuade).</td>
</tr>
<tr>
<td>Justify</td>
<td>Student provides reasoning/evidence.</td>
</tr>
<tr>
<td>Speculate</td>
<td>Student predicts/hypothesizes an idea.</td>
</tr>
<tr>
<td>Imagine</td>
<td>Student creates an analogy, mental image or scenario.</td>
</tr>
<tr>
<td>Challenge</td>
<td>Student provides a challenge or counter example.</td>
</tr>
<tr>
<td>Shift position</td>
<td>Student indicates a change of mind or perspective.</td>
</tr>
</tbody>
</table>
## Appendix J - Reflection evidence grid

Highlighted evidence is discussed in greater detail in ‘Postscript – Narrative Critical Reflection’.

<table>
<thead>
<tr>
<th>Category</th>
<th>Feedback Received / PDP targets achieved/areas to work on</th>
<th>How this shaped my dissertation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge and understanding</td>
<td>1)TMA 01 tutor feedback: ‘You provide a brief rationale to contextualise the background of the enquiry and to explain how this emerges from your professional practice...expand on this to further highlight the potential significance of the research.’</td>
<td>I thought deeper about why I had chosen my focus and shared my ideas with teaching colleagues who also work in my setting to gather their views.</td>
</tr>
<tr>
<td>Critical analysis and evaluation</td>
<td>2)TMA 01 tutor feedback: ‘It would strengthen the writing here to reference the module material to deepen the discussion.’</td>
<td>As I make decisions about my own inquiry, I need to link ideas in my research journal to the relevant literature so I can include them in my final write up.</td>
</tr>
<tr>
<td>Links to professional practice</td>
<td>3)TMA 01 tutor feedback: ‘Consider if a closed (research) question will open the research.’</td>
<td>I looked again at my research questions and altered ‘Do talk moves...’ to ‘What effect do talk moves...’.</td>
</tr>
<tr>
<td></td>
<td>4)TMA 02 tutor feedback: ‘...explain here what kind of quantitative data you are planning to generate.’</td>
<td>I thought carefully about my methods. Transcribing the observations of whole class discussions from the videos was the main quantitative method of data collection. To make it manageable I decided to only transcribe a section of</td>
</tr>
</tbody>
</table>
5) TMA Q2 tutor feedback: ‘What are the advantages for conducting (semi-structured) interviews in pairs?’ and ‘any pros and cons when using focus groups as a data generation method...within the context of your research?’

6) Feedback on the TGF suggested I may find it difficult to lead a focus group with teaching colleagues while also making detailed notes of participants comments.

7) I decided to video the lesson observation using the class iPad. However, when I tried to play the video to the learners, to get their perspective, the sound was muffled.

<table>
<thead>
<tr>
<th>5) TMA Q2 tutor feedback: ‘What are the advantages for conducting (semi-structured) interviews in pairs?’ and ‘any pros and cons when using focus groups as a data generation method...within the context of your research?’</th>
<th>6) I read over the module materials about semi-structured interviews. To support my less able reluctant talkers I decided to interview them together. To avoid bias I also interviewed the more able talkers together too. I read over module materials from Unit 7 and made notes in my learning journal for future reference. I added these points when writing about my research methods in Chp.3.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7) I decided to video the lesson observation using the class iPad. However, when I tried to play the video to the learners, to get their perspective, the sound was muffled.</td>
<td>Each video rather than the whole discussion. This data could then be coded for analysis.</td>
</tr>
<tr>
<td></td>
<td>I reflected on this and decided to send participants the key themes/topics/questions before the focus group meeting. These would also be on view on a flipchart at the focus group meeting; I can then openly record comments from participants on the flipchart as they are made. This helps with transparency and shifts the power and focus away from myself as the researcher to create a more open equal ‘safe space’ for dialogue to occur.</td>
</tr>
<tr>
<td></td>
<td>I used the video setting on the camera for further recordings. The sound quality was better but there were fewer children captured in the shot.</td>
</tr>
</tbody>
</table>
8) I shared my idea of using a ‘fortune line’ (Hall and Wall, 2019, p82) visual tool at the first focus group meeting. However, none of the teachers chose to use this tool to reflect on their practice during the inquiry. I made the decision not to insist that teachers use this tool and gathered perceptions through dialogue rather than from the visual.

Structure, communication, and presentation

9) TMA 01 tutor feedback: ‘Reference the page number when a direct quotation is used.’

10) After completing TMA 01, and as my research process started to gather pace, I realised I needed to keep track of the academic literature I had read. I needed to be able to organise my notes for future access and referencing.

11) I had identified PDP target 1.2 as a focus. I needed to understand how to analyse my data to address my research questions. I read the ‘Quick guide to Harvard referencing’ to establish correct referencing for in-text citations.

I spent some time learning how to use the software package Quirkos. I piloted the software using a sample of my data linked to one of my sub-questions before deciding to go ahead with the program.